

Genomic and Functional Characterization of Heat Shock Protein Families in Jujube Genome (*Ziziphus jujuba*) by *in silico* Methods

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Abstract

Aim of study: It was aimed to identify and characterize *Hsp* genes in jujube genome using genomics methods.

Material and method: Protein sequences of jujube *Hsp* genes were obtained from NCBI databases. GSDS program was used to detect of exon-intron sites. To define the conserved motifs and estimated 3D-structures, Hsp proteins were used in the MEME-SUITE and PHYRE2 program, respectively. miRNAs targeting *ZjuHsp* transcripts were identified using the psRNATarget Server database. The gene annotations of Hsp proteins were presented by Blast2GO program. Sequence alignment was performed with ClustalW software, and then the phylogenetic tree was drawn using MEGAX program.

Main results: A total of 474 genes were defined in the jujube genome. The amino acid length of the Hsp proteins changes from 75 aa to 2577 aa. The estimated 3-D structure of the *ZjuHsp* proteins revealed the dominance of the α -helix structure. Phylogenetic tree was constructed to detect evolutionary relationships revealed the eight major groups of the *ZjuHsp100* and *ZjuHsp60*. *ZjuHsp* proteins could be mainly found in cell parts, membranes, and organelles. It was determined that the *ZjuHsp100* genes was targeted by 313 miRNAs.

Highlights: This study helps the researchers who would like to comparative and functional genomic studies.

Keywords: Heat Shock Proteins (Hsp), *Ziziphus jujuba*, Genome Wide Identification, Gene Ontology Analysis, Phylogenetic Tree

Hünnap Genomunda (*Ziziphus jujuba*) Isı Şoku Protein Ailelerinin *in silico* Yöntemler ile Genomik ve Fonksiyonel Karakterizasyonu

Öz

Çalışmanın amacı : Bu çalışmada, genomic yöntemler kullanarak hünnap genomunda yer alan *Hsp* genlerini tanımlamak ve karakterize etmek amaçlanmıştır.

Materyal ve yöntem : NCBI veritabanı kullanılarak *Hsp* genlerinin protein dizileri elde edilmiştir. Genlerin ekzon-intron bölgelerinin tespiti, GSDS program ile yapılmıştır. Hsp proteinlerinin korunmuş motiflerini ve tahmini üç boyutlu yapılarını tanımlamak için sırasıyla MEME-SUITE ve PHYRE2 programı kullanılmıştır. *Hsp* transkriptlerini hedefleyen miRNA'lar, psRNATarget Server veritabanı kullanılarak tanımlanmıştır. Hsp proteinlerinin moleküler fonksiyonu, hücresel bileşeni ve biyolojik fonksiyonları Blast2GO program ile sunulmuştur. Hsp proteinlerinin evrimsel ilişkilerini belirlemek amacı ile ClustalW yazılımı ile dizi hizalaması yapılmış ve ardından MEGAX program ile filogenetik ağaç çizilmiştir.

Temel sonuçlar: Hünnap genomunda toplam 474 gen tanımlanmış ve genler çoğunlukla 1. ve 2. kromozomda dağılım göstermiştir. Hsp proteinlerinin amino asit uzunluğu 75 aa (*ZjuHsp100-117*) ile 2577 aa (*ZjuHsp40-104* ve *ZjuHsp40-157*) arasında değişim göstermiştir. *ZjuHsp* proteinlerinin tahmini üç boyutlu yapısında α -sarmal yapısının baskın olduğu görülmüştür. Proteinlerin evrimsel ilişkilerini saptamak için oluşturulan filogenetik ağaçta, *ZjuHsp100* ve *ZjuHsp60* grup proteinlerin sekiz ana gruba ayrıldığı gözlenmiştir. *ZjuHsp* proteinlerinin esas olarak hücre kısımlarında, zarlarda, ve organellerde bulunduğu tespit edilmiştir. *ZjuHsp* transkriptlerini hedef alan miRNA'lardan 313'ünün *ZjuHsp100* genlerini hedeflediği bulunmuştur.

Araştırma vurguları : Bu çalışma, karşılaştırmalı ve fonksiyonel genomic çalışmalar yapmak isteyen araştırmacılara yardımcı olmaktadır.

Anahtar Kelimeler: Isı Şoku Proteinleri (Hsp), *Ziziphus jujuba*, Genom Analizi, Gen Ontoloji Analizi, Filogenetik Ağaç



Introduction

Jujube is a small deciduous tree or shrub reaching 12 metres, usually with thorny branches and belongs to Rhamnaceae family. Known as a hard-core fruit that has naturally grown in the US, Europe, North Africa, Australia, and especially China for many years, jujube (*Ziziphus jujuba* Mill.) is a bramble that is hard to grow. (Pandey et al., 2010). According to one of the most important alternative medicine books (Huangdi Neijing) published in China, jujube is regarded as one of the most valuable fruit (Li et al., 2005; Wang et al., 2016). In Turkey, jujube is grown especially in the Aegean and the Mediterranean Region and produced in the Central Anatolia and the Marmara Region (Gün, 2017; Karıncalı, 2003). Due to its resistance to drought and cold, jujube has high food quality and is an important part of human nutrition (Karıncalı, 2003). Jujube is also used for medical purposes other than for nutritional purposes. Jujube has many of properties such as hypoglycemic, hypotensive, antiinflammatory, antimicrobial, antioxidant, antitumor and liver protectant (Karıncalı, 2003; Wang et al., 2016; Devi & Bora, 2017). It is known that jujube seeds are used as tonic and glue, especially in the Far East countries. It is also recognized that the jujube seeds are used for sedative and for the treatment of insomnia (Pandey et al., 2010; Chen et al., 2017; Devi & Bora, 2017; Kumar et al., 2018).

Plants are contended with many stress factors throughout their life. Microorganisms, weeds, insects are biotic stress, temperature, radiation, chemicals, drought, cold are such as factors of the abiotic stress. Plants produce different and specific proteins for responding to stress factors. Heat shock proteins are one of the special proteins that plants produce in case of stress. Heat shock proteins are involved in cellular regulation, protein folding, and the prevention of the accumulation of abnormal proteins in the cell (Altunoğlu et al., 2019). Heat shock protein family is also comprised in the normal developmental process of plants as well as abiotic stress conditions such as high and low temperature, drought, and salinity (Sabehat et al., 1998; Swindell et

al., Krishna & Gloor, 2001; 2007; Cho & Choi, 2009; Zou et al., 2012; Çelik Altunoğlu, 2016;). According to the molecular weights of heat shock proteins, there are five different groups as small Hsp proteins (sHsps), Hsp60 (chaperonin), Hsp70 (DnaK/Ssa), Hsp90 (HtpG) and Hsp100 (Clp) (Altunoğlu et al., 2019).

The sHsps proteins are in a range of 16 kDa to 40 kDa according to their molecular weight. There is α -crystallin at the carbon end, and this protein family is usually found in the nucleus and cytoplasm. Since the sHsps domain also plays role in the normal developmental process of the plant, it is a critical protein for survival of the plant after stress (Wang et al., 2004).

Hsp60 protein is in mitochondria and cytoplasm. Together with Hsp70, it participates in protein folding. It also helps folding of misfolded proteins (Nollen et al., 1999). The tolerance of mitochondria against to stress is occurred by Hsp60 because of its presence in the mitochondria. The role of Hsp60 protein in the cytoplasm was also determined in the amino acid transport (Zhao et al., 2002; Deocaris et al., 2006)

The most studied Hsp protein is Hsp70 that is found in two different forms as Hsp72 increased by stress in cell and Hsp73 perpetually produced. It is also located outside the cell together with Hsp60. The production of Hsp70 protein is also increased in plants exposed to heavy metal stress except high temperature stress. Hsp70 protein is responsible for protein folding in the cytoplasm, nucleus, endoplasmic reticulum, and mitochondria (Waters et al., 1996). Under stress conditions, it takes charge in preventing protein aggregation and in refolding the damaged proteins. It is also believed that Hsp70 proteins facilitate ATP hydrolysis and protein folding, bind to proteins that are denatured during high temperature stress, and prevent the denaturation of pre-ribosomes (Pelham, 1986; Frydman, 2001; Çelik Altunoğlu et al., 2016)

Hsp90 protein is seen in the cytoplasm and endoplasmic reticulum and is the most abundant Hsp protein in the endoplasmic reticulum. The Hsp90 protein needs ATP to become active. Hsp90 binds to proteins and

regulates their activation and folding. It also prevents clustering of folded proteins. Furthermore, it plays a part in the control of cell cycle, signal transduction networks, protein fragmentation and protein interaction. In *Arabidopsis*, the expression of Hsp90 protein increased in stress conditions such as cold, salt, heavy metal except for high temperature stress (Frydman, 2001; Krishna & Gloor, 2001; Young et al., 2001).

The Hsp100 domain was first identified in the *Saccharomyces cerevisiae*. In the organism exposed to high temperature stress, the protein increases during the first hours of stress but then loses its function. Unlike the normal chaperone function, which prevents protein aggregation and misfolding, the Hsp100 domain also functions in protein disaggregation and fragmentation. The removal of potentially harmful polypeptides that have misfolding, denaturation, or aggregation and have no function is crucial for sustaining cellular homeostasis (Lindquist, 1986; Wang et al., 2004).

Whole genome data enables to determine gene families in organisms. In 2014, the genome sequence of the jujube plant (*Ziziphus jujuba* Mill.) was published (Liu et al., 2014). However no genome-wide studies have been conducted with all subgroups of Hsp family. Therefore, in the current study, it was aimed to determine members of all subgroups of Hsp family and make comprehensive and comparative bioinformatical analyses to understand the features and significance of the *Hsp* gene family in jujube. This paper additionally will permit further characterization of *Hsp* gene family in jujube to study their functions and evolution.

Material and Methods

Determination of HspGenes in Jujube Genome

Protein sequences of sHsps, Hsp40, Hsp60, Hsp70, Hsp90 and Hsp100 were obtained from the HSPiR database (<http://pdslab.biochem.iisc.ernet.in/hspir/index.php>) (Kumar et al., 2012), which is a database of heat shock proteins. Using these sequences, BLASTP search was performed on the Phytozome v.11 database (Goodstein et al., 2012), which contains the plant

genomes of the whole genome sequence, and homologous sequences belonging to *Ziziphus jujuba* were determined. Then, conserved region analyzes of Hsp proteins were applied on CLC Genomic workbench 7.5 v (Qiagen, Germany). Functional regions of the proteins have been identified using databases from Pfam (<http://pfam.sanger.ac.uk/>) and Smart (<http://smart.emblheidelberg.de/>) (Letunic et al., 2012), which have a big collection of proteins. Based on the conserved region contents, the amino acid sequences of jujube were analyzed. Genomic and coding region sequences of these proteins were also collected for further analysis using the Phytozome v. 11 database. In addition, properties such as protein length and molecular weight, isoelectric point (pI), and instability index of the *Hsp* gene sequences were defined by the Expasy Prot Paramtool (<http://web.expasy.org/protparam/>) (Gasteiger et al., 2003). Expasy-Prot Param is a web tool that permit the estimation of chemical and physical parameter for user loaded protein sequence.

Determination of the Structure of Jujube Hsp Genes and Target miRNAs for ZjuHsp Genes

To determine the gene structure of the identified jujube *Hsp* genes (*ZjuHsp40*, *ZjuHsp60*, *ZjuHsp70*, and *ZjuHsp100*), the genomic sequences of the genes were compared with the coding region sequences. GSDS 2.0 ‘Gene structure display server’ is a tool that provides visualization of conserved elements and binding regions as well as exon-intron regions in genes (<http://gsds.gao-lab.org/>) (Hu et al., 2015). A web-based ps RNA Target Server (<https://www.zhaolab.org/psRNATarget/>) server was used to find target candidate sequences of their interest and identify mi RNAs targeting *ZjuHsp* genes (Zhang, 2005).

Determination of Three-Dimensional Structures and Ontology Analysis of ZjuHsp proteins

The BLASTP was designed to identify the closest known three-dimensional formation of the protein, similar to the Protein Data Bank (PDB), which provides a source for three-dimensional structures of biological molecules for all *ZjuHsp* proteins. The

results obtained were used to predict protein structure by homology modeling in the Phyre2 program (Protein Homology/ Analog/ Y Recognition Engine; <http://www.sbg.bio.ic.ac.uk/phyre2>), a useful tool for determining the predicted protein structure, function and mutations (Kelley & Sternberg, 2009). For ontology analysis, the amino acid sequences of ZjuHsp proteins was loaded Blast2GO program (<http://www.blast2go.com>), (Conesa & Götz, 2008). With this program, predicted molecular functions, cellular components, and biological processes for ZjuHsp proteins were detected.

Determination of Molecular Phylogeny and Motifs of ZjuHsp proteins

Protein sequences were aligned using the ClustalW sequence alignment method in the MEGA7 program (Thompson et al., 1997; Tamura et al., 2011) Then, using these aligned sequences a phylogenetic tree was created with 1000 repetitive 'bootstrap' analyzes through the maximum likelihood method. This tree was regulated in Interactive Tree of Life (ITOL) database (Letunic & Bork, 2016). Protein sequence motifs were identified by loading into the database of MEME (<https://meme-suite.org/meme/tools/meme>) (Bailey & Elkan, 1994). The MEME Suite provide to search novel motifs in unaligned nucleotide or protein sequences.

Determination of Orthologue Genes and Divergence Times

In order to compare ZjuHsp proteins with the ones in *Arabidopsis thaliana*, banana (*Musa acuminata*), orange (*Citrus sinensis*), and peach (*Prunus persica*), BlastP was used in the Phytozome database. ZjuHsp protein sequences and orthologous in *Arabidopsis*, banana, orange and peach were compared using Clustal Omega online tool that multiple sequence alignment program that utilizes seeded guide trees and Hidden Markov Model profile-profile methods to create alignments between three or more sequences (<https://www.ebi.ac.uk/Tools/msa/clustalo/>). The PAL2NAL (<http://www.bork.embl.de/pal2nal/>) online tool was utilized to calculate homologous

(Ks) and non-homologous (Ka) change rates of amino acid sequences of paralogous (jujube) and orthologous pairs (*Arabidopsis*, banana, orange, and peach) from phylogeny. The related coding sequences were used. Time (million years ago, MYA) of duplication and divergence of each *Hsp* genes were estimated with the equation of $T = Ks/2\lambda$ ($\lambda = 6.5 \times 10^{-9}$) (Lynch & Conery, 2000; Suyama et al., 2006).

Results and Discussion

Determination of HspGenes in Jujube Genome

The sHsps, Hsp40, Hsp60, Hsp70, Hsp90 and Hsp100 protein sequences were obtained from the HSPiR database (Kumar et al., 2012). Names for all jujube *Hsp* genes were assigned based on their location on the jujube chromosomes (For example, ZjusHsp-01 indicates the first gene of the small *Hsp* gene family). A total of 474 *ZjuHsp* genes were defined. As a result of the constructed multiple searches and conserved region screenings, 72, 174, 39, 21, 6 and 162 genes encoding proteins from ZjusHsps, ZjuHsp40, ZjuHsp60, ZjuHsp70, ZjuHsp90, and ZjuHsp100 were found in the jujube genome, respectively and (Table S1.1-6). Hsp90 and Hsp70 genes were less numerous than genes encoding other *Hsp* proteins, however, these two protein groups also produced alternative transcripts. In the previous studies, total of 390 *Hsp* genes in *Populus trichocarpa* (Yer et al., 2018), 130 *Hsp* genes in *Setaria italica* L. (Singh et al., 2016), 163 *Hsp* genes in *Arabidopsis thaliana* (Swindell et al., 2007) and 186 *Hsp* genes in *Eucalyptus* sp. genome (Cagliari et al., 2005) were identified. In addition, 21 genes in Hsp70 subgroup and 6 genes in Hsp100 subgroup were identified and characterized in a previous study. While the number of *Hsp70* genes was the same as in this study, the number of *Hsp100* genes was more comprehensive in the current paper (Panzade et al., 2021).

The number of *Hsp* genes demonstrates a great range in plants. As a result of this study, the jujube genome has been found to have the greatest number of *Hsp* gene family members. The amino acid (aa) sequences of all *Hsp* proteins revealed that ZjuHsp40-104 and ZjuHsp40-157 had the longest protein

sequences (2577 aa), while ZjuHsp100-117 had the shortest sequence (75 aa).

When the isoelectric points (pI) of the Hsp proteins were analyzed, it was seen that the proteins had both acidic (pI<7) and basic (pI>7) characteristic and that the instability index had both stable and unstable proteins (threshold value <40). Chen et al. (2018) have determined that *sHsp*, *Hsp70* and *Hsp90* genes in *Camellia sinensis* also demonstrated both acidic and basic characteristic. Considering that Hsp proteins are located in many cellular components with variable pH range, such as membrane systems, organelles, cytosol and nuclei, it is thought that they easily adapt to the cellular environment with both acidic and basic characters (Shen et al., 2013; Khan et al., 2021).

Determination of the Structure of Jujube Hsp Genes and Target miRNAs for ZjuHsp Genes

The identified *ZjuHsp* genes were mapped on 12 jujube chromosomes. *ZjuHsp* genes were most abundant on the 2nd chromosome (62 genes), while those on the 7th chromosome (15 genes) were the least abundant. Besides, more than 100 *Hsp* genes were identified in scaffold level (Figure 1). Introns and exons are fundamental to understand gene structure because the combination of the exons and introns determines how genes are regulated. (Xu et al., 2012). *ZjuHsp* genes were examined in terms of intron and exon regions, and some *ZjuHsp* genes (10-21, 23-26, 31-33, 55-57, 62, 65, 67-70), *ZjuHsp40* (4, 5, 25, 49, 50, 61, 73, 79, 91-94, 106, 136, 150, 162), *ZjuHsp60* (13), *ZjuHsp70* (1, 4-5, 15) and *ZjHsp100* (4, 23, 45, 49, 52-56, 64-66, 93, 135, 144, 150, 156-160, 162) were found to lack introns (Supplementary Figure 1). Different combinations of exon and intron regions were found to be main components of gene structures in many previous studies (Baloglu et al., 2014; Çelik Altunoğlu, 2016; Lu et al., 2016; Chen et al., 2018; Nagaraju et al., 2019; J. Xu et al., 2020). On the other hand, it was observed that genes of same phylogenetic subgroup undertake similar functions and have similar gene organization in terms of exon-intron distribution. For example, while the intron-free ZjHsp70-01,

ZjHsp70-04 and ZjHsp70-05 genes were in the same subgroup, on the contrary, ZjHsp70-02, ZjHsp70-03 and ZjHsp70-14 genes, which were observed to contain more than one intron, were the members of another subgroup of the phylogenetic tree.

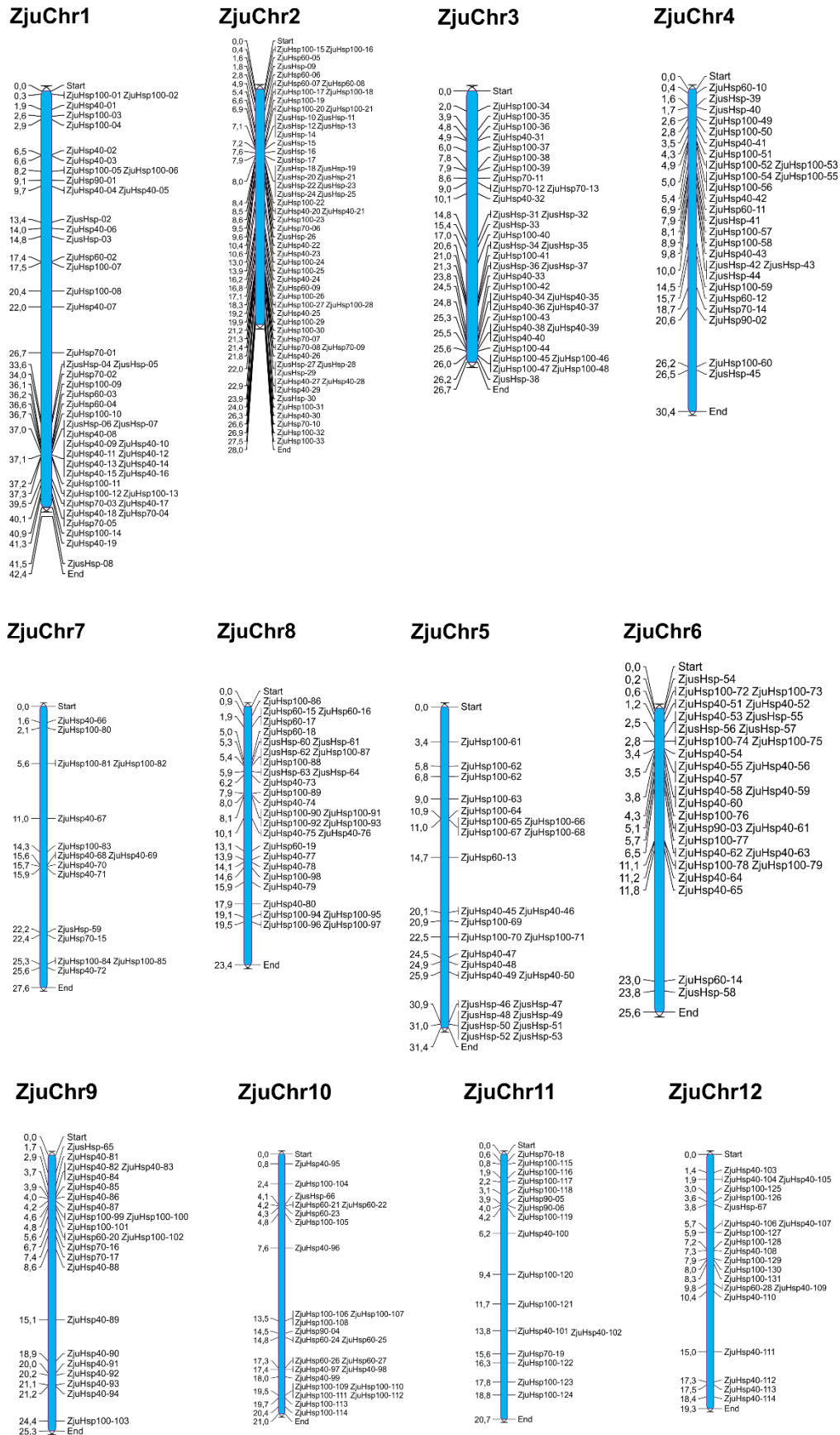


Figure 1. Chromosomal distribution of *ZjuHsp*s genes in jujube

All *ZjuHsp* genes targeted by miRNAs were analyzed by psRNA Target database (Figure 2) (Table S2.1-6). At first, the miRU score chart was used to determine inverse complementary mapping among miRNAs and their target transcripts (Dai & Zhao, 2011; Yer et al., 2018). Secondly, target genes and miRNAs targeting them were performed. It was found that *ZjusHsp* genes were targeted by 189 miRNAs, *ZjuHsp40* genes were targeted by 69 miRNAs, *ZjuHsp60* genes targeted by 74 miRNAs, *ZjuHsp70* genes targeted by 97 miRNAs, *ZjuHsp90* genes targeted by 32 miRNAs and *ZjuHsp100* genes targeted by 313 miRNAs. Under biotic and abiotic stress conditions to plants are exposed, target gene expression is inhibited by the cleavage of target transcripts by miRNAs (Srivastava et al., 2013). Plant miRNAs can contribute to several biological processes of the stress response, plant growth and development, signal transduction, and reproduction (Wang et al., 2019). Hsp100 proteins are very essential to support cellular homeostasis and play role in preventing misfolding and protein aggregation (Wang et al., 2004). Most of *ZjusHsp*, *ZjuHsp40*, *ZjuHsp60*, *ZjuHsp70*, *ZjuHsp90* and *ZjuHsp100* genes were targeted by different miRNA families including ath-miR8167, ath-miR169, ath-miR157, ath-miR172 and ath-miR8167, ath-miR2111 and ath-miR156, respectively. The most number of various miRNAs was detected for *ZjusHsp-58*, *ZjuHsp40-109*, *ZjuHsp60-01*, *ZjuHsp70-03*, *ZjuHsp90-01* and *ZjuHsp100-12* family members.

miR156 targeting SPL (Squamosa Promoter Binding Protein Like) family members is involved in many plants developmental processes such as fruit ripening, flowering, leaf development and branching, fertility maintenance, the transition from the vegetative stage to reproductive stage (Yu et al., 2015; Wang et al., 2019 Ding et al., 2020). The miR169 family is a preserved and big-scale miRNA family in plants. The miR169 family, identified in more than thirty species, frequently has roles in abiotic stress responses including high salt, drought, extreme heat, and N deficiency (Li et al., 2005; Xu et al., 2014; Yu et al., 2019).

miR172 was highly conserved in seed plants but not identified in lycopods and bryophytes. Most studies have indicated that miR172 is played role in plant flowering time control (Yu et al., 2019). In recent studies, it was observed that the miR172 family in wheat increased in osmotic, cold, and salt stresses (Gupta et al., 2014), and decreased in drought stress in rice (Zhou et al., 2010). In Arabidopsis, it has been shown to be a regulator controlling cotyledon greening under ABA and osmotic stresses (Zou et al., 2013). It has been observed that miR2111 interacts with proteins involved in the epigenetic regulation of plants and take part in organism homeostasis (Huen et al., 2018). It has also been determined to play a regulatory function in the ubiquitination process (Shukla et al., 2018). In the current study, miRNAs targeting members of the jujube Hsp family were identified. Identification of miRNAs can provide new perspectives to understand the roles of miRNAs and the roles of their targets.

Determination of Estimated Three Dimensional (3D) Structures and Ontology Analysis of ZjuHsp proteins

In Protein Data Bank (PDB), the Hidden Markov Model (HMM) search was done by through the intensive mode in the Phyre2 database for the BLASTP search result rates. Then estimated three-dimensional structures of these proteins were determined. Phyre2 database presents on protein modeling at >90% confidence level and protein similarity were detected with high fidelity in terms of intensive mode selection for 3D structure of protein (Figure 3). Especially, the homology modeling supply knowledge about protein function and structure. As a consequence of modeling, it was detected that α -helix structure was predominated in all modeled Hsp proteins belonging to jujube, and β -sheet structure was seen in rare cases. Since the role of Hsps proteins is binding and response to stimulus, this structure seems to be suitable for these functions. In previous papers, it was reported that Hsps proteins were predominantly α -helix in eucalyptus (Çelik Altunoğlu, 2016), poplar (Yer et al., 2018) and watermelon (Altunoğlu et al., 2019), which were in accordance with the current study findings in jujube.

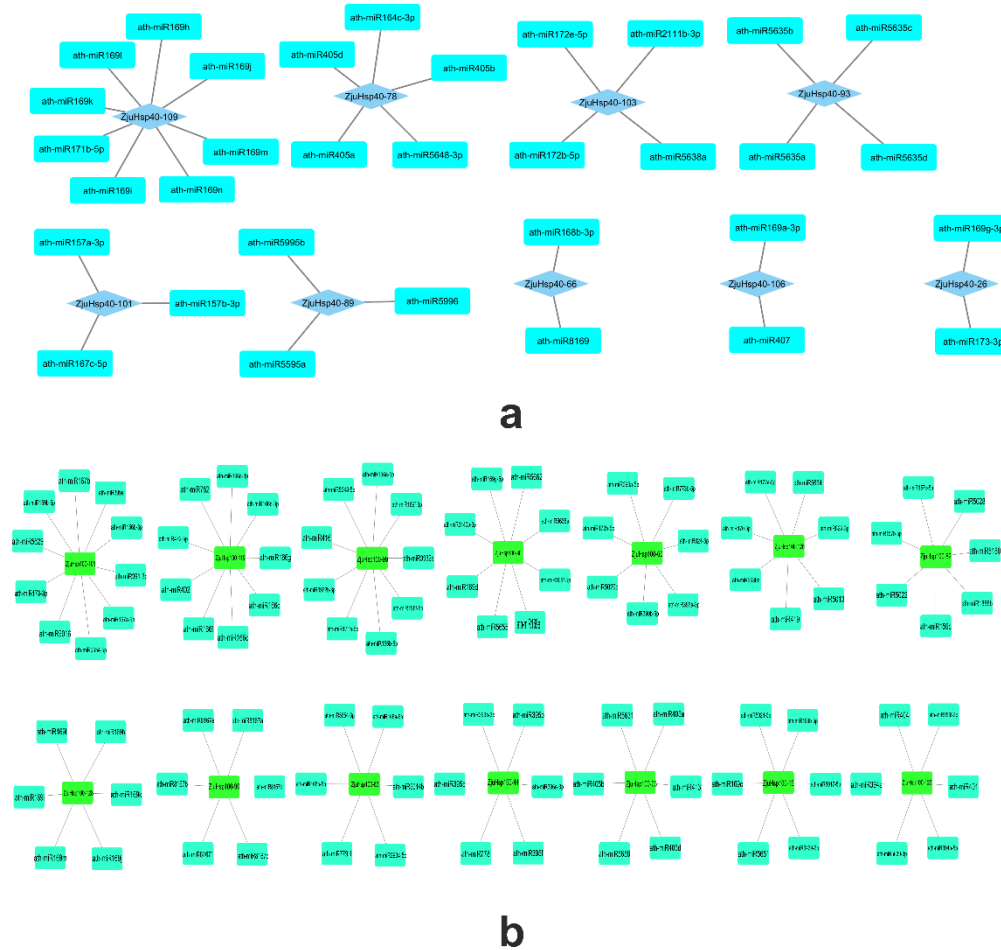


Figure 2. Most targeted (a) ZjuHsp40 genes, (b) ZjuHsp100 genes and their targeting miRNA

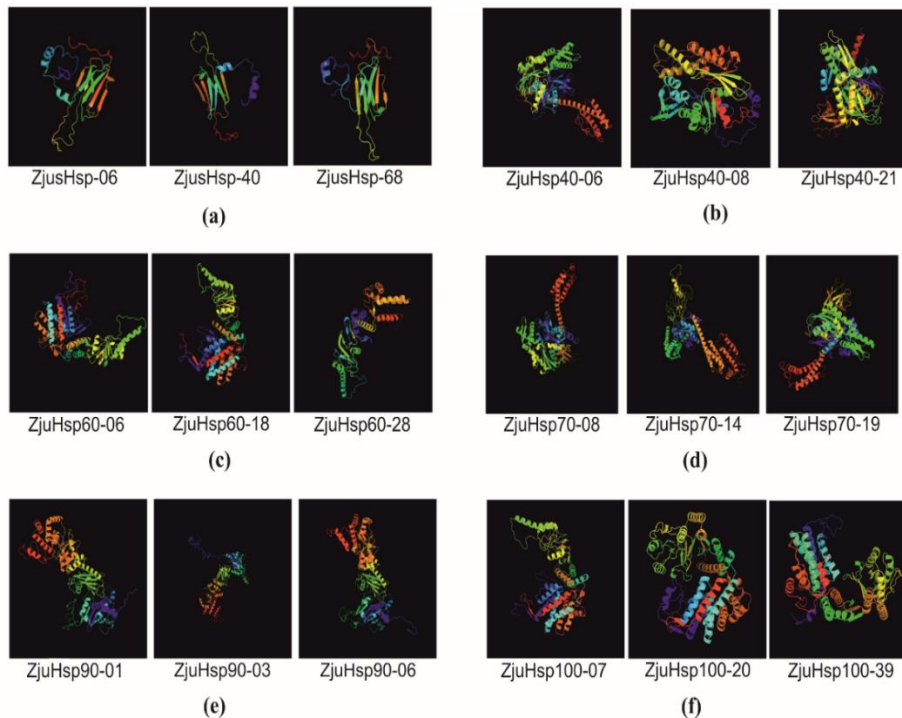


Figure 3. Predicted three-dimensional structure of some Hsp proteins (a) ZjusHsp, (b) ZjuHsp40, (c) ZjuHsp60, (d) ZjuHsp70, (e) ZjuHsp90 and (f) ZjuHsp100

The biological process, molecular function and cellular component analyzes of ZjuHsp proteins were carried out using the Blast2GO program (Figure 4 and Supplementary Figure 4). It has been identified that ZjuHsp proteins were mainly found in cell, cell part, membrane, and membrane part. They had molecular function such as binding and mainly played roles in response to biotic and abiotic stimulus. ZjuHsp40 proteins possessed roles in response to stimulus and cellular processes and were mostly located in the membrane, cell part, cell, and organelle. Binding, transportability, and catalysis were the molecular functions of these molecules (Figure 4a). The ontology analysis of ZjuHsp60 proteins revealed that their biological functions were cellular and metabolic processes and response to stimulus and their molecular functions were binding and catalytic activity. They were generally located in the cell, cell part, organelle, and organelle part (Figure 4b). Unlike other ZjuHsp protein groups, ZjuHsp70 proteins were found in the chloroplast and mediator complexes. They played a part of single organism process and metabolic process, and their molecular function were binding and catalytic activity. ZjuHsp90 family members took part in biologic process like cellular process and response to stimulus and molecular function as binding. They were mainly found in the cell, cell part, organelle, organelle part and membrane (Figure 4c). Most of ZjuHsp100 proteins were located in the cell, cell part, membrane, organelle, membrane part and organelle parts as other Hsp proteins. Many biological processes including metabolic, cellular, and single organism process and cellular composition organization were determined for Hsp100 proteins. The binding and catalytic activity were defined as molecular function for this family (Figure 4d). According to the cellular component analysis of ZjuHsp proteins, it was observed that other proteins apart from ZjuHsp70 proteins mostly appeared in cell, cell part, membrane, membrane part, organelle, and organelle part. All Hsp proteins got binding activity and also catalytic activities of the ZjuHsp40, ZjuHsp60, ZjuHsp70 and ZjuHsp100

proteins were identified. In addition, it has been observed that only ZjuHsp40 group of proteins had transport activity as molecular function. Former papers on eucalyptus (Çelik Altunoğlu, 2016) soybean (Srivastava et al., 2013) watermelon (Altunoğlu et al., 2019) and common wheat (Kumar et al., 2020) reported that Hsps were mostly located in the cell, cell part, membrane, membrane part, organelle, and organelle part. Hsp proteins performed activity by binding as molecular function and were involved in the biological process, response to environmental stimuli and regulation of the organism. Previous studies have shown that Hsps form synergistic interactions to cope with adverse conditions, promote plant growth, and defend these plants. It was realized that most of ZjuHsps got a role in the regulation of biological processes and responding to stimuli. These responses mainly result from abiotic/biotic stimuli, and they regulate the biologic activity, which supports the biological activity, molecular function, and cellular localization of Hsps described in our gene ontology data.

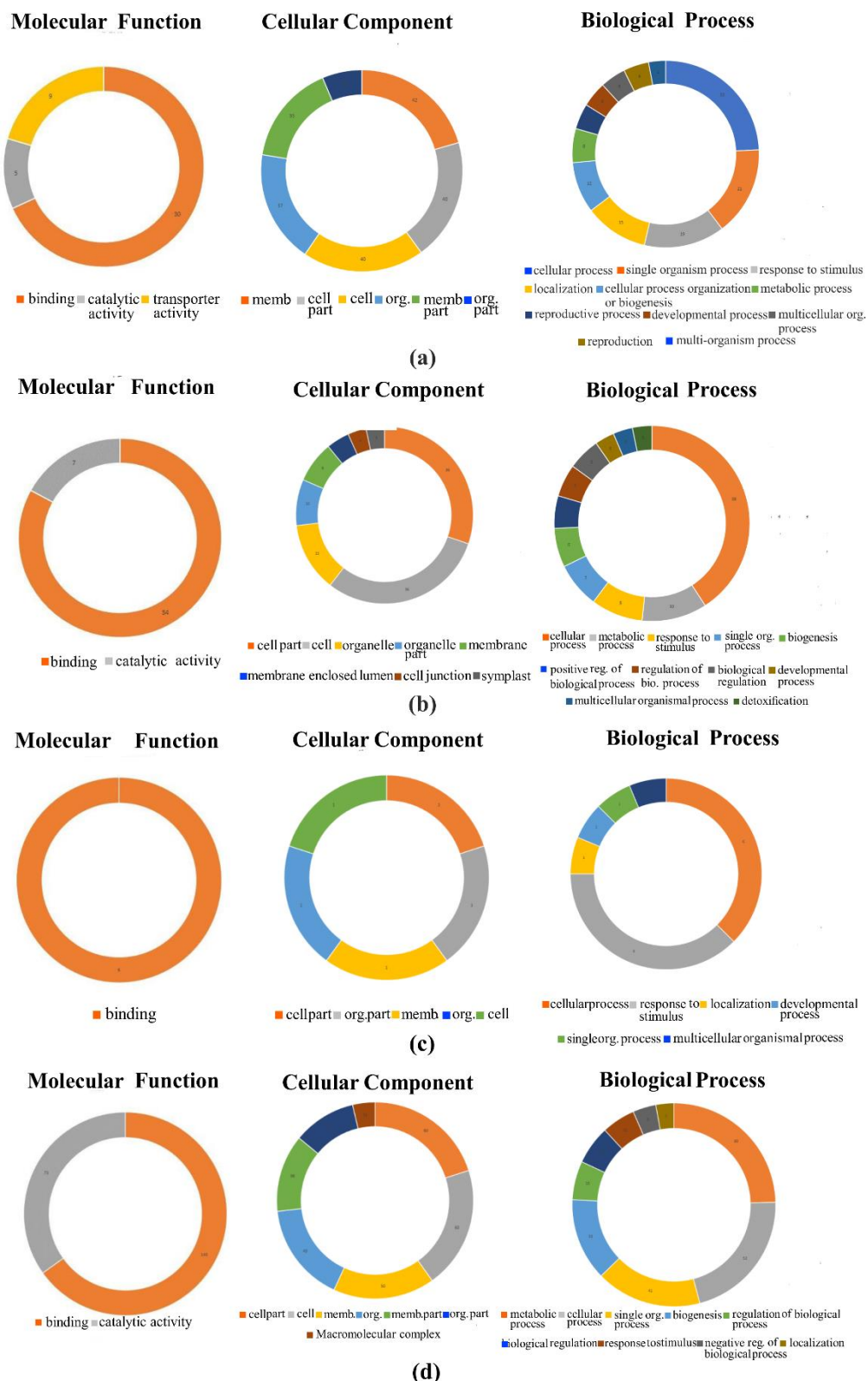


Figure 4. Gene ontology analysis of ZjuHsp proteins (a) ZjuHsp40, (b) ZjuHsp60, (c) ZjuHsp90, (d) ZjuHsp100

Determination of Molecular Phylogeny and Motifs of Hsp Proteins

To determine the evolutionary relationship between each domain of ZjuHsp proteins, phylogenetic trees were constructed. The "Neighbor-Joining-NJ" method was used to construct a phylogenetic tree for the conserved ZjuHsp proteins (Supplementary Figure 2). Based on 1000

repetitive bootstrap analysis, high bootstrap values were obtained between branches. ZjuHsp100 proteins were divided into 8 different groups, ZjuHsp40 proteins into 6, ZjuHsp70 and ZjusHsp into 5, ZjuHsp60 proteins into 8, and ZjuHsp90 proteins into 3. All trees of Hsp proteins formed different branches within themselves (Figure 5).

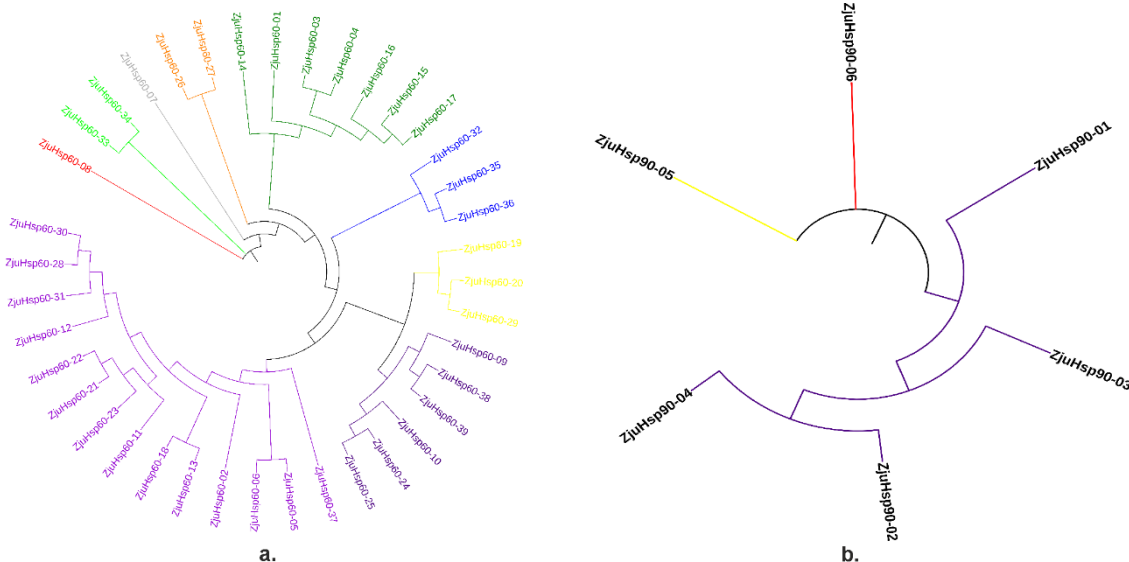


Figure 5. Phylogenetic tree of some ZjuHsp proteins (a) ZjuHsp60 and (b) ZjuHsp90

The amino acid sequences of jujube Hsp proteins were loaded to the MEME suite database and ten different conserved motifs were determined for each ZjuHsp family (Figure 6) (Supplementary Figure 3). Except for ZjusHsp proteins, ten motifs were observed in all jujube Hsp proteins. Seven motifs were identified among ZjusHsp proteins. Apart from ZjuHsp40 and ZjuHsp100, the distribution within the domain of conserved motifs in all other Hsp groups was generally consistent. Panzade et al., (2020) studied on jujube Hsp70 and Hsp100 proteins and they emphasized that the motif distribution was similar in Hsp70 and Hsp100 proteins. Based on the phylogenetic trees constructed, it is apparent that these proteins possess motif patterns consistent with the clusters underlying the trees.

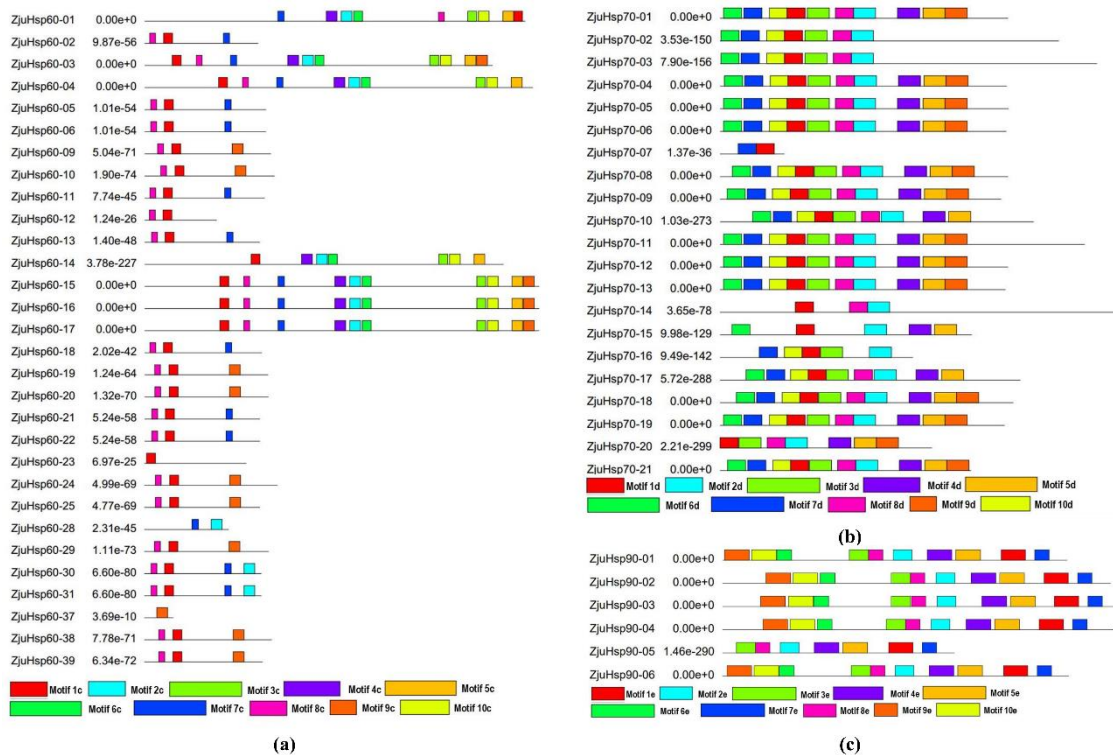


Figure 6. Motif patterns of some ZjuHsp proteins (a) ZjuHsp60 (b) ZjuHsp70 (c) ZjuHsp90

Determination of Orthologous Genes and Divergence Times

Orthologous gene analysis was performed by comparing *Hsp* gene family members in the jujube genome with different organisms *Arabidopsis thaliana*, *Citrus sinensis* (orange), *Musa accuminata* (banana), *Prunus persica* (peach). Also, possible differentiation times and similar and different rates of change have been analyzed in the evolutionary process (Figure 7). Mean of Ka/Ks rates between *ZjuHsp* genes and their orthologues were (Arabidopsis, orange, banana, peach; respectively) 0.78, 0.14, 0.05, 0.13 for *ZjuHsp*; 0.53, 0.33, 0.06, 0.16 for *ZjuHsp40*; 0.02, 0.59, 0.02, 0.03 for *ZjuHsp60*; 0.02, 0.02, 0.02, 0.02 for *ZjuHsp70*; 0.02, 0.06, 1.66, 0.03 for *ZjuHsp90*; 0.48, 0.68, 0.49, 0.39 for *ZjuHsp100*, respectively (Table S3.1-6). Based on the results, it was revealed that the orthologous relationships of the *ZjuHsp* gene family are with orange (234 pairs), peach (236 pairs), Arabidopsis (163 pairs) and banana (118 pairs), respectively. When the divergence times were examined, it was found out that the initial divergence from jujube was by banana with a mean of 123

million years ago (MYA) and the last divergence was with orange, about 28 MYA (Figure 7a). Considering the orthologous relationships between *Hsp40* genes from jujube and *Hsp40* genes from analyzed plants, orthologous genes were found with peach (712 pairs), orange (662 pairs), Arabidopsis (416 pairs) and banana (377 pairs), respectively. The first separation was with orange (488 MYA) and the last divergence was with banana (66 MYA) for *ZjuHsp40* genes (Figure 7b). When the orthologous relations for the *ZjuHsp60* genes were evaluated, the most orthologous relationship was with orange (600 pairs) and this was followed by peach (400 pairs), banana (294 pairs) and Arabidopsis (270 pairs). When the probable divergence times were analyzed, it was showed that the earliest separation was with Arabidopsis about 252 MYA and followed by banana (241 MYA), orange (205 MYA) and peach (155 MYA), respectively (Figure 7c). When the orthologous relationships of the *ZjuHsp70* gene family were studied, the orthologous relationship for the *ZjuHsp70* gene family was severally identified with peach (718 pairs), orange (412 pairs), Arabidopsis (341

pairs) and banana (245 pairs). Considering separation times, the first diverged genes from jujube were banana *Hsp70* genes with 236 MYA, and then Arabidopsis and orange *Hsp70* genes with 226 MYA and peach with 192 MYA, respectively (Figure 7d). When the orthologous relationships between jujube *Hsp* genes and compared plants were examined, the least orthologous gene identified group was the *ZjuHsp90* gene family. The orthologous relationship for the *ZjuHsp90* gene family was identified with orange (88 pairs), banana (68 pairs), Arabidopsis (60 pairs) and peach (42 pairs). Considering possible divergence times, the earliest separated genes from jujube were banana genes with 275 MYA, and then peach with 236 MYA, Arabidopsis with 234 MYA and orange with 200 MYA, respectively (Figure 7e). Finally, when the orthologous relationships between jujube *Hsp* genes were investigated, the group with the most number of orthologous genes defined was the *ZjuHsp100* gene family. It was recorded that the orthologous relationship for the *ZjuHsp100* gene family was determined with orange (2361 pairs), peach (2037 pairs), Arabidopsis (1608 pairs) and banana (1212 pairs). When the possible divergence times were evaluated, it was defined that the earliest diverged genes from jujube were banana genes with 263 MYA and then Arabidopsis with 262 MYA, orange with 248 MYA and peach with 216 MYA, respectively (Figure 7f). The most orthologous genes in all *Hsp* groups, except for *Hsp70*, were obtained in the orange and jujube plants, both of which are dicotyl plants. Jujube *Hsp70* genes most often had orthologous pairs with peach *Hsp70* genes. According to the divergence times, it was seen that the last separation occurred between peach and *ZjuHsp60*, *ZjuHsp70* and *ZjuHsp100* genes, between orange and *ZjuHsp* and *ZjuHsp90* genes, and between banana and *ZjuHsp40* genes.

The concept of evolutionary relationships among species is formed through the detection of divergence times among different organisms. Determination of these orthologous genes will present feasible usage of them in genetic and plant breeding studies as well. Ceylan et al., (2019) studied

on *LEA* genes in jujube fruit and orthologous gene analysis was performed between jujube genes and *A. thaliana*, *M. accuminata*, *P. persica* and *C. sinensis*. The orthologous relationship for the *ZjuLEA* gene family was identified with orange (81 pairs), banana (93 pairs), Arabidopsis (103 pairs) and peach (116 pairs), which was convenient with the orthologous gene results of *ZjuHsp70* family in the current study.

In addition to the functions, it plays in plant physiological processes, the *Hsp* protein family plays a vital role in plant development and survival in the face of biotic and abiotic stress. In the current study, a first extensive and systematic analysis of *Hsp* gene families in jujube plant, which is one of the fruits with high commercial importance, was performed. Consequently, whole 474 *ZjuHsps* genes were identified and characterized with reference to determination and structure analysis of the genes, estimation of their 3D structures, phylogenetic analysis, duplication events and their potential miRNA targets. Gene determination studies like the present study have the potential to open new viewpoints in the analysis of the functions of members of the *Hsp* protein family in plants and provide an important basis for further functional research and contribute to revealing stress tolerance mechanisms in jujube.

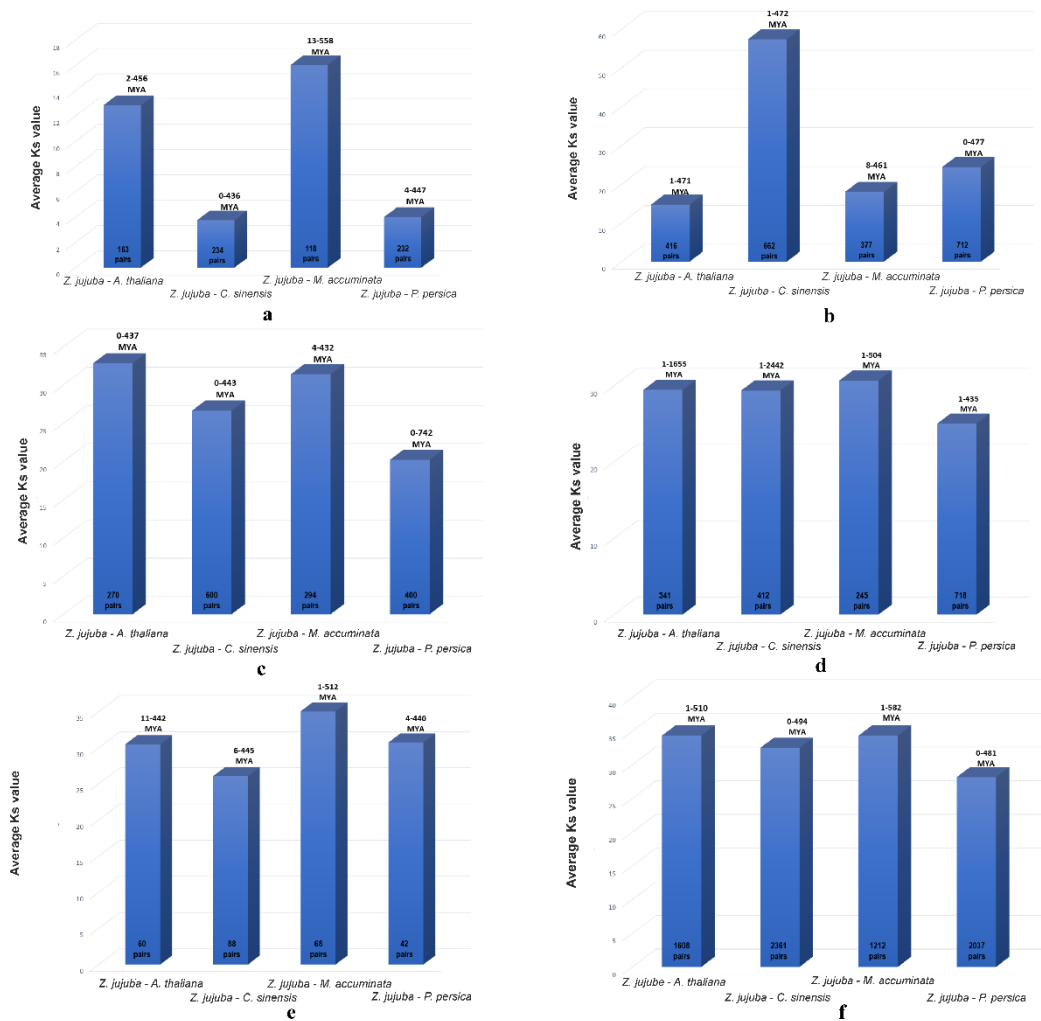


Figure 7. Time of duplication and divergence (MYA) according to Ks and orthologues Hsp genes (a) ZjuHsp, (b) ZjuHsp40, (c) ZjuHsp60, (d) ZjuHsp70, (e) ZjuHsp90, (f) ZjuHsp100pairs between Arabidopsis, orange, banana, peach

Ethics Committee Approval

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Author Contributions

Conceptualization: M.C.B., Y.Ç.A.;
 Investigation: M.C.B., Y.Ç.A., Y.C., K.C.B.;
 Material and Methodology: Y.C., K.B.C.;
 Supervision: M.C.B., Y.Ç.A.; Writing-
 Original Draft: Y.C., M.C.B., Y.Ç.A.;
 Writing-review & Editing: M.C.B., Y.Ç.A.;
 Other: All authors have read and agreed to
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Conflict of Interest

The authors have no conflicts of interest
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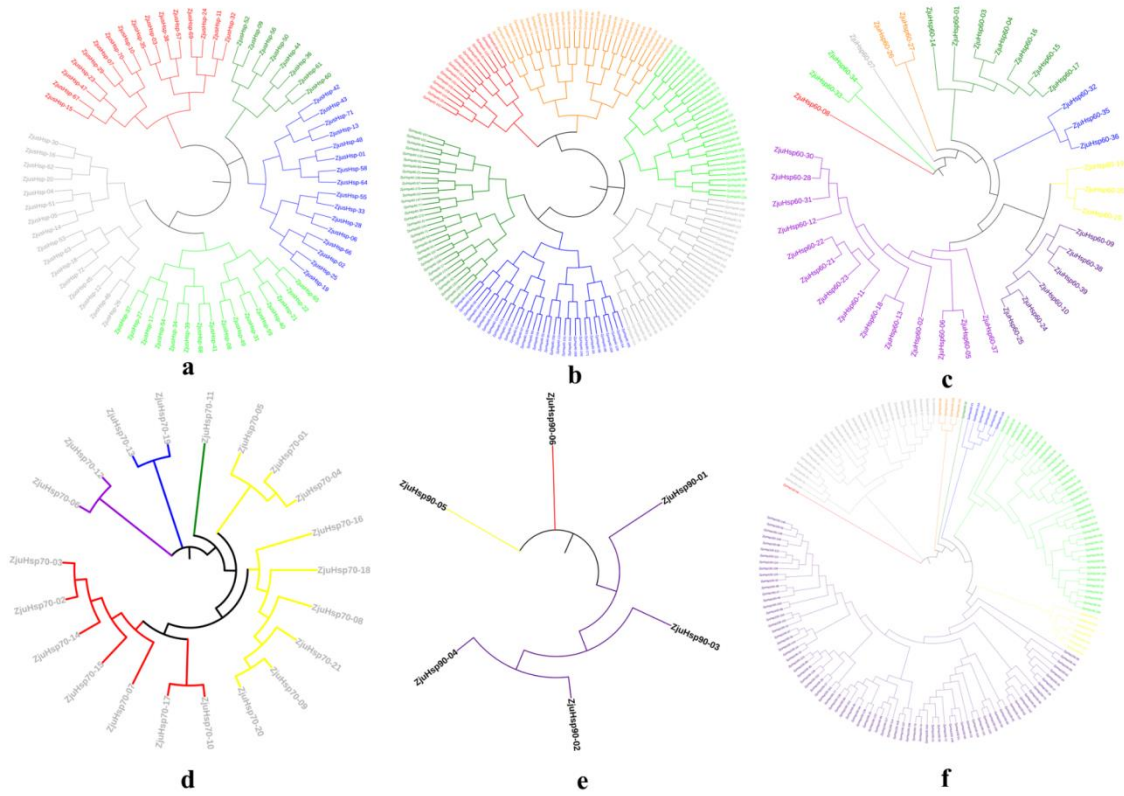
Supplementary Table and Figure Legends



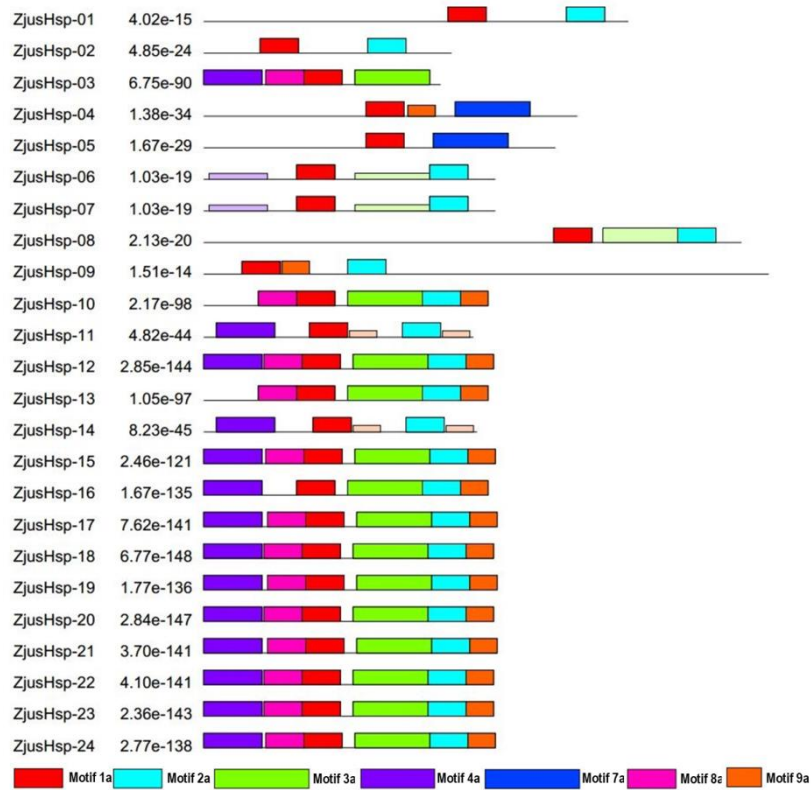
Supplementary Figure 1. Exon-intron organization of all *Z. jujubaHsp* genes (a) ZjusHsp, (b) ZjuHsp40, (c) ZjuHsp60, (d) ZjuHsp70, (e) ZjuHsp90 and (f) ZjuHsp100



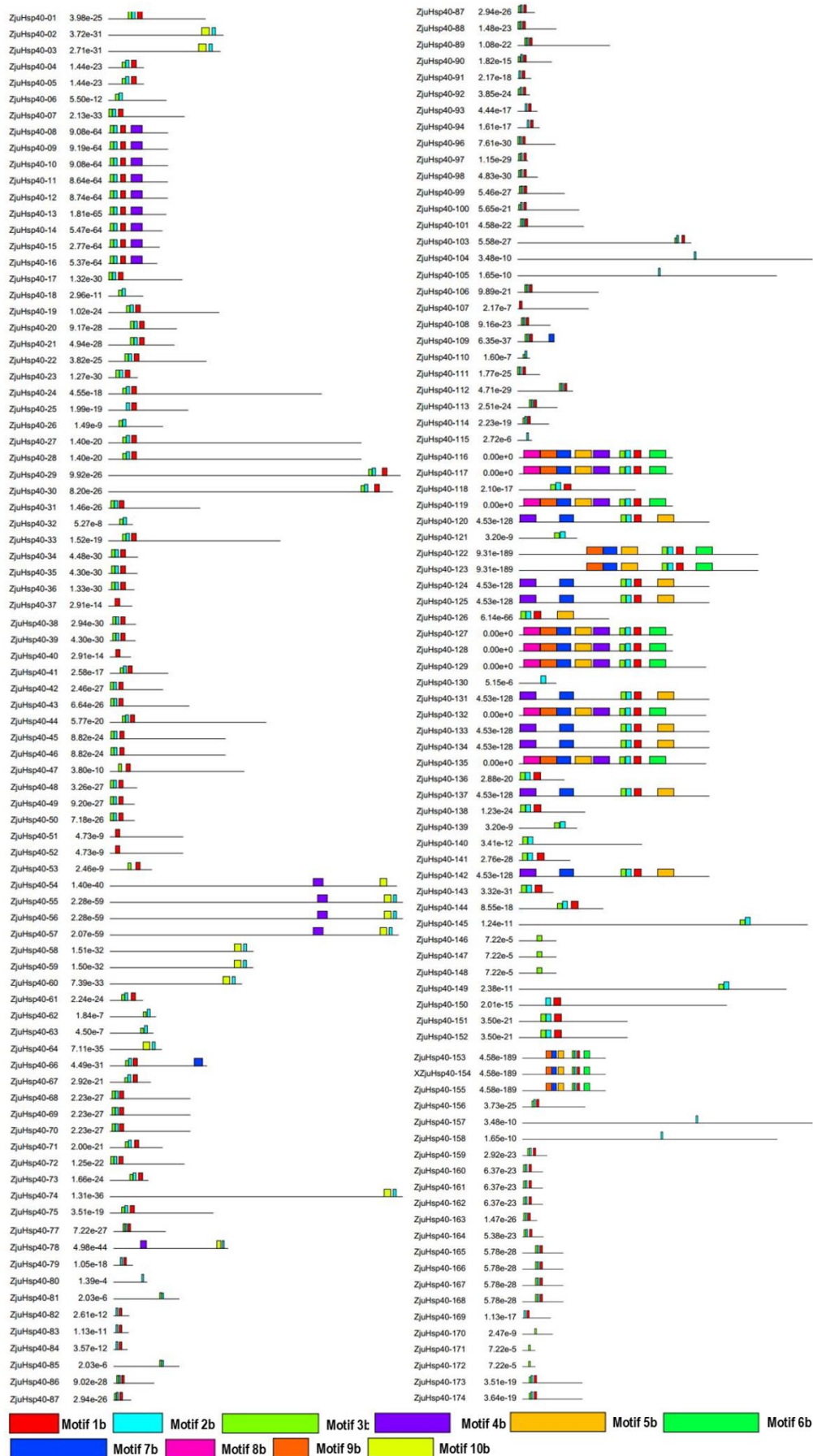
Supplementary Figure 1. continued

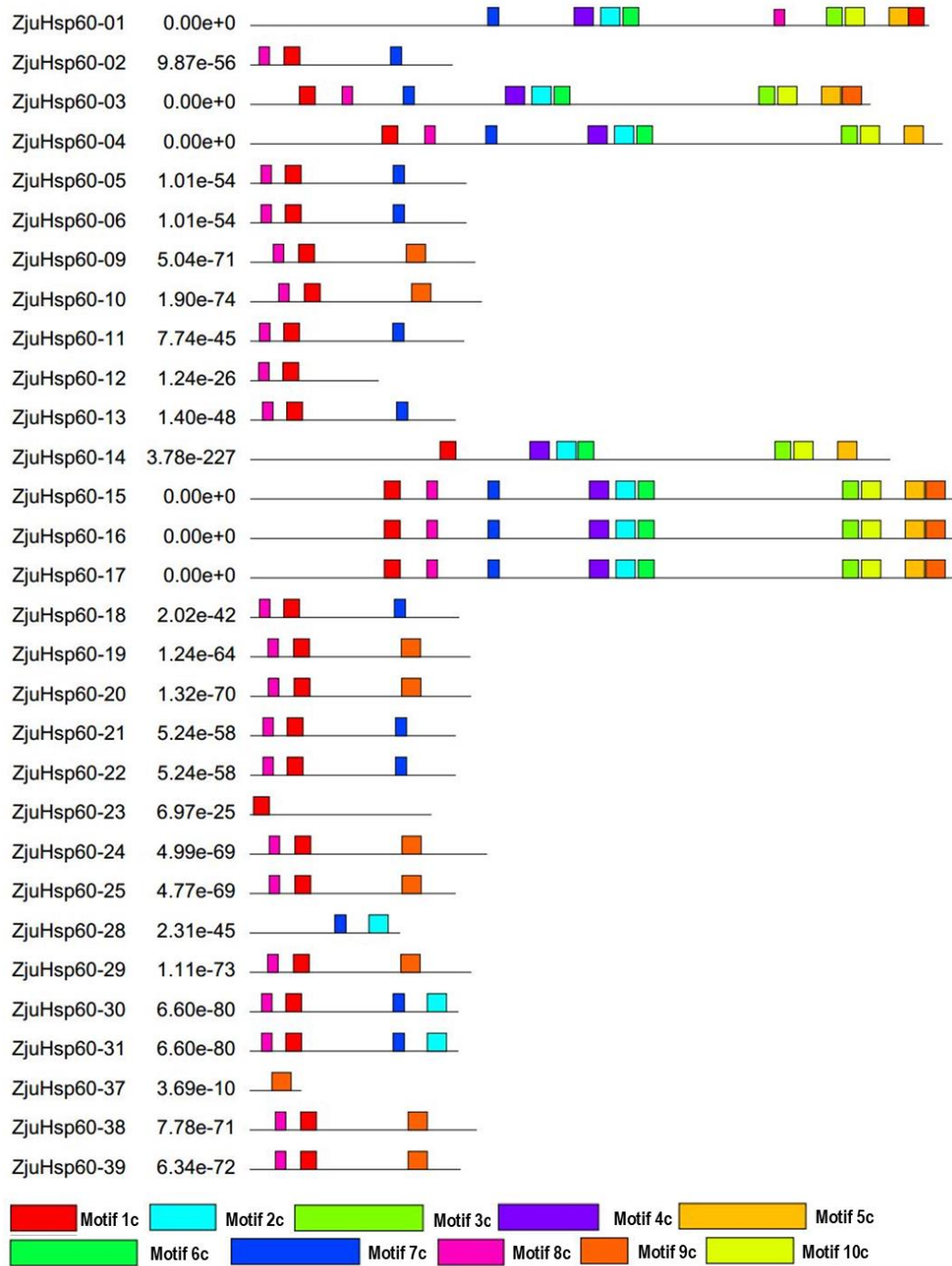


Supplementary Figure 2. Phylogenetic tree of ZjuHsp proteins (a) ZjusHsp, (b) ZjuHsp40, (c) ZjuHsp60, (d) ZjuHsp70, (e) ZjuHsp90 and (f) ZjuHsp100

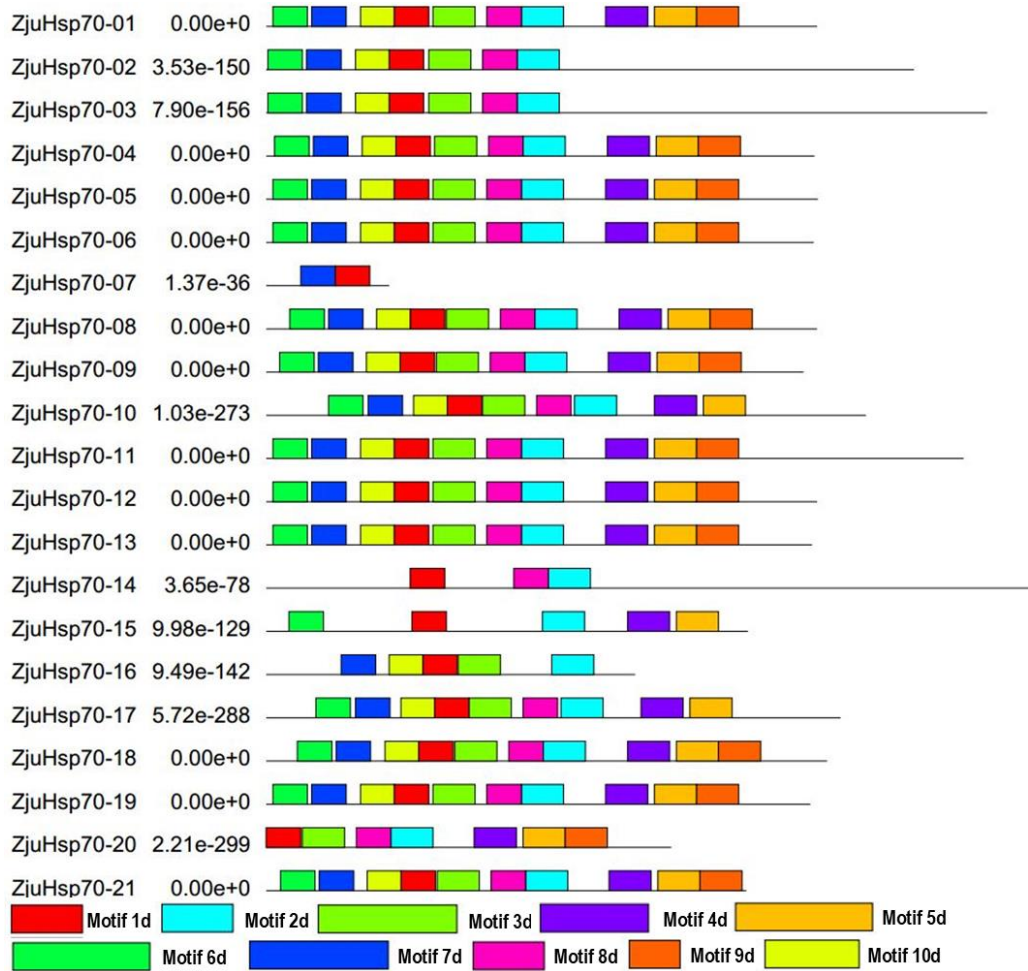


Supplementary Figure 3.1. Conserved motifs of ZjusHsp proteins

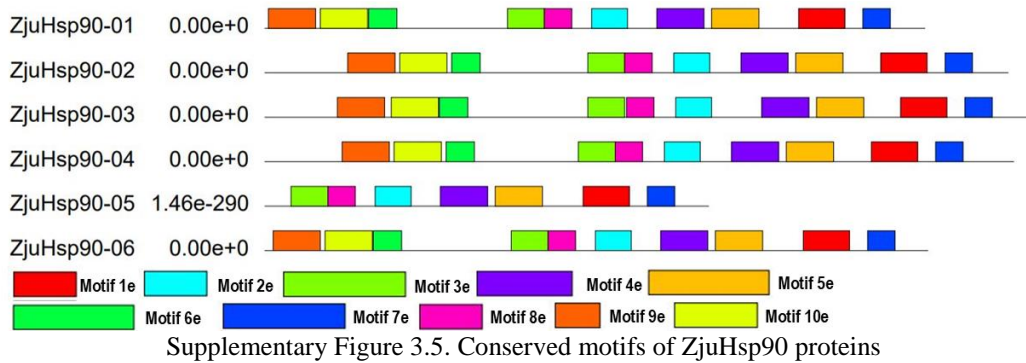




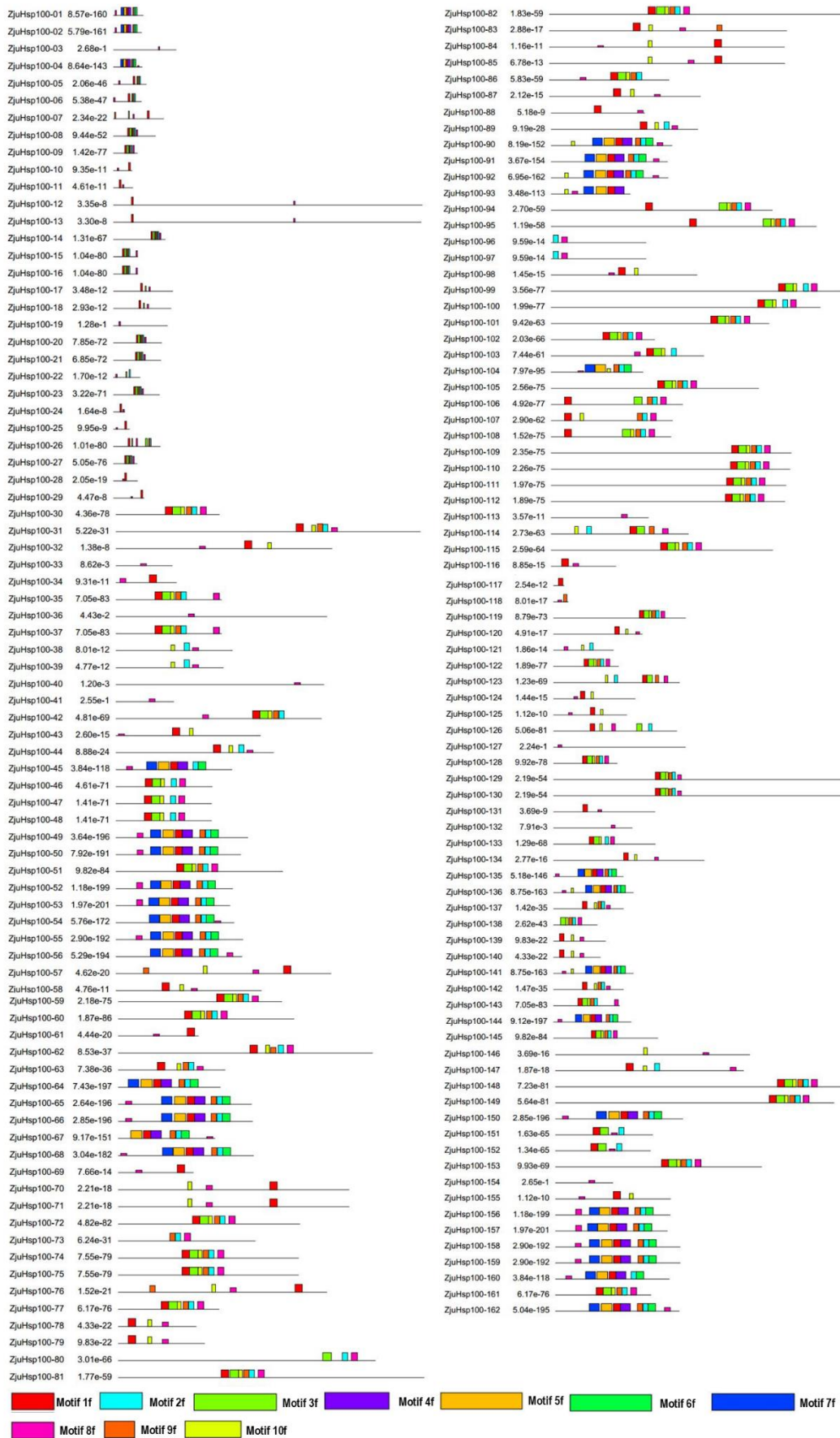
Supplementary Figure 3.3. Conserved motifs of ZjuHsp60 proteins



Supplementary Figure 3.4. Conserved motifs of ZjuHsp70 proteins



Supplementary Figure 3.5. Conserved motifs of ZjuHsp90 proteins



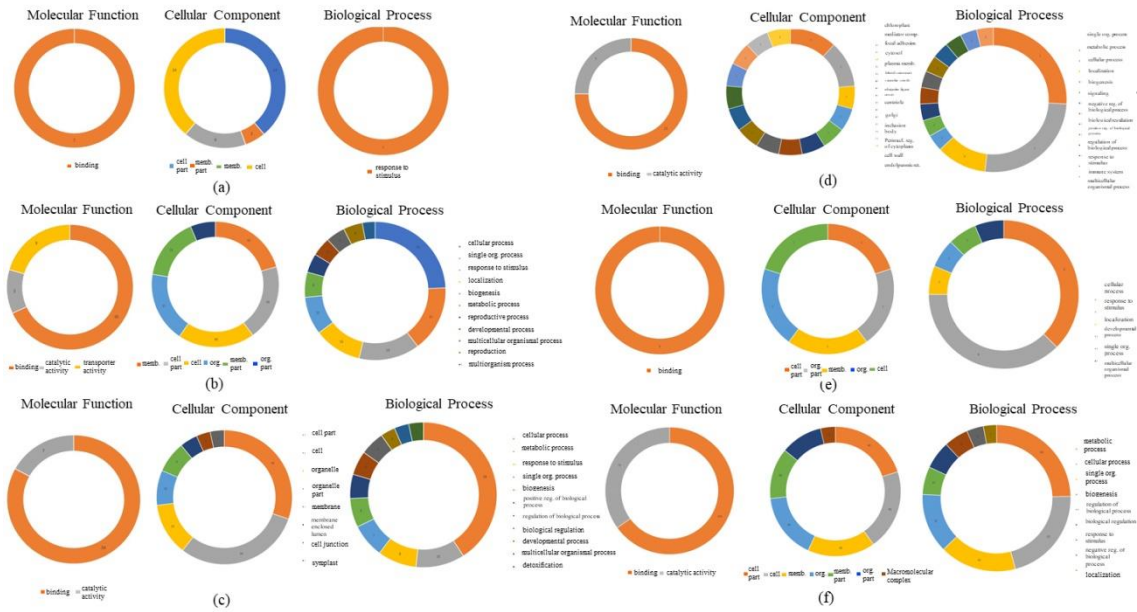


Table S1.1 Supplementary table for sHsps

ID	NCBI Accession No.	Physical position on cucumber genome			Protein length (aa)	pI	Molecular weight (Da)	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjusHsp-01	XP_015867231.1	1	17,443	18,622	233	7.80	25992.52	54.73	unstable
ZjusHsp-02	XP_015884201.1	1	13,417,956	13,419,326	136	5.36	15662.82	65.27	unstable
ZjusHsp-03	XP_015885915.1	1	14,809,284	14,809,754	130	6.20	14994.84	56.30	unstable
ZjusHsp-04	XP_015898099.1	1	33,614,437	33,616,255	205	5.24	23658.59	52.83	unstable
ZjusHsp-05	XP_015898108.1	1	33,614,589	33,616,103	193	5.12	22396.19	56.12	unstable
ZjusHsp-06	XP_015902194.1	1	36,991,693	36,993,682	160	6.75	17847.34	50.58	unstable
ZjusHsp-07	XP_015902201.1	1	36,991,693	36,993,682	160	6.75	17847.34	50.58	unstable
ZjusHsp-08	XP_015870830.1	1	41,450,889	41,452,383	295	9.65	33030.58	46.31	unstable
ZjusHsp-09	XP_015873299.1	2	1,756,803	1,758,345	310	9.57	33758.54	35.86	stable
ZjusHsp-10	XP_015873885.1	2	7,094,694	7,095,817	156	8.80	17940.48	39.65	stable
ZjusHsp-11	XP_015873886.1	2	7,096,668	7,097,686	148	4.60	16705.70	49.59	unstable
ZjusHsp-12	XP_015873883.1	2	7,099,593	7,100,540	159	5.56	18243.63	49.70	unstable
ZjusHsp-13	XP_015873884.1	2	7,101,398	7,102,443	156	8.83	17863.39	38.73	stable
ZjusHsp-14	XP_015873864.1	2	7,103,197	7,104,404	150	4.70	16929.05	49.55	unstable
ZjusHsp-15	XP_015873868.1	2	7,155,316	7,156,071	160	6.92	18209.79	55.76	unstable
ZjusHsp-16	XP_015873909.1	2	7,621,892	7,622,920	156	5.57	17894.24	56.42	unstable
ZjusHsp-17	XP_015873916.1	2	7,949,665	7,950,608	161	5.36	18380.68	51.13	unstable
ZjusHsp-18	XP_015873917.1	2	7,953,958	7,954,768	159	5.56	18286.61	53.17	unstable
ZjusHsp-19	XP_015873925.1	2	7,963,909	7,964,812	161	6.19	18452.88	47.61	unstable
ZjusHsp-20	XP_015873923.1	2	7,977,213	7,978,026	159	5.83	18216.56	50.35	unstable
ZjusHsp-21	XP_015873951.1	2	7,994,479	8,010,391	161	5.57	18452.89	55.22	unstable
ZjusHsp-22	XP_015873952.1	2	7,994,479	8,010,391	159	6.20	18205.62	54.92	unstable
ZjusHsp-23	XP_015873953.1	2	8,005,199	8,006,129	159	6.20	18191.60	55.27	unstable
ZjusHsp-24	XP_015873905.1	2	8,012,202	8,013,156	160	6.19	18219.56	52.58	unstable
ZjusHsp-25	XP_015873906.1	2	8,015,273	8,016,331	159	5.36	18196.48	50.95	unstable
ZjusHsp-26	XP_015874125.1	2	9,585,329	9,586,381	157	5.83	17763.11	55.84	unstable
ZjusHsp-27	XP_015875198.1	2	21,963,665	21,967,972	206	6.30	22093.40	37.73	stable
ZjusHsp-28	XP_015875199.1	2	21,963,665	21,967,972	165	5.61	17824.50	30.24	stable
ZjusHsp-29	XP_015875197.1	2	21,970,394	21,973,585	423	6.11	46744.17	34.70	stable
ZjusHsp-30	XP_015875511.1	2	23,897,270	23,898,623	212	9.27	24638.74	28.13	stable
ZjusHsp-31	XP_015877332.1	3	14,763,411	14,764,636	161	9.35	18718.12	68.49	unstable
ZjusHsp-32	XP_015877333.1	3	14,764,560	14,765,880	158	5.73	17849.06	55.89	unstable
ZjusHsp-33	XP_015877344.1	3	15,350,897	15,351,918	161	6.86	18362.75	46.62	unstable
ZjusHsp-34	XP_015877801.1	3	20,621,416	20,622,930	219	5.85	24483.51	53.03	unstable
ZjusHsp-35	XP_015877802.1	3	20,621,416	20,622,930	218	5.60	24427.44	53.62	unstable
ZjusHsp-36	XP_015877905.1	3	21,313,034	21,314,686	219	5.85	24483.51	53.03	unstable
ZjusHsp-37	XP_015877906.1	3	21,313,034	21,314,686	218	5.60	24427.44	53.62	unstable
ZjusHsp-38	XP_015878626.1	3	26,151,311	26,153,251	233	7.80	25992.52	54.73	unstable
ZjusHsp-39	XP_015879034.1	4	1,580,681	1,582,526	210	9.02	23830.15	53.05	unstable
ZjusHsp-40	XP_015879026.1	4	1,683,552	1,684,362	138	5.45	15612.83	36.75	stable
ZjusHsp-41	XP_015879741.1	4	7,856,672	7,858,637	259	5.77	29312.74	42.21	unstable
ZjusHsp-42	XP_015880019.1	4	10,008,821	10,017,366	466	5.04	51939.06	48.48	unstable
ZjusHsp-43	XP_015880020.1	4	10,008,821	10,017,366	466	5.04	51939.06	48.48	unstable
ZjusHsp-44	XP_015880021.1	4	10,008,821	10,017,366	461	5.04	51432.55	49.08	unstable
ZjusHsp-45	XP_015881310.1	4	26,452,230	26,456,643	260	8.93	28769.74	60.39	unstable
ZjusHsp-46	XP_015883985.1	5	30,942,558	30,943,993	208	6.85	23222.64	26.31	stable
ZjusHsp-47	XP_015883987.1	5	30,946,139	30,947,805	163	8.67	18317.32	25.69	stable
ZjusHsp-48	XP_015883946.1	5	30,950,957	30,951,870	143	9.89	16931.35	44.70	unstable
ZjusHsp-49	XP_015883989.1	5	30,965,594	30,967,024	189	9.27	22211.82	29.72	stable
ZjusHsp-50	XP_015883991.1	5	30,965,594	30,967,024	156	9.73	18065.26	31.27	stable
ZjusHsp-51	XP_015883992.1	5	30,971,683	30,973,190	161	5.49	18266.37	42.66	unstable
ZjusHsp-52	XP_015883986.1	5	30,975,676	30,977,138	172	9.19	19408.59	43.96	unstable
ZjusHsp-53	XP_015883948.1	5	30,978,709	30,980,612	256	9.65	28666.46	24.84	stable
ZjusHsp-54	XP_015884114.1	6	189,168	192,165	150	6.27	16385.68	44.55	unstable
ZjusHsp-55	XP_015884424.1	6	2,542,593	2,543,860	163	6.75	18397.22	40.53	unstable
ZjusHsp-56	XP_015884425.1	6	2,544,258	2,545,584	159	6.32	17812.31	35.11	stable
ZjusHsp-57	XP_015884537.1	6	2,546,454	2,547,542	156	5.93	17353.97	40.24	unstable
ZjusHsp-58	XP_015886428.1	6	23,787,852	23,789,772	427	5.01	48257.82	48.16	unstable
ZjusHsp-59	XP_015888179.1	7	22,172,534	22,178,103	248	6.09	27470.50	46.56	unstable
ZjusHsp-60	XP_015889508.1	8	5,314,425	5,320,913	518	5.58	56599.16	44.04	unstable
ZjusHsp-61	XP_015889509.1	8	5,314,425	5,320,913	512	5.65	55857.36	42.50	unstable
ZjusHsp-62	XP_015889497.1	8	5,431,194	5,432,296	195	5.68	22373.57	47.61	unstable
ZjusHsp-63	XP_015889609.1	8	5,862,773	5,869,994	512	5.65	55857.36	42.50	unstable
ZjusHsp-64	XP_015889611.1	8	5,862,773	5,869,994	512	5.65	55857.36	42.50	unstable
ZjusHsp-65	XP_015891512.1	9	1,711,294	1,711,888	164	7.88	18172.69	35.84	stable

Table S1.1 Continued

ID	NCBI Accession No.	Physical position on cucumber genome			Protein length (aa)	pI	Molecular weight (Da)	Instability index	Stable or unstable
		Chr.	Start position (bp)	End position (bp)					
ZjusHsp-66	XP_015894503.1	10	4,057,541	4,059,162	248	9.38	28053.85	42.61	unstable
ZjusHsp-67	XP_015898443.1	12	3,756,274	3,757,219	156	5.83	17761.02	63.17	unstable
ZjusHsp-68	XP_015872242.1	scaffold	1,081	1,664	161	5.16	17978.22	42.20	unstable
ZjusHsp-69	XP_015872307.1	scaffold	1,679	2,174	137	6.20	15315.77	71.18	unstable
ZjusHsp-70	XP_015872060.1	scaffold	1,892	2,428	148	5.92	16527.59	23.66	stable
ZjusHsp-71	XP_015902986.1	scaffold	61,739	63,761	339	9.38	37791.72	41.12	unstable
ZjusHsp-72	XP_015900296.1	scaffold	346,182	347,349	178	9.24	19798.80	46.99	unstable

Table S1.2 Supplementary table for Hsp40

ID	NCBI Accession No.	Physical position on Ziziphus jujuba genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End position (bp)					
ZjuHsp40-01	XP_015889870.1	Chr1	1.920.757	1.928.370	443	49032,34	9,15	37,60	stable
ZjuHsp40-02	XP_015877431.1	Chr1	6.524.888	6.529.023	524	59743,13	5,23	70,76	unstable
ZjuHsp40-03	XP_015877439.1	Chr1	6.524.888	6.529.023	510	58112,44	5,31	68,19	unstable
ZjuHsp40-04	XP_015881196.1	Chr1	9.672.150	9.672.638	162	18074,06	9,33	81,24	unstable
ZjuHsp40-05	XP_015881758.1	Chr1	9.700.851	9.701.559	162	18074,06	9,33	81,24	unstable
ZjuHsp40-06	XP_015884193.1	Chr1	14.040.692	14.043.271	265	30681,49	9,47	44,93	unstable
ZjuHsp40-07	XP_015890449.1	Chr1	21.959.293	21.962.225	347	38035,36	9,05	40,19	unstable
ZjuHsp40-08	XP_015902400.1	Chr1	37.042.566	37.057.181	272	30262,36	5,29	53,85	unstable
ZjuHsp40-09	XP_015902408.1	Chr1	37.042.566	37.057.181	272	30284,41	5,51	53,29	unstable
ZjuHsp40-10	XP_015902418.1	Chr1	37.042.566	37.057.181	272	30248,33	5,29	53,85	unstable
ZjuHsp40-11	XP_015902426.1	Chr1	37.042.566	37.057.181	271	29714,70	5,38	54,26	unstable
ZjuHsp40-12	XP_015902435.1	Chr1	37.042.566	37.057.181	271	29736,75	5,61	53,71	unstable
ZjuHsp40-13	XP_015902441.1	Chr1	37.042.566	37.057.181	264	30609,11	5,19	68,19	unstable
ZjuHsp40-14	XP_015902449.1	Chr1	37.042.566	37.057.181	247	27287,85	5,27	58,61	unstable
ZjuHsp40-15	XP_015902456.1	Chr1	37.042.566	37.057.181	234	26982,68	5,02	71,49	unstable
ZjuHsp40-16	XP_015902464.1	Chr1	37.042.566	37.057.181	223	24986,31	5,38	66,16	unstable
ZjuHsp40-17	XP_015867336.1	Chr1	39.529.130	39.532.079	337	36974,74	8,36	47,12	unstable
ZjuHsp40-18	XP_015868951.1	Chr1	40.069.865	40.071.906	159	17930,00	5,15	43,75	unstable
ZjuHsp40-19	XP_015870905.1	Chr1	41.343.01	41.349.697	505	53826,85	8,96	41,12	unstable
ZjuHsp40-20	XP_015873970.1	Chr2	8.514.154	8.516.983	312	35595,69	6,35	70,05	unstable
ZjuHsp40-21	XP_015873971.1	Chr2	8.514.155	8.516.984	301	34338,24	6,35	72,38	unstable
ZjuHsp40-22	XP_015874199.1	Chr2	10.402.206	10.464.088	447	49302,80	8,67	41,57	unstable
ZjuHsp40-23	XP_015874150.1	Chr2	10.611.700	10.614.849	134	16075,87	4,59	45,53	unstable
ZjuHsp40-24	XP_015874479.1	Chr2	16.163.649	16.168.225	971	111239,95	7,22	45,94	unstable
ZjuHsp40-25	XP_015874812.1	Chr2	19.238.899	19.240.485	364	40775,60	8,56	50,04	unstable
ZjuHsp40-26	XP_015875227.1	Chr2	21.792.911	21.795.327	249	27588,23	6,13	45,50	unstable
ZjuHsp40-27	XP_015875310.1	Chr2	22.873.480	22.878.294	1151	128809,32	8,32	39,68	stable
ZjuHsp40-28	XP_015875311.1	Chr2	22.873.480	22.878.294	1151	128809,32	8,32	39,68	stable
ZjuHsp40-29	XP_015875799.1	Chr2	22.873.480	22.878.294	1329	145397,34	5,79	41,55	unstable
ZjuHsp40-30	XP_015875800.1	Chr2	26.342.438	26.351.164	1294	141475,9	5,74	42,10	unstable
ZjuHsp40-31	XP_015876529.1	Chr3	4.892.874	4.896.713	418	46653,66	6,06	38,70	stable
ZjuHsp40-32	XP_015877084.1	Chr3	10.130.785	10.134.592	112	11970,91	10,17	21,63	stable
ZjuHsp40-33	XP_015878240.1	Chr3	23.847.375	23.851.898	783	87981,89	9,11	35,79	stable
ZjuHsp40-34	XP_015878364.1	Chr3	24.820.963	24.824.575	135	15773,73	5,56	33,30	stable
ZjuHsp40-35	XP_015878365.1	Chr3	24.820.963	24.824.575	133	15597,48	5,35	30,35	stable
ZjuHsp40-36	XP_015878366.1	Chr3	24.820.963	24.824.575	119	13888,63	5,52	27,84	stable
ZjuHsp40-37	XP_015878368.1	Chr3	24.820.963	24.824.575	109	12556,10	5,76	35,56	stable
ZjuHsp40-38	XP_015878535.1	Chr3	25.487.440	25.491.052	135	15872,86	5,81	33,93	stable
ZjuHsp40-39	XP_015878536.1	Chr3	25.487.440	25.491.052	133	15696,61	5,56	30,98	stable
ZjuHsp40-40	XP_015878537.1	Chr3	25.487.440	25.491.052	109	12655,24	6,06	36,34	stable
ZjuHsp40-41	XP_015879312.1	Chr4	3.540.312	3.542.001	302	34635,32	8,48	39,91	stable
ZjuHsp40-42	XP_015879479.1	Chr4	5.363.545	5.365.448	275	30039,49	8,73	46,49	unstable
ZjuHsp40-43	XP_015879991.1	Chr4	9.762.337	9.769.358	411	45968,15	5,68	41,97	unstable
ZjuHsp40-44	XP_015882178.1	Chr5	6.804.725	6.808.895	808	91014,12	9,40	42,65	unstable
ZjuHsp40-45	XP_015883263.1	Chr5	20.100.704	20.104.674	598	68475,16	5,25	44,93	unstable
ZjuHsp40-46	XP_015883264.1	Chr5	20.100.704	20.104.674	598	68475,16	5,25	44,93	unstable
ZjuHsp40-47	XP_015883448.1	Chr5	24.512.652	24.525.088	695	78752,28	6,67	52,65	unstable
ZjuHsp40-48	XP_015883456.1	Chr5	24.882.744	24.894.646	141	16061,02	8,83	55,80	unstable
ZjuHsp40-49	XP_015883498.1	Chr5	25.874.144	25.874.530	128	14805,81	9,60	59,60	unstable
ZjuHsp40-50	XP_015883499.1	Chr5	25.900.364	25.900.750	128	14773,84	9,46	62,01	unstable
ZjuHsp40-51	XP_015884258.1	Chr6	1.196.089	1.199.559	379	42859,09	8,43	36,91	stable
ZjuHsp40-52	XP_015884259.1	Chr6	1.200.598	1.204.486	379	42859,09	8,43	36,91	stable
ZjuHsp40-53	XP_015884444.1	Chr6	2.463.166	2.465.111	218	24378,33	4,93	57,93	unstable
ZjuHsp40-54	XP_015884566.1	Chr6	3.436.924	3.443.135	1483	168636,66	4,72	46,66	unstable
ZjuHsp40-55	XP_015884702.1	Chr6	3.454.253	3.461.451	1514	171823,1	4,71	45,60	unstable
ZjuHsp40-56	XP_015884703.1	Chr6	3.454.253	3.461.451	1514	171823,1	4,71	45,60	unstable
ZjuHsp40-57	XP_015884704.1	Chr6	3.454.253	3.461.451	1492	169654,69	4,71	45,38	unstable
ZjuHsp40-58	XP_015884558.1	Chr6	3.794.360	3.799.209	742	82030,00	6,34	52,54	unstable

Table S1.2 Continued

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp40-59	XP_015884559.1	Chr6	3.794.360	3.799.209	741	81903,83	6,51	52,59	unstable
ZjuHsp40-60	XP_015884560.1	Chr6	3.794.360	3.799.209	683	75305,49	7,23	54,23	unstable
ZjuHsp40-61	XP_015884858.1	Chr6	5.123.492	2.124.311	171	18705,06	9,87	52,14	unstable
ZjuHsp40-62	XP_015885115.1	Chr6	6.507.398	6.511.883	239	28768,87	9,57	52,57	unstable
ZjuHsp40-63	XP_015885116.1	Chr6	6.507.398	6.511.883	225	27008,88	9,52	52,12	unstable
ZjuHsp40-64	XP_015885634.1	Chr6	11.236.708	11.241.256	269	30180,71	9,54	62,78	unstable
ZjuHsp40-65	XP_015885723.1	Chr6	11.823.298	11.824.479	332	37026,64	8,42	60,54	unstable
ZjuHsp40-66	XP_015886703.1	Chr7	1.598.081	1.601.390	503	55015,17	9,,17	55,48	unstable
ZjuHsp40-67	XP_015887231.1	Chr7	10.952.587	10.955.086	212	24763,97	9,83	54,62	unstable
ZjuHsp40-68	XP_015887681.1	Chr7	15.610.750	15.614.602	416	46629,77	6,87	35,22	stable
ZjuHsp40-69	XP_015887682.1	Chr7	15.610.750	15.614.602	416	46629,77	6,87	35,22	stable
ZjuHsp40-70	XP_015887683.1	Chr7	15.610.750	15.614.602	416	46629,77	6,87	35,22	stable
ZjuHsp40-71	XP_015887673.1	Chr7	15.867.584	15.870.460	273	32399,91	9,60	52,52	unstable
ZjuHsp40-72	XP_015888522.1	Chr7	25.597.996	25.601.549	386	43918,59	5,54	38,80	stable
ZjuHsp40-73	XP_015889641.1	Chr8	6.159.425	6.160.458	199	22048,09	9,45	46,67	unstable
ZjuHsp40-74	XP_015890020.1	Chr8	8.006.947	8.013.758	1513	170702,86	5,67	40,04	unstable
ZjuHsp40-75	XP_015890356.1	Chr8	10.061.825	10.066.289	535	61107,36	8,33	49,93	unstable
ZjuHsp40-76	XP_015890357.1	Chr8	10.061.825	10.066.289	534	60951,17	8,16	49,24	unstable
ZjuHsp40-77	XP_015890791.1	Chr8	13.895.761	13.902.743	446	47751,30	9,25	39,98	stable
ZjuHsp40-78	XP_015890839.1	Chr8	14.136.470	14.146.108	978	107398,36	6,02	53,66	unstable
ZjuHsp40-79	XP_015890929.1	Chr8	15.881.746	15.882.323	166	19349,40	9,59	66,06	unstable
ZjuHsp40-80	XP_015891015.1	Chr8	17.902.163	17.907.016	288	32949,79	9,03	51,28	unstable
ZjuHsp40-81	XP_015891703.1	Chr9	2.925.987	2.928.786	562	62357,49	8,77	47,60	unstable
ZjuHsp40-82	XP_015891800.1	Chr9	3.720.631	3.724.977	136	15193,41	10,10	30,23	stable
ZjuHsp40-83	XP_015891801.1	Chr9	3.720.631	3.724.977	130	14416,52	10,06	31,96	stable
ZjuHsp40-84	XP_015891802.1	Chr9	3.720.631	3.724.977	121	13785,49	9,22	46,94	unstable
ZjuHsp40-85	XP_015891907.1	Chr9	3.917.160	3.920.036	562	62357,49	8,77	47,60	unstable
ZjuHsp40-86	XP_015892024.1	Chr9	3.954.866	3.958.348	348	39377,84	6,19	44,42	unstable
ZjuHsp40-87	XP_015891944.1	Chr9	4.171.423	4.172.880	152	17789,15	5,60	54,83	unstable
ZjuHsp40-88	XP_015892587.1	Chr9	8.559.291	8.564.174	340	38274,67	6,30	32,10	stable
ZjuHsp40-89	XP_015893017.1	Chr9	15.109.107	15.116.426	808	89612,68	9,12	30,77	stable
ZjuHsp40-90	XP_015893251.1	Chr9	18.921.988	18.924.264	301	33605,24	9,13	42,61	unstable
ZjuHsp40-91	XP_015893405.1	Chr9	20.042.112	20.042.697	121	14166,29	9,45	49,85	unstable
ZjuHsp40-92	XP_015893415.1	Chr9	20.172.390	20.172.717	109	11860,28	7,85	41,33	unstable
ZjuHsp40-93	XP_015893516.1	Chr9	21.148.149	21.149.166	176	20462,47	9,71	60,97	unstable
ZjuHsp40-94	XP_015893513.1	Chr9	21.157.818	21.159.111	194	22581,07	10,06	53,12	unstable
ZjuHsp40-95	XP_015894029.1	Chr10	799.463	810.649	212	23539,30	4,88	57,78	unstable
ZjuHsp40-96	XP_015894860.1	Chr10	7.559.178	7.561.619	332	36719,64	9,31	38,53	stable
ZjuHsp40-97	XP_015895464.1	Chr10	17.398.617	17.399.807	91	10543,58	5,76	54,03	unstable
ZjuHsp40-98	XP_015895471.1	Chr10	17.439.815	17.443.987	178	20427,65	5,14	56,05	unstable
ZjuHsp40-99	XP_015895555.1	Chr10	18.000.284	18.005.870	413	45716,20	5,92	34,37	stable
ZjuHsp40-100	XP_015896607.1	Chr11	6.199.935	6.206.878	540	59981,33	9,05	35,36	stable
ZjuHsp40-101	XP_015897225.1	Chr11	13.816.445	13.821.483	580	63616,26	9,15	35,40	stable
ZjuHsp40-102	XP_015897226.1	Chr11	13.816.445	13.821.483	492	53310,42	9,21	34,28	stable
ZjuHsp40-103	XP_015898091.1	Chr12	1.379.389	1.386.520	1517	165372,14	8,22	48,19	unstable
ZjuHsp40-104	XP_015898179.1	Chr12	1.934.574	1.949.037	2577	281791,02	5,73	46,54	unstable
ZjuHsp40-105	XP_015898180.1	Chr12	1.934.574	1.949.037	2265	247428,02	5,47	47,56	unstable
ZjuHsp40-106	XP_015898779.1	Chr12	5.730.171	5.736.113	709	78316,00	8,93	34,74	stable
ZjuHsp40-107	XP_015898780.1	Chr12	5.730.171	5.736.113	621	68400,60	8,85	35,76	stable
ZjuHsp40-108	XP_015899025.1	Chr12	7.341.758	7.345.841	288	32819,95	8,47	54,51	unstable
ZjuHsp40-109	XP_015899368.1	Chr12	9.793.794	9.797.616	323	36792,03	9,03	47,85	unstable
ZjuHsp40-110	XP_015899418.1	Chr12	10.442.487	10.444.228	110	12000,89	10,51	43,10	unstable
ZjuHsp40-111	XP_015899774.1	Chr12	15.048.895	15.051.591	197	22434,82	9,62	48,26	unstable
ZjuHsp40-112	XP_015899837.1	Chr12	17.316.450	17.321.500	484	53584,17	6,49	41,07	unstable
ZjuHsp40-113	XP_015899909.1	Chr12	17.501.021	17.504.109	349	40685,23	9,01	60,07	unstable
ZjuHsp40-114	XP_015899984.1	Chr12	18.422.176	18.424.077	276	31856,23	9,56	57,63	unstable
ZjuHsp40-115	XP_015872623.1	scaffold	1	1.999	127	14783,13	5,92	63,99	unstable
ZjuHsp40-116	XP_015870866.1	scaffold	9	7.762	476	54635,79	8,13	50,43	unstable
ZjuHsp40-117	XP_015870632.1	scaffold	21	8.491	476	54635,79	8,13	50,43	unstable
ZjuHsp40-118	XP_015872367.1	scaffold	25	2.064	361	41227,48	9,27	49,28	unstable
ZjuHsp40-119	XP_015870646.1	scaffold	82	8.553	476	54635,79	8,13	50,43	unstable
ZjuHsp40-120	XP_015871033.1	scaffold	105	5.356	589	66928,93	9,09	53,90	unstable
ZjuHsp40-121	XP_015872846.1	scaffold	117	894	180	20523,45	9,23	54,20	unstable
ZjuHsp40-122	XP_015867831.1	scaffold	156	5385	740	82486,40	9,02	49,24	unstable
ZjuHsp40-123	XP_015867832.1	scaffold	156	5385	740	82486,40	9,02	49,24	unstable
ZjuHsp40-124	XP_015870971.1	scaffold	253	5.501	589	66928,93	9,09	53,90	unstable
ZjuHsp40-125	XP_015871004.1	scaffold	256	5.504	589	66928,93	9,09	53,90	unstable
ZjuHsp40-126	XP_015872197.1	scaffold	304	2.868	279	32150,11	8,84	46,01	unstable
ZjuHsp40-127	XP_015870639.1	scaffold	462	8.927	476	54635,79	8,13	50,43	unstable
ZjuHsp40-128	XP_015870638.1	scaffold	473	8.938	476	54606,79	8,13	50,03	unstable
ZjuHsp40-129	XP_015868910.1	scaffold	608	10873	579	66650,32	8,32	50,81	unstable
ZjuHsp40-130	XP_015872312.1	scaffold	662	1.688	116	13737,85	9,62	43,30	unstable
ZjuHsp40-131	XP_015870975.1	scaffold	806	5.947	589	66928,93	9,09	53,90	unstable

Table S1.2 Continued

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp40-132	XP_015867540.1	scaffold	825	11019	579	66621.32	8,32	50,48	unstable
ZjuHsp40-133	XP_015871063.1	scaffold	1.335	6.586	589	66928,93	9,09	53,90	unstable
ZjuHsp40-134	XP_015870534.1	scaffold	1.409	6.657	589	66928,63	9,09	53,90	unstable
ZjuHsp40-135	XP_015870212.1	scaffold	1.447	11.587	579	66621,32	8,32	50,48	unstable
ZjuHsp40-136	XP_015872408.1	scaffold	1.567	1.989	141	15712,46	5,11	44,28	unstable
ZjuHsp40-137	XP_015870505.1	scaffold	2.678	7.922	589	66928,63	9,09	53,90	unstable
ZjuHsp40-138	XP_015869039.1	scaffold	6.656	9.994	205	23053,48	6,53	28,21	stable
ZjuHsp40-139	XP_015870728.1	scaffold	7.694	8.471	180	20523,45	9,23	54,20	unstable
ZjuHsp40-140	XP_015865970.1	scaffold	10.696	12.769	381	42486,40	8,12	34,56	stable
ZjuHsp40-141	XP_015869662.1	scaffold	12.265	14.651	159	18149,23	5,15	48,29	unstable
ZjuHsp40-142	XP_015901698.1	scaffold	13.633	18.934	589	66928,93	9,09	53,90	unstable
ZjuHsp40-143	XP_015868843.1	scaffold	15.004	18.658	107	12755,41	5,33	40,66	unstable
ZjuHsp40-144	XP_015867529.1	scaffold	17.163	19.101	261	29913,17	5,83	62,34	unstable
ZjuHsp40-145	XP_015866342.1	scaffold	44.385	53.223	893	101349,44	6,16	54,69	unstable
ZjuHsp40-146	XP_015900255.1	scaffold	44.895	51.632	116	12869,65	9,56	50,25	unstable
ZjuHsp40-147	XP_015900256.1	scaffold	44.895	51.632	116	12869,65	9,56	50,25	unstable
ZjuHsp40-148	XP_015900258.1	scaffold	44.895	51.632	116	12869,65	9,56	50,25	unstable
ZjuHsp40-149	XP_015865971.1	scaffold	49.44	58.409	827	93563,01	5,71	54,62	unstable
ZjuHsp40-150	XP_015865618.1	scaffold	54.324	56.931	643	73263,37	9,45	45,70	unstable
ZjuHsp40-151	XP_015901044.1	scaffold	54.505	61.389	336	37878,00	6,27	55,77	unstable
ZjuHsp40-152	XP_015901046.1	scaffold	54.505	61.389	336	37878,00	6,27	55,77	unstable
ZjuHsp40-153	XP_015867285.1	scaffold	59.005	68.195	740	82475,29	9,02	48,98	unstable
ZjuHsp40-154	XP_015867286.1	scaffold	59.005	68.195	740	82475,29	9,02	48,98	unstable
ZjuHsp40-155	XP_015867287.1	scaffold	59.005	68.195	740	82475,29	9,02	48,98	unstable
ZjuHsp40-156	XP_015902171.1	scaffold	67.599	74.685	559	61216,10	9,29	51,00	unstable
ZjuHsp40-157	XP_015902468.1	scaffold	87.607	101.88	2577	281791,02	5,73	46,54	unstable
ZjuHsp40-158	XP_015902469.1	scaffold	87.607	101.88	2265	247428,02	5,47	47,56	unstable
ZjuHsp40-159	XP_015865789.1	scaffold	90.101	95.615	221	24947,20	5,30	60,08	unstable
ZjuHsp40-160	XP_015865790.1	scaffold	90.101	95.615	183	20483,07	4,78	59,44	unstable
ZjuHsp40-161	XP_015865791.1	scaffold	90.101	95.615	183	20483,07	4,78	59,44	unstable
ZjuHsp40-162	XP_015865792.1	scaffold	90.101	95.615	183	20483,07	4,78	59,44	unstable
ZjuHsp40-163	XP_015866343.1	scaffold	90.384	91.545	132	14530,08	6,84	54,17	unstable
ZjuHsp40-164	XP_015865785.1	scaffold	97.127	97.893	188	21012,59	4,86	61,18	unstable
ZjuHsp40-165	XP_015866578.1	scaffold	103.404	106.609	364	40838,86	8,58	44,28	unstable
ZjuHsp40-166	XP_015866580.1	scaffold	103.404	106.609	364	40838,86	8,58	44,28	unstable
ZjuHsp40-167	XP_015866581.1	scaffold	103.404	106.609	364	40838,86	8,58	44,28	unstable
ZjuHsp40-168	XP_015866582.1	scaffold	103.404	106.609	254	40838,86	8,58	44,28	unstable
ZjuHsp40-169	XP_015866141.1	scaffold	124.414	126.344	252	28843,61	8,84	49,80	unstable
ZjuHsp40-170	XP_015900398.1	scaffold	169.285	172.042	270	31090,37	7,54	53,33	unstable
ZjuHsp40-171	XP_015901032.1	scaffold	180.993	184.548	116	12869,65	9,56	50,25	unstable
ZjuHsp40-172	XP_015901034.1	scaffold	180.993	184.548	116	12869,65	9,56	50,25	unstable
ZjuHsp40-173	XP_015901645.1	scaffold	221.896	225.979	535	61107,36	8,33	49,93	unstable
ZjuHsp40-174	XP_015901646.1	scaffold	221.896	225.979	534	60951,17	8,16	49,24	unstable

Table S1.3 Supplementary table for Hsp60

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp60-02	XP_015887708.1	1	17,419,097	17,425,886	527	57083.94	5.75	30.83	stable
ZjuHsp60-03	XP_015901189.1	1	36,221,836	36,232,192	1615	180054.38	5.60	45.97	unstable
ZjuHsp60-04	XP_015901843.1	1	36,589,479	36,599,070	1802	201117.37	5.60	47.27	unstable
ZjuHsp60-05	XP_015873252.1	2	1,613,875	1,620,849	563	60705.40	6.20	34.98	stable
ZjuHsp60-06	XP_015873356.1	2	2,753,877	2,760,851	563	60705.40	6.20	34.98	stable
ZjuHsp60-07	XP_015873560.1	2	4,884,924	4,940,964	83	8969.57	9.57	22.27	stable
ZjuHsp60-08	XP_015873558.1	2	4,884,924	4,940,964	97	10712.44	8.01	22.32	stable
ZjuHsp60-09	XP_015874553.1	2	16,751,415	16,756,049	586	61891.79	5.15	29.76	stable
ZjuHsp60-10	XP_015878843.1	4	37,622	42,123	603	64124.42	5.72	28.92	stable
ZjuHsp60-11	XP_015879696.1	4	6,948,926	6,956,654	557	60453.78	5.75	37.48	stable
ZjuHsp60-12	XP_015880526.1	4	15,679,794	15,683,172	334	37405.26	6.41	32.59	stable
ZjuHsp60-13	XP_015882951.1	5	14,661,454	14,664,142	535	57736.25	7.14	37.03	stable
ZjuHsp60-14	XP_015886302.1	6	22,979,312	22,989,943	1666	185430.49	5.43	42.59	unstable
ZjuHsp60-15	XP_015888945.1	8	1,928,512	1,940,907	1832	203159.18	5.86	49.50	unstable
ZjuHsp60-16	XP_015888946.1	8	1,928,512	1,940,907	1832	203159.18	5.86	49.50	unstable
ZjuHsp60-17	XP_015888947.1	8	1,928,512	1,940,907	1832	203159.18	5.86	49.50	unstable
ZjuHsp60-18	XP_015889450.1	8	4,955,499	4,962,529	544	59090.43	6.04	28.60	stable
ZjuHsp60-19	XP_015890662.1	8	13,094,597	13,101,712	573	61175.39	5.87	23.34	stable
ZjuHsp60-20	XP_015892245.1	9	5,602,821	5,609,644	575	61691.08	5.72	29.18	stable

Table S1.3 Continued

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp60-21	XP_015894543.1	10	4,236,069	4,244,458	535	59179.27	5.51	40.74	unstable
ZjuHsp60-22	XP_015894544.1	10	4,236,069	4,244,458	535	59179.27	5.51	40.74	unstable
ZjuHsp60-23	XP_015894449.1	10	4,265,981	4,269,434	474	53351.30	5.19	33.13	stable
ZjuHsp60-24	XP_015895290.1	10	14,763,882	14,769,582	619	66936.60	8.91	38.52	stable
ZjuHsp60-25	XP_015895291.1	10	14,763,882	14,769,582	537	57893.56	7.58	30.93	stable
ZjuHsp60-26	XP_015895483.1	10	17,279,839	17,282,925	98	10494.28	8.76	25.65	stable
ZjuHsp60-27	XP_015895458.1	10	17,282,589	17,283,509	138	15510.27	9.48	24.34	stable
ZjuHsp60-28	XP_015899362.1	12	9,758,336	9,765,285	392	42242.47	5.62	35.76	stable
ZjuHsp60-29	XP_015871454.1	scaffold	1	5,050	578	61613.97	5.71	21.28	stable
ZjuHsp60-30	XP_015870311.1	scaffold	294	8,196	544	58746.43	5.44	35.39	stable
ZjuHsp60-31	XP_015869850.1	scaffold	6,347	14,246	544	58746.43	5.44	35.39	stable
ZjuHsp60-32	XP_015869556.1	scaffold	15,825	18,632	253	26477.43	8.83	18.26	stable
ZjuHsp60-33	XP_015867860.1	scaffold	16,368	18,189	82	8914.49	9.57	19.41	stable
ZjuHsp60-34	XP_015866923.1	scaffold	34,020	37,514	97	10756.54	8.01	22.32	stable
ZjuHsp60-35	XP_015867470.1	scaffold	46,200	49,079	253	26477.43	8.83	18.26	stable
ZjuHsp60-36	XP_015867471.1	scaffold	46,200	49,079	253	26477.43	8.83	18.26	stable
ZjuHsp60-37	XP_015866249.1	scaffold	72,925	76,475	135	14799.30	9.05	31.89	stable
ZjuHsp60-38	XP_015866274.1	scaffold	89,972	97,303	592	63455.39	6.46	25.56	stable
ZjuHsp60-39	XP_015866275.1	scaffold	89,972	97,303	550	59471.63	7.94	31.13	stable

Table S1.4 Supplementary table for Hsp70

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp70-01	XP_015892346.1	Chr1	26,731,209	26,733,985	654	71740.48	5,3	35.20	stable
ZjuHsp70-02	XP_015898589.1	Chr1	33,963,123	33,969,183	769	85921.44	5,46	47.49	unstable
ZjuHsp70-03	XP_015867532.1	Chr1	39,496,118	39,501,841	856	94335.98	5,21	43.30	unstable
ZjuHsp70-04	XP_015868485.1	Chr1	40,123,468	40,125,896	651	71213.74	5,4	30.15	stable
ZjuHsp70-05	XP_015869094.1	Chr1	40,127,705	40,130,207	655	71850.47	5,19	36.22	stable
ZjuHsp70-06	XP_015874072.1	Chr2	9,486,170	9,489,224	650	71180.70	5,18	31.68	stable
ZjuHsp70-07	XP_015875002.1	Chr2	21,279,708	21,280,490	146	16877.61	9,55	30.98	stable
ZjuHsp70-08	XP_015875014.1	Chr2	21,371,401	21,374,733	654	72534.44	5,19	30.98	stable
ZjuHsp70-09	XP_015875107.1	Chr2	21,377,178	21,380,028	638	71054.42	5,14	28.62	stable
ZjuHsp70-10	XP_015875846.1	Chr2	26,580,605	26,584,668	712	75880.63	5,18	28.59	stable
ZjuHsp70-11	XP_015876923.1	Chr3	8,647,593	8,650,878	828	92316.76	8,99	30.35	stable
ZjuHsp70-12	XP_015876979.1	Chr3	9,005,197	9,008,120	654	71511.93	5,12	33.60	stable
ZjuHsp70-13	XP_015876976.1	Chr3	9,028,820	9,031,390	648	70798.24	5,13	33.55	stable
ZjuHsp70-14	XP_015880901.1	Chr4	18,703,082	18,710,630	917	101489.10	5,23	42.43	unstable
ZjuHsp70-15	XP_015888210.1	Chr7	22,429,108	22,432,386	572	61852.25	5,44	35.06	stable
ZjuHsp70-16	XP_015892192.1	Chr9	6,725,850	6,728,056	438	49668.46	8,78	38.03	stable
ZjuHsp70-17	XP_015892501.1	Chr9	7,425,501	7,429,550	682	73379.30	6,02	41.50	unstable
ZjuHsp70-18	XP_015896049.1	Chr11	570,167	573,872	666	73360.17	5,1	28.72	stable
ZjuHsp70-19	XP_015897485.1	Chr11	15,648,197	15,651,321	646	70824.31	5,13	34.40	stable
ZjuHsp70-20	XP_015871808.1	NW	87	1,754	481	53608.39	4,88	30.96	stable
ZjuHsp70-21	XP_015870241.1	NW	917	3,108	570	62800.50	5,93	30.54	stable

Table S1.5 Supplementary table for Hsp90

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp90-01	XP_015880753.1	Chr1	9,084,836	9,088,074	699	80088.06	4,98	35.03	stable
ZjuHsp90-02	XP_015881024.1	Chr4	20,564,671	20,571,195	787	89794.26	5,32	35.54	stable
ZjuHsp90-03	XP_015884861.1	Chr6	5,093,600	5,098,652	817	93579.12	4,87	33.36	stable
ZjuHsp90-04	XP_015895264.1	Chr10	14,500,534	14,506,848	793	89783.12	4,96	44.21	unstable
ZjuHsp90-05	XP_015896451.1	Chr11	3,941,210	3,950,934	470	54518.34	5,38	42.88	unstable
ZjuHsp90-06	XP_015896503.1	Chr11	3,951,992	3,955,067	702	80851.93	5,00	41.31	unstable

Table S1.6 Supplementary table for Hsp100

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp100-01	XP_015873612.1	1	338.864	342.008	528	59753.39	5,65	45.1	unstable
ZjuHsp100-02	XP_015871972.1	1	342.600	346.334	499	56504.13	6,70	43.18	unstable
ZjuHsp100-03	XP_015900334.1	1	2.647.657	2.653.546	1104	123785.07	6,73	50.93	unstable
ZjuHsp100-04	XP_015901205.1	1	2.918.677	2.921.149	508	56905.45	8,26	57.69	unstable
ZjuHsp100-05	XP_015879473.1	1	8.198.014	8.206.869	583	64601.91	8,40	51.1	unstable
ZjuHsp100-06	XP_015879478.1	1	8.198.014	8.198.014	495	55057.08	6,51	53.31	unstable
ZjuHsp100-07	XP_015887830.1	1	17.460.215	17.467.566	887	99841.15	5,75	35.04	stable
ZjuHsp100-08	XP_015890094.1	1	20.379.301	20.392.479	743	81637.55	5,87	33.53	stable
ZjuHsp100-09	XP_015901372.1	1	36.139.233	36.143.333	426	47763.14	6,14	34.27	stable
ZjuHsp100-10	XP_015901928.1	1	36.735.781	36.737.520	331	38307.83	9,43	50.31	unstable
ZjuHsp100-11	XP_015902110.1	1	37.075.017	37.082.013	344	39925.46	9,16	55.82	unstable
ZjuHsp100-12	XP_015902684.1	1	37.263.000	37.309.141	5420	617359.98	5,22	42.79	unstable
ZjuHsp100-13	XP_015902703.1	1	37.333.036	37.379.093	5402	615166.37	5,21	42.72	unstable
ZjuHsp100-14	XP_015869493.1	1	40.869.292	40.884.522	914	100962.30	6,87	39.61	stable
ZjuHsp100-15	XP_015872358.1	2	35.865	44.357	432	48246.79	8,20	41.28	unstable
ZjuHsp100-16	XP_015872366.1	2	35.865	44.357	432	48246.79	8,20	41.28	unstable
ZjuHsp100-17	XP_015873622.1	2	5.433.960	5.447.306	1045	114147.84	9,28	35.41	stable
ZjuHsp100-18	XP_015873623.1	2	5.433.960	5.447.306	1015	110719.03	9,39	34.37	stable
ZjuHsp100-19	XP_015873715.1	2	6.573.855	6.579.554	951	105136.16	7,54	50.82	unstable
ZjuHsp100-20	XP_015873805.1	2	6.886.445	6.894.423	850	91896.52	8,76	35.8	stable
ZjuHsp100-21	XP_015873806.1	2	6.886.445	6.894.423	836	90324.73	8,76	35.47	stable
ZjuHsp100-22	XP_015874027.1	2	8.436.330	8.440.053	471	51817.81	5,73	36.86	stable
ZjuHsp100-23	XP_015874012.1	2	8.629.845	8.636.832	815	90385.78	8,03	34.8	stable
ZjuHsp100-24	XP_015874348.1	2	12.991.459	13.017.819	204	22144.62	9,73	24.46	stable
ZjuHsp100-25	XP_015874386.1	2	13.915.990	13.938.094	288	31821.87	9,55	27.98	stable
ZjuHsp100-26	XP_015874529.1	2	17.074.671	17.098.214	826	91877.94	5,04	43.9	unstable
ZjuHsp100-27	XP_015874684.1	2	18.283.724	18.288.950	420	47320.93	5,42	37.83	stable
ZjuHsp100-28	XP_015874664.1	2	18.294.299	18.298.166	429	48042.74	8,25	42.95	unstable
ZjuHsp100-29	XP_015874879.1	2	19.906.252	19.914.679	542	60191.26	6,08	49.11	unstable
ZjuHsp100-30	XP_015875105.1	2	21.221.686	21.226.918	423	47428.18	4,98	37.14	unstable
ZjuHsp100-31	XP_015875583.1	2	23.977.827	23.990.472	1242	143578.08	8,42	44.62	unstable
ZjuHsp100-32	XP_015875890.1	2	26.914.370	26.920.502	882	100415.84	8,68	51.34	unstable
ZjuHsp100-33	XP_015875944.1	2	27.497.177	27.499.583	231	25194.45	10,90	40.55	unstable
ZjuHsp100-34	XP_015876181.1	3	1.999.188	2.002.689	248	27954.93	8,58	45.06	unstable
ZjuHsp100-35	XP_015876359.1	3	3.901.631	3.907.133	4,32	48385.93	8,12	41.97	unstable
ZjuHsp100-36	XP_015876484.1	3	4.819.952	4.824.651	861	97216.88	6,39	52.02	unstable
ZjuHsp100-37	XP_015876621.1	3	5.985.559	5.991.097	4,32	48385.93	8,12	41.97	unstable
ZjuHsp100-38	XP_015876856.1	3	7.848.564	7.852.567	476	52046.09	5,45	34.95	stable
ZjuHsp100-39	XP_015876857.1	3	7.848.564	7.852.567	439	48163.89	5,95	32.01	stable
ZjuHsp100-40	XP_015877383.1	3	16.982.864	16.986.491	849	94424.42	6,45	51.07	unstable
ZjuHsp100-41	XP_015877854.1	3	20.973.051	20.976.589	237	25758.53	8,76	28.15	stable
ZjuHsp100-42	XP_015878309.1	3	24.470.247	24.479.044	839	93883.84	6,02	49.86	unstable
ZjuHsp100-43	XP_015878439.1	3	25.263.202	25.270.198	590	63969.51	6,51	36.15	Stable
ZjuHsp100-44	XP_015878588.1	3	25.642.018	25.648.147	644	71107.22	9,37	45.18	unstable
ZjuHsp100-45	XP_015878624.1	3	26.012.114	26.014.360	474	54302.00	5,80	40.59	unstable
ZjuHsp100-46	XP_015878601.1	3	26.016.320	26.021.322	394	43233.37	5,89	49.39	unstable
ZjuHsp100-47	XP_015878726.1	3	26.024.145	26.030.309	391	43052.34	5,69	53.71	unstable
ZjuHsp100-48	XP_015878727.1	3	26.024.145	26.030.309	391	43052.34	5,69	53.71	unstable
ZjuHsp100-49	XP_015879268.1	4	2.605.715	2.607.905	539	62001.57	6,12	38.92	stable
ZjuHsp100-50	XP_015879192.1	4	2.613.766	2.621.851	510	58962.34	7,18	41.46	unstable
ZjuHsp100-51	XP_015879394.1	4	4.287.714	4.291.184	681	74044.97	5,83	38.49	stable
ZjuHsp100-52	XP_015879422.1	4	4.911.891	4.914.226	477	54922.83	6,86	43.41	unstable
ZjuHsp100-53	XP_015879423.1	4	4.915.813	4.918.006	466	53660.32	7,67	41.1	unstable
ZjuHsp100-54	XP_015879421.1	4	4.918.274	4.920.548	483	55911.87	9,14	32.53	stable
ZjuHsp100-55	XP_015879403.1	4	4.927.352	4.929.751	519	59951.05	6,12	38.23	stable
ZjuHsp100-56	XP_015879405.1	4	4.951.770	4.953.998	515	59360.35	5,88	38.94	stable
ZjuHsp100-57	XP_015879764.1	4	8.133.901	8.139.549	878	99086.16	6,55	39.2	stable
ZjuHsp100-58	XP_015879922.1	4	8.897.420	8.900.523	594	64381.85	6,88	46.31	unstable
ZjuHsp100-59	XP_015880471.1	4	14.457.073	14.461.707	645	71420.74	9,77	51.73	unstable
ZjuHsp100-60	XP_015881315.1	4	26.224.949	26.230.554	693	74072.69	5,80	31.89	stable
ZjuHsp100-61	XP_015881807.1	5	3.369.013	3.373.584	317	35006.34	7,69	27	stable
ZjuHsp100-62	XP_015882043.1	5	5.844.772	5.854.140	1002	114462.50	6,46	39.78	stable
ZjuHsp100-63	XP_015882450.1	5	9.007.260	9.011.316	422	47244.43	5,27	37.76	stable
ZjuHsp100-64	XP_015882676.1	5	10.935.345	10.937.111	403	46594.92	5,52	51.15	unstable
ZjuHsp100-65	XP_015882672.1	5	10.951.940	10.958.930	526	60817.95	8,83	39.06	unstable

Table S1.6 Continued

ID	NCBI Accession No.	Physical position on <i>Ziziphos jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp100-66	XP_015882673.1	5	10.951.940	10.958.930	530	61215.47	8,89	38.68	unstable
ZjuHsp100-67	XP_015882664.1	5	10.959.664	10.961.080	382	44178.41	8,49	46.25	unstable
ZjuHsp100-68	XP_015882671.1	5	10.961.252	10.964.153	534	61522.66	8,85	44.97	unstable
ZjuHsp100-69	XP_015883276.1	5	20.922.198	20.961.607	297	33736.66	4,39	47.26	unstable
ZjuHsp100-70	XP_015883323.1	5	22.501.871	22.506.834	910	101398.66	5,83	40.4	unstable
ZjuHsp100-71	XP_015883324.1	5	22.501.871	22.506.834	910	101398.66	5,83	40.4	unstable
ZjuHsp100-72	XP_015884139.1	6	579.338	587.963	716	76923.83	6,16	36.73	stable
ZjuHsp100-73	XP_015884140.1	6	579.338	587.963	541	59309.72	5,40	33.11	stable
ZjuHsp100-74	XP_015884496.1	6	2.810.457	2.816.195	711	76906.95	8,72	45.3	unstable
ZjuHsp100-75	XP_015884497.1	6	2.810.457	2.816.195	711	76906.95	8,72	45.3	unstable
ZjuHsp100-76	XP_015884727.1	6	4.327.750	4.334.993	822	91406.06	7,02	36.3	unstable
ZjuHsp100-77	XP_015884978.1	6	5.670.381	5.675.204	398	44624.38	8,25	37.8	stable
ZjuHsp100-78	XP_015885636.1	6	11.095.904	11.102.468	308	34184.10	5,53	42.44	unstable
ZjuHsp100-79	XP_015885637.1	6	11.095.904	11.102.468	341	37890.23	5,09	41.71	unstable
ZjuHsp100-80	XP_015886722.1	7	2.105.965	2.115.651	1013	110851.86	6,20	44.5	unstable
ZjuHsp100-81	XP_015886889.1	7	5.638.700	5.663.866	1205	133750.14	5,71	46.99	unstable
ZjuHsp100-82	XP_015886890.1	7	5.638.700	5.663.866	1205	133748.17	5,71	46.93	unstable
ZjuHsp100-83	XP_015887529.1	7	14.317.874	14.331.689	974	109998.05	6,13	57.36	unstable
ZjuHsp100-84	XP_015888445.1	7	25.260.129	25.268.535	965	105850.63	6,49	45.71	unstable
ZjuHsp100-85	XP_015888444.1	7	25.260.129	25.268.535	966	105978.76	6,49	45.59	unstable
ZjuHsp100-86	XP_015888815.1	8	854.082	859.59	492	54214.87	9,50	44.04	unstable
ZjuHsp100-87	XP_015889489.1	8	5.434.485	5.441.369	621	68030.16	7,63	41.08	unstable
ZjuHsp100-88	XP_015889500.1	8	5.446.378	5.450.553	403	44649.07	7,64	42.96	unstable
ZjuHsp100-89	XP_015889974.1	8	7.850.454	7.855.613	631	70555.97	9,09	45.91	unstable
ZjuHsp100-90	XP_015889982.1	8	8.084.230	8.088.151	521	59912.18	5,79	45.45	unstable
ZjuHsp100-91	XP_015889980.1	8	8.089.416	8.093.054	501	57831.22	8,92	49.68	unstable
ZjuHsp100-92	XP_015890002.1	8	8.095.471	8.099.481	504	57570.41	7,54	49.4	unstable
ZjuHsp100-93	XP_015889991.1	8	8.110.331	8.112.046	341	39552.51	8,60	41.84	unstable
ZjuHsp100-94	XP_015891067.1	8	19.136.863	19.152.409	951	103711.08	6,20	44.67	unstable
ZjuHsp100-95	XP_015891068.1	8	19.136.863	19.152.409	1140	124802.17	6,15	46.52	unstable
ZjuHsp100-96	XP_015891084.1	8	19.502.282	19.512.742	409	46456.01	5,11	48.07	unstable
ZjuHsp100-97	XP_015891085.1	8	19.502.282	19.512.742	409	46456.01	5,11	48.07	unstable
ZjuHsp100-98	XP_015890817.1	8	14.574.883	14.582.882	628	68878.42	6,67	40.42	unstable
ZjuHsp100-99	XP_015891974.1	9	4.618.135	4.630.287	1246	135469.51	6,40	44.51	unstable
ZjuHsp100-100	XP_015891975.1	9	4.618.135	4.630.287	1157	125841.29	6,07	46.03	unstable
ZjuHsp100-101	XP_015892039.1	9	4.811.373	4.819.653	937	102518.19	6,48	49.05	unstable
ZjuHsp100-102	XP_015892558.1	9	5.633.189	5.637.230	446	49635.23	5,91	40.48	unstable
ZjuHsp100-103	XP_015893823.1	9	24.443.104	24.449.151	657	73087.82	8,20	52.98	unstable
ZjuHsp100-104	XP_015894220.1	10	2.373.919	2.375.536	396	45473.11	7,64	41.09	unstable
ZjuHsp100-105	XP_015894593.1	10	4.805.641	4.812.251	893	101570.12	9,43	43.97	unstable
ZjuHsp100-106	XP_015895161.1	10	13.513.968	13.520.173	566	61957.52	5,81	39.72	stable
ZjuHsp100-107	XP_015895162.1	10	13.513.968	13.520.173	523	57212.12	5,92	40.24	unstable
ZjuHsp100-108	XP_015895164.1	10	13.513.968	13.520.173	516	56596.53	5,57	37.78	stable
ZjuHsp100-109	XP_015895834.1	10	19.504.413	19.520.398	1032	116126.56	6,20	48.3	unstable
ZjuHsp100-110	XP_015895835.1	10	19.504.413	19.520.398	1027	115518.89	6,20	48.64	unstable
ZjuHsp100-111	XP_015895836.1	10	19.504.413	19.520.398	1010	113783.83	6,07	49.24	unstable
ZjuHsp100-112	XP_015895837.1	10	19.504.413	19.520.398	1005	113176.17	6,07	49.59	unstable
ZjuHsp100-113	XP_015895803.1	10	19.728.779	19.736.898	419	47368.31	8,42	42.68	unstable
ZjuHsp100-114	XP_015895928.1	10	20.411.867	20.417.154	591	66471.28	8,31	50.71	unstable
ZjuHsp100-115	XP_015896062.1	11	760.054	767.644	953	108009.07	8,65	41.49	unstable
ZjuHsp100-116	XP_015896233.1	11	1.907.430	1.911.255	333	37021.54	7,00	36.51	unstable
ZjuHsp100-117	XP_015896261.1	11	2.210.260	2.211.277	75	8389.83	7,88	28.98	stable
ZjuHsp100-118	XP_015896397.1	11	3.111.561	3.112.577	97	11260.04	9,30	48.55	unstable
ZjuHsp100-119	XP_015896541.1	11	4.219.893	4.228.713	862	95846.10	6,86	44.68	unstable
ZjuHsp100-120	XP_015896742.1	11	9.418.529	9.425.669	580	64886.75	7,68	44.7	unstable
ZjuHsp100-121	XP_015896965.1	11	11.718.974	11.721.233	393	43566.95	8,42	29.96	stable
ZjuHsp100-122	XP_015897566.1	11	16.287.918	16.293.014	426	47736.13	6,03	35	stable
ZjuHsp100-123	XP_015897690.1	11	17.802.873	17.808.824	822	90803.04	6,21	49.35	unstable
ZjuHsp100-124	XP_015897830.1	11	18.787.207	18.795.918	534	58138.05	5,45	37.51	stable
ZjuHsp100-125	XP_015898317.1	12	2.957.458	2.961.741	479	53721.70	6,31	37.58	stable
ZjuHsp100-126	XP_015898466.1	12	3.603.477	3.608.784	805	89594.61	5,16	44.38	unstable
ZjuHsp100-127	XP_015898864.1	12	5.906.894	5.911.330	861	95052.22	6,15	57.23	unstable
ZjuHsp100-128	XP_015899007.1	12	7.215.722	7.222.079	417	47145.71	8,70	42.9	unstable
ZjuHsp100-129	XP_015899188.1	12	7.945.451	7.955.509	1886	209074.34	5,98	48.6	unstable
ZjuHsp100-130	XP_015899189.1	12	7.945.451	7.955.509	1886	209074.34	5,98	48.6	unstable

Table S1.6 Continued

ID	NCBI Accession No.	Physical position on <i>Ziziphus jujuba</i> genome			Protein length (aa)	Molecular weight (Da)	pI	Instability index	Stable or unstable
		Chr.	Start position (bp)	End Position (bp)					
ZjuHsp100-131	XP_015899095.1	12	8.294.530	8.301.670	663	72833.47	5,47	45.56	unstable
ZjuHsp100-132	XP_015872453.1	scaffold	1	2.306	515	55143.99	8,86	53.15	unstable
ZjuHsp100-133	XP_015869558.1	scaffold	1	5.494	665	76153.88	9,62	41.45	unstable
ZjuHsp100-134	XP_015870637.1	scaffold	1	8.943	983	108632.70	5,43	43.41	unstable
ZjuHsp100-135	XP_015869074.1	scaffold	1.106	2750	456	51743.91	6,40	35.14	stable
ZjuHsp100-136	XP_015871346.1	scaffold	2.068	4.774	522	59710.40	9,01	48.61	unstable
ZjuHsp100-137	XP_015869826.1	scaffold	2.994	7.832	457	50775.36	5,14	39.5	Stable
ZjuHsp100-138	XP_015867445.1	scaffold	4.212	6.271	287	32421.23	8,25	30.16	stable
ZjuHsp100-139	XP_015867910.1	scaffold	7.037	13.559	341	37922.29	5,09	42.28	unstable
ZjuHsp100-140	XP_015867911.1	scaffold	7.037	13.559	308	34184.10	5,53	42.44	unstable
ZjuHsp100-141	XP_015868454.1	scaffold	4.879	7.585	522	59710.40	9,01	48.61	unstable
ZjuHsp100-142	XP_015869116.1	scaffold	5.923	10.234	457	50791.36	5,10	39.48	stable
ZjuHsp100-143	XP_015866498.1	scaffold	13.160	18.686	432	48385.93	8,12	41.97	unstable
ZjuHsp100-144	XP_015868790.1	scaffold	14.872	16.883	507	58813.10	6,35	49.28	unstable
ZjuHsp100-145	XP_015867650.1	scaffold	21.811	25.133	681	74075.00	5,73	37.93	stable
ZjuHsp100-146	XP_015865748.1	scaffold	28.115	35.225	808	89497.07	8,70	44.3	unstable
ZjuHsp100-147	XP_015867936.1	scaffold	31.539	42.086	782	86971.61	6,29	36.48	stable
ZjuHsp100-148	XP_015866983.1	scaffold	31.593	45.392	1191	129345.16	6,03	40.7	unstable
ZjuHsp100-149	XP_015866984.1	scaffold	31.593	45.392	1157	125662.55	5,75	41.07	unstable
ZjuHsp100-150	XP_015868789.1	scaffold	32.453	34.516	530	61142.35	8,90	39.06	stable
ZjuHsp100-151	XP_015868575.1	scaffold	32.546	39.148	405	45411.57	6,06	49.86	unstable
ZjuHsp100-152	XP_015868576.1	scaffold	32.546	39.148	396	44283.27	6,06	49.46	unstable
ZjuHsp100-153	XP_015865625.1	scaffold	56.667	65.489	857	93842.59	5,68	45.72	unstable
ZjuHsp100-154	XP_015865803.1	scaffold	67.168	71.875	240	26390.28	9,22	51.77	unstable
ZjuHsp100-155	XP_015866753.1	scaffold	94.036	98.322	479	53721.70	6,31	37.58	stable
ZjuHsp100-156	XP_015902773.1	scaffold	118.16	120.164	477	54923.78	6,46	43.41	unstable
ZjuHsp100-157	XP_015902766.1	scaffold	122.608	125.114	466	53660.32	5,67	41.1	unstable
ZjuHsp100-158	XP_015902764.1	scaffold	135.146	137.355	519	59933.02	6,12	38.06	stable
ZjuHsp100-159	XP_015902759.1	scaffold	144.914	147.123	519	59946.10	6,19	38.53	stable
ZjuHsp100-160	XP_015902929.1	scaffold	150.345	152.811	474	54302.00	8,8	40.59	unstable
ZjuHsp100-161	XP_015902580.1	scaffold	156.18	162.609	398	44624.38	8,25	37.8	stable
ZjuHsp100-162	XP_015902765.1	scaffold	158.243	160.29	515	59400.41	5,83	38.97	stable

Table S2.1 Targeted *Zjushsp* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR156h	ZjusHsp-55	5.0	-1.0	GUAAGAUGGCUGAUGCUAUUGG	CCAUUAUCAUCAGCCAGCUCAA
ath-miR156i	ZjusHsp-28	5.0	-1.0	UGGCCGUUGGUAGAGUAGGAGA	UUUCUUCAUUUACCAUUGGCUU
ath-miR156j	ZjusHsp-08	5.0	-1.0	UGGCCGUUGGUAGAGUAGGAGA	ACACCAGCUUUGUCAUUGGCUU
ath-miR157a-3p	ZjusHsp-58	5.0	-1.0	UGUUAUGAUCUGCUUCUCAUC	CAUCGCAAGCUGAUCUAAUUG
ath-miR157a-5p	ZjusHsp-58	5.0	-1.0	UGUUAUGAUCUGCUUCUCAUC	CAUCGCAAGCUGAUCUAAUUG
ath-miR157b-3p	ZjusHsp-39	5.0	-1.0	UGACAGAAGAAAGAGAGCAC	GUUUUUUUUUUUUUUGUUU
ath-miR157b-5p	ZjusHsp-40	5.0	-1.0	UGACAGAAGAAAGAGAGCAC	GUGUUGUGUUUUUCGGUCA
ath-miR157c-5p	ZjusHsp-02	5.0	-1.0	UGACAGAAGAGAGAGAGCAC	AUGCUUUUUUUUUUUGGCU
ath-miR157d	ZjusHsp-02	5.0	-1.0	UGACAGAAGAGAGAGAGCAC	AUGCUUUUUUUUUUUGGCU
ath-miR158a-3p	ZjusHsp-45	5.0	-1.0	GCUCUCUAGCCUUCUGUCAUC	AAUGACAUAAGGGUGGAGGUC
ath-miR158a-5p	ZjusHsp-26	5.0	-1.0	UGACAGAAGAUAGAGAGCAC	GUUCUUUUUAUUUUUUUUUA
ath-miR158b	ZjusHsp-59	4.5	-1.0	UGACAGAAGAGAGAGAGCAC	UUUCUCUCUCUUUUUUUUU
ath-miR160c-3p	ZjusHsp-12	4.5	-1.0	UCCCAAUUGUAGACAAAGCA	UUCUCUCUCGACAUUUGGGA
ath-miR162a-5p	ZjusHsp-25	4.5	-1.0	UCCCAAUUGUAGACAAAGCA	UUCUCUCUCGACAUUUGGGA
ath-miR162b-5p	ZjusHsp-24	4.5	-1.0	UCCCAAUUGUAGACAAAGCA	GUCUCUCUCAACAUUUGGGA
ath-miR163	ZjusHsp-27	5.0	-1.0	UGACAGAAGAUAGAGAGCAC	CUGGUCUCUAUCAUCUCUCU
ath-miR164a	ZjusHsp-66	5.0	-1.0	UCCCAAUUGUAGACAAAGCA	UGUUUGAUUUACGUUUUGGA
ath-miR164b-5p	ZjusHsp-21	5.0	-1.0	UCCCAAUUGUAGACAAAGCA	UUCUCUCUCGACGUUUGGGA
ath-miR164c-5p	ZjusHsp-17	5.0	-1.0	UCCCAAUUGUAGACAAAGCA	UUCUCUCUCGACGUUUGGGA
ath-miR165a-3p	ZjusHsp-41	4.0	-1.0	CUUUGUCUACAUUUUGGAAA	CUUCCUGGAUUGAAGACAGAG
ath-miR165b	ZjusHsp-58	4.0	-1.0	UCGGACCAGGCUUCAUCCCC	GAGAGAGGAAACCGGUUCGA
ath-miR166a-3p	ZjusHsp-47	4.5	-1.0	UCCCAAUUGUAGACAAAGCA	GGUUUCAUCUAUUUUGGGA
ath-miR166b-3p	ZjusHsp-44	4.5	-1.0	CGUACAAGGAGUCAAGCAUGA	GCAUGGUCGACGUUUUGGCG
ath-miR166c	ZjusHsp-43	4.5	-1.0	CGUACAAGGAGUCAAGCAUGA	GCAUGGUCGACGUUUUGGCG
ath-miR166d	ZjusHsp-42	4.5	-1.0	CGUACAAGGAGUCAAGCAUGA	GCAUGGUCGACGUUUUGGCG
ath-miR166e-3p	ZjusHsp-62	4.5	-1.0	UGGAGGCAGCGGUUCAUGCAUC	UUCCAAUGGAUCAUGCUUCCA
ath-miR166f	ZjusHsp-62	4.5	-1.0	UGGAGGCAGCGGUUCAUGCAUC	UUCCAAUGGAUCAUGCUUCCA
ath-miR166g	ZjusHsp-58	4.5	-1.0	UCGGACCAGGCUUCAUCCCC	GAGAGAGGAAACCGGUUCGA
ath-miR167a-5p	ZjusHsp-07	5.0	-1.0	CUUUGUCUACAUUUUGGAAA	GAUCCGAAGUGGGAAGAG
ath-miR167b	ZjusHsp-06	5.0	-1.0	CUUUGUCUACAUUUUGGAAA	GAUCCGAAGUGGGAAGAG
ath-miR167c-5p	ZjusHsp-26	5.0	-1.0	UGAAGAGGACUUGGAACUUCGAU	UUGUGCUUUCUAAGUUCUUUUUA
ath-miR167d	ZjusHsp-45	5.0	-1.0	UGGAGAAGCGAGGGCACGUGCG	CUCAAAUGCCCUGGUUCGCA
ath-miR172a	ZjusHsp-48	3.5	-1.0	UGUUAUGAUCUGCUUCUCAUC	AACGAGGAGCGGAUCCUAACA
ath-miR172b-3p	ZjusHsp-07	3.5	-1.0	AGAAUCUUGAUGAUGCUGCAU	UAGCAGCGUUUUAGUAUUCU
ath-miR172c	ZjusHsp-06	3.5	-1.0	AGAAUCUUGAUGAUGCUGCAU	UAGCAGCGUUUUAGUAUUCU
ath-miR172d-3p	ZjusHsp-06	3.5	-1.0	AGAAUCUUGAUGAUGCUGCAU	UAGCAGCGUUUUAGUAUUCU
ath-miR172e-3p	ZjusHsp-58	4.0	-1.0	UCGGACCAGGCUUCAUCCCC	GAGAGAGGAAACCGGUUCGA
ath-miR1886.1	ZjusHsp-07	4.0	-1.0	GGAAUCUUGAUGAUGCUGCAU	UAGCAGCGUUUUAGUAUUCU
ath-miR1886.2	ZjusHsp-02	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUA	CGGAGCCUGCUAGGAGCUUCA
ath-miR1888a	ZjusHsp-02	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUA	CGGAGCCUGCUAGGAGCUUCA
ath-miR2933a	ZjusHsp-42	5.0	-1.0	UAAGCUGCCAGCAUGAUCUUG	UCAGAUCACAGCUGGCGUUUG
ath-miR2933b	ZjusHsp-43	5.0	-1.0	UAAGCUGCCAGCAUGAUCUUG	UCAGAUCACAGCUGGCGUUUG
ath-miR2934-3p	ZjusHsp-44	5.0	-1.0	UAAGCUGCCAGCAUGAUCUUG	UCAGAUCACAGCUGGCGUUUG
ath-miR2937	ZjusHsp-02	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUGG	ACGGAGCCUGCUAGGAGCUUCA
ath-miR3434-5p	ZjusHsp-10	5.0	-1.0	UGAGAUGAAAUCUUUGAUUGG	CCAUAUCAAGGAUUCCUUUUC
ath-miR3440b-3p	ZjusHsp-39	5.0	-1.0	UAAGUUUAGAUUUUGAAGAA	UACAUGACAGAUCCUAGUUUA
ath-miR390a-5p	ZjusHsp-55	4.0	-1.0	UGAGAGAAGUGAGAUGAAUUC	AUUUUUUUUUUUUUUUUUCU
ath-miR390a-5p	ZjusHsp-39	5.0	-1.0	AUAAGAGCUGUUGAAGGAGUC	UAUUCUCCAGCAACUCUGAU
ath-miR391-5p	ZjusHsp-33	5.0	-1.0	CAUCCAAGGUUUUGUAGAAA	UUCUUCGGAUCUUGGGAUC
ath-miR3932a	ZjusHsp-58	4.5	-1.0	UCGGACCAGGCUUCAUCCCC	GAGAGAGGAAACCGGUUCGA
ath-miR3932b-3p	ZjusHsp-58	4.5	-1.0	UCGGACCAGGCUUCAUCCCC	GAGAGAGGAAACCGGUUCGA
ath-miR3932b-5p	ZjusHsp-39	5.0	-1.0	AUAAGAGCUGUUGAAGGAGUC	UAUUCUCCAGCAACUCUGAU
ath-miR393a-5p	ZjusHsp-09	5.0	-1.0	ACUUGGCUGAUUCUUAUUUU	AAAAGGAGAAGCAAGCCAAAGC
ath-miR393b-5p	ZjusHsp-17	5.0	-1.0	UGGAUUGGCUAAGGGAAGCGU	AUGUUUGCUUUGAUUACUCA
ath-miR394a	ZjusHsp-08	5.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	GCUGCUUCCUCUUCUACUUC
ath-miR394b-5p	ZjusHsp-08	5.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	GCUGCUUCCUCUUCUACUUC
ath-miR395a	ZjusHsp-57	5.0	-1.0	UUCGCAGGAGAGAUAGCGCCA	UCGAGCUGUCUUUGUGUGGA
ath-miR395b	ZjusHsp-33	5.0	-1.0	UUGGCAUUCUGUCCACCUC	GGAGGAGGCGAGAGUGCCUC
ath-miR395c	ZjusHsp-34	5.0	-1.0	CUGAAGUUUUGGGGAACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR395d	ZjusHsp-34	5.0	-1.0	CUGAAGUUUUGGGGGACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR395e	ZjusHsp-34	5.0	-1.0	CUGAAGUUUUGGGGGACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR395f	ZjusHsp-34	5.0	-1.0	CUGAAGUUUUGGGGGGAACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR396a-5p	ZjusHsp-34	5.0	-1.0	CUGAAGUUUUGGGGGGAACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR396b-3p	ZjusHsp-36	5.0	-1.0	CUGAAGUUUUGGGGGGACUC	GGAGUUCUCCAGAUACUUCAA
ath-miR396b-5p	ZjusHsp-28	4.5	-1.0	UUCACAGCUCUUGAAGCUG	AAGGAUUAAGGAAGCCUGGAA
ath-miR398c-5p	ZjusHsp-04	5.0	-1.0	UCCACAGCUCUUGAACUC	CAGU--GAGAAAGUUGUGGAA
ath-miR403-3p	ZjusHsp-05	5.0	-1.0	UCCACAGCUCUUGAACUC	CAGU--GAGAAAGUUGUGGAA
ath-miR403-5p	ZjusHsp-17	5.0	-1.0	GCUCAAGAAAGCUGUGGGAAA	UUUCCUGAGCUUCUAGGGA
ath-miR406	ZjusHsp-22	5.0	-1.0	GCUCAAGAAAGCUGUGGGAAA	UCUCCAGAGUUUCUAGGGA
ath-miR408-5p	ZjusHsp-14	4.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	AAAGCCGUCUUCUUGGCUUU
ath-miR414	ZjusHsp-23	5.0	-1.0	GCUCAAGAAAGCUGUGGGAAA	UCUCCAGAGUUUCUAGGGA
ath-miR415	ZjusHsp-18	4.5	-1.0	GCUCAAGAAAGCUGUGGGAAA	UUUCCAGAGUUUCUAGGGA
ath-miR4221	ZjusHsp-13	5.0	-1.0	UUAGAUAACAGCACAAACUCG	UGCAUCUGGCGAGAGUCUAA
ath-miR4228-3p	ZjusHsp-56	5.0	-1.0	UGUUUUGUCUUGAAUCUAAUU	AUCAAGGUUCAAGUGGAGACA
ath-miR4239	ZjusHsp-12	5.0	-1.0	UAGAAUGCUAUUGUAAUCCAG	UGCAAUAACGAUAGCGUUUUG

Table S2.1 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR4243	ZjusHsp-39	5.0	-1.0	UCGGAUGCGAAACGGUGGUGU	UUGUCACAGUU-CGCAUCCGA
ath-miR4245	ZjusHsp-57	5.0	-1.0	UUUGUUAUUUUCGCAUGCUC	CAAGUAUGUGAGAAUGGAGAG
ath-miR426	ZjusHsp-37	5.0	-1.0	UUUGUUAUUUUCGCAUGCUC	CUGGGAUGCGAAGGAGACAGA
ath-miR447a.2-3p	ZjusHsp-04	4.5	-1.0	UUCCACAGCUUUCUUGAACUU	GACAGUGAGAAAGUUGUGGAA
ath-miR472-5p	ZjusHsp-34	5.0	-1.0	UUUGUUAUUUUCGCAUGCUC	CUGGGAUGCGAAGGAGACAGA
ath-miR5012	ZjusHsp-35	5.0	-1.0	UUUGUUAUUUUCGCAUGCUC	CUGGGAUGCGAAGGAGACAGA
ath-miR5014a-3p	ZjusHsp-06	3.5	-1.0	AGAAUCUUUGAUGAUGCUCGAG	UAGCAGCGUUUUAGUUAUUCU
ath-miR5014a-5p	ZjusHsp-55	5.0	-1.0	UUGAAAUUGUAGAUUUCGUAC	CAACGAAAUUUGAACUUUUGA
ath-miR5015	ZjusHsp-70	5.0	-1.0	AUGGUCGAAGUAGGCAAAAUC	CGUUUUCCCGACUUCGACGAC
ath-miR5016	ZjusHsp-29	5.0	-1.0	UUUUACUGCUACUUGUGUUC	GAAACAGGAGAAGCAGCAGAA
ath-miR5017-5p	ZjusHsp-50	4.5	-1.0	UUUUGGAAAUUUGUCCUACG	CUUAAUGGCAGGUUUCAAAAG
ath-miR5019	ZjusHsp-29	4.0	-1.0	UUGGUGUUUUGUGUAGUCUUC	CAAGAUUACACACAACUCCAG
ath-miR5020a	ZjusHsp-37	5.0	-1.0	ACACUUAGUUUUGUACAACAU	AUGUUGAGUAAAAUUGGCUGU
ath-miR5020c	ZjusHsp-08	5.0	-1.0	UUGGUGUUUUGUGUAGUCUUC	GCAAGCAACGCAGAACAUCAA
ath-miR5021	ZjusHsp-64	5.0	-1.0	UUUUUGUGGAUCCUUGGAAA	AUUUCGAGGGUUUUUUGGAAA
ath-miR5023	ZjusHsp-63	5.0	-1.0	UUUUUGUGGAUCCUUGGAAA	AUUUCGAGGGUUUUUUGGAAA
ath-miR5025	ZjusHsp-01	4.5	-1.0	UUUUUGUGGAUCCUUGGAAA	UAUCAAAGGAGAGCAACAGAA
ath-miR5028	ZjusHsp-09	4.5	-1.0	AUUUGUACUAAUUUGGAAUG	GCAACCGAAUGGUUAAACAAU
ath-miR5029	ZjusHsp-60	5.0	-1.0	UUUUUGUGGAUCCUUGGAAA	AUUUCGAGGGUUUUUUGGAAA
ath-miR5631	ZjusHsp-59	5.0	-1.0	UGGCAUGGAGAAGGUGAGAC	UUUUUUUUUUUUUCCAUCCA
ath-miR5632-5p	ZjusHsp-55	4.0	-1.0	UGAGAAGAAGAAGAAGAAA	AUUUUUUUUUUUUUUUUUUUG
ath-miR5633	ZjusHsp-39	5.0	-1.0	UGAGAAGAAGAAGAAGAAA	UUUUUUUUUUUUUUUUUUUU
ath-miR5634	ZjusHsp-26	5.0	-1.0	UGAGAAGAAGAAGAAGAAA	UAUUUUUUUUUUUUUUUUUCA
ath-miR5637	ZjusHsp-12	5.0	-1.0	AAUGAGAGAGAACACUGCAA	GGUUCAUUGUUCUUUUUUUGA
ath-miR5640	ZjusHsp-40	5.0	-1.0	UGGCAGGAAAGACAUAAUUUU	UGUGUUUGUUUUUUUUCGGUCA
ath-miR5641	ZjusHsp-59	5.0	-1.0	UAUGAUCACAGAAAACAGUG	GUGAGUUUUUUGGUCAUUAUA
ath-miR5645c	ZjusHsp-58	4.0	-1.0	UGGAAGAAGAUGAUAGAAUUA	UUUUUUUUUUUUUUUUUUUA
ath-miR5648-5p	ZjusHsp-24	5.0	-1.0	AGGGACUUUGUGAAUUUAGGG	ACUUGAAUUUACGAAGUUCGA
ath-miR5649a	ZjusHsp-58	5.0	-1.0	UGAGAGAAGUUAUUAGAUUCA	AAUUUUCAAUUUUUUUUUUUA
ath-miR5649b	ZjusHsp-59	5.0	-1.0	UUUGGAAAUUUUGGCUUGACU	UCCAUUCCAAAUAUUUCGAG
ath-miR5650	ZjusHsp-06	5.0	-1.0	AUUGAAUUGUUGGUUACUUA	GCAGUGAACAAUUUCUCAAU
ath-miR5653	ZjusHsp-19	5.0	-1.0	AUUGAAUUGUUGGUUACUUA	CCAGAAGCCCAUGUAUCCAAG
ath-miR5655	ZjusHsp-07	5.0	-1.0	AUUGAAUUGUUGGUUACUUA	GCAGUGAACAAUUUCUCAAU
ath-miR5658	ZjusHsp-31	5.0	-1.0	UUUUUUUGGAUCUUAGAUACA	AAUGUCUUAUGAUCCGGAACGU
ath-miR5662	ZjusHsp-28	5.0	-1.0	UGGGUUGAGUUGAGUUGAGUUGGC	UCCGUCUCAGCUCAGCUGGGCUCU
ath-miR5997	ZjusHsp-27	5.0	-1.0	UGGGUUGAGUUGAGUUGAGUUGGC	UCCGUCUCAGCUCAGCUGGGCUCU
ath-miR5998a	ZjusHsp-29	5.0	-1.0	UGGGUUGAGUUGAGUUGAGUUG	AUGGUUGGCUCACUCAGCCUA
ath-miR5998b	ZjusHsp-14	5.0	-1.0	AAGUAGACACAUAGAAGGAG	UGUCUUUUUUUUUUUUUUUUU
ath-miR773a	ZjusHsp-62	5.0	-1.0	AAGUAGACACAUAGAAGGAG	UGGCUUUUUUAGUAGUCUUCUU
ath-miR773b-3p	ZjusHsp-31	5.0	-1.0	AGAGGUGACCAUUGGAGAUG	CUUCUUUUAAUCGUCACCUGU
ath-miR777	ZjusHsp-59	4.5	-1.0	UGAGAGAAGGAAUUAGAUUCA	AAAAUUUGAAUUUCUUAUUUCA
ath-miR778	ZjusHsp-51	5.0	-1.0	UGAAACCAAGUAGCUAAAUAG	AUUAUUGAUCUAAUUUUUCA
ath-miR779.1	ZjusHsp-19	5.0	-1.0	ACAGUUUGUUUUUUGUUUUUGU	AAAAAACAAAACACAAGUCUG
ath-miR779.2	ZjusHsp-07	5.0	-1.0	UGGCUUGGUUUUAGUACACCG	CGUUUGAAAUGAGCCGAGCCG
ath-miR780.2	ZjusHsp-06	5.0	-1.0	UGGCUUGGUUUUAGUACACCG	CGUUUGAAAUGAGCCGAGCCG
ath-miR781a	ZjusHsp-37	5.0	-1.0	UUCUGCUAUGUUGCUCUCAU	GAGGGUAUCAGUGGACAGAA
ath-miR781b	ZjusHsp-58	5.0	-1.0	UUCUUCGUGAAUUCUGGCAU	CAGCCAGAUAAUCGUGCAGAU
ath-miR782	ZjusHsp-66	4.5	-1.0	UUUGAUUCCAGCUUUUGUCUC	AAGAUAACGGCUGAGGUCAA
ath-miR8121	ZjusHsp-15	5.0	-1.0	UUAGAUUUUCUGGAUACUUA	AUUUUUCGCGAAAACUCGCA
ath-miR8167a	ZjusHsp-09	4.0	-1.0	UUUGCUUCCAGCUUUUGUCUC	AGCAAAGAAGUUGGAAGCAAU
ath-miR8167b	ZjusHsp-04	4.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CAACCCACGAUCUCAAAAUCC
ath-miR8167c	ZjusHsp-04	4.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CAACCCACGAUCUCAAAAUCC
ath-miR8167d	ZjusHsp-05	4.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CAACCCACGAUCUCAAAAUCC
ath-miR8167e	ZjusHsp-04	4.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CAACCCACGAUCUCAAAAUCC
ath-miR8167f	ZjusHsp-04	4.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CAACCCACGAUCUCAAAAUCC
ath-miR8168	ZjusHsp-31	5.0	-1.0	UUAGAUUUUCUGGAUACUUA	UAGGUUGCCGAGAAGCUCUA
ath-miR8169	ZjusHsp-03	5.0	-1.0	UUAGAUUUUCUGGAUACUUA	AUUUUUCGCGAAAACUCUGC
ath-miR8170-3p	ZjusHsp-28	5.0	-1.0	AAAGUAUAAUGUUUAGUGGUUUU	GUAGCC-UAGAAUCAUUUAUUUU
ath-miR8170-5p	ZjusHsp-30	4.5	-1.0	UACGCAUUGAGUUCGUGUCUU	UUCCAACUAUUUUUGGUGGUA
ath-miR8177	ZjusHsp-43	5.0	-1.0	AGGUGCUGAGUGUCUAGUGC	GGGUUGGCAUGCACAACGUCU
ath-miR8178	ZjusHsp-44	5.0	-1.0	AGGUGCUGAGUGUCUAGUGC	GGGUUGGCAUGCACAACGUCU
ath-miR8179	ZjusHsp-16	5.0	-1.0	AUAGACAGAGUCACUCACAGA	GCUGAGAGUGGUU-UGUCUAU
ath-miR8182	ZjusHsp-28	5.0	-1.0	UUGCUUAAAGAUUUUCUAUGU	AAGAAGAGAGUGUUUGACAA
ath-miR8183	ZjusHsp-41	5.0	-1.0	UUGCUUAAAGAUUUUCUAUGU	UGAUGGAGAUUUUCUAAGUAA
ath-miR822-3p	ZjusHsp-26	4.5	-1.0	ACAAACACCUUGGAUGUUCUU	UCGAAAAACCAUUGUGUUUGA
ath-miR822-5p	ZjusHsp-15	5.0	-1.0	GUGUGAUGAUGUGUCAUUUAUA	UUCCAUCACACAUUAGCAGAG
ath-miR824-3p	ZjusHsp-23	5.0	-1.0	UAACAGAGUAAUUGUACAGUG	GUUUUUUGAUGUUCUGUUUU
ath-miR826a	ZjusHsp-43	4.5	-1.0	AUAGCAAUCGAUUAAGCAAUG	AGUUGCAUGUCGAAUUGCUAU
ath-miR826b	ZjusHsp-25	5.0	-1.0	CCUUCUACUGAUGGUCUAGA	UCCAGAUACGCGGUGAGAGGA
ath-miR827	ZjusHsp-33	5.0	-1.0	UGUUUUUGGACACGUGAAAAU	AAGCCAUUGUUCUAAAGCCG
ath-miR829-3p.2	ZjusHsp-03	5.0	-1.0	UGGUUUUGGACACGUGAAAAU	AAGCUCAUGUUCUAAAGCCU
ath-miR829-5p	ZjusHsp-40	4.5	-1.0	UAACAGAGUAAUUGUACAGUG	AUGUGGCAUUGCUUUUGUUG
ath-miR830-3p	ZjusHsp-50	5.0	-1.0	UGGUUUUGGACACGUGAAAAU	UUUCCAGGUGUUCGAAUGCA
ath-miR830-5p	ZjusHsp-49	5.0	-1.0	UGGUUUUGGACACGUGAAAAU	UUUCCAGGUGUUCGAAUGCA
ath-miR831-3p	ZjusHsp-54	4.5	-1.0	UUGUGUUGCGUUCUGUUGAUU	UUUCAACCGAAAGGGAUACAA

Table S2.1 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR831-5p	ZjusHsp-14	5.0	-1.0	CAAAUUAAGCUUACAGGUAG	UAACUUUAGAGUGAUGGUUUG
ath-miR832-3p	ZjusHsp-07	4.5	-1.0	UAGUCCGGUUUUGGAUACGUG	CAUGCAUUCAGAACCAGAAUUA
ath-miR833a-5p	ZjusHsp-11	5.0	-1.0	CAAAUUAAGCUUACAGGUAG	UAACUUUAGAGUGAUGGUUUG
ath-miR833b	ZjusHsp-45	5.0	-1.0	UAACUUAUUUGAGAAGAAGUG	AUCUGCUUCUCAAUCUAGUUU
ath-miR834	ZjusHsp-02	4.5	-1.0	ACUUUGAAGCUUUGAUUUGAA	UGGAAGUUGAGGAUUCAAAGU
ath-miR835-3p	ZjusHsp-14	5.0	-1.0	UCUUCUCCAAAAGUUUAGGUU	UCGUUGAAAUUUCUGGAGAAGA
ath-miR835-5p	ZjusHsp-11	5.0	-1.0	UCUUCUCCAAAAGUUUAGGUU	UCGUUGAAAUUUCUGGAGAAGA
ath-miR836	ZjusHsp-09	5.0	-1.0	UGUUUGUUGACAUCGGUCUAG	GCCUACCGGUGUCAAUAGCCA
ath-miR837-3p	ZjusHsp-57	5.0	-1.0	UGUUUGUUGACAUCGGUCUAG	CAUGAUCGAUGCCAACGAAGA
ath-miR837-5p	ZjusHsp-64	5.0	-1.0	AAACGAACAATAAACUGAUGG	UGGCCAGUUUUUUGUUCGUGU
ath-miR838	ZjusHsp-63	5.0	-1.0	AAACGAACAATAAACUGAUGG	UGGCCAGUUUUUUGUUCGUGU
ath-miR840-3p	ZjusHsp-42	4.0	-1.0	UUUUUCUUCACUUCUUGCACA	UGUUUCAGCAAGAAGAAGAAAA
ath-miR841b-3p	ZjusHsp-44	5.0	-1.0	UUUUUCUUCACUUCUUGCACA	AGAAGAAGAAGAAGAAGAAGA
ath-miR844-5p	ZjusHsp-42	5.0	-1.0	UUUUUCUUCACUUCUUGCACA	AGAAGAAGAAGGAGAAGAAGA
ath-miR846-3p	ZjusHsp-42	5.0	-1.0	UUUUUCUUCACUUCUUGCACA	AGAAGAAGAAGAAGAAGAAGA
ath-miR847	ZjusHsp-14	4.5	-1.0	AAACGAACAATAAACUGAUGG	AUAUCAUUUUUUUGUCUUUUU
ath-miR849	ZjusHsp-57	5.0	-1.0	UUUUUCUUCACUUCUUGCACA	GCGGCGAGAGGAAGAGGGAAG
ath-miR850	ZjusHsp-72	5.0	-1.0	UGGUAAGAUUGCUUAUAAGCU	AGAUUUUGAGCCAUUUUGCCA
ath-miR854a	ZjusHsp-29	5.0	-1.0	UUGAAUUGAAGUGCUUGAAUU	GGUGAAAGCAAAUUCUUCUCAA
ath-miR854b	ZjusHsp-37	5.0	-1.0	UAACUAAAACAUUGGUGUAGUA	CUCCACAUUAAUUGUUGAGUAA
ath-miR854c	ZjusHsp-35	5.0	-1.0	UAACUAAAACAUUGGUGUAGUA	CUCCACAUUAAUUGUUGAGUAA
ath-miR854d	ZjusHsp-10	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR854e	ZjusHsp-13	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR855	ZjusHsp-43	4.5	-1.0	AUCAGUUUCUUGUCGUUUUCA	UGAAGCAGUAAGCAACUGGU
ath-miR857	ZjusHsp-13	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR858a	ZjusHsp-41	4.5	-1.0	UUUUUCUUCACUUCUUGCACA	GUAGCAAGAAGGAAGAGAAAA
ath-miR858b	ZjusHsp-13	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR860	ZjusHsp-13	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR863-3p	ZjusHsp-10	5.0	-1.0	GAUGAGGAUAGGGAGGAGGAG	CCCUUCCUCUUAUCCACCUA
ath-miR863-5p	ZjusHsp-10	5.0	-1.0	UUUUGUAUGUUGAAGGUGUAU	UCAUAAUUUCAUAAAAAAA
ath-miR869.1	ZjusHsp-66	5.0	-1.0	UUCGUUGUCUGUUCGACCUUG	GACGGUUCAGCAGAUAGUGGA
ath-miR869.2	ZjusHsp-56	5.0	-1.0	UUAUGUCUUUGUUGAUCUCAAU	GCUGAAUUCGAAUAGAUACUG
ath-miR870-3p	ZjusHsp-58	5.0	-1.0	AUGAAUUGGAUCUAAUUGAG	UUAAGUUUGUUCUAGAUAUCAU
ath-miR870-5p	ZjusHsp-49	5.0	-1.0	AUUGGUUCAAUUCUGGUGUUG	GGAAAACAATAUUGAACUAAA
atr-miR172	ZjusHsp-42	4.0	-1.0	UUUUUCUUCACUUCUUGCACA	UGUUCAGCAAGAAGAAGAAAA
atr-miR390.2	ZjusHsp-66	4.0	-1.0	UCACUCCUUCUUCUUGAUG	AAUUGGAGAAGGAGGAAUUGG
atr-miR396d	ZjusHsp-07	4.0	-1.0	GGAAUCUUGAUGAUGCUGCA	AGCAGCGUUUUUAGUAUUUC
atr-miR8551	ZjusHsp-14	4.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	AAAGCCGUCCUUCUGGGUUU
atr-miR8590	ZjusHsp-28	4.0	-1.0	CUCCACGGCUUUUCUUGAACUU	AAGGAUAAGGAAGCCGUGGAA

Table S2.2 Targeted *ZjuHsp40* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR156b-5p	ZjuHsp40-145	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	CUGCAC-UUCUCUUCUGUUC
ath-miR156c-3p	ZjuHsp40-150	5.0	-1.0	GCUCACUGCUCUACUGUCAGA	GGCGGCGAAUGGAGUGGUGGA
ath-miR156c-5p	ZjuHsp40-52	5.0	-1.0	UGACAGAAGAG-AGUGAGCAC	GUGCUCACUUCUACUUCUGUUA
ath-miR157a-3p	ZjuHsp40-101	4.0	-1.0	GCUCUCUAGCCUUCUGUCAUC	AAGUACAGGAGGCGAGGGAGC
ath-miR157b-3p	ZjuHsp40-101	4.0	-1.0	GCUCUCUAGCCUUCUGUCAUC	AAGUACAGGAGGCGAGGGAGC
ath-miR157c-3p	ZjuHsp40-20	5.0	-1.0	GCUCUCUACUUCUGUCACC	CAAAACAUAAGUAAAGGGAGC
ath-miR164c-3p	ZjuHsp40-78	5.0	-1.0	CACGUAUUCUACUACUCCAAC	AAGGGAGUAGUAGUGCAUUUG
ath-miR164c-5p	ZjuHsp40-37	4.0	-1.0	UGGAGAAGCAGGGCAGGUGCG	CAUAGGUGUCCUACUUCUUCU
ath-miR167c-5p	ZjuHsp40-101	5.0	-1.0	UAAGCUGCCAGCAUGAUCUUG	GUGGAGUAGCUGGUGACUUG
ath-miR168b-3p	ZjuHsp40-66	5.0	-1.0	CCCUCUUGUAUCAACUGAAU	AUGGAGGUGAGACAAGGCGGG
ath-miR169a-3p	ZjuHsp40-106	4.0	-1.0	GGCAAGUUGUCCUUGGCUAC	GGAGGAGAGGCGAAUUUGCC
ath-miR169g-3p	ZjuHsp40-26	4.0	-1.0	UCCGGCAAGUUGACCUUGGCU	UACCAAGUUCAGCUUGCUGU
ath-miR169h	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169i	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169j	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169k	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169l	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169m	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR169n	ZjuHsp40-109	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CGGCUUCGUAUCCUGGGCUA
ath-miR170-5p	ZjuHsp40-143	5.0	-1.0	UAUUGGCCUGGUUCACUCAGA	UUUGGAUGUAUUGGGUCAUAU
ath-miR171b-5p	ZjuHsp40-109	5.0	-1.0	AGAUAUAGUGCGGUUCAUUC	CUUAGAUUCGUAUUUUGUUCU
ath-miR171c-3p	ZjuHsp40-55	5.0	-1.0	UUGAGCCGUGCCAAUUAUCACG	AUUAUAUUGGGGAGCUCAG
ath-miR172b-5p	ZjuHsp40-103	4.0	-1.0	GCAGCACCACUUAAGAUUCAC	GUGAAUGUUGAAGGUGCUGA
ath-miR172c	ZjuHsp40-29	4.0	-1.0	AGAAUCUUGAUGAUGCUGCAG	CUGUGGCUUCAGCAAGAUUUU
ath-miR172e-5p	ZjuHsp40-103	4.0	-1.0	GCAGCACCACUUAAGAUUCAC	GUGAAUGUUGAAGGUGCUGA
ath-miR173-3p	ZjuHsp40-26	5.0	-1.0	UGAUUCUCUGUGUAAGCGAAA	UUACACCUUCACAGAGAAUUA
ath-miR173-5p	ZjuHsp40-72	4.0	-1.0	UUCGCUGCAGAGAGAAAUCAC	UGCUUCUCUUCUUGGAAAGCGAA
ath-miR1886.1	ZjuHsp40-114	2.0	-1.0	UGAGAAUAGUGAGAGUAGAAUC	GUUUUCUCUUCUUCUUCUUU
ath-miR211b-3p	ZjuHsp40-103	5.0	-1.0	AUCCUCGGGAUACAGUUUACC	AAAGAACUUUAUCUCGGGGAA
ath-miR211b-5p	ZjuHsp40-96	5.0	-1.0	UAAUCUGCAUCCUGAGGUUA	CAAUUCUCGGGAUCCCGAUGA
ath-miR3434-3p	ZjuHsp40-74	5.0	-1.0	UCAGAGUAUCAGCCAUGUGA	UGAAGUGGCUAGUGUCUGA

Table S2.2 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR3440b-3p	ZjuHsp40-104	4.0	-1.0	UGGAAUUGGCUAAGGGAAGCGU	UAGCUGCCCUUGAACAAACCA
ath-miR390b-3p	ZjuHsp40-156	5.0	-1.0	CGCUAUCCAUCUCGAGUUC	UGGAAUCAGGAGGGGAGUGUC
ath-miR390b-5p	ZjuHsp40-104	3.0	-1.0	AAGCUCAGGAGGGGAUAGCGCC	AGAGUUCUCCUCCUGGGCUU
ath+A64:L225-miR403-5p	ZjuHsp40-68	5.0	-1.0	UGUUUUGUGCUUGAAUCUAAUU	UCCUAAAAUCAACCAUAGGGUA
ath-miR405a	ZjuHsp40-78	4.0	-1.0	AUGAGUUGGGUCUAACCCAUAACU	CACCAAGGCCUAGGUCUAAACUCAU
ath-miR405b	ZjuHsp40-78	4.0	-1.0	AUGAGUUGGGUCUAACCCAUAACU	CACCAAGGCCUAGGUCUAAACUCAU
ath-miR405d	ZjuHsp40-78	4.0	-1.0	AUGAGUUGGGUCUAACCCAUAACU	CACCAAGGCCUAGGUCUAAACUCAU
ath-miR406	ZjuHsp40-17	4.0	-1.0	UAGAAUGCUAUUGUAAUCCAG	GUGGAUACUAUAGCAUAUUG
ath-miR407	ZjuHsp40-106	5.0	-1.0	UUUAAAUCUAUACUUUUGGU	UCCGGAAGUAUGUGAAUAAGA
ath-miR408-3p	ZjuHsp40-41	5.0	-1.0	AUGCACUGCCUCUCCUGGC	AAUAGAAAAGAGGCAGUGGAA
ath-miR4245	ZjuHsp40-87	5.0	-1.0	ACAAAGUUUUUACUGACAAU	CCUGUCAGUCGUGAGUUUUGU
ath-miR5014a-3p	ZjuHsp40-74	5.0	-1.0	UUUGACAAAUUUAAAGUGUACG	GCUCUCUAAAAUUUGUAAAA
ath-miR5017-3p	ZjuHsp40-151	4.0	-1.0	UUUAACAAAUAUAGCAA	GAUGAAAUCAUUUUGGUAAU
ath-miR5022	ZjuHsp40-31	5.0	-1.0	GUCAUGGGGUAUGAUCGAAUG	UUUUCGAGCACACCUUAUCAC
ath-miR5595a	ZjuHsp40-89	5.0	-1.0	ACAUAUGAUCUGCAUCUUUGC	UAGAAGUAAGGCUGUAUGU
ath-miR5635a	ZjuHsp40-93	4.0	-1.0	UGUUAAGGAGUGUUAACGGUG	UUUCUUGAACAUUCCUUAAAA
ath-miR5635b	ZjuHsp40-93	4.0	-1.0	UGUUAAGGAGUGUUAACGGUG	UUUCUUGAACAUUCCUUAAAA
ath-miR5635c	ZjuHsp40-93	4.0	-1.0	UGUUAAGGAGUGUUAACGGUG	UUUCUUGAACAUUCCUUAAAA
ath-miR5635d	ZjuHsp40-93	4.0	-1.0	UGUUAAGGAGUGUUAACGGUG	UUUCUUGAACAUUCCUUAAAA
ath-miR5636	ZjuHsp40-141	5.0	-1.0	CGUAGUUCGAGAGCUUGACGG	UCUUUAGGCUCUGUAUCUACU
ath-miR5638a	ZjuHsp40-103	5.0	-1.0	AUACAAAACUCUCACUUU	AAAAUGUGAGAGUUUAGUGA
ath-miR5642a	ZjuHsp40-140	4.0	-1.0	UCUCGCGCUUGUACGGCUUU	GGAGCUGGACGAGUGUGAGG
ath-miR5642b	ZjuHsp40-140	4.0	-1.0	UCUCGCGCUUGUACGGCUUU	GGAGCUGGACGAGUGUGAGG
ath-miR5648-3p	ZjuHsp40-78	5.0	-1.0	AUCUGAAGAAAUAAGC-GGCAU	GUGCCAGCU-UUUUCUUCAGAU
ath-miR5655	ZjuHsp40-100	4.0	-1.0	AAGUAGACACAUAAAGAGGAG	UUUUUUUCGGGUGUUUACU
ath-miR5995b	ZjuHsp40-89	5.0	-1.0	ACAUAUGAUCUGCAUCUUUGC	UAGAAGUAAGGCUGUAUGU
ath-miR5996	ZjuHsp40-89	5.0	-1.0	UGACAUCCAGAUAGAAGCUUUG	UCUAGGUUUUUCUGACUGUUA
ath-miR5997	ZjuHsp40-170	3.0	-1.0	UGAAACCAAGUAGCUAAUAG	AAAUUUAGCUGCAAGGUUUA
ath-miR776	ZjuHsp40-86	4.0	-1.0	UCUAAAGUCUUCUUAUUGAUGU	UGCCUCACUGGAAGAUUUUA
ath-miR777	ZjuHsp40-33	5.0	-1.0	UACGCAUUGAGUUUCGUUGCUU	UGCUGAUGACGCUUGAUGUGUA
ath-miR8165	ZjuHsp40-100	5.0	-1.0	AAUGGAGGCAAGUGUGAAGGA	CCCUCCAAGUAUGCUUCCAUU
ath-miR8169	ZjuHsp40-66	5.0	-1.0	AUAGACAGAGUCACUCACAGA	UUUGCUAUUGAAUCUGUUUAU
ath-miR8170-5p	ZjuHsp40-18	5.0	-1.0	AUAGCAAUCGAUAAGCAAUG	CCCUGCCAUUGAUUUUGUUA
ath-miR8173	ZjuHsp40-168	5.0	-1.0	AUGUGCGUAUCGAGGUGGGA	GCCCUUCGUAUCAGUAUAU
ath-miR837-3p	ZjuHsp40-112	4.0	-1.0	AAACGACAAAACACUGAUGG	UACUCCAUUUUGUGUCUUAU
ath-miR845a	ZjuHsp40-79	5.0	-1.0	CGCGCUCUGAUAACAAUUGAUG	AUUCAAUUUGUAUCGAAGUCU
ath-miR851-3p	ZjuHsp40-47	2.0	-1.0	UGGGUGGCAACAAAGACGAC	GCCGUGUUUUUGCCACUCU
ath-miR863-3p	ZjuHsp40-150	5.0	-1.0	UUGAGAGCAACAAGACAUAU	CUUGU-UUUUGUUGUUCUCA

Table S2.3 Targeted *ZjuHsp60* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR157a-3p	ZjuHsp60-01	5.0	-1.0	GCUCUCUAGCCUUCUGUCAUC	CAUGA-GGGAGGCUGGAGUGC
ath-miR157b-3p	ZjuHsp60-01	5.0	-1.0	GCUCUCUAGCCUUCUGUCAUC	CAUGA-GGGAGGCUGGAGUGC
ath-miR157c-3p	ZjuHsp60-12	5.0	-1.0	GCUCUCUAUACUUCUGUCACC	GAUGACAUAAAGGGAGAUAGGC
ath-miR158a-3p	ZjuHsp60-29	4.5	-1.0	UCCAAAUGUAGACAAAGCA	AGCUUGGUCUGAAUUUGGAA
ath-miR158a-5p	ZjuHsp60-19	5.0	-1.0	CUUUUGUCUACAUUUUGGAAA	AAUCUAAAAAUGAUGGUGCAG
ath-miR159b-5p	ZjuHsp60-14	5.0	-1.0	GAGCUCUUGAAGUCAAUGG	AAAUUGGUCUCAAUCUAGUUC
ath-miR165a-5p	ZjuHsp60-14	5.0	-1.0	GGAAUGUUGUCUGGAUCGAGG	UGAUGGUUCAGGCAGUGUUCU
ath-miR167a-3p	ZjuHsp60-20	4.0	-1.0	GAUCAUGUUCGAGUUUCACC	GGUGAAUUGUGGACAUAGUA
ath-miR168b-3p	ZjuHsp60-01	5.0	-1.0	CCGUCUUGUAUCACUGAAU	UCACAGUUGUUAACAAGGUGAG
ath-miR169f-3p	ZjuHsp60-04	5.0	-1.0	GCAAGUUGACCUUGGCUCUGC	AGAGAGGCAAGUAGAUUUGC
ath-miR173-5p	ZjuHsp60-02	5.0	-1.0	UUCGCUUGCAGAGAGAAUCAC	UGUGUUGCUCUGCAACAGAG
ath-miR2111a-5p	ZjuHsp60-29	5.0	-1.0	UAAUCUGCAUCCUGAGGUUA	AGAAGAUUGGUGGCAGAUUA
ath-miR2111b-5p	ZjuHsp60-29	5.0	-1.0	UAAUCUGCAUCCUGAGGUUA	AGAAGAUUGGUGGCAGAUUA
ath-miR319a	ZjuHsp60-04	5.0	-1.0	UUGGACUGAAGGGAGCUCCU	AGAGAUUUCCUUCAGUCAU
ath-miR319b	ZjuHsp60-04	5.0	-1.0	UUGGACUGAAGGGAGCUCCU	AGAGAUUUCCUUCAGUCAU
ath-miR319c	ZjuHsp60-04	5.0	-1.0	UUGGACUGAAGGGAGCUCCU	AGAGAUUUCCUUCAGUCAU
ath-miR390a-3p	ZjuHsp60-02	5.0	-1.0	CGCUAUCCAUCUGAGUUUCA	CCAACAUUGCGGUGGAGGCCG
ath-miR391-5p	ZjuHsp60-14	5.0	-1.0	UUCGCAAGGAGAGUAGCGCCA	CAGUCCAUUCUUGCUGUGAA
ath-miR394b-3p	ZjuHsp60-01	5.0	-1.0	AGGUGGGCAUACUGCCAUAAG	CAAGUGGUAGUAUGUCCUGU
ath-miR396a-5p	ZjuHsp60-23	5.0	-1.0	UUCACAGCUUUCUUGAACUG	UGGUUCGAGAAAUCU-UGGAA
ath-miR396b-5p	ZjuHsp60-23	5.0	-1.0	UUCACAGCUUUCUUGAACU	UGGUUCGAGAAAUCU-UGGAA
ath-miR399b	ZjuHsp60-01	5.0	-1.0	UGCCAAAGGAGAGUUGCCUG	CUUGGGACUUUCUUUUGGAA
ath-miR399c-3p	ZjuHsp60-01	5.0	-1.0	UGCCAAAGGAGAGUUGCCUG	CUUGGGACUUUCUUUUGGAA
ath-miR400	ZjuHsp60-24	5.0	-1.0	UAUGAGAGUAUUUAAGUCAC	CUGACAUCUAAUGCUGUUGUA
ath-miR407	ZjuHsp60-36	5.0	-1.0	UUUAAAUCUAUACUUUUGGU	UGCAAAUUAUUGAUUUUGAA
ath-miR415	ZjuHsp60-12	5.0	-1.0	AACAGACAGAAACAGAACA	GAGUUUCAGUUUCUUGUUUU
ath-miR417	ZjuHsp60-33	5.0	-1.0	GAAGGUAGUAAUUUGUUCGA	AGAAAUAGAUUAUUUCUUC
ath-miR4228-5p	ZjuHsp60-11	5.0	-1.0	AUAGCCUUGAACCCGUCGU	UGCUAUAGCUUUUGAGGCUAU
ath-miR4243	ZjuHsp60-01	3.5	-1.0	UUGAAAUCUAGAUUUCGUAC	GAAUGAGUUUUUAUUUUUA
ath-miR426	ZjuHsp60-24	4.5	-1.0	UUUUGGAAAUUUGUCCUACG	AAUUGGAAGAGUUUUAAAA
ath-miR447a-3p	ZjuHsp60-10	4.5	-1.0	UUGGGGACGAGAUUUUUGUUG	CCACAAAAGCUCUUGUUCCGA
ath-miR447b	ZjuHsp60-10	4.5	-1.0	UUGGGGACGAGAUUUUUGUUG	CCACAAAAGCUCUUGUUCCGA

Table S2.3 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR447c-3p	ZjuHsp60-10	5.0	-1.0	UUGGGACGACAUUUUUGUUG	CCACAAAAGCUCUUGUUUCCGA
ath-miR472-3p	ZjuHsp60-02	4.0	-1.0	UUUUUCCUACUCGCCCAUACC	UGAAGGGGCGAGAAGGAAAAA
ath-miR5017-5p	ZjuHsp60-36	4.0	-1.0	AUUUGUUAC-UAAUUUGGAAUG	UGUUUCAAUUUAAAGUGACAAU
ath-miR5018	ZjuHsp60-18	5.0	-1.0	UUAAAGCUCACCACUAGUCCAAU	GGAGGUCUUUUGGUUGAGUUUUGC
ath-miR5019	ZjuHsp60-18	4.5	-1.0	UGUUGGGAAAGAAAAACUCUU	CUUUGAUUUUCUUUCCUAGUA
ath-miR5020b	ZjuHsp60-10	5.0	-1.0	AUGGCAUGAAGAAGGUGAGA	GAACAAUAAUUUUAUGUUUUAU
ath-miR5020c	ZjuHsp60-01	4.5	-1.0	UGGCAUGGAAGAAGGUGAGAC	UUCUCAC-UUUUUACAUGUCA
ath-miR5022	ZjuHsp60-14	5.0	-1.0	GUCAUGGGGUAGAUCCGAAUG	CUUUGGACUAGGCCCAUGGC
ath-miR5023	ZjuHsp60-29	4.5	-1.0	AUUGGUAGUG-GAUAAAGGGGGC	AUCUCCUUAAUUAUACCAAU
ath-miR5633	ZjuHsp60-23	5.0	-1.0	UAUGAUCAUCAGAAAACAGUG	UGUUGCUUGCAGAUGAUCAUG
ath-miR5641	ZjuHsp60-01	5.0	-1.0	UGGAAGAAGAUGAUAGAAUUA	UCGUUUUUUGUUCUUUCCA
ath-miR5642a	ZjuHsp60-01	4.5	-1.0	UCUCGCGCUUGUACGGCUUU	UAAGCCAAUAGCAUGAGG
ath-miR5642b	ZjuHsp60-01	4.5	-1.0	UCUCGCGCUUGUACGGCUUU	UAAGCCAAUAGCAUGAGG
ath-miR5650	ZjuHsp60-01	4.5	-1.0	UUGUUUUGGACUUAGAUACA	UGCAUUGAGGGUCCAAGACAG
ath-miR5657	ZjuHsp60-12	5.0	-1.0	UGGACAAGGUUAGAUUUGGUG	GCUCAAAUCUAAUUCGAGGCC
ath-miR5664	ZjuHsp60-04	5.0	-1.0	AUAGUCAUUUUUAUCGGUCUG	AGGGGCAGUAGGAUUGAUUGU
ath-miR774a	ZjuHsp60-10	5.0	-1.0	UUGGUUACCAUUGGCCAUC	CCUGCCCUUGGGUUAACCC
ath-miR775	ZjuHsp60-26	5.0	-1.0	UUCGAUGUCUAGCAGUGCCA	AUGCAAUGUUAGACUUUGGA
ath-miR8166	ZjuHsp60-13	5.0	-1.0	AGAGAGUUGAGAAAGUUUCUA	AGUGAUUGUUUACAUUUUUCU
ath-miR8170-3p	ZjuHsp60-10	5.0	-1.0	UUGCUUAAAAGAUUUUCUAUGU	UGUUAGAAGAGCUUUAAGUUA
ath-miR8172	ZjuHsp60-02	5.0	-1.0	AUGGAUCAUCUAGAUGGAGAU	CCGUUGAUCUACGUGAUCUUAU
ath-miR8177	ZjuHsp60-01	5.0	-1.0	GUGUGAUGAUGUGCAUUUAUA	UGAAAAUUGGUUAUUGUCAGAG
ath-miR822-3p	ZjuHsp60-14	5.0	-1.0	UGUGCAAUUGCUUUCUACAGG	CAUGAAGGAGGCAUUUGAAUU
ath-miR828	ZjuHsp60-01	5.0	-1.0	UCUUGCUUAAAAGAGAUUUCUA	UAGAUUACUUUUUUAAGGAGGA
ath-miR830-3p	ZjuHsp60-20	4.5	-1.0	UACAAUUUUUGAGAAGAAGUG	UUUUUUUUUCAAUUUAUUUA
ath-miR831-5p	ZjuHsp60-03	5.0	-1.0	AGAAGCGUACAAGGAGAUGAGG	GCACGUCUCUUGUACAUUUUG
ath-miR833a-5p	ZjuHsp60-11	5.0	-1.0	UGUUUGUUGUACUCGGUCUAGU	AGGAGGUUGAGGAAAACAGACA
ath-miR834	ZjuHsp60-09	3.5	-1.0	UGGUAGCAGUAGCGGUGGUAA	AUAUCAAGCUGUUGCUACCA
ath-miR835-5p	ZjuHsp60-24	5.0	-1.0	UUCUUGCAUUAUGUUUUUAUC	CGGAAGGAAAAUUGGAGAGG
ath-miR836	ZjuHsp60-01	4.5	-1.0	UCCUGUGUUCCUUUGAUGCGUGG	GUUUCCAGCAAAGGAGAAACAGAA
ath-miR839-5p	ZjuHsp60-02	5.0	-1.0	UACCAACCUUUAUCUGUCC	AGGGAGGCGUAAAAGUUGGU
ath-miR841a-5p	ZjuHsp60-14	5.0	-1.0	UACGAGCCACUUGAA-ACUGAA	GUCAGUCUUAAGUGGAUUGUC
ath-miR846-3p	ZjuHsp60-14	5.0	-1.0	UUGAAUUGAAGUGCUUGAAUU	ACAUCAGGCAUUUCAUUGGAA
ath-miR859	ZjuHsp60-12	4.5	-1.0	UCUCUCUGUUGUGAAGUCAAA	CUCGAAUUGCAGAACAGAGAGA
ath-miR860	ZjuHsp60-01	5.0	-1.0	UCAAUAGAUUGGACUAGUAAU	AGGCAGAGUUAUCUUUUUA
ath-miR862-3p	ZjuHsp60-01	5.0	-1.0	AUUGUGGUAAGUACUUGAAG	GUUAAAAGAAAGGUUAAGCAUGU
ath-miR863-3p	ZjuHsp60-27	4.5	-1.0	UUGAGAGCAACAAG-ACAUAAU	AGUAUGUUCUUUUUGCUUUUA
ath-miR863-5p	ZjuHsp60-14	5.0	-1.0	UUUAGUCUUGUUGAUCUCAAU	AAAGAAAUCAAGAAGACAGAA
ath-miR865-5p	ZjuHsp60-14	5.0	-1.0	AUGAAUUUGGACUAAUUGAG	GUUCUUUAGAUUCAGAUUCAG
ath-miR868-3p	ZjuHsp60-11	3.5	-1.0	CUUCUUAAGUGCUGAUAAUGC	UUUUUUUAGGGUUUAGGAAG
ath-miR869.2	ZjuHsp60-14	4.0	-1.0	UCUGGUGUUGAGAUAGUUGAC	UUCACCAUUUUUGACAUCA
ath-miR870-3p	ZjuHsp60-01	5.0	-1.0	UAAUUUGGUGUUUCUUGCAUC	UUUAGGAGGAGCACUAGAAU

Table S2.4 Targeted *ZjuHsp70* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR156d-3p	ZjuHsp70-05	5.0	-1.0	GCUCACUCUCUUUUGUCUAAAC	CAAUAGACAAGGGAAAGUUGAGC
ath-miR157c-3p	ZjuHsp70-11	5.0	-1.0	GCUCUCUUAUCUUCUGUCACC	UGUUCGGGAAGUGUAUGGAGC
ath-miR158a-5p	ZjuHsp70-15	5.0	-1.0	CUUUGUCUACAAUUUUGGAAA	UAAGCAAGGUUGUGGAUAGGG
ath-miR160c-3p	ZjuHsp70-19	5.0	-1.0	CGUACAAGGAGUCAAGCAUGA	UUGAAUUUGAUUCCUUGUAUG
ath-miR162a-5p	ZjuHsp70-17	5.0	-1.0	UGGAGGCAGCGGUUCAUCGAUC	ACACCAUCAGUUGUUGUUAUCA
ath-miR162b-5p	ZjuHsp70-17	5.0	-1.0	UGGAGGCAGCGGUUCAUCGAUC	ACACCAUCAGUUGUUGUUAUCA
ath-miR163	ZjuHsp70-19	5.0	-1.0	UUGAAGAGGACUUGGAACUUCGAU	GCAGCUGUUGCAGGACUUCUUUAA
ath-miR168a-5p	ZjuHsp70-04	5.0	-1.0	UCGCUUGGUGCAGGUCGGGAA	CAUCCACCCGACCAAGAGG
ath-miR168b-5p	ZjuHsp70-04	5.0	-1.0	UCGCUUGGUGCAGGUCGGGAA	CAUCCACCCGACCAAGAGG
ath-miR169a-3p	ZjuHsp70-01	5.0	-1.0	GGCAAGUUGUCCUUGGCUAC	AAGGUUGAGGACGGCUUGCG
ath-miR169b-3p	ZjuHsp70-01	5.0	-1.0	GGCAAGUUGUCCUUGGCUACA	AGAAGGUUGAGGACGGUUGCG
ath-miR172a	ZjuHsp70-01	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAU	GGGCGGUGCAUGACGGUUCU
ath-miR172b-3p	ZjuHsp70-01	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAU	GGGCGGUGCAUGACGGUUCU
ath-miR172b-5p	ZjuHsp70-06	5.0	-1.0	GCAGCACCAUUAAGAUCAC	AUGGAUGAUGAUGGUCUUC
ath-miR172c	ZjuHsp70-01	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAG	GGGCGGUGCAUGACGGUUCU
ath-miR172d-3p	ZjuHsp70-01	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAG	GGGCGGUGCAUGACGGUUCU
ath-miR172e-5p	ZjuHsp70-06	5.0	-1.0	GCAGCACCAUUAAGAUCAC	AUGGAUGAUGAUGGUCUUC
ath-miR173-3p	ZjuHsp70-14	5.0	-1.0	UGAAUCUCUGUGUAAGCGAAA	UUUGGUUAACGCGCGGAAUUU
ath-miR1886.3	ZjuHsp70-08	5.0	-1.0	AAUUAAAAGAUUUAUCUUACU	UUCAAGGUGGAAUCCUUAUGUG
ath-miR1888a	ZjuHsp70-15	5.0	-1.0	UAAGUUUAGAUUUUGAAGAA	CCUUUUGGAAAUUUGGACUUG
ath-miR2936	ZjuHsp70-14	5.0	-1.0	CUUGAGAGAGAGAACACAGACG	GACCUGCCGUUUCUUUUCAA
ath-miR2937	ZjuHsp70-19	5.0	-1.0	AUAAGAGCUGUUGAAGGAGUC	GAUCUUUCAUUGGUUUUCAU
ath-miR3434-3p	ZjuHsp70-15	5.0	-1.0	UCAGAGUAUCAGCCAUGUGA	GGUCAUGGCUUGGUGUGUGA
ath-miR3440b-5p	ZjuHsp70-06	5.0	-1.0	UUUUCUUGGCCAUCCACUUC	CUUGGAGAGGGGCAAGAGGA
ath-miR3932b-5p	ZjuHsp70-05	5.0	-1.0	UUUGACGUGCUGAUCUGCUC	UUGCAAACAGCCGCGGAAUU
ath-miR393b-3p	ZjuHsp70-11	5.0	-1.0	AUCAUGCGAUCUCUUUGGAUU	UCUCCACGAAGAUGCAUGUU
ath-miR396a-5p	ZjuHsp70-18	5.0	-1.0	UCCACAGCUUUCUUGAACUG	CCCUGAAGAAGGCUAUGGAA
ath-miR396b-5p	ZjuHsp70-18	5.0	-1.0	UCCACAGCUUUCUUGAACUU	CCCUGAAGAAGGCUAUGGAA

Table S2.4 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR399c-5p	ZjuHsp70-03	5.0	-1.0	GGGCAUCUUUCUAUUGGCAGG	UUUGUCA-UGGAAAGGUGCUG
ath-miR402	ZjuHsp70-16	5.0	-1.0	UUCGAGGCCUAAUAAACCUCUG	GCAGGGCUUAAUUGGCUCGAA
ath-miR403-5p	ZjuHsp70-07	5.0	-1.0	UGUUUUGUGCUUGAAUCUAAUU	GAUUAGUUACAAGGACCAAACA
ath-miR413	ZjuHsp70-03	5.0	-1.0	AUAGUUUCUCUUGUUCUGCAC	GAGCACAGAGAGGGGAACUGU
ath-miR419	ZjuHsp70-02	5.0	-1.0	UUUUGAAUGCUGAGGAUGUUG	GUGCUUCUUCGGCAAUUUAGA
ath-miR4239	ZjuHsp70-09	5.0	-1.0	UUUGUUUUUUCGCAUGCUC	AAAGCUUGCGGAGAAGAUAGA
ath-miR5012	ZjuHsp70-06	5.0	-1.0	UUUUACUGCUACUUGUGUUC	AUGGUACAAGAAGCAGAAAAAG
ath-miR5014b	ZjuHsp70-11	5.0	-1.0	AUUUGUACACCUAGAUUCUGUA	UGUUGAUCCAGGUGUACGAGG
ath-miR5023	ZjuHsp70-11	5.0	-1.0	AUUGGUAGUGGAUAGGGGGC	ACUCUCUCAUCCACUGCCCAA
ath-miR5028	ZjuHsp70-15	5.0	-1.0	AAUUGGGUUUUGCUAGAGUU	AGCUAUGGGCGAAGUCCAGUU
ath-miR5628	ZjuHsp70-18	5.0	-1.0	GAAAUAGCGAAGAUUGAUUA	CGGUUGUCUUUUUGCAAUUUC
ath-miR5630a	ZjuHsp70-09	5.0	-1.0	GCUAAGAGCGGUUCUGAUGGA	GUGAUUUGGAAUUGAUCUUGGC
ath-miR5630b	ZjuHsp70-21	5.0	-1.0	GCUAAGAGCGGUUCUGAUGGA	GUAUUUGGAAUUGAUCUUGGC
ath-miR5632-3p	ZjuHsp70-02	5.0	-1.0	UUGGAUUUUAUGUUGGAUAG	UCUAUUGAACGAUGAAUCAA
ath-miR5632-5p	ZjuHsp70-19	5.0	-1.0	UUGAUUCUCUUUCCAACUGU	UUCCUUGUAUGAGGGAUUUGA
ath-miR5641	ZjuHsp70-18	5.0	-1.0	UGGAAGAAGAUGAUAGAAUUA	UCGUUCGGUUGUCUUUUUGCA
ath-miR5642a	ZjuHsp70-13	5.0	-1.0	UCUCGCGCUUGUACGGCUUU	CCAGGUGUACGAGGGUGAGA
ath-miR5642b	ZjuHsp70-13	5.0	-1.0	UCUCGCGCUUGUACGGCUUU	CCAGGUGUACGAGGGUGAGA
ath-miR5643a	ZjuHsp70-02	5.0	-1.0	AGGCUUUUUAAGAUUCUGUUGC	GGAAAAGAUGUUUAAGGGCUU
ath-miR5643b	ZjuHsp70-02	5.0	-1.0	AGGCUUUUUAAGAUUCUGUUGC	GGAAAAGAUGUUUAAGGGCUU
ath-miR5645a	ZjuHsp70-17	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CCUAGAGGCAUGCCUCAGAU
ath-miR5645b	ZjuHsp70-17	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CCUAGAGGCAUGCCUCAGAU
ath-miR5645d	ZjuHsp70-17	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CCUAGAGGCAUGCCUCAGAU
ath-miR5645e	ZjuHsp70-17	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CCUAGAGGCAUGCCUCAGAU
ath-miR5645f	ZjuHsp70-17	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CCUAGAGGCAUGCCUCAGAU
ath-miR5648-5p	ZjuHsp70-05	5.0	-1.0	UUUGGAAAUUUUGGCUUGACU	CUGCAAUCCAUCUUAUCUUAAG
ath-miR5649a	ZjuHsp70-12	5.0	-1.0	AUUGAAUUGUUGGUUACUUAU	CCAUGACCAAGCUAUUCAGU
ath-miR5649b	ZjuHsp70-12	5.0	-1.0	AUUGAAUUGUUGGUUACUUAU	CCAUGACCAAGCUAUUCAGU
ath-miR5654-3p	ZjuHsp70-16	5.0	-1.0	UGGAAGAUUCUUUGGGAUUUAUU	AAUCAAGCCAAAGCAAUUUUCA
ath-miR5655	ZjuHsp70-14	5.0	-1.0	AAGUAGACACAUAGAAGGAG	UUUCUUUUUGUUUUUUCUU
ath-miR5661	ZjuHsp70-06	5.0	-1.0	AGAGGUACAUCAGUAGUCUG	GCGAUUCAGUAGUUAUCUGU
ath-miR5662	ZjuHsp70-03	5.0	-1.0	AGAGGUGACCAUUGGAGAUUG	GAUACA AAAUCGUUUGCUUU
ath-miR5664	ZjuHsp70-05	5.0	-1.0	AUAGUCAUUUUUUCGGUCUG	AAGAUUGAAGAAGUUAUUA
ath-miR771	ZjuHsp70-05	5.0	-1.0	UGAGCCUCUGUGGUAGCCCUCA	UGAGGGGAGUUCGCCAGGCUUA
ath-miR773a	ZjuHsp70-13	5.0	-1.0	UUUGCUUCCAGCUUUUGUCUC	AUUCAGGAGCUGGAGACAAA
ath-miR773b-3p	ZjuHsp70-20	5.0	-1.0	UUUGAUUCCAGCUUUUGUCUC	UUGACAAGAGCUAGAUUUGAG
ath-miR774b-3p	ZjuHsp70-02	5.0	-1.0	CAUCCAUAUUUAUCUCGAA	UGAUAGAAGAACAUGUGGAGU
ath-miR780.1	ZjuHsp70-10	5.0	-1.0	UCUAGCAGCUGUUGAGCAGGU	GUGUUCUCAACAGCUGC-AGA
ath-miR782	ZjuHsp70-06	5.0	-1.0	ACAAAACCCUUGGAGUUCUU	AUGGCCGUUCAAGGUAUUGC
ath-miR8167a	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8167b	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8167c	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8167d	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8167e	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8167f	ZjuHsp70-03	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAGU	GAACCCGAAGAAUUCUUAUUCU
ath-miR8175	ZjuHsp70-12	5.0	-1.0	GAUCCCCGCAACGCGCCCA	UGGGUCUGGGUGGUGGUC
ath-miR8179	ZjuHsp70-14	5.0	-1.0	UGACUGCAUUAAUUGAUCGU	UGGAUCGGGCGAUGCUGUUA
ath-miR822-3p	ZjuHsp70-12	5.0	-1.0	UGUGCAAAUGCUUUCACAGG	GAAUUGGAAAGCAUUGCAAC
ath-miR823	ZjuHsp70-09	5.0	-1.0	UGGGUGGUGAUCAUUAAGAU	AUCUCAGGUGUUUACCACUA
ath-miR826a	ZjuHsp70-17	5.0	-1.0	UAGUCCGGUUUUGGAUACGUG	GCUGUAUCCAAGAUUGGCAG
ath-miR828	ZjuHsp70-06	5.0	-1.0	UCUUGCUUAAAUGAGUAUCCA	GGUGAUACUUAUUAGGUGGUG
ath-miR831-5p	ZjuHsp70-14	5.0	-1.0	AGAAGCGUACAAGGAGAUGAGG	GGUUAUUUUUUUGUUGUUUU
ath-miR832-5p	ZjuHsp70-01	5.0	-1.0	UGCUGGGAUCCGGAAUCGAAA	UGCUGAUUCUUGAUCUGCGCG
ath-miR833a-3p	ZjuHsp70-10	5.0	-1.0	UAGACCGAUGUCAACAACAAG	GAAGGUAGUUGGUUUCGUAUCUG
ath-miR833a-5p	ZjuHsp70-08	5.0	-1.0	UGUUUGUUGUACUCGGUCUAGU	UUAAGAAGAAGUAUAACAAGA
ath-miR833b	ZjuHsp70-20	5.0	-1.0	UGUUUGUUGAUCUUGGUCUAG	CAAAAUUGAUUUACAAGAAACA
ath-miR834	ZjuHsp70-05	5.0	-1.0	UGGUAGCAGUAGCGGUGGUAA	AGCCACUGCAGCUGCUAUUG
ath-miR835-5p	ZjuHsp70-03	5.0	-1.0	UUUCUGCAUAUGUUCUUAUC	UCUGAUGUGAAUUGCAAGAG
ath-miR836	ZjuHsp70-09	5.0	-1.0	UCCUGUGUUUCUUUGAUGCGUGG	GUACUUGUUGGAGGAAGUAACA
ath-miR837-5p	ZjuHsp70-20	5.0	-1.0	AUCAGUUUCUUGUUCGUUUA	AGAGGCGGAUAAGAAGGUGAA
ath-miR838	ZjuHsp70-03	5.0	-1.0	UUUUCUUCUACUUCUUGCACA	UGUACA AAAAAGCAGUAGAAAA
ath-miR842	ZjuHsp70-11	5.0	-1.0	UCAUGGUCAGAUCCGCUAUC	GGUAUAGGGCUCUGUCCAUGA
ath-miR844-3p	ZjuHsp70-16	5.0	-1.0	UUUAAGCCAUUCUACUAGUU	GUAUGGUAAGAAGGCUUUUGA
ath-miR856	ZjuHsp70-13	5.0	-1.0	UAAUCCUACCAAUAACUUCAGC	GCCGGUGUUUUGCUGGGCUUA
ath-miR857	ZjuHsp70-03	5.0	-1.0	UUUUGUAGUUGAAGGUGUAU	GGUCCUUUUCAAUCACAAAA
ath-miR858a	ZjuHsp70-14	5.0	-1.0	UUUCGUUGUCUUCGACCUU	GAGGCCGAACAGACAAGAGU
ath-miR865-3p	ZjuHsp70-05	5.0	-1.0	UUUUCCUCAAAUUUAUCCAA	GUAGAUGAAUUGGAGGACAAG
ath-miR869.2	ZjuHsp70-17	5.0	-1.0	UCUGGUGUUGAGAUAGUUGAC	GCUAAAACUUCUUAACAUCACA
ath-miR870-3p	ZjuHsp70-08	5.0	-1.0	UAAUUUGGUGUUUCUUCGAUC	GUUCAA AAAAGAUUCAAGUUU

Table S2.5 Targeted *ZjuHsp90* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR774b-3p	ZjuHsp90-03	4.0	-1.0	CAUCCAUAUUUUAUCUCGAA	UGUGACAUCAAGUAUGGAUG
ath-miR162a-3p	ZjuHsp90-02	4.0	-1.0	UCGAUAAACCUCUGCAUCCAG	ACGGAUUCAGAGGCUUAUCA
ath-miR162b-3p	ZjuHsp90-02	4.0	-1.0	UCGAUAAACCUCUGCAUCCAG	ACGGAUUCAGAGGCUUAUCA
ath-miR774b-5p	ZjuHsp90-03	4.0	-1.0	UGAGAUGAAGAUUGGGUGAU	GCCUCCCAUAUCUACAGCUCA
ath-miR8174	ZjuHsp90-02	4.0	-1.0	AUGUGUAUAGGGAAAGCUAAUC	UGUUUCUUUCCCUUAUAUCAC
ath-miR171b-3p	ZjuHsp90-01	4.0	-1.0	UUGAGCCGUGCCAAUAUCACG	AGUGGUUAUUGUAUGACUAAA
ath-miR171c-3p	ZjuHsp90-01	4.0	-1.0	UUGAGCCGUGCCAAUAUCACG	AGUGGUUAUUGUAUGACUAAA
ath-miR1886.3	ZjuHsp90-04	4.0	-1.0	AAUAAAAGAUUUCACUUACU	GACAAGUUGAGAUUUUUAAGU
ath-miR5016	ZjuHsp90-04	4.0	-1.0	UUCUUGUGGAUUCUUGGAAA	GUACCAAGAAUUCUACAAGAA
ath-miR5641	ZjuHsp90-03	4.0	-1.0	UGGAAGAAGAUGAUAGAUAUA	GAAUUUGAUGAUCUUCUGCCA
ath-miR5643a	ZjuHsp90-01	4.0	-1.0	AGGCUUUUAAGAUCUGGUUGC	AGAACAAAUCUUGAAGGUCU
ath-miR5643b	ZjuHsp90-01	4.0	-1.0	AGGCUUUUAAGAUCUGGUUGC	AGAACAAAUCUUGAAGGUCU
ath-miR5658	ZjuHsp90-06	4.0	-1.0	AUGAUGAUGAUGAUGAUGAAA	UCUCAGCCUCAUCAACAC
ath-miR837-5p	ZjuHsp90-03	4.0	-1.0	AUCAGUUUCUUGUUCGUUCA	GAAAAUGAGGGAGAAAGUGAU
ath-miR859	ZjuHsp90-04	4.0	-1.0	UCUCUCUGUUGGAAGUCAAAA	ACUCAUUUCACAACUGAGGGU
ath-miR163	ZjuHsp90-01	5.0	-1.0	UUGAAGAGGACUUGGAACUUCGAU	AGAGAAGUUCGAGGGUCUCUGCAA
ath-miR2111a-3p	ZjuHsp90-01	5.0	-1.0	GUCCUCGGGAUUCGGAAUACC	GGUAUUGUGGAUUCGAGGAU
ath-miR2111a-5p	ZjuHsp90-01	5.0	-1.0	UAAUCUGCAUUCUGAGGUUUA	GAAGGUUGAGGAUGAAGAU
ath-miR2111b-5p	ZjuHsp90-01	5.0	-1.0	UAAUCUGCAUUCUGAGGUUUA	GAAGGUUGAGGAUGAAGAU
ath-miR407	ZjuHsp90-03	5.0	-1.0	UUUAAAUCAUAUACUUUUGGU	GUUAAAAGCUUAUUGGUUGAGG
ath-miR414	ZjuHsp90-03	5.0	-1.0	UCAUCUUAUCAUCAUCGUA	UGAUGAGGAAGGAGAAGAU
ath-miR4228-5p	ZjuHsp90-03	5.0	-1.0	AUAGCCUUGAAGCCGUCGUU	UGAUGUGGAGUUAAGGUCUGU
ath-miR5028	ZjuHsp90-03	5.0	-1.0	AAUUGGGUUUAUGCUAGAGUU	GCCUUUAGCAUGGAGUCAUUU
ath-miR5652	ZjuHsp90-06	5.0	-1.0	UUGAAUUGGAAUUGAAUCGGGC	CAGCGAGACAUCGCAUUCU
ath-miR5659	ZjuHsp90-01	5.0	-1.0	CGAUGAAGGUAUUGGAACGGUA	GUGGAUUCGAGGAUUCUUCU
ath-miR780.2	ZjuHsp90-06	5.0	-1.0	UUCUCUGGAAUUCUGGCAU	AAGCUGGGCGUUCUAUGAAGAU
ath-miR8172	ZjuHsp90-06	5.0	-1.0	AUGGAUCAUCUAGAUUGGAGAU	GUUUUAGCCUAGAUGAUCCGA
ath-miR824-5p	ZjuHsp90-01	5.0	-1.0	UAGACCAUUGUGAGAAGGGA	AAGUUUCGAUGAGUGGUCUU
ath-miR840-5p	ZjuHsp90-04	5.0	-1.0	ACACUGAAGGACCUAAAACUAAC	ACAAGUUAGAUUUUUAAGUGU
ath-miR857	ZjuHsp90-01	5.0	-1.0	UUUUGUAUGUUGAAGGUGUAU	CAACACCUUUGGCA-ACAGAA
ath-miR864-3p	ZjuHsp90-02	5.0	-1.0	UAAAGUCAAAUUAUCCUUGAAG	GUCAAAGGUGUUGUGGACUCUA
ath-miR865-3p	ZjuHsp90-01	5.0	-1.0	UUUUUCCUCAAAUUUAUCCAA	GAGGAUGAUGAUGAGGAAAAG

Table S2.6 Targeted *ZjuHsp100* genes and their targeting miRNAs.

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR156a-3p	ZjuHsp100-74	5.0	-1.0	GCUCACUGCUCUUUCUGUCAGA	GACAAUGGAAAGAGCA-UGAGC
ath-miR156a-5p	ZjuHsp100-99	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156b-3p	ZjuHsp100-101	5.0	-1.0	UGCUCACUUCUUCUUCUGUCAGU	GAAGGUAGAAGGAUAGGAGGCCA
ath-miR156b-5p	ZjuHsp100-99	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156c-5p	ZjuHsp100-100	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156d-3p	ZjuHsp100-129	5.0	-1.0	GCUCACUCUCUUUUGUCAUAAC	UUUCAGAGAGAAAGAGAGAGAGA
ath-miR156d-5p	ZjuHsp100-100	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156e	ZjuHsp100-100	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156f-3p	ZjuHsp100-123	5.0	-1.0	GCUCACUCUCUAUCCGUCACC	CAUGGUGAAUGGAGAGUUAGA
ath-miR156f-5p	ZjuHsp100-99	5.0	-1.0	UGACAGAAGAGAGUGAGCAC	GUUUUUUAUCUUCUUGUCA
ath-miR156g	ZjuHsp100-57	5.0	-1.0	CGACAGAAGAGAGUGAGCAC	UUGUUUCCUGUCUUCUGUUU
ath-miR156h	ZjuHsp100-25	5.0	-1.0	UGACAGAAGAAAGAGAGCAC	UCUCUCUCUUUUUUCUCUCC
ath-miR156i	ZjuHsp100-146	5.0	-1.0	UGACAGAAGAGAGAGAGCAC	UCUCUCUCUCUCUUCUUUUU
ath-miR156j	ZjuHsp100-146	5.0	-1.0	UGACAGAAGAGAGAGAGCAC	UCUCUCUCUCUCUUCUUUUU
ath-miR157a-3p	ZjuHsp100-51	4.0	-1.0	GCUCUCAAGCCUUCUGUCAUC	AUUGAUGAAGCCUAGACAGA
ath-miR157a-5p	ZjuHsp100-81	5.0	-1.0	UUGACAGAAGAUAGAGAGCAC	GUGUCUUGGUUUUUUCUCA
ath-miR157b-3p	ZjuHsp100-51	4.0	-1.0	GCUCUCAAGCCUUCUGUCAUC	AUUGAUGAAGCCUAGACAGA
ath-miR157b-5p	ZjuHsp100-82	5.0	-1.0	UUGACAGAAGAUAGAGAGCAC	GUGUCUUGGUUUUUUCUCA
ath-miR157c-3p	ZjuHsp100-13	4.0	-1.0	GCUCUCUAUACUUCUGUCACC	AAUGAUAAGGUUAAGAGAUG
ath-miR157c-5p	ZjuHsp100-82	5.0	-1.0	UUGACAGAAGAUAGAGAGCAC	GUGUCUUGGUUUUUUCUCA
ath-miR157d	ZjuHsp100-81	5.0	-1.0	UGACAGAAGAUAGAGAGCAC	GUGUCUUGGUUUUUUCUCA
ath-miR158a-3p	ZjuHsp100-71	5.0	-1.0	UCCAAAUGUAGACAAAGCA	ACUUUUUUUCCAUUUUUGGA
ath-miR158a-5p	ZjuHsp100-07	5.0	-1.0	CUUUGUCUACAUUUUGGAAA	UUGCUGAAAUUGUAAGCAAAU
ath-miR159a	ZjuHsp100-154	5.0	-1.0	UUUGGAUUGAAGGGAGCUCUA	GAGAGCUUUCUUCACCCGAA
ath-miR159b-3p	ZjuHsp100-36	3.0	-1.0	UUUGGAUUGAAGGGAGCUCUU	UUAAUUUUUCUUAUCCAAA
ath-miR159b-5p	ZjuHsp100-101	5.0	-1.0	GAGCUCCUUGAAGUCAAUUGG	CCAUUAAAUUUCAAGAAAUC
ath-miR159c	ZjuHsp100-82	5.0	-1.0	UUUGGAUUGAAGGGAGCUCUU	GGGACUUCUUUUAAUUGCAA
ath-miR160a-3p	ZjuHsp100-58	5.0	-1.0	GCGUAUGAGGAGCCAUUGCAUA	CUUCGUUUUCUUCUAGCCAA
ath-miR161.2	ZjuHsp100-70	5.0	-1.0	UCAAUUGCAUUGAAAGUGACUA	AUACCACUUCUCCAGGCAUUGA
ath-miR162a-3p	ZjuHsp100-62	5.0	-1.0	UCGAUAAACCUCUGCAUCCAG	GAAAAUGAAGAAGUUUAUGA
ath-miR162a-5p	ZjuHsp100-12	4.0	-1.0	UGGAGGCAGCGGUUCAUCGAUC	AGUCGAAGAACUACUGCUUCCU
ath-miR163	ZjuHsp100-134	5.0	-1.0	UUGAAGAGGACUUGGAACUUGAU	AACGAAGUACUGUUCUUAUG
ath-miR164a	ZjuHsp100-131	5.0	-1.0	UGGAGAAGCAGGGCACGUGCA	UCUACGUGUCUUCUUCUUAUG
ath-miR164b-3p	ZjuHsp100-72	5.0	-1.0	CAUGUUGCCAUUCUACCAUC	GGAGGUCUAGGUGGGCCCAUG
ath-miR164c-5p	ZjuHsp100-131	5.0	-1.0	UGGAGAAGCAGGGCACGUGCG	UCUACGUGUCUUCUUCUUAUG
ath-miR165a-5p	ZjuHsp100-14	5.0	-1.0	GGAUUGUUGUCUGGAUCGAGG	CAAAGUUCAGUAACAUCUCC
ath-miR166a-3p	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUCCCC	UUGGAGUGGGGCUUGGAUUGG
ath-miR166c	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUCCCC	UUGGAGUGGGGCUUGGAUUGG

Table S2.6 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR166d	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUUC	UUGGAGUGGGGUUGGAUUGG
ath-miR166e-3p	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUUC	UUGGAGUGGGGUUGGAUUGG
ath-miR166e-5p	ZjuHsp100-42	5.0	-1.0	GGAAUGUUGUCUGGCACGAGG	CCAUCUGCAAAGACAACAUUUU
ath-miR166f	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUUC	UUGGAGUGGGGUUGGAUUGG
ath-miR166g	ZjuHsp100-119	5.0	-1.0	UCGGACCAGGCUUCAUUC	UUGGAGUGGGGUUGGAUUGG
ath-miR167a-3p	ZjuHsp100-96	5.0	-1.0	GAUCAUGUUCGAGUUUAC	ACAGAAACUCCGGCAAGAUC
ath-miR167a-5p	ZjuHsp100-101	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUA	AACUUCUUGUUGGCAGUUUUG
ath-miR167b	ZjuHsp100-101	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUA	AACUUCUUGUUGGCAGUUUUG
ath-miR167c-3p	ZjuHsp100-23	5.0	-1.0	UAGGUCUAGCUGGUAGUUUAC	GAGAAGGUUACUAAAAUGACCUA
ath-miR167c-5p	ZjuHsp100-26	5.0	-1.0	UAAGCUGCCAGCAUGAUCUUG	UAUGAUGAUGUUGGCGGUGUA
ath-miR167d	ZjuHsp100-132	5.0	-1.0	UGAAGCUGCCAGCAUGAUCUGG	CCGUUCAGGCCGGCGGUUUG
ath-miR168a-3p	ZjuHsp100-23	5.0	-1.0	CCCAGCUUGCAUCAACUGAAU	GGGCGGAGGAUGCAAGGUGGA
ath-miR168a-5p	ZjuHsp100-83	3.0	-1.0	UCGCUUGGUGCAGGUCGGGAA	CAGCCAGCCUGCAUCAGUGA
ath-miR168b-3p	ZjuHsp100-162	5.0	-1.0	CCCAGCUUGCAUCAACUGAAU	AAUCACGUUAUCAAGAAGGG
ath-miR168b-5p	ZjuHsp100-83	3.0	-1.0	UCGCUUGGUGCAGGUCGGGAA	CAGCCAGCCUGCAUCAGUGA
ath-miR169a-3p	ZjuHsp100-129	5.0	-1.0	GGCAAGUUGUCCUUGGCUAC	CUGGCCAGAGGCAUCUUGCU
ath-miR169a-5p	ZjuHsp100-12	5.0	-1.0	CAGCCAAGGAUGACUUGCCGA	UCAGAGGUCUUCUUGGUCU
ath-miR169b-3p	ZjuHsp100-31	4.0	-1.0	GGCAAGUUGUCCUUGGCUACA	CCGAGCCAGAGGAAAUUUGCU
ath-miR169b-5p	ZjuHsp100-15	5.0	-1.0	CAGCCAAGGAUGACUUGCCGG	CUGGGAAGUCAUACUUGGCCA
ath-miR169c	ZjuHsp100-15	5.0	-1.0	CAGCCAAGGAUGACUUGCCGG	CUGGGAAGUCAUACUUGGCCA
ath-miR169d	ZjuHsp100-80	5.0	-1.0	UGAGCCAAGGAUGACUUGCCG	AGGAAAGACGUGUUUGGCUUG
ath-miR169e	ZjuHsp100-80	5.0	-1.0	UGAGCCAAGGAUGACUUGCCG	AGGAAAGACGUGUUUGGCUUG
ath-miR169f-3p	ZjuHsp100-99	4.0	-1.0	GCAAGUUGACCUUGGCUUGC	GGAGAUGAUGGUUACUUGC
ath-miR169f-5p	ZjuHsp100-80	5.0	-1.0	UGAGCCAAGGAUGACUUGCCG	AGGAAAGACGUGUUUGGCUUG
ath-miR169g-3p	ZjuHsp100-19	5.0	-1.0	UCCGCAAGUUGUUGGCUUGC	CUCCAAGUCCAGUUUGUUGG
ath-miR169g-5p	ZjuHsp100-80	5.0	-1.0	UGAGCCAAGGAUGACUUGCCG	AGGAAAGACGUGUUUGGCUUG
ath-miR169h	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169i	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169j	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169k	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169l	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169m	ZjuHsp100-128	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	CCGGCAAAAACACUUUUGGCUA
ath-miR169n	ZjuHsp100-120	5.0	-1.0	UAGCCAAGGAUGACUUGCCUG	UUGGGAAAAACACUUUUGGCUU
ath-miR170-3p	ZjuHsp100-155	4.0	-1.0	UGAUUGAGCCGUGUCAUAUUC	UGUAUAGACCGGAUGAAUUA
ath-miR170-5p	ZjuHsp100-126	5.0	-1.0	UAUUGGCCUGGUUCACUCAGA	UUGGAGAGAGUGAGGCCAUG
ath-miR171a-5p	ZjuHsp100-59	5.0	-1.0	UAUUGGCCUGGUUCACUCAGA	GCUUGAUCAACCAGGUUAAGUG
ath-miR171b-3p	ZjuHsp100-62	5.0	-1.0	UUGAGCCGUGCCAUAUUCACG	GGUUGUGUUGGAACGUGUUAG
ath-miR171b-5p	ZjuHsp100-99	5.0	-1.0	AGAUUAUUGGCGGUUCAAUUC	GCUUGGAUUGCCUGAUUAUUG
ath-miR171c-3p	ZjuHsp100-13	5.0	-1.0	UUGAGCCGUGCCAUAUUCACG	UUUGAGAAGGGCACAGUCAAA
ath-miR171c-5p	ZjuHsp100-59	4.0	-1.0	AGAUUAUUGGCGGUUCAAUUC	ACUUGGGUUCUACCGAUUCU
ath-miR172a	ZjuHsp100-04	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAU	AUUUAGAUAUGGAGAUUUU
ath-miR172b-3p	ZjuHsp100-04	5.0	-1.0	AGAAUCUUGAUGAUGCUGCAU	AUUUAGAUAUGGAGAUUUU
ath-miR172b-5p	ZjuHsp100-60	5.0	-1.0	GCAGCACCAUUAAGAUCAC	GUGACAUUUGAUGAUGUUGC
ath-miR172c	ZjuHsp100-08	5.0	-1.0	AGAAUCUUGAUGAUG-CUGCAG	GUGCACAUUCGUAAGGUUUU
ath-miR172d-3p	ZjuHsp100-08	5.0	-1.0	AGAAUCUUGAUGAUG-CUGCAG	GUGCACAUUCGUAAGGUUUU
ath-miR172d-5p	ZjuHsp100-04	5.0	-1.0	GCAACAUCUUGAAGAUUCAGA	UUAGAACAUGGAGAUUUUGU
ath-miR172e-3p	ZjuHsp100-155	5.0	-1.0	GGAAUCUUGAUGAUGCUGCAU	AAGCAGCAGGCUA-GAUUCC
ath-miR172e-5p	ZjuHsp100-126	5.0	-1.0	GCAGCACCAUUAAGAUCAC	GGGGAUGCUGGUGGUGCUGC
ath-miR173-3p	ZjuHsp100-101	5.0	-1.0	UGAUUCUCUGUGUAAGCGAAA	UUCUUCUUGCAUAGAUUAUCA
ath-miR173-5p	ZjuHsp100-58	5.0	-1.0	UUCGCUUGCAGAGAGAAAUCAC	CUUUUUCUUUUUGCAAGUGGU
ath-miR1886.1	ZjuHsp100-110	5.0	-1.0	UGAG-AGAAGUGAGAUGAAAUC	UCUUUUUUUUUUUUUUUUUUUU
ath-miR1886.2	ZjuHsp100-12	5.0	-1.0	UGAGAUGAAAUCUUUGAUUGG	AUGAAAUAUGAUUUUUUUUCA
ath-miR1886.3	ZjuHsp100-41	5.0	-1.0	AUUUAAAGAUUUUCAUCUUACU	ACAAAAGAUUUUUUUUUUUUU
ath-miR1887	ZjuHsp100-59	4.0	-1.0	UACUAAGUAGAGUCUAAGAGA	AGUGUUAGAUUUUUUUUGAUA
ath-miR1888a	ZjuHsp100-31	5.0	-1.0	UAAGUUAAGAUUUUGAAGAA	CGCUUCGGAACUCUUUUCUUG
ath-miR1888b	ZjuHsp100-82	5.0	-1.0	UUAGGCUAAGAUUUUGAAGAA	UUCUAGUAACUGAGACUAA
ath-miR2111a-5p	ZjuHsp100-139	5.0	-1.0	UAAUCUGCAUCCUGAGGUUUA	AUAAUCUAAAAGAUUAUUA
ath-miR2111b-5p	ZjuHsp100-79	5.0	-1.0	UAAUCUGCAUCCUGAGGUUUA	AUAAUCUAAAAGAUUAUUA
ath-miR2112-3p	ZjuHsp100-31	4.0	-1.0	CUUUUAUUCGCAUUUUGCGCA	AAAGGAAUUGCGGUUUUGAAG
ath-miR2112-5p	ZjuHsp100-12	5.0	-1.0	CGCAAAUUGCGGAUAUCAUUGU	GGAAUGAUUUUUUUUUUUUGA
ath-miR2934-3p	ZjuHsp100-94	5.0	-1.0	CAUCCAAGGUGUUUGAAGAAA	UUUUAAUAGACAUUUGGAUG
ath-miR2934-5p	ZjuHsp100-83	5.0	-1.0	UCUUUCUGCAAACGCCUUGGA	CUCAAGUCGUGGUCGAAAGG
ath-miR2936	ZjuHsp100-52	5.0	-1.0	CUUGAGAGAGAGAACACAGACG	UGUUUUUGUUUUUUUUUUUUUU
ath-miR2937	ZjuHsp100-115	5.0	-1.0	AUAAGAGC-UGUUGAAGGAGUC	GCCUCCAUGACAUGCUCUUUAU
ath-miR2938	ZjuHsp100-129	5.0	-1.0	GAUCUUUUAGAGGGUUCACG	UUUGAACCUUCCCAAAGGCUU
ath-miR2939	ZjuHsp100-120	5.0	-1.0	UAACGCACAACACUAAGCCAG	GAGGCCUUGUGUUGGCUUUUG
ath-miR319a	ZjuHsp100-122	5.0	-1.0	UUGGACUGAAGGGAGCUCCCU	CAAGUGCUCUUUUUGGUCCAC
ath-miR319b	ZjuHsp100-122	5.0	-1.0	UUGGACUGAAGGGAGCUCCCU	CAAGUGCUCUUUUUGGUCCAC
ath-miR319c	ZjuHsp100-122	5.0	-1.0	UUGGACUGAAGGGAGCUCCCU	CAAGUGCUCUUUUUGGUCCAC
ath-miR3434-5p	ZjuHsp100-25	5.0	-1.0	ACUUGCUGAUUCUUAUUUUU	GAAAACAACUACGCCAAGU
ath-miR3434-3p	ZjuHsp100-15	5.0	-1.0	UCAGAGUAUCAGCAUGUGA	CCAAAUUGUUGAUGCAUUGA
ath-miR3440b-3p	ZjuHsp100-80	5.0	-1.0	UGGAUUGGCUAAGGGAAGCGU	CCGCUUUCGUGGCAACUCA
ath-miR3440b-5p	ZjuHsp100-71	5.0	-1.0	UUUUUCUUGGCCAUCACUUC	AGAGGGGAUGGCAAGCAAU
ath-miR390a-5p	ZjuHsp100-60	5.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	GGUGAUGUUUCUUGAGGUU
ath-miR390b-3p	ZjuHsp100-151	5.0	-1.0	CGCUAUCCAUCUGAGUUC	GGGAGUCAGGAUGAAAAGUG

Table S2.6 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR390b-5p	ZjuHsp100-60	5.0	-1.0	AAGCUCAGGAGGGAUAGCGCC	GGUGAUGUUUCUCUUGAGGUU
ath-miR391-3p	ZjuHsp100-101	5.0	-1.0	ACGGUUAUCUCUCCUACGUAGC	GAUUUGUGGGAAAGGUACCGA
ath-miR3932a	ZjuHsp100-99	5.0	-1.0	AACUUUGUGAUGACAACGAAG	UUUGGUUGUCGGGGCAAAGUU
ath-miR3932b-3p	ZjuHsp100-99	5.0	-1.0	AACUUUGUGAUGACAACGAAG	UUUGGUUGUCGGGGCAAAGUU
ath-miR3933	ZjuHsp100-96	5.0	-1.0	AGAAGCAAAAUGACGACUCGG	AAGAGU-GUUUUUUUGGUUCA
ath-miR393a-3p	ZjuHsp100-60	5.0	-1.0	AUCAUGCUAUCUCUUUGGAUU	CAUCUAAAGAGAUUG-AUGAU
ath-miR393a-5p	ZjuHsp100-38	5.0	-1.0	UCCAAAGGGAUCGCAUUGAUCC	CAAUCCAU-CGAUUUCUUUGGU
ath-miR393b-3p	ZjuHsp100-109	5.0	-1.0	AUCAUGCUAUCUCUUUGGAUU	GCAACAAAGAGAUACGAUGAU
ath-miR393b-5p	ZjuHsp100-38	5.0	-1.0	UCCAAAGGGAUCGCAUUGAUCC	CAAUCCAU-CGAUUUCUUUGGU
ath-miR394a	ZjuHsp100-123	5.0	-1.0	UUGGCAUUCUGUCCACCUC	AGAGUUAGAUGGAGGGCCAA
ath-miR394b-5p	ZjuHsp100-123	5.0	-1.0	UUGGCAUUCUGUCCACCUC	AGAGUUAGAUGGAGGGCCAA
ath-miR395a	ZjuHsp100-39	5.0	-1.0	CUGAAGUGUUUGGGGGAACUC	GAGUUCCUACGAGUACAUCAG
ath-miR395b	ZjuHsp100-44	5.0	-1.0	CUGAAGUGUUUGGGGGACUC	AUUGCCCCCAAACCUUUCU
ath-miR395c	ZjuHsp100-44	5.0	-1.0	CUGAAGUGUUUGGGGGACUC	AUUGCCCCCAAACCUUUCU
ath-miR395d	ZjuHsp100-38	5.0	-1.0	CUGAAGUGUUUGGGGGAACUC	GAGUUCCUACGAGUACAUCAG
ath-miR395e	ZjuHsp100-39	5.0	-1.0	CUGAAGUGUUUGGGGGAACUC	GAGUUCCUACGAGUACAUCAG
ath-miR395f	ZjuHsp100-44	5.0	-1.0	CUGAAGUGUUUGGGGGACUC	AUUGCCCCCAAACCUUUCU
ath-miR396a-3p	ZjuHsp100-44	4.0	-1.0	GUCCAUAUAAGCUGUGGGAAG	UUUGCCGUCAGUUUUGUAGU
ath-miR396a-5p	ZjuHsp100-04	5.0	-1.0	UCCACAGCUUUCUUGAACUG	GAGUUUGAGGAGGUGGUGGG
ath-miR396b-3p	ZjuHsp100-44	5.0	-1.0	GCUCAAGAAAGCUGUGGGAAA	UUUGCCGUCAGCUUUGUAGU
ath-miR396b-5p	ZjuHsp100-04	5.0	-1.0	UCCACAGCUUUCUUGAACUU	GAGUUUGAGGAGGUGGUGGG
ath-miR397a	ZjuHsp100-148	5.0	-1.0	UCAUUGAGUGCAUGCUUGAUG	GUUUGAGGUCUGUAUUUGUGA
ath-miR397b	ZjuHsp100-12	5.0	-1.0	UCAUUGAGUGCAUGCUUGAUG	CGUCGGUGAUGCGCUGAAGGA
ath-miR398a-3p	ZjuHsp100-106	5.0	-1.0	UGUGUUCACAGGUCACCCUU	CAAAGGUGACUUGGGAAGUA
ath-miR398a-5p	ZjuHsp100-55	5.0	-1.0	AAGGAGUGGCAUGUGAACACA	UGUGUCCAUUGUUUUUGUU
ath-miR398b-3p	ZjuHsp100-106	5.0	-1.0	UGUGUUCACAGGUCACCCUG	CAAAGGUGACUUGGGAAGUA
ath-miR398b-5p	ZjuHsp100-30	5.0	-1.0	AGGGUUGAUUUGAGAACACAC	GAGUCCUUAUUAUGGACCUC
ath-miR398c-3p	ZjuHsp100-108	5.0	-1.0	UGUGUUCACAGGUCACCCUG	CAAAGGUGACUUGGGAAGUA
ath-miR398c-5p	ZjuHsp100-30	5.0	-1.0	AGGGUUGAUUUGAGAACACAC	GAGUCCUUAUUAUGGACCUC
ath-miR399b	ZjuHsp100-79	3.0	-1.0	UGCCAAAGGAGAGUUGCCUG	GGGGGCAACUUUGAUUUGGCA
ath-miR399c-3p	ZjuHsp100-140	3.0	-1.0	UGCCAAAGGAGAGUUGCCUG	GGGGGCAACUUUGAUUUGGCA
ath-miR399c-5p	ZjuHsp100-19	5.0	-1.0	GGGCAUCUUUCUAUUGGCAGG	CCUCCCAUACAGAGGUUCC
ath-miR399e	ZjuHsp100-101	5.0	-1.0	UGCCAAAGGAGAUUUGCCUG	ACAGGGAAAACUUUUAUGGCA
ath-miR400	ZjuHsp100-34	5.0	-1.0	UAUGAGAGUUAUUAAGUCAC	GACAUUGAUAAUGUCUUAAA
ath-miR401	ZjuHsp100-123	5.0	-1.0	CGAAACUGGUGCAGCCGACA	UUUUGGUUGGAGUUAUUUG
ath-miR402	ZjuHsp100-119	5.0	-1.0	UUCGAGCCUUAUUAACCCUCUG	UGGGGCUUGGAUUUGGCUUGAA
ath-miR403-5p	ZjuHsp100-01	5.0	-1.0	UGUUUUGUCUUGAAUCUAAUU	CCGGCGUUUAAGCUCAAAGCG
ath-miR404	ZjuHsp100-123	5.0	-1.0	AUUAACGCGGCGGUUGCGGCAGC	GCCGCGCGCGCGCGCGGUUUAU
ath-miR405a	ZjuHsp100-03	4.0	-1.0	AUGAGUUGGUCUAACCCAUAAU	CGAUUUGGCUAGUACCCAGUUCU
ath-miR405b	ZjuHsp100-03	4.0	-1.0	AUGAGUUGGUCUAACCCAUAAU	CGAUUUGGCUAGUACCCAGUUCU
ath-miR405d	ZjuHsp100-03	4.0	-1.0	AUGAGUUGGUCUAACCCAUAAU	CGAUUUGGCUAGUACCCAGUUCU
ath-miR406	ZjuHsp100-160	5.0	-1.0	UAGAAUGCUUUGUAUCCAG	GAGGAUCUUGAUCGUAUCUG
ath-miR407	ZjuHsp100-11	5.0	-1.0	UUUAAAUCUAUACUUUUGGU	UGAGAAAUAUUAUGAUGUAAU
ath-miR408-3p	ZjuHsp100-26	5.0	-1.0	AUGCACUGCCUUCUCCUGGC	UGCACGGAAGCGGCACUGCAA
ath-miR413	ZjuHsp100-03	5.0	-1.0	AUAGUUUCUCUUGUUCGCAC	CGAUUUAAACAAGAGAAACUAA
ath-miR414	ZjuHsp100-92	5.0	-1.0	UCAUCUUGAUCAUCAUCGUCA	CGACGAGUAGUAGGAGGCAU
ath-miR415	ZjuHsp100-49	5.0	-1.0	AACAGAGCAGAAACAGAACAU	AUGUUC-GUCUAGUCUCUGUU
ath-miR416	ZjuHsp100-99	5.0	-1.0	GGUUCGUACGUACACUGUUCA	CGAACAG-GUAUGUGCGAGUG
ath-miR417	ZjuHsp100-12	5.0	-1.0	GAAGGUAGUGAAUUUGUUCGA	UCAAAUAGGUUUAUGCUUUG
ath-miR418	ZjuHsp100-89	5.0	-1.0	UAAUGUGAUGAUGAACUGACC	CAUGAGUCCAUUAUCCGUUA
ath-miR419	ZjuHsp100-126	5.0	-1.0	UUAGUAAUGCUGAGGAGUUGU	CGAAGUUCUCCGUUAUCAUAC
ath-miR420	ZjuHsp100-53	4.0	-1.0	UAAACAUAUCAGGAAAUGCA	UGUAUAUACGUGUUUAGUUUA
ath-miR4221	ZjuHsp100-121	5.0	-1.0	UUUUCUUGUUGUUAUUCUUGC	GCAAGUAUUAUCUAGGGGAAAA
ath-miR4228-3p	ZjuHsp100-95	5.0	-1.0	UCGGAUGCGAAACGGUGGUGU	AUACUGUGGUUUUCCAUUCGA
ath-miR4228-5p	ZjuHsp100-162	5.0	-1.0	AUAGCCUUGAACGCCGUCGUU	UCCGGCGACGUUUAAGACUCU
ath-miR4239	ZjuHsp100-12	5.0	-1.0	UUUGUUAAUUCGCAUGCUC	AAAGGUUGGAAAUAUUGCAAG
ath-miR4240	ZjuHsp100-75	4.0	-1.0	UGACUAGACCCGUAACAUUAC	UCAAGUAGCGGUUCUAAUCA
ath-miR4243	ZjuHsp100-12	5.0	-1.0	UUGAAAUAUGAUAUUCGUAC	UUUGGUAUUCACAGGUUUUA
ath-miR4245	ZjuHsp100-59	5.0	-1.0	ACAAAGUUUUUAUCUGACAAU	UCUGAGAUAAAAUUUUUGA
ath-miR426	ZjuHsp100-89	5.0	-1.0	UUUUGGAAAUUUGUCUACG	GCAAGAAUAAGAUUUUAAAA
ath-miR447a.2-3p	ZjuHsp100-98	5.0	-1.0	UAUGGAAGAAAUUGUAGUAAU	GAGAUUGUAAUUUCUUCUUG
ath-miR447a-3p	ZjuHsp100-144	5.0	-1.0	UUGGGGACGAGAUUUUUGUUG	UUGCAGAGAAUCUAGCCCAA
ath-miR447b	ZjuHsp100-144	5.0	-1.0	UUGGGGACGAGAUUUUUGUUG	UUGCAGAGAAUCUAGCCCAA
ath-miR447c-3p	ZjuHsp100-12	5.0	-1.0	UUGGGGACGACAUUUUUGUUG	AAAUAAGAGGUCGUUGUUAA
ath-miR472-3p	ZjuHsp100-84	4.0	-1.0	UUUUCCUACUCCGCCCAUACC	GGUGAAAGUUGGGUAGGAAAAA
ath-miR472-5p	ZjuHsp100-119	5.0	-1.0	AUGUCGGAAGUAGGCAAAAU	UGUCUGGUUACUUGGUCUUA
ath-miR5012	ZjuHsp100-12	5.0	-1.0	UUUUACUGCUACUUGUGUUC	UAAAUGCAUGUGGCAGCAGAA
ath-miR5013	ZjuHsp100-126	5.0	-1.0	UUUGUGACAUUCAGGUCUUU	AGAGAAGAUUGAUGUUAUAGA
ath-miR5014a-3p	ZjuHsp100-30	5.0	-1.0	UUGUACAAAUUUAAGUGUACG	UUUGGAGUUGGAUUCGUACAA
ath-miR5014a-5p	ZjuHsp100-81	5.0	-1.0	ACACUUAGUUUUUGUACAAAU	UCGUCUACAAAAGUAGCUGU
ath-miR5014b	ZjuHsp100-83	5.0	-1.0	AUUUGUACACCUAGAUUCUGA	AACAACUUUGGGUGGUAUUAA
ath-miR5015	ZjuHsp100-62	5.0	-1.0	UUGGUGUUUGUGUAGUCUUC	UGCUUCUGCACAAUACCGUCGA
ath-miR5016	ZjuHsp100-101	5.0	-1.0	UUUUUGGUAUUUCUUUGGAAA	AUUUCAAGAAAUAACCAAAAU
ath-miR5017-3p	ZjuHsp100-20	5.0	-1.0	UUUAACCAAAUUUAAGCAAA	CUUGCUAUUUGUUCGUUAGC
ath-miR5017-5p	ZjuHsp100-15	5.0	-1.0	AUUUGUUACUAAUUUGGAAUG	UAUCCAAAUUUGUAGUAGAU

Table S2.6 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR5019	ZjuHsp100-144	5.0	-1.0	UGUUGGGAAAGAAAAACUCUU	UUUUUUUUUUUUUUUUUUUAUA
ath-miR5020a	ZjuHsp100-127	5.0	-1.0	UGGAAGAAGGUGAGACUUGCA	CUUCCGUUUACCUUCUUCUU
ath-miR5020b	ZjuHsp100-65	5.0	-1.0	AUGCAUGAAAAGAAGGUGAGA	UUUACCUUUUUUUUGGGCUAU
ath-miR5020c	ZjuHsp100-60	5.0	-1.0	UGGCAUGGAAGAAGGUGAGAC	GUUCCAUUUUUUUUCCAUUCCA
ath-miR5021	ZjuHsp100-36	5.0	-1.0	UGAGAAGAAGAAGAAGAAAA	UUGUCUUUUUCUCUUUUUUCC
ath-miR5022	ZjuHsp100-82	5.0	-1.0	GUCAUGGGUUAUGAUCGAAUG	CCUUCGAUCAUCUUCUUUGAU
ath-miR5023	ZjuHsp100-93	5.0	-1.0	AUUGGUAGUGGAUAAGGGGGC	GUUUUUGUUCUACCACCAAU
ath-miR5024-3p	ZjuHsp100-15	5.0	-1.0	CCGUACUUCUGCCUUGUCAUU	CCAGAGCAGGCCAAGUUGCGG
ath-miR5025	ZjuHsp100-124	5.0	-1.0	ACUGUAUAUAUGUAAGUGACA	AGUUCUUUGUAUAUAUAUGGA
ath-miR5027	ZjuHsp100-18	5.0	-1.0	ACCGGUUGGAACUUGCCUUA	AUAGGCCAAGUUC-AAUCGGU
ath-miR5028	ZjuHsp100-82	5.0	-1.0	AAUUGGGUUUAUGCUAGAGUU	GAUUUGAUCGUGAAUUCAAUU
ath-miR5029	ZjuHsp100-45	5.0	-1.0	AAUGAGAGAGAACACUCGCAA	CCUGCACUAUUUUUUUCUUUU
ath-miR5029a	ZjuHsp100-97	5.0	-1.0	ACAUUAUGAUCUGCAUCUUUGC	GGAAAGAUUUAGAUUAUAUG
ath-miR5028	ZjuHsp100-14	5.0	-1.0	GAAAUAGCGAAGAUUAUGAUA	UAAUUUAU-UCUUUGGUUUUU
ath-miR5029	ZjuHsp100-101	5.0	-1.0	UUAGGGUAGUUAACGGAAGUUA	UGGCUUCCUUGACAACUCUCG
ath-miR5030a	ZjuHsp100-126	5.0	-1.0	GCUAAGAGCGGUUCUGAUGGA	CACUCCAAACUGCUCUUGGG
ath-miR5030b	ZjuHsp100-42	5.0	-1.0	GCUAAGAGCGGUUCUGAUGGA	CCUAUGAAAGCCGCUUCUGU
ath-miR5031	ZjuHsp100-03	5.0	-1.0	UGGACGGAAGACAUAAUUUU	GAAUUUCUGUCUCUCGACG
ath-miR5032-3p	ZjuHsp100-114	4.0	-1.0	UUGGAUUUAUAGUUGGAUAAG	UAGAUCUACUGUGAAUUUGA
ath-miR5032-5p	ZjuHsp100-146	5.0	-1.0	UUGAUUCUCUUAUCCAACUGU	UAGGUUGGAUGAGAUUAUGU
ath-miR5033	ZjuHsp100-25	5.0	-1.0	UAUGAUAUCAGAAAACAGUG	AAUUGUUUAUGAUGAUUGUA
ath-miR5034	ZjuHsp100-96	5.0	-1.0	AGGACUUUUGUGAUUUUAGGG	CAACAAAUAUCAAGUCUUUU
ath-miR5035a	ZjuHsp100-152	4.0	-1.0	UGUUAAAGGAGUUAACGGUG	ACUCAUUAGUAUUUUUUGACA
ath-miR5035b	ZjuHsp100-151	4.0	-1.0	UGUUAAAGGAGUUAACGGUG	ACUCAUUAGUAUUUUUUGACA
ath-miR5035c	ZjuHsp100-152	4.0	-1.0	UGUUAAAGGAGUUAACGGUG	ACUCAUUAGUAUUUUUUGACA
ath-miR5035d	ZjuHsp100-151	4.0	-1.0	UGUUAAAGGAGUUAACGGUG	ACUCAUUAGUAUUUUUUGACA
ath-miR5038a	ZjuHsp100-80	5.0	-1.0	AUACCAAAACUCUCACUUU	AAAGUGAUGGGGUUCAGUAU
ath-miR5038b	ZjuHsp100-72	5.0	-1.0	ACAGUGGUCUUCUGGUGGCU	UGCCCUUCAACUGACCGCUGU
ath-miR5039-3p	ZjuHsp100-123	4.0	-1.0	UUUAGCCUCAGACCAGGUGGACU	AGUUGAACGGUUCUGAUUUAAA
ath-miR5039-5p	ZjuHsp100-96	5.0	-1.0	UAGUCCACUGGGUCUAAGGC	GAUUUAGAUUAUAUUGGACGA
ath-miR5040	ZjuHsp100-85	5.0	-1.0	UGAGAGAAGGAAUUAAGAUUA	GUACUAUAUUUUUUUUUUUA
ath-miR5041	ZjuHsp100-31	5.0	-1.0	UGGAAGAAGAUAGAUAGAAUA	GAAUUCAAUAUUUGCUUCA
ath-miR5042a	ZjuHsp100-14	4.0	-1.0	UCUCGCGCUUGUACGGCUUU	AAACCAGUCCAGGCGUGAGA
ath-miR5042b	ZjuHsp100-14	4.0	-1.0	UCUCGCGCUUGUACGGCUUU	AAACCAGUCCAGGCGUGAGA
ath-miR5043	ZjuHsp100-68	5.0	-1.0	AGGCUUUUAAGAUUCUG-GUUGC	GCAACAUAGAUCUUAGGAGCU
ath-miR5043a	ZjuHsp100-36	5.0	-1.0	AGGCUUUUAAGAUUCUGGUGC	UUAAACUCGAUCAUGAAACCU
ath-miR5044	ZjuHsp100-75	5.0	-1.0	GUGGGUUGCGGAUAACGGUA	UAUUGUUGUCCAAUCCAG
ath-miR5045a	ZjuHsp100-12	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CUUGAUGAAAUGAAUCAAAAG
ath-miR5045b	ZjuHsp100-12	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CUUGAUGAAAUGAAUCAAAAG
ath-miR5045d	ZjuHsp100-12	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CUUGAUGAAAUGAAUCAAAAG
ath-miR5045e	ZjuHsp100-12	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CUUGAUGAAAUGAAUCAAAAG
ath-miR5045f	ZjuHsp100-12	5.0	-1.0	AUUUGAGUCAUGUCGUUAAG	CUUGAUGAAAUGAAUCAAAAG
ath-miR5046	ZjuHsp100-157	5.0	-1.0	GUUCGAGGCACGUUGGGAGG	ACUUGCAACAUGUCUUGAAA
ath-miR5047	ZjuHsp100-109	5.0	-1.0	UCAAGUUUGAUGACGAUUCCA	UGAAAUUGGUGUCAAGUUUGA
ath-miR5048-5p	ZjuHsp100-99	5.0	-1.0	UUUGGAAUAUUUGGCUUGACU	UUUCGGGGUAGUAUUUCCAAA
ath-miR5049a	ZjuHsp100-89	5.0	-1.0	AUUGAAUAUGUUGGUUAACUAU	AUAUUAAUUAAGUUAUUUUUA
ath-miR5049b	ZjuHsp100-89	5.0	-1.0	AUUGAAUAUGUUGGUUAACUAU	AUAUUAAUUAAGUUAUUUUUA
ath-miR5050	ZjuHsp100-127	5.0	-1.0	UUGUUUUUGAUCUUAAGAUACA	UUGAUCGAAGAUGUGGAACAA
ath-miR5051	ZjuHsp100-15	5.0	-1.0	UUGUGCGGUUGAUAUAAGAAC	UCUUUUAAUUGGAUUGCGCAG
ath-miR5052	ZjuHsp100-43	5.0	-1.0	UUGAAUGUGAAUGAACGGGC	GCCCGAUUUUGUAUUGUCCA
ath-miR5053	ZjuHsp100-12	5.0	-1.0	UGGGUUGAGUUGAGUUGAGUUGGC	AUGAGCUUAACUUGCCUCCAGC
ath-miR5054-3p	ZjuHsp100-83	5.0	-1.0	UGGAAGAGUUCUUUGGUAUUUAU	CAUAUAUUUCAAGGCUUUUGCA
ath-miR5054-5p	ZjuHsp100-101	4.0	-1.0	AUAAAUCCCAACAUUCUCCA	AAGUGGAUGAUGGGAAUUUGU
ath-miR5055	ZjuHsp100-80	5.0	-1.0	AAGUAGACACAUAAAGAAGGAG	UGCAUUCUUGU-UGUUUACUU
ath-miR5056	ZjuHsp100-132	5.0	-1.0	ACUGAAGUAGAGAUUGGGUUU	GCUCUCGAGCUCUCUUCAGC
ath-miR5057	ZjuHsp100-12	5.0	-1.0	UGGACAAGGUUAGAUUUGGUG	UGGGAAGACUAGCCUUGUUCG
ath-miR5058	ZjuHsp100-03	5.0	-1.0	AUGAUGAUGAUGAUGAUGAAA	GAUCAUGAUCACGAUCAUCA
ath-miR5059	ZjuHsp100-34	5.0	-1.0	CGAUGAAGGUUCUUGGAACGGUA	GAAAUAUCCAGAUUCUUAUUG
ath-miR5060	ZjuHsp100-37	5.0	-1.0	CAGGUGUUUAGUGCAAUGGAA	UUUCUUUGAUGGUCCACCUG
ath-miR5061	ZjuHsp100-07	4.0	-1.0	AGAGGUACAUCAGUAGUCUG	ACAAUUGCAUGAUGUUGUUUU
ath-miR5062	ZjuHsp100-80	4.0	-1.0	AGAGGUGACCAUUGGAGAUG	AGCCUUCUUGGUCGCCUUCU
ath-miR5063-3p	ZjuHsp100-40	5.0	-1.0	UGAGAAUGCAAUCCUUAAGCU	UUCUAAAGAUUUU- AUUUUUUA
ath-miR5063-5p	ZjuHsp100-125	5.0	-1.0	AGCUAAGGAUUUGCAUUCUCA	AGAGAAUUUGGAUCUUAGGCU
ath-miR5064	ZjuHsp100-126	5.0	-1.0	AUAGUCAAUUUUAU-CGGUCUG	UAGACUGGAUGAGGUUGGUUAU
ath-miR5065	ZjuHsp100-01	4.0	-1.0	UUGGUGGACAAGAUCUGGGAU	GGACCGGCUUUUGUACACCAA
ath-miR5065b	ZjuHsp100-96	5.0	-1.0	ACAUUAUGAUCUGCAUCUUUGC	GGAAAGAUUUAGAUUAUAUG
ath-miR5066	ZjuHsp100-130	4.0	-1.0	UGACAUCAGAUAGAAGCUUUG	AGGAGCUACUAU-UGGAUGUCG
ath-miR5067	ZjuHsp100-57	4.0	-1.0	UGAAACCAAGUAGCUAAAUAAG	ACAUUUGGUU-CUUGGUUUCA
ath-miR5068	ZjuHsp100-91	5.0	-1.0	ACAGUUUGUUGUUUGUUUUUGU	ACAGUAUAUAACAUAACUGG
ath-miR5069	ZjuHsp100-91	5.0	-1.0	ACAGUUUGUUGUUUGUUUUUGU	ACAGUAUAUAACAUAACUGG
ath-miR5070	ZjuHsp100-12	5.0	-1.0	UCUUCACAUUAGACGGACAA	AGAAUUGUCUGAUACUGAAGA
ath-miR771	ZjuHsp100-114	5.0	-1.0	UGAGCCUUCUGGUAGCCUCA	UCGAGGCAAAUACAAGGUUCA
ath-miR773a	ZjuHsp100-68	5.0	-1.0	UUUGUCUCCAGCUUUUGUCUC	CAGGCGAAAGAUUGAGGCGAA
ath-miR773b-3p	ZjuHsp100-20	5.0	-1.0	UUUGAUUCCAGCUUUUG-UCUC	GAGAUCAAUAGCUGGAUAAGAA
ath-miR773b-5p	ZjuHsp100-60	5.0	-1.0	GGCAAUAACUUGAGCAAACA	GGCUUCUUAAAGUUGUUGCU

Table S2.6 Continued

miRNA_Acc.	Target_Acc.	Exp.	UPE	miRNA_aligned_fragment	Target_aligned_fragment
ath-miR774a	ZjuHsp100-151	5.0	-1.0	UUGGUUACCCAUAUGGCCAUC	UCUGACCGUAUGGAUGACAAA
ath-miR774b-3p	ZjuHsp100-12	5.0	-1.0	CAUCCAUAUUUUAUCUCGAA	CUGGGGAUGGAAAUCUUGAUG
ath-miR774b-5p	ZjuHsp100-105	5.0	-1.0	UGAGAUGAAGAU AUGGGUGAU	UUUCUCCAUAUCUGCCUCUCA
ath-miR775	ZjuHsp100-40	5.0	-1.0	UUCGAUGUCUAGCAGUGCCA	AGGCAAUGUUUGACAUCCGA
ath-miR776	ZjuHsp100-135	5.0	-1.0	UCUAAGUCUUCUAUUGAUGUU	GGAAUUGCUGGGAGAUUUGGA
ath-miR777	ZjuHsp100-18	5.0	-1.0	UACGCAUUGAGUUUCGUUGCUU	AACUAACUGGGCUUGAUGUGUG
ath-miR778	ZjuHsp100-44	5.0	-1.0	UGGCUUGGUUUUAUGUACACCG	UUUGUGUCUUGAUCCAAGCCU
ath-miR779.1	ZjuHsp100-83	4.0	-1.0	UUCUGCUAUGUUGCUGCUCAU	CGGAUGAGAAACGUAGCAGGA
ath-miR779.2	ZjuHsp100-109	5.0	-1.0	UGAUUGGAAAUUUCGUUGACU	GGUGGAAGAAAUUUUUAAACA
ath-miR780.1	ZjuHsp100-116	5.0	-1.0	UCUAGCAGCUGUUGAGCAGGU	UCUUGCUCUAGAGUUGCUGGG
ath-miR780.2	ZjuHsp100-70	5.0	-1.0	UUCUUCGUGAAUAUCUGGCAU	UUCCAAGUAUUCAAUAAGAA
ath-miR781a	ZjuHsp100-115	5.0	-1.0	UUAGAGUUUUCUGGAUACUUA	CCAAUUUCUAGGAAACUUUGU
ath-miR781b	ZjuHsp100-115	5.0	-1.0	UUAGAGUUUUCUGGAUACUUA	CCAAUUUCUAGGAAACUUUGU
ath-miR782	ZjuHsp100-119	5.0	-1.0	ACAACACCUUGGAUGUUCUU	AAGAAUUUCGAGGGAGUUUGU
ath-miR8121	ZjuHsp100-91	5.0	-1.0	AAAGUAUAAUGGUUUAGUGGUUU	CAGGCCAC-AAGUUUAGUACUUG
ath-miR8165	ZjuHsp100-36	5.0	-1.0	AAUGGAGGCAAGUGUGAAGGA	CAAGUCAAGCUUGCCUUAUG
ath-miR8166	ZjuHsp100-98	5.0	-1.0	AGAGAGUGUAGAAAGUUUCUCA	GAAGGAACUGUCUGCAUAUUCU
ath-miR8167a	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8167b	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8167c	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8167d	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8167e	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8167f	ZjuHsp100-90	5.0	-1.0	AGAUGUGGAGAUUCGUGGGGAUG	CUCCCCAUGAGUCCAUGACU
ath-miR8168	ZjuHsp100-109	5.0	-1.0	AGGUGCUGAGUGUCUAGUGC	GCACAAGAGAAUUAGCACCU
ath-miR8169	ZjuHsp100-12	5.0	-1.0	AUAGACAGAGUCACUCACAGA	AGAGUGGGUCACUUUGUUUAG
ath-miR8170-3p	ZjuHsp100-129	5.0	-1.0	UUGCUIAAAGAUUUUCUUAUGU	UUUAUAGAAUCUUUCAGAGA
ath-miR8170-5p	ZjuHsp100-27	4.0	-1.0	AUAGCAAUCGUAUAGCAAUG	CAUUGAUUUAUUGGUUUUUUGU
ath-miR8171	ZjuHsp100-95	5.0	-1.0	AUAGGUGGGCCAGUGGUAGGA	UGCUCGUGUUGGUCGAUUUAU
ath-miR8172	ZjuHsp100-127	5.0	-1.0	AUGGAUCAUCU-AGAUGGAGAU	AUCUCCAUUUUGGAAUCCCAA
ath-miR8173	ZjuHsp100-131	5.0	-1.0	AUGUGCUGAUUCGAGGUGGGA	CCCAUCACGGUUCAGGACAU
ath-miR8174	ZjuHsp100-12	5.0	-1.0	AUGUGUAUAGGGAAGCUAAUC	UUUUAGCUUCUCUCUAUUCAA
ath-miR8176	ZjuHsp100-58	5.0	-1.0	GGCCGGUGGUCGCGAGAGGGA	AAGCCUCGUCGCCACCGGCG
ath-miR8177	ZjuHsp100-01	5.0	-1.0	GUGUGAUGAUGUGUCAUUUAUA	UCUAAUAACUUUAUUUACAA
ath-miR8178	ZjuHsp100-42	5.0	-1.0	UAACAGAGUAAUUGUACAGUG	AUUUGUAAAAGUUAUUCUGUGU
ath-miR8179	ZjuHsp100-08	5.0	-1.0	UGACUGCAUUAACUUGAUCGU	GUGAGCAGGUUGAUGCUGUUC
ath-miR8180	ZjuHsp100-82	5.0	-1.0	UGCUGGUGGCGGAGAAAGUGC	GCAAUUUUCUUCACUGUU
ath-miR8181	ZjuHsp100-58	5.0	-1.0	UGGGGUGGGGGGUGACAG	UCCUCCUUCUCCACUCCCA
ath-miR8182	ZjuHsp100-155	5.0	-1.0	UUGUGUUGCGUUUCUGUUGAUU	AAACAACAGAAUACAGCGAAG
ath-miR8183	ZjuHsp100-12	4.0	-1.0	UUUAGUUGACGGAAUUGUGGC	UACACCAUUCUGUUAUUGGC
ath-miR8184	ZjuHsp100-43	5.0	-1.0	UUUGGUCUGAUUACGAAUGUA	UAAGUUUGUAAUUGGACAAGA
ath-miR822-3p	ZjuHsp100-126	5.0	-1.0	UGUGCAAUUGCUUUCUACAGG	AAUUGGAAAGCGUGUUCACA
ath-miR823	ZjuHsp100-147	5.0	-1.0	UGGUGGUGAUCAUAUAAGAU	ACAUUCAUUGAUCACUAUUUA
ath-miR824-3p	ZjuHsp100-102	5.0	-1.0	CCUUCUCAUCGAUGGUCUAGA	AGGAGCUCUACGAUGAGAACC
ath-miR824-5p	ZjuHsp100-60	5.0	-1.0	UAGACCAUUGUGAGAAGGGA	UGCCUUGUGGAAAUGGUUUA
ath-miR825	ZjuHsp100-153	5.0	-1.0	UUCUCAAGAAGGUGCAUGAAC	AUUCAUGUAUUUUUUGAUAA
ath-miR826a	ZjuHsp100-70	4.0	-1.0	UAGUCCGGUUUUGGAUACGUG	UUAGGAUUCAGACCGGGCUC
ath-miR826b	ZjuHsp100-131	5.0	-1.0	UGUUUUUGGACACGUGAAAAU	CUAUUUUUGGACUAAGACUA
ath-miR827	ZjuHsp100-12	5.0	-1.0	UUAGAUGACCAUCAACAAACU	UACCGUUUGAUGGUUUUUUAA
ath-miR870-3p	ZjuHsp100-13	4.0	-1.0	UAAUUUGGUGUUUCUUCGAUC	ACUGGAAGAAACUCCAAGUAA
ath-miR870-5p	ZjuHsp100-12	4.0	-1.0	AAGAACAUCAAAUAAGAAUGU	CGAUGCAAUUGAUGUUCUC

Table S3.1 Calculation of divergence time rates and Ka/Ks ratios of orthologous *Zjushsp* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Ziziphus jujuba – *A. thaliana*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-01	1	AT4G27670.1	4	5,4464	0,2618	0,048068449	41,89538462
ZjusHsp-04	1	AT5G54660.1	5	6,9186	0,4109	0,059390628	53,22
ZjusHsp-10	2	AT2G29500.1	2	17,6597	0,1919	0,010866549	135,8438462
ZjusHsp-10	2	AT1G07400.1	1	4,5738	0,1917	0,041912633	35,18307692
ZjusHsp-10	2	AT3G46230.1	3	11,1716	0,2521	0,02256615	85,93538462
ZjusHsp-10	2	AT5G59720.1	5	7,0981	0,2365	0,033318775	54,60076923
ZjusHsp-10	2	AT1G53540.1	1	6,8061	0,2388	0,035086173	52,35461538
ZjusHsp-10	2	AT1G59860.1	1	56,9142	0,1967	0,00345608	437,8015385
ZjusHsp-12	2	AT2G29500.1	2	53,1931	0,1328	0,002496564	409,1776923
ZjusHsp-12	2	AT5G59720.1	5	16,3847	0,2189	0,013360025	126,0361538
ZjusHsp-12	2	AT3G46230.1	3	6,4691	0,2099	0,032446554	49,76230769
ZjusHsp-12	2	AT1G53540.1	1	4,9877	0,1935	0,038795437	38,36692308
ZjusHsp-12	2	AT1G07400.1	1	9,6581	0,1748	0,018098798	74,29307692
ZjusHsp-13	2	AT2G29500.1	2	17,0303	0,1893	0,011115482	131,0023077
ZjusHsp-13	2	AT1G53540.1	1	6,8204	0,2289	0,033561081	52,46461538
ZjusHsp-13	2	AT1G07400.1	1	4,6325	0,1884	0,040669185	35,63461538
ZjusHsp-13	2	AT3G46230.1	3	9,1355	0,2417	0,026457227	70,27307692
ZjusHsp-13	2	AT5G59720.1	5	6,9812	0,2264	0,032429955	53,70153846
ZjusHsp-16	2	AT2G29500.1	2	13,4878	0,1183	0,008770889	103,7523077
ZjusHsp-16	2	AT3G46230.1	3	51,6998	0,2	0,003868487	397,6907692
ZjusHsp-16	2	AT5G59720.1	5	51,7111	0,2093	0,004047487	397,7776923
ZjusHsp-16	2	AT1G53540.1	1	55,5624	0,1935	0,003482571	427,4030769
ZjusHsp-16	2	AT1G07400.1	1	3,8494	0,17	0,044162727	29,61076923
ZjusHsp-16	2	AT1G59860.1	1	2,8405	0,1837	0,064671713	21,85
ZjusHsp-17	2	AT5G59720.1	5	51,9847	0,2179	0,004191618	399,8823077
ZjusHsp-17	2	AT1G53540.1	1	9,503	0,2032	0,021382721	73,1
ZjusHsp-17	2	AT3G46230.1	3	9,4729	0,2078	0,02193626	72,86846154
ZjusHsp-17	2	AT1G07400.1	1	12,6857	0,1521	0,011989878	97,58230769
ZjusHsp-18	2	AT2G29500.1	2	9,6916	0,1298	0,013393041	74,55076923
ZjusHsp-18	2	AT3G46230.1	3	10,4039	0,2171	0,020867175	80,03
ZjusHsp-18	2	AT5G59720.1	5	36,086	0,2192	0,006074378	277,5846154
ZjusHsp-18	2	AT1G53540.1	1	5,5316	0,1944	0,035143539	42,55076923
ZjusHsp-18	2	AT1G07400.1	1	3,1631	0,1712	0,054124119	24,33153846
ZjusHsp-18	2	AT1G59860.1	1	9,6683	0,1942	0,020086261	74,37153846
ZjusHsp-19	2	AT2G29500.1	2	23,4462	0,1476	0,006295263	180,3553846
ZjusHsp-19	2	AT5G59720.1	5	52,8597	0,2258	0,004271685	406,6130769
ZjusHsp-19	2	AT1G53540.1	1	10,2796	0,2099	0,020419082	79,07384615
ZjusHsp-19	2	AT3G46230.1	3	10,7955	0,2222	0,02058265	83,04230769
ZjusHsp-19	2	AT1G07400.1	1	39,6042	0,1846	0,004661122	304,6476923
ZjusHsp-19	2	AT2G29500.1	2	12,5935	0,1238	0,009830468	96,87307692
ZjusHsp-20	2	AT3G46230.1	3	13,2672	0,1996	0,015044621	102,0553846
ZjusHsp-20	2	AT5G59720.1	5	53,5031	0,21	0,003925006	411,5623077
ZjusHsp-20	2	AT1G53540.1	1	8,4506	0,179	0,021181928	65,00461538
ZjusHsp-20	2	AT1G07400.1	1	3,4483	0,1653	0,047936664	26,52538462
ZjusHsp-21	2	AT2G29500.1	2	21,0417	0,127	0,006035634	161,8592308
ZjusHsp-21	2	AT5G59720.1	5	55,2897	0,2003	0,003622736	425,3053846
ZjusHsp-21	2	AT3G46230.1	3	7,1784	0,197	0,027443441	55,21846154
ZjusHsp-21	2	AT1G53540.1	1	4,657	0,1883	0,040433756	35,82307692
ZjusHsp-21	2	AT1G07400.1	1	23,0819	0,1545	0,006693556	177,5530769
ZjusHsp-21	2	AT1G59860.1	1	52,0275	0,1624	0,003121426	400,2115385
ZjusHsp-22	2	AT2G29500.1	2	6,2729	0,1312	0,020915366	48,25307692
ZjusHsp-22	2	AT3G46230.1	3	11,397	0,2122	0,018618935	87,66923077
ZjusHsp-22	2	AT5G59720.1	5	54,1087	0,2232	0,00412503	416,2207692
ZjusHsp-22	2	AT1G53540.1	1	5,685	0,1905	0,033509235	43,73076923
ZjusHsp-22	2	AT1G07400.1	1	2,9428	0,1777	0,060384668	22,63692308
ZjusHsp-22	2	AT1G59860.1	1	9,4159	0,1957	0,020783993	72,43
ZjusHsp-23	2	AT2G29500.1	2	8,2674	0,1316	0,015917943	63,59538462
ZjusHsp-23	2	AT3G46230.1	3	17,6745	0,2076	0,011745735	135,9576923
ZjusHsp-23	2	AT5G59720.1	5	53,355	0,2193	0,004110205	410,4230769
ZjusHsp-23	2	AT1G53540.1	1	10,3532	0,1869	0,01805239	79,64
ZjusHsp-23	2	AT1G07400.1	1	3,4382	0,1736	0,050491536	26,44769231
ZjusHsp-24	2	AT2G29500.1	2	7,0245	0,1471	0,020940992	54,03461538
ZjusHsp-24	2	AT5G59720.1	5	45,9297	0,2213	0,004818233	353,3053846
ZjusHsp-24	2	AT3G46230.1	3	52,9817	0,2195	0,00414294	407,5515385
ZjusHsp-24	2	AT1G53540.1	1	9,0928	0,2216	0,024370931	69,94461538

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-24	2	AT1G59860.1	1	7,6343	0,2013	0,02636784	58,72538462
ZjusHsp-25	2	AT2G29500.1	2	11,9839	0,1353	0,011290148	92,18384615
ZjusHsp-25	2	AT3G46230.1	3	7,9576	0,2181	0,027407761	61,21230769
ZjusHsp-25	2	AT5G59720.1	5	53,2362	0,2229	0,004187001	409,5092308
ZjusHsp-25	2	AT1G53540.1	1	5,5241	0,1919	0,03473869	42,49307692
ZjusHsp-25	2	AT1G07400.1	1	3,7786	0,1766	0,046736887	29,06615385
ZjusHsp-25	2	AT1G59860.1	1	12,3814	0,1995	0,016112879	95,24153846
ZjusHsp-26	2	AT1G53540.1	1	6,2105	0,153	0,024635698	47,77307692
ZjusHsp-26	2	AT3G46230.1	3	6,2099	0,1421	0,022882816	47,76846154
ZjusHsp-26	2	AT5G59720.1	5	2,4399	0,1685	0,069060207	18,76846154
ZjusHsp-26	2	AT2G29500.1	2	39,9893	0,1831	0,004578725	307,61
ZjusHsp-26	2	AT1G07400.1	1	17,3717	0,2138	0,012307373	133,6284615
ZjusHsp-26	2	AT1G59860.1	1	53,561	0,2051	0,003829279	412,0076923
ZjusHsp-27	2	AT1G54850.1	1	2,775	0,4001	0,14418018	21,34615385
ZjusHsp-28	2	AT1G54850.1	1	21,986	0,3462	0,015746384	169,1230769
ZjusHsp-29	2	AT1G54850.1	1	6,5413	0,3923	0,059972788	50,31769231
ZjusHsp-29	2	AT1G54840.1	1	3,4549	0,4809	0,139193609	26,57615385
ZjusHsp-31	3	AT1G53540.1	1	3,4275	0,3201	0,093391685	26,36538462
ZjusHsp-31	3	AT1G07400.1	1	8,9359	0,3002	0,033594825	68,73769231
ZjusHsp-31	3	AT5G59720.1	5	3,2714	0,342	0,104542398	25,16461538
ZjusHsp-32	3	AT5G59720.1	5	5,2569	0,2299	0,043732999	40,43769231
ZjusHsp-32	3	AT3G46230.1	3	53,2481	0,2076	0,003898731	409,6007692
ZjusHsp-32	3	AT1G53540.1	1	56,7844	0,2231	0,003928896	436,8030769
ZjusHsp-32	3	AT2G29500.1	2	10,451	0,2004	0,019175199	80,39230769
ZjusHsp-32	3	AT1G07400.1	1	6,1565	0,2258	0,036676683	47,35769231
ZjusHsp-33	3	AT5G59720.1	5	57,6905	0,1625	0,002816755	443,7730769
ZjusHsp-33	3	AT3G46230.1	3	4,5128	0,1784	0,039531998	34,71384615
ZjusHsp-33	3	AT1G53540.1	1	5,6976	0,1719	0,030170598	43,82769231
ZjusHsp-33	3	AT2G29500.1	2	14,2111	0,1782	0,012539494	109,3161538
ZjusHsp-33	3	AT1G07400.1	1	2,7066	0,1811	0,066910515	20,82
ZjusHsp-34	3	AT4G25200.1	4	0,2793	32,1460	115,0948801	2,148461538
ZjusHsp-34	3	AT5G51440.1	5	6,8399	0,3044	0,044503575	52,61461538
ZjusHsp-35	3	AT4G25200.1	4	2,7737	0,2742	0,098857122	21,33615385
ZjusHsp-35	3	AT5G51440.1	5	6,1158	0,2978	0,048693548	47,04461538
ZjusHsp-36	3	AT4G25200.1	4	3,2146	0,2793	0,086884838	24,72769231
ZjusHsp-36	3	AT5G51440.1	5	6,8394	0,3044	0,044506828	52,61076923
ZjusHsp-37	3	AT4G25200.1	4	2,7737	0,2742	0,098857122	21,33615385
ZjusHsp-37	3	AT5G51440.1	5	6,1157	0,2978	0,048694344	47,04384615
ZjusHsp-38	3	AT4G27670.1	4	5,4458	0,2618	0,048073745	41,89076923
ZjusHsp-42	4	AT1G76510.1	1	1,4242	0,326	0,228900435	10,95538462
ZjusHsp-42	4	AT1G76510.2	1	1,4242	0,326	0,228900435	10,95538462
ZjusHsp-42	4	AT1G76510.3	1	1,3976	0,3331	0,238337149	10,75076923
ZjusHsp-42	4	AT1G20910.1	1	1,7505	0,3224	0,18417595	13,46538462
ZjusHsp-42	4	AT2G17410.1	2	2,2159	0,439	0,198113633	17,04538462
ZjusHsp-42	4	AT2G17410.2	2	2,162	0,4428	0,204810361	16,63076923
ZjusHsp-43	4	AT1G76510.1	1	1,4242	0,326	0,228900435	10,95538462
ZjusHsp-43	4	AT1G76510.2	1	1,4242	0,326	0,228900435	10,95538462
ZjusHsp-43	4	AT1G76510.3	1	1,3976	0,3331	0,238337149	10,75076923
ZjusHsp-43	4	AT1G20910.1	1	1,7505	0,3224	0,18417595	13,46538462
ZjusHsp-43	4	AT2G17410.1	2	2,2159	0,439	0,198113633	17,04538462
ZjusHsp-43	4	AT2G17410.2	2	2,162	0,4428	0,204810361	16,63076923
ZjusHsp-44	4	AT1G76510.1	1	1,418	0,332	0,234132581	10,90769231
ZjusHsp-44	4	AT1G76510.2	1	1,418	0,332	0,234132581	10,90769231
ZjusHsp-44	4	AT1G76510.3	1	1,3918	0,3393	0,243785027	10,70615385
ZjusHsp-44	4	AT1G20910.1	1	1,7354	0,322	0,185548	13,34923077
ZjusHsp-44	4	AT2G17410.1	2	2,2745	0,434	0,190811167	17,49615385
ZjusHsp-44	4	AT2G17410.2	2	2,2216	0,4376	0,196975153	17,08923077
ZjusHsp-45	4	AT1G06460.1	1	1,8965	0,5286	0,278723965	14,58846154
ZjusHsp-54	6	AT1G76440.2	1	2,6833	0,3564	0,132821526	20,64076923
ZjusHsp-54	6	AT1G76440.1	1	2,6833	0,3564	0,132821526	20,64076923
ZjusHsp-54	6	AT1G76440.3	1	2,6833	0,3564	0,132821526	20,64076923
ZjusHsp-55	6	AT5G12020.1	5	4,9009	0,1665	0,033973352	37,69923077
ZjusHsp-55	6	AT5G12030.1	5	6,015	0,2229	0,037057357	46,26923077
ZjusHsp-56	6	AT5G12020.1	5	10,0214	0,2751	0,027451254	77,08769231
ZjusHsp-57	6	AT5G12020.1	5	4,864	0,2132	0,043832237	37,41538462
ZjusHsp-59	7	AT4G14830.1	4	12,0339	0,2547	0,021165208	92,56846154
ZjusHsp-59	7	AT3G22530.1	3	8,3146	0,3525	0,042395305	63,95846154
ZjusHsp-60	8	AT2G17410.1	2	2,9334	0,3451	0,117645054	22,56461538
ZjusHsp-60	8	AT2G17410.2	2	2,942	0,3468	0,117878994	22,63076923

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-60	8	AT1G76510.1	1	1,9665	0,4202	0,213679125	15,12692308
ZjusHsp-60	8	AT1G76510.2	1	1,9666	0,4202	0,21366826	15,12769231
ZjusHsp-60	8	AT1G76510.3	1	1,9952	0,4312	0,216118685	15,34769231
ZjusHsp-60	8	AT1G20910.1	1	2,3671	0,4145	0,175108783	18,20846154
ZjusHsp-61	8	AT2G17410.1	2	2,9334	0,3451	0,117645054	22,56461538
ZjusHsp-61	8	AT2G17410.2	2	2,942	0,3468	0,117878994	22,63076923
ZjusHsp-61	8	AT1G76510.1	1	1,9666	0,4203	0,213719109	15,12769231
ZjusHsp-61	8	AT1G76510.2	1	1,9666	0,4203	0,213719109	15,12769231
ZjusHsp-61	8	AT1G76510.3	1	1,9952	0,4312	0,216118685	15,34769231
ZjusHsp-61	8	AT1G20910.1	1	1,9952	0,4312	0,216118685	15,34769231
ZjusHsp-62	8	AT4G10250.1	4	3,9075	0,2446	0,062597569	30,05769231
ZjusHsp-63	8	AT2G17410.1	2	2,9334	0,3451	0,117645054	22,56461538
ZjusHsp-63	8	AT2G17410.2	2	2,942	0,3468	0,117878994	22,63076923
ZjusHsp-63	8	AT1G76510.1	1	1,9666	0,4203	0,213719109	15,12769231
ZjusHsp-63	8	AT1G76510.2	1	1,9665	0,4203	0,213729977	15,12692308
ZjusHsp-63	8	AT1G76510.3	1	1,9952	0,4312	0,216118685	15,34769231
ZjusHsp-63	8	AT1G20910.1	1	2,3671	0,4145	0,175108783	18,20846154
ZjusHsp-64	8	AT2G17410.1	2	2,9334	0,3451	0,117645054	22,56461538
ZjusHsp-64	8	AT2G17410.2	2	2,942	0,3468	0,117878994	22,63076923
ZjusHsp-64	8	AT1G76510.1	1	1,9666	0,4203	0,213719109	15,12769231
ZjusHsp-64	8	AT1G76510.2	1	1,9666	0,4203	0,213719109	15,12769231
ZjusHsp-64	8	AT1G76510.3	1	1,9952	0,4312	0,216118685	15,34769231
ZjusHsp-64	8	AT1G20910.1	1	2,3671	0,4145	0,175108783	18,20846154
ZjusHsp-67	12	AT1G53540.1	1	59,3929	0,1752	0,002949848	456,8684615
ZjusHsp-67	12	AT5G59720.1	5	4,7616	0,1722	0,036164315	36,62769231
ZjusHsp-67	12	AT1G07400.1	1	4,1555	0,2706	0,065118518	31,96538462
ZjusHsp-67	12	AT3G46230.1	3	56,8862	0,1948	0,003424381	437,5861538
ZjusHsp-67	12	AT2G29500.1	2	5,2898	0,174	0,032893493	40,69076923
sMean				12,86119693	0,458355828	0,781633958	98,9322841

Z. jujube – *C. sinensis*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-02	1	orange1.1g004229m	scaffold	0,7644	0,1767	0,231161695	5,88
ZjusHsp-04	1	orange1.1g029160m	scaffold	1,1409	0,2524	0,221228854	8,776153846
ZjusHsp-04	1	orange1.1g028228m	scaffold	1,1409	0,2524	0,221228854	8,776153846
ZjusHsp-05	1	orange1.1g029160m	scaffold	1,1024	0,2493	0,226142961	8,48
ZjusHsp-05	1	orange1.1g028228m	scaffold	1,1024	0,2493	0,226142961	8,48
ZjusHsp-10	2	orange1.1g031365m	scaffold	1,7424	0,176	0,101010101	13,40307692
ZjusHsp-10	2	orange1.1g043288m	scaffold	2,2609	0,2052	0,090760317	17,39153846
ZjusHsp-10	2	orange1.1g031266m	scaffold	1,6184	0,2042	0,126173999	12,44923077
ZjusHsp-10	2	orange1.1g031937m	scaffold	1,3531	0,2148	0,158746582	10,40846154
ZjusHsp-10	2	orange1.1g037294m	scaffold	4,2413	0,2663	0,062787353	32,62538462
ZjusHsp-12	2	orange1.1g031218m	scaffold	1,6564	0,1253	0,075645979	12,74153846
ZjusHsp-12	2	orange1.1g031266m	scaffold	1,9275	0,1379	0,07154345	14,82692308
ZjusHsp-12	2	orange1.1g031365m	scaffold	1,5746	0,1286	0,081671536	12,11230769
ZjusHsp-12	2	orange1.1g043288m	scaffold	1,3641	0,1506	0,110402463	10,49307692
ZjusHsp-12	2	orange1.1g031937m	scaffold	4,3859	0,1455	0,033174491	33,73769231
ZjusHsp-12	2	orange1.1g037294m	scaffold	1,6116	0,2396	0,148672127	12,39692308
ZjusHsp-13	2	orange1.1g031365m	scaffold	1,6665	0,1734	0,104050405	12,81923077
ZjusHsp-13	2	orange1.1g031218m	scaffold	2,0442	0,1825	0,089276979	15,72461538
ZjusHsp-13	2	orange1.1g043288m	scaffold	2,0925	0,2062	0,098542413	16,09615385
ZjusHsp-13	2	orange1.1g031266m	scaffold	1,608	0,2011	0,125062189	12,36923077
ZjusHsp-13	2	orange1.1g037294m	scaffold	3,5325	0,2736	0,077452229	27,17307692
ZjusHsp-14	2	orange1.1g031218m	scaffold	1,4819	0,1801	0,121533167	11,39923077
ZjusHsp-14	2	orange1.1g031365m	scaffold	1,34	0,1595	0,119029851	10,30769231
ZjusHsp-14	2	orange1.1g031266m	scaffold	1,5179	0,1754	0,115554384	11,67615385
ZjusHsp-16	2	orange1.1g031218m	scaffold	1,2553	0,1054	0,083963993	9,656153846
ZjusHsp-16	2	orange1.1g031365m	scaffold	1,2165	0,1029	0,08458693	9,357692308
ZjusHsp-16	2	orange1.1g031266m	scaffold	1,5540	0,1192	0,076705277	11,95384615
ZjusHsp-16	2	orange1.1g043288m	scaffold	1,4542	0,1571	0,108031908	11,18615385
ZjusHsp-16	2	orange1.1g031937m	scaffold	3,1844	0,1334	0,041891722	24,49538462
ZjusHsp-16	2	orange1.1g037294m	scaffold	3,0767	0,2165	0,070367602	23,66692308
ZjusHsp-16	2	orange1.1g033685m	scaffold	1,7025	0,1143	0,067136564	13,09615385
ZjusHsp-17	2	orange1.1g031218m	scaffold	1,654	0,1254	0,075816203	12,72307692
ZjusHsp-17	2	orange1.1g031266m	scaffold	2,06	0,1441	0,069951456	15,84615385
ZjusHsp-17	2	orange1.1g031365m	scaffold	1,8139	0,1345	0,074149622	13,95307692
ZjusHsp-17	2	orange1.1g043288m	scaffold	1,5712	0,1531	0,097441446	12,08615385

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-17	2	orange1.1g031937m	scaffold	3,7185	0,1491	0,040096813	28,60384615
ZjusHsp-17	2	orange1.1g037294m	scaffold	2,3018	0,2603	0,113085411	17,70615385
ZjusHsp-18	2	orange1.1g031218m	scaffold	1,3736	0,1199	0,087288876	10,56615385
ZjusHsp-18	2	orange1.1g031266m	scaffold	1,4481	0,1353	0,093432774	11,13923077
ZjusHsp-18	2	orange1.1g031365m	scaffold	1,2963	0,1261	0,097276865	9,971538462
ZjusHsp-18	2	orange1.1g043288m	scaffold	1,2168	0,1488	0,122287968	9,36
ZjusHsp-18	2	orange1.1g031937m	scaffold	2,0808	0,1443	0,069348328	16,00615385
ZjusHsp-18	2	orange1.1g037294m	scaffold	1,7505	0,2461	0,140588403	13,46538462
ZjusHsp-19	2	orange1.1g031365m	scaffold	1,846	0,1374	0,074431203	14,2
ZjusHsp-19	2	orange1.1g031218m	scaffold	2,3142	0,1382	0,059718261	17,80153846
ZjusHsp-19	2	orange1.1g031266m	scaffold	3,3086	0,1502	0,045396845	25,45076923
ZjusHsp-19	2	orange1.1g043288m	scaffold	1,8837	0,1696	0,090035568	14,49
ZjusHsp-19	2	orange1.1g037294m	scaffold	4,3062	0,2609	0,060587061	33,12461538
ZjusHsp-19	2	orange1.1g031937m	scaffold	4,5939	0,1504	0,032739067	35,33769231
ZjusHsp-19	2	orange1.1g031218m	scaffold	1,2862	0,1129	0,087777951	9,893846154
ZjusHsp-20	2	orange1.1g031266m	scaffold	1,3917	0,131	0,094129482	10,70538462
ZjusHsp-20	2	orange1.1g031365m	scaffold	1,1971	0,1229	0,102664773	9,208461538
ZjusHsp-20	2	orange1.1g043288m	scaffold	1,1767	0,1523	0,129429761	9,051538462
ZjusHsp-20	2	orange1.1g031937m	scaffold	1,9705	0,1415	0,071809185	15,15769231
ZjusHsp-20	2	orange1.1g037294m	scaffold	1,699	0,2333	0,137316068	13,06923077
ZjusHsp-21	2	orange1.1g031218m	scaffold	1,811	0,1218	0,06725566	13,93076923
ZjusHsp-21	2	orange1.1g031365m	scaffold	1,8455	0,1269	0,068761853	14,19615385
ZjusHsp-21	2	orange1.1g031266m	scaffold	2,3092	0,136	0,058894855	17,76307692
ZjusHsp-21	2	orange1.1g043288m	scaffold	1,4877	0,1648	0,110775022	11,44384615
ZjusHsp-21	2	orange1.1g031937m	scaffold	3,1586	0,1317	0,041695688	24,29692308
ZjusHsp-21	2	orange1.1g037294m	scaffold	2,4418	0,2446	0,100172004	18,78307692
ZjusHsp-22	2	orange1.1g031218m	scaffold	1,6328	0,129	0,07900539	12,56
ZjusHsp-22	2	orange1.1g031365m	scaffold	1,5153	0,1373	0,09060912	11,65615385
ZjusHsp-22	2	orange1.1g043288m	scaffold	1,314	0,1678	0,127701674	10,10769231
ZjusHsp-22	2	orange1.1g031266m	scaffold	1,7866	0,1453	0,081327661	13,74307692
ZjusHsp-22	2	orange1.1g031937m	scaffold	2,8579	0,1548	0,054165646	21,98384615
ZjusHsp-22	2	orange1.1g037294m	scaffold	1,8605	0,2433	0,130771298	14,31153846
ZjusHsp-23	2	orange1.1g031218m	scaffold	1,6567	0,1251	0,075511559	12,74384615
ZjusHsp-23	2	orange1.1g031266m	scaffold	1,8476	0,1413	0,076477593	14,21230769
ZjusHsp-23	2	orange1.1g031365m	scaffold	1,5214	0,1334	0,087682398	11,70307692
ZjusHsp-23	2	orange1.1g043288m	scaffold	1,3387	0,1635	0,122133413	10,29769231
ZjusHsp-23	2	orange1.1g031937m	scaffold	3,06	0,1505	0,049183007	23,53846154
ZjusHsp-23	2	orange1.1g037294m	scaffold	1,8192	0,2381	0,130881706	13,99384615
ZjusHsp-24	2	orange1.1g031218m	scaffold	1,4409	0,1332	0,092442224	11,08384615
ZjusHsp-24	2	orange1.1g031365m	scaffold	1,4184	0,1364	0,096164693	10,91076923
ZjusHsp-24	2	orange1.1g043288m	scaffold	1,371	0,1695	0,123632385	10,54615385
ZjusHsp-24	2	orange1.1g031266m	scaffold	1,8708	0,1456	0,077827667	14,39076923
ZjusHsp-24	2	orange1.1g031937m	scaffold	2,1177	0,1474	0,069603815	16,29
ZjusHsp-24	2	orange1.1g037294m	scaffold	2,3143	0,2638	0,113986951	17,80230769
ZjusHsp-25	2	orange1.1g031218m	scaffold	1,5172	0,1156	0,076192987	11,67076923
ZjusHsp-25	2	orange1.1g043288m	scaffold	1,3128	0,1606	0,122333943	10,09846154
ZjusHsp-25	2	orange1.1g031365m	scaffold	1,3274	0,132	0,099442519	10,21076923
ZjusHsp-25	2	orange1.1g031266m	scaffold	1,6392	0,1403	0,085590532	12,60923077
ZjusHsp-25	2	orange1.1g031937m	scaffold	1,9025	0,1434	0,075374507	14,63461538
ZjusHsp-25	2	orange1.1g037294m	scaffold	2,1792	0,2404	0,110315712	16,76307692
ZjusHsp-26	2	orange1.1g031266m	scaffold	45,5909	0,1611	0,0035336	350,6992308
ZjusHsp-26	2	orange1.1g031365m	scaffold	10,3042	0,1894	0,018380854	79,26307692
ZjusHsp-26	2	orange1.1g031218m	scaffold	11,9242	0,1868	0,015665621	91,72461538
ZjusHsp-26	2	orange1.1g037294m	scaffold	1,1527	0,2397	0,20794656	8,866923077
ZjusHsp-26	2	orange1.1g043288m	scaffold	18,829	0,228	0,012108981	144,8384615
ZjusHsp-26	2	orange1.1g031937m	scaffold	8,7453	0,224	0,025613758	67,27153846
ZjusHsp-27	2	orange1.1g025769m	scaffold	2,2815	0,2902	0,12719702	17,55
ZjusHsp-27	2	orange1.1g043145m	scaffold	2,3924	0,221	0,092375857	18,40307692
ZjusHsp-27	2	orange1.1g025484m	scaffold	2,8892	0,4438	0,153606535	22,22461538
ZjusHsp-28	2	orange1.1g025769m	scaffold	49,8131	0,2967	0,005956265	383,1776923
ZjusHsp-28	2	orange1.1g043145m	scaffold	2,3924	0,221	0,092375857	18,40307692
ZjusHsp-28	2	orange1.1g025484m	scaffold	2,9924	0,4082	0,136412244	23,01846154
ZjusHsp-29	2	orange1.1g039702m	scaffold	8,1597	0,5864	0,071865387	62,76692308
ZjusHsp-29	2	orange1.1g043145m	scaffold	1,007	0,1484	0,147368421	7,746153846
ZjusHsp-29	2	orange1.1g025769m	scaffold	2,1944	0,3901	0,177770689	16,88
ZjusHsp-29	2	orange1.1g025484m	scaffold	1,7822	0,4872	0,273369992	13,70923077
ZjusHsp-31	3	orange1.1g031266m	scaffold	1,3884	0,2734	0,196917315	10,68
ZjusHsp-31	3	orange1.1g031365m	scaffold	1,572	0,2981	0,189631043	12,09230769
ZjusHsp-31	3	orange1.1g037294m	scaffold	2,1035	0,3232	0,153648681	16,18076923

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-31	3	orange1.1g031218m	scaffold	1,5182	0,3073	0,20241075	11,67846154
ZjusHsp-31	3	orange1.1g043288m	scaffold	1,8492	0,2925	0,158176509	14,22461538
ZjusHsp-32	3	orange1.1g037294m	scaffold	1,3402	0,2392	0,178480824	10,30923077
ZjusHsp-32	3	orange1.1g031218m	scaffold	7,767	0,2204	0,028376465	59,74615385
ZjusHsp-32	3	orange1.1g031266m	scaffold	2,9389	0,2228	0,075810677	22,60692308
ZjusHsp-32	3	orange1.1g031365m	scaffold	4,1174	0,2366	0,057463448	31,67230769
ZjusHsp-32	3	orange1.1g043288m	scaffold	21,0068	0,2368	0,01127254	161,5907692
ZjusHsp-32	3	orange1.1g031937m	scaffold	4,8169	0,2045	0,042454691	37,05307692
ZjusHsp-33	3	orange1.1g037294m	scaffold	1,2885	0,1765	0,136980986	9,911538462
ZjusHsp-33	3	orange1.1g031218m	scaffold	2,5722	0,1637	0,063642019	19,78615385
ZjusHsp-33	3	orange1.1g031266m	scaffold	2,0837	0,1635	0,07846619	16,02846154
ZjusHsp-33	3	orange1.1g031365m	scaffold	3,7239	0,1523	0,040897983	28,64538462
ZjusHsp-33	3	orange1.1g043288m	scaffold	5,5115	0,0337	0,006114488	42,39615385
ZjusHsp-33	3	orange1.1g031937m	scaffold	3,8251	0,1673	0,043737419	29,42384615
ZjusHsp-34	3	orange1.1g028463m	scaffold	0,1364	0,1785	1,308651026	1,049230769
ZjusHsp-34	3	orange1.1g028468m	scaffold	0,1245	0,1796	1,442570281	0,957692308
ZjusHsp-34	3	orange1.1g028577m	scaffold	1,3741	0,1791	0,130339859	10,57
ZjusHsp-34	3	orange1.1g028542m	scaffold	1,5285	0,1801	0,117827936	11,75769231
ZjusHsp-34	3	orange1.1g028809m	scaffold	1,6241	0,280	0,172403177	12,49307692
ZjusHsp-34	3	orange1.1g044098m	scaffold	1,3826	0,3218	0,232749892	10,63538462
ZjusHsp-35	3	orange1.1g028577m	scaffold	1,3315	0,1797	0,134960571	10,24230769
ZjusHsp-35	3	orange1.1g028542m	scaffold	1,4704	0,1807	0,12289173	11,31076923
ZjusHsp-35	3	orange1.1g028463m	scaffold	1,411	0,1918	0,135931963	10,85384615
ZjusHsp-35	3	orange1.1g028468m	scaffold	1,5763	0,1927	0,122248303	12,12538462
ZjusHsp-35	3	orange1.1g044098m	scaffold	1,5444	0,3142	0,203444703	11,88
ZjusHsp-35	3	orange1.1g028809m	scaffold	1,8081	0,2612	0,144461036	13,90846154
ZjusHsp-36	3	orange1.1g028463m	scaffold	1,3095	0,1785	0,136311569	10,07307692
ZjusHsp-36	3	orange1.1g028468m	scaffold	1,4421	0,1796	0,124540601	11,09307692
ZjusHsp-36	3	orange1.1g028577m	scaffold	1,3741	0,1791	0,130339859	10,57
ZjusHsp-36	3	orange1.1g028542m	scaffold	1,5285	0,1801	0,117827936	11,75769231
ZjusHsp-36	3	orange1.1g028809m	scaffold	1,6241	0,28	0,172403177	12,49307692
ZjusHsp-36	3	orange1.1g044098m	scaffold	1,3826	0,3218	0,232749892	10,63538462
ZjusHsp-37	3	orange1.1g028577m	scaffold	1,3315	0,1797	0,134960571	10,24230769
ZjusHsp-37	3	orange1.1g028542m	scaffold	1,4704	0,1807	0,12289173	11,31076923
ZjusHsp-37	3	orange1.1g028463m	scaffold	1,411	0,1918	0,135931963	10,85384615
ZjusHsp-37	3	orange1.1g028468m	scaffold	1,5763	0,1927	0,122248303	12,12538462
ZjusHsp-37	3	orange1.1g044098m	scaffold	1,5444	0,3142	0,203444703	11,88
ZjusHsp-37	3	orange1.1g028809m	scaffold	1,8082	0,2612	0,144453047	13,90923077
ZjusHsp-39	4	orange1.1g027048m	scaffold	1,8104	0,3885	0,21459346	13,92615385
ZjusHsp-39	4	orange1.1g027026m	scaffold	1,5846	0,4195	0,26473558	12,18923077
ZjusHsp-42	4	orange1.1g013477m	scaffold	1,1949	0,2669	0,223365972	9,191538462
ZjusHsp-42	4	orange1.1g012818m	scaffold	1,208	0,2819	0,233360927	9,292307692
ZjusHsp-42	4	orange1.1g012780m	scaffold	1,208	0,2819	0,233360927	9,292307692
ZjusHsp-42	4	orange1.1g004663m	scaffold	1,7459	0,3891	0,222864998	13,43
ZjusHsp-42	4	orange1.1g009739m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-42	4	orange1.1g009744m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-42	4	orange1.1g009726m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-42	4	orange1.1g019019m	scaffold	1,4367	0,3615	0,251618292	11,05153846
ZjusHsp-42	4	orange1.1g016768m	scaffold	2,3035	0,5333	0,231517256	17,71923077
ZjusHsp-42	4	orange1.1g011847m	scaffold	2,259	0,496	0,21956618	17,37692308
ZjusHsp-43	4	orange1.1g013477m	scaffold	1,1949	0,2669	0,223365972	9,191538462
ZjusHsp-43	4	orange1.1g012818m	scaffold	1,208	0,2819	0,233360927	9,292307692
ZjusHsp-43	4	orange1.1g012780m	scaffold	1,208	0,2819	0,233360927	9,292307692
ZjusHsp-43	4	orange1.1g004663m	scaffold	1,7459	0,3891	0,222864998	13,43
ZjusHsp-43	4	orange1.1g009739m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-43	4	orange1.1g009744m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-43	4	orange1.1g009726m	scaffold	2,0602	0,4099	0,198961266	15,84769231
ZjusHsp-43	4	orange1.1g019019m	scaffold	1,4367	0,3615	0,251618292	11,05153846
ZjusHsp-43	4	orange1.1g011847m	scaffold	2,259	0,496	0,21956618	17,37692308
ZjusHsp-43	4	orange1.1g016768m	scaffold	2,3035	0,5333	0,231517256	17,71923077
ZjusHsp-44	4	orange1.1g013477m	scaffold	1,1936	0,2688	0,225201072	9,181538462
ZjusHsp-44	4	orange1.1g012818m	scaffold	1,207	0,284	0,235294118	9,284615385
ZjusHsp-44	4	orange1.1g012780m	scaffold	1,207	0,284	0,235294118	9,284615385
ZjusHsp-44	4	orange1.1g004663m	scaffold	1,7249	0,3875	0,224650704	13,26846154
ZjusHsp-44	4	orange1.1g009739m	scaffold	2,0611	0,4112	0,199505119	15,85461538
ZjusHsp-44	4	orange1.1g009744m	scaffold	2,0612	0,4112	0,19949544	15,85538462
ZjusHsp-44	4	orange1.1g009726m	scaffold	2,0611	0,4112	0,199505119	15,85461538
ZjusHsp-44	4	orange1.1g019019m	scaffold	1,4357	0,3658	0,254788605	11,04384615
ZjusHsp-44	4	orange1.1g011847m	scaffold	2,264	0,4977	0,219832155	17,41538462

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-44	4	orange1.1g016768m	scaffold	2,3079	0,5359	0,232202435	17,75307692
ZjusHsp-54	6	orange1.1g032436m	scaffold	1,9687	0,3144	0,159699294	15,14384615
ZjusHsp-54	6	orange1.1g032405m	scaffold	1,9687	0,3144	0,159699294	15,14384615
ZjusHsp-54	6	orange1.1g032427m	scaffold	1,9687	0,3144	0,159699294	15,14384615
ZjusHsp-55	6	orange1.1g031515m	scaffold	3,1757	0,1574	0,049563876	24,42846154
ZjusHsp-55	6	orange1.1g031533m	scaffold	2,4252	0,1681	0,069313871	18,65538462
ZjusHsp-56	6	orange1.1g031533m	scaffold	7,1823	0,2833	0,039444189	55,24846154
ZjusHsp-56	6	orange1.1g031515m	scaffold	5,2416	0,295	0,056280525	40,32
ZjusHsp-57	6	orange1.1g031533m	scaffold	4,0058	0,2145	0,053547356	30,81384615
ZjusHsp-57	6	orange1.1g031515m	scaffold	3,9373	0,2409	0,06118406	30,28692308
ZjusHsp-59	7	orange1.1g026013m	scaffold	49,7675	0,273	0,005485508	382,8269231
ZjusHsp-59	7	orange1.1g023450m	scaffold	10,3454	0,2911	0,02813811	79,58
ZjusHsp-60	8	orange1.1g009739m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-60	8	orange1.1g009744m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-60	8	orange1.1g009726m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-60	8	orange1.1g004663m	scaffold	2,4686	0,3962	0,160495828	18,98923077
ZjusHsp-60	8	orange1.1g013477m	scaffold	3,1	0,3807	0,122806452	23,84615385
ZjusHsp-60	8	orange1.1g011847m	scaffold	1,9969	0,3323	0,166407932	15,36076923
ZjusHsp-60	8	orange1.1g012818m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-60	8	orange1.1g012780m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-60	8	orange1.1g016768m	scaffold	1,8734	0,3794	0,202519483	14,41076923
ZjusHsp-60	8	orange1.1g019019m	scaffold	4,3013	0,5015	0,116592658	33,08692308
ZjusHsp-61	8	orange1.1g009739m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-61	8	orange1.1g009744m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-61	8	orange1.1g009726m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-61	8	orange1.1g004663m	scaffold	2,4686	0,3962	0,160495828	18,98923077
ZjusHsp-61	8	orange1.1g013477m	scaffold	3,0999	0,3807	0,122810413	23,84538462
ZjusHsp-61	8	orange1.1g011847m	scaffold	1,9969	0,3323	0,166407932	15,36076923
ZjusHsp-61	8	orange1.1g012818m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-61	8	orange1.1g012780m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-61	8	orange1.1g016768m	scaffold	1,8734	0,3794	0,202519483	14,41076923
ZjusHsp-61	8	orange1.1g019019m	scaffold	4,3014	0,5015	0,116589947	33,08769231
ZjusHsp-62	8	orange1.1g028798m	scaffold	2,1444	0,194	0,090468196	16,49538462
ZjusHsp-63	8	orange1.1g009739m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-63	8	orange1.1g009744m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-63	8	orange1.1g009726m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-63	8	orange1.1g004663m	scaffold	2,4686	0,3962	0,160495828	18,98923077
ZjusHsp-63	8	orange1.1g013477m	scaffold	3,0999	0,3807	0,122810413	23,84538462
ZjusHsp-63	8	orange1.1g011847m	scaffold	1,9969	0,3323	0,166407932	15,36076923
ZjusHsp-63	8	orange1.1g012818m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-63	8	orange1.1g012780m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-63	8	orange1.1g016768m	scaffold	1,8734	0,3794	0,202519483	14,41076923
ZjusHsp-63	8	orange1.1g019019m	scaffold	4,3014	0,5015	0,116589947	33,08769231
ZjusHsp-64	8	orange1.1g009739m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-64	8	orange1.1g009744m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-64	8	orange1.1g009726m	scaffold	1,5285	0,2725	0,178279359	11,75769231
ZjusHsp-64	8	orange1.1g004663m	scaffold	2,4686	0,3962	0,160495828	18,98923077
ZjusHsp-64	8	orange1.1g013477m	scaffold	3,0999	0,3807	0,122810413	23,84538462
ZjusHsp-64	8	orange1.1g011847m	scaffold	1,9969	0,3323	0,166407932	15,36076923
ZjusHsp-64	8	orange1.1g012818m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-64	8	orange1.1g012780m	scaffold	3,3358	0,3991	0,119641465	25,66
ZjusHsp-64	8	orange1.1g016768m	scaffold	1,8734	0,3794	0,202519483	14,41076923
ZjusHsp-64	8	orange1.1g019019m	scaffold	4,3014	0,5015	0,116589947	33,08769231
ZjusHsp-66	10	orange1.1g027048m	scaffold	5,0291	0,3525	0,070092064	38,68538462
ZjusHsp-66	10	orange1.1g027900m	scaffold	2,8187	0,2161	0,076666548	21,68230769
ZjusHsp-66	10	orange1.1g027026m	scaffold	4,2312	0,3712	0,087729249	32,54769231
ZjusHsp-67	12	orange1.1g031218m	scaffold	55,486	0,1806	0,003254875	426,8153846
ZjusHsp-67	12	orange1.1g031365m	scaffold	56,7615	0,1979	0,003486518	436,6269231
ZjusHsp-67	12	orange1.1g031266m	scaffold	56,2661	0,1831	0,00325418	432,8161538
ZjusHsp-67	12	orange1.1g037294m	scaffold	2,3558	0,2459	0,104380677	18,12153846
ZjusHsp-67	12	orange1.1g043288m	scaffold	8,0006	0,2069	0,02586056	61,54307692
Mean				3,755125214	0,25530812	0,137667546	28,88557857

Z. jujuba – *M. accuminata*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-01	1	GSMUA_Achr2T12540_001	2	51,7447	0,2940	0,005681741	398,0361538
ZjusHsp-04	1	GSMUA_Achr8T03630_001	8	4,7432	0,3935	0,08296087	36,48615385
ZjusHsp-04	1	GSMUA_Achr9T24740_001	9	2,4186	0,3914	0,161829157	18,60461538

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-05	1	GSMUA_Achr8T03630_001	8	4,8826	0,3732	0,076434686	37,55846154
ZjusHsp-05	1	GSMUA_Achr9T24740_001	9	2,3971	0,3593	0,14988945	18,43923077
ZjusHsp-10	2	GSMUA_Achr1T21160_001	1	57,2561	0,2091	0,003652013	440,4315385
ZjusHsp-10	2	GSMUA_Achr9T00510_001	9	10,0659	0,1984	0,01971011	77,43
ZjusHsp-10	2	GSMUA_Achr9T03540_001	9	18,0814	0,2353	0,013013373	139,0876923
ZjusHsp-10	2	GSMUA_Achr6T33860_001	6	47,5565	0,2184	0,004592432	365,8192308
ZjusHsp-12	2	GSMUA_Achr6T33860_001	6	21,1455	0,1653	0,007817266	162,6576923
ZjusHsp-12	2	GSMUA_Achr1T21160_001	1	9,6361	0,1469	0,015244757	74,12384615
ZjusHsp-12	2	GSMUA_Achr9T03540_001	9	59,4041	0,1927	0,003243884	456,9546154
ZjusHsp-12	2	GSMUA_Achr9T00510_001	9	6,3633	0,1618	0,025427058	48,94846154
ZjusHsp-13	2	GSMUA_Achr1T21160_001	1	12,7425	0,1977	0,015515009	98,01923077
ZjusHsp-13	2	GSMUA_Achr9T00510_001	9	6,7743	0,1957	0,028888594	52,11
ZjusHsp-13	2	GSMUA_Achr9T03540_001	9	10,6258	0,2205	0,020751379	81,73692308
ZjusHsp-16	2	GSMUA_Achr1T21160_001	1	12,8197	0,1337	0,010429261	98,61307692
ZjusHsp-16	2	GSMUA_Achr6T33860_001	6	6,1995	0,1585	0,025566578	47,68846154
ZjusHsp-16	2	GSMUA_Achr9T03540_001	9	53,5130	0,1703	0,003182404	411,6384615
ZjusHsp-16	2	GSMUA_Achr9T00510_001	9	9,5684	0,1511	0,015791564	73,60307692
ZjusHsp-16	2	GSMUA_Achr7T14910_001	7	13,4136	0,24	0,017892288	103,1815385
ZjusHsp-17	2	GSMUA_Achr6T33860_001	6	17,9137	0,1698	0,009478779	137,7976923
ZjusHsp-17	2	GSMUA_Achr1T21160_001	1	23,6450	0,1587	0,006711778	181,8846154
ZjusHsp-17	2	GSMUA_Achr9T03540_001	9	21,3363	0,1746	0,008183237	164,1253846
ZjusHsp-17	2	GSMUA_Achr9T00510_001	9	9,2471	0,1738	0,018795082	71,13153846
ZjusHsp-18	2	GSMUA_Achr6T33860_001	6	8,2287	0,169	0,020537874	63,29769231
ZjusHsp-18	2	GSMUA_Achr1T21160_001	1	5,7967	0,144	0,02484172	44,59
ZjusHsp-18	2	GSMUA_Achr9T03540_001	9	9,7027	0,1872	0,019293599	74,63615385
ZjusHsp-18	2	GSMUA_Achr9T00510_001	9	5,2775	0,163	0,030885836	40,59615385
ZjusHsp-19	2	GSMUA_Achr6T33860_001	6	28,6761	0,1847	0,006440904	220,5853846
ZjusHsp-19	2	GSMUA_Achr1T21160_001	1	17,8142	0,168	0,009430679	137,0323077
ZjusHsp-19	2	GSMUA_Achr9T00510_001	9	9,6901	0,1659	0,017120566	74,53923077
ZjusHsp-19	2	GSMUA_Achr9T03540_001	9	22,4297	0,1931	0,008609121	172,5361538
ZjusHsp-20	2	GSMUA_Achr1T21160_001	1	72,6674	0,1407	0,001936219	558,98
ZjusHsp-20	2	GSMUA_Achr6T33860_001	6	8,3754	0,1646	0,019652793	64,42615385
ZjusHsp-20	2	GSMUA_Achr9T03540_001	9	7,3976	0,1831	0,024751271	56,90461538
ZjusHsp-20	2	GSMUA_Achr9T00510_001	9	5,3538	0,1575	0,029415357	41,18307692
ZjusHsp-21	2	GSMUA_Achr1T21160_001	1	22,7266	0,1399	0,006155782	174,82
ZjusHsp-21	2	GSMUA_Achr6T33860_001	6	46,8272	0,167	0,003566303	360,2092308
ZjusHsp-21	2	GSMUA_Achr9T03540_001	9	58,9569	0,1573	0,002668051	453,5146154
ZjusHsp-21	2	GSMUA_Achr9T00510_001	9	11,0312	0,15	0,013597795	84,85538462
ZjusHsp-21	2	GSMUA_Achr7T14910_001	7	25,4362	0,2439	0,009588696	195,6630769
ZjusHsp-22	2	GSMUA_Achr1T21160_001	1	5,9061	0,1474	0,024957248	45,43153846
ZjusHsp-22	2	GSMUA_Achr9T03540_001	9	6,3329	0,1923	0,030365236	48,71461538
ZjusHsp-22	2	GSMUA_Achr6T33860_001	6	5,7280	0,1684	0,029399441	44,06153846
ZjusHsp-22	2	GSMUA_Achr9T00510_001	9	4,8291	0,166	0,034374935	37,14692308
ZjusHsp-22	2	GSMUA_Achr7T14910_001	7	6,8768	0,2511	0,036514076	52,89846154
ZjusHsp-23	2	GSMUA_Achr1T21160_001	1	6,2317	0,1435	0,023027424	47,93615385
ZjusHsp-23	2	GSMUA_Achr6T33860_001	6	8,2994	0,1643	0,019796612	63,84153846
ZjusHsp-23	2	GSMUA_Achr9T03540_001	9	60,1397	0,1856	0,003086148	462,6130769
ZjusHsp-23	2	GSMUA_Achr9T00510_001	9	5,1096	0,1617	0,031646313	39,30461538
ZjusHsp-24	2	GSMUA_Achr1T21160_001	1	8,1175	0,1633	0,020117031	62,44230769
ZjusHsp-24	2	GSMUA_Achr6T33860_001	6	8,8685	0,1812	0,020431866	68,21923077
ZjusHsp-24	2	GSMUA_Achr9T03540_001	9	6,4450	0,192	0,029790535	49,57692308
ZjusHsp-24	2	GSMUA_Achr9T00510_001	9	4,3850	0,1732	0,03949829	33,73076923
ZjusHsp-24	2	GSMUA_Achr7T14910_001	7	16,6066	0,2297	0,01383185	127,7430769
ZjusHsp-25	2	GSMUA_Achr1T21160_001	1	6,4953	0,1496	0,023032039	49,96384615
ZjusHsp-25	2	GSMUA_Achr6T33860_001	6	14,7230	0,1715	0,011648441	113,2538462
ZjusHsp-25	2	GSMUA_Achr9T03540_001	9	19,1081	0,1969	0,010304531	146,9853846
ZjusHsp-25	2	GSMUA_Achr9T00510_001	9	5,9242	0,1646	0,027784342	45,57076923
ZjusHsp-25	2	GSMUA_Achr7T14910_001	7	10,6426	0,2515	0,023631443	81,86615385
ZjusHsp-26	2	GSMUA_Achr1T21160_001	1	33,4696	0,1375	0,004108206	257,4584615
ZjusHsp-26	2	GSMUA_Achr9T00510_001	9	18,2482	0,1471	0,008061069	140,3707692
ZjusHsp-26	2	GSMUA_Achr9T03540_001	9	30,3472	0,1852	0,006102705	233,44
ZjusHsp-26	2	GSMUA_Achr6T33860_001	6	19,1669	0,2	0,010434656	147,4376923
ZjusHsp-26	2	GSMUA_Achr7T14910_001	7	14,9494	0,2486	0,01662943	114,9953846
ZjusHsp-31	3	GSMUA_Achr6T33860_001	6	4,8450	0,2603	0,05372549	37,26923077
ZjusHsp-31	3	GSMUA_Achr9T03540_001	9	7,6456	0,2521	0,032973213	58,81230769
ZjusHsp-31	3	GSMUA_Achr1T21160_001	1	4,3100	0,2603	0,060394432	33,15384615
ZjusHsp-31	3	GSMUA_Achr9T00510_001	9	3,9322	0,2567	0,065281522	30,24769231
ZjusHsp-31	3	GSMUA_Achr7T14910_001	7	3,2995	0,3385	0,102591302	25,38076923
ZjusHsp-32	3	GSMUA_Achr1T21160_001	1	13,762	0,1374	0,009984014	105,8615385
ZjusHsp-32	3	GSMUA_Achr9T00510_001	9	49,9168	0,1514	0,003033047	383,9753846
ZjusHsp-32	3	GSMUA_Achr6T33860_001	6	15,895	0,181	0,011387229	122,2692308
ZjusHsp-32	3	GSMUA_Achr9T03540_001	9	26,797	0,1839	0,006862709	206,1307692
ZjusHsp-33	3	GSMUA_Achr1T21160_001	1	7,3063	0,1064	0,014562775	56,20230769
ZjusHsp-33	3	GSMUA_Achr9T00510_001	9	11,5295	0,1055	0,00915044	88,68846154
ZjusHsp-33	3	GSMUA_Achr6T33860_001	6	14,0244	0,1657	0,011815122	107,88

Table S3.1 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjusHsp-33	3	GSMUA_Achr9T03540_001	9	69,8225	0,1586	0,002271474	537,0961538
ZjusHsp-38	3	GSMUA_Achr2T12540_001	2	51,9465	0,294	0,005659669	399,5884615
ZjusHsp-39	4	GSMUA_Achr10T16640_001	10	5,9754	0,3359	0,05621381	45,96461538
ZjusHsp-39	4	GSMUA_Achr1T17060_001	1	3,1516	0,4551	0,144402843	24,24307692
ZjusHsp-42	4	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,2046	0,4051	0,126412033	24,65076923
ZjusHsp-42	4	GSMUA_Achr4T19240_001	4	1,7715	0,2416	0,136381598	13,62692308
ZjusHsp-42	4	GSMUA_Achr3T11660_001	3	3,0981	0,5713	0,184403344	23,83153846
ZjusHsp-43	4	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,2045	0,4051	0,126415978	24,65
ZjusHsp-43	4	GSMUA_Achr4T19240_001	4	1,7715	0,2416	0,136381598	13,62692308
ZjusHsp-43	4	GSMUA_Achr3T11660_001	3	3,0981	0,5713	0,184403344	23,83153846
ZjusHsp-44	4	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,1831	0,4105	0,128962332	24,48538462
ZjusHsp-44	4	GSMUA_Achr4T19240_001	4	1,7395	0,2395	0,137683242	13,38076923
ZjusHsp-44	4	GSMUA_Achr3T11660_001	3	2,9267	0,5645	0,192879352	22,51307692
ZjusHsp-45	4	GSMUA_Achr3T03670_001	3	2,3731	0,5863	0,247060807	18,25461538
ZjusHsp-55	6	GSMUA_Achr10T21120_001	1	18,0973	0,2277	0,012581987	139,21
ZjusHsp-55	6	GSMUA_Achr7T23960_001	7	7,7178	0,2446	0,031692969	59,36769231
ZjusHsp-56	6	GSMUA_Achr10T21120_001	1	54,3983	0,2674	0,004915595	418,4484615
ZjusHsp-57	6	GSMUA_Achr7T23960_001	7	19,6401	0,1901	0,009679177	151,0776923
ZjusHsp-57	6	GSMUA_Achr10T21120_001	10	22,4632	0,1643	0,007314185	172,7938462
ZjusHsp-59	7	GSMUA_Achr9T25740_001	9	3,3766	0,3515	0,104098798	25,97384615
ZjusHsp-60	8	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,4652	0,3633	0,104842433	26,65538462
ZjusHsp-60	8	GSMUA_Achr4T19240_001	4	2,4481	0,1938	0,079163433	18,83153846
ZjusHsp-60	8	GSMUA_Achr3T11660_001	3	2,4344	0,5682	0,233404535	18,72615385
ZjusHsp-61	8	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,4652	0,3633	0,104842433	26,65538462
ZjusHsp-61	8	GSMUA_Achr4T19240_001	4	2,4481	0,1938	0,079163433	18,83153846
ZjusHsp-61	8	GSMUA_Achr3T11660_001	3	2,4344	0,5682	0,233404535	18,72615385
ZjusHsp-62	8	GSMUA_Achr8T29100_001	8	51,7315	0,256	0,004948629	397,9346154
ZjusHsp-63	8	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,4651	0,3633	0,104845459	26,65461538
ZjusHsp-63	8	GSMUA_Achr4T19240_001	4	2,4481	0,1938	0,079163433	18,83153846
ZjusHsp-63	8	GSMUA_Achr3T11660_001	3	2,4344	0,5682	0,233404535	18,72615385
ZjusHsp-64	8	GSMUA_AchrUn_randomT12940_001	chrUn_random	3,4652	0,3633	0,104842433	26,65538462
ZjusHsp-64	8	GSMUA_Achr4T19240_001	4	2,4481	0,1938	0,079163433	18,83153846
ZjusHsp-64	8	GSMUA_Achr3T11660_001	3	2,4344	0,5682	0,233404535	18,72615385
ZjusHsp-66	10	GSMUA_Achr1T17060_001	1	2,2837	0,3026	0,132504269	17,56692308
ZjusHsp-66	10	GSMUA_Achr10T16640_001	1	2,3784	0,2268	0,095358224	18,29538462
ZjusHsp-67	12	GSMUA_Achr6T33860_001	6	22,4216	0,197	0,00878617	172,4738462
ZjusHsp-67	12	GSMUA_Achr9T03540_001	9	62,4253	0,182	0,002915485	480,1946154
ZjusHsp-67	12	GSMUA_Achr1T21160_001	1	8,8854	0,1472	0,016566502	68,34923077
ZjusHsp-67	12	GSMUA_Achr9T00510_001	9	67,733	0,1599	0,00236074	521,0230769
ZjusHsp-67	12	GSMUA_Achr7T14910_001	7	8,1384	0,2888	0,035486091	62,60307692
		Mean		16,0377	0,2400	0,049388969	123,3666037

Z. jujuba – P. persica

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjusHsp-01	1	Prupe.2G317700.1	2	1,4474	0,1495	0,103288656	11,13384615
ZjusHsp-02	1	Prupe.4G023100.1	4	0,7261	0,1182	0,162787495	5,585384615
ZjusHsp-04	1	Prupe.4G201100.3	4	0,8411	0,1882	0,223754607	6,47
ZjusHsp-05	1	Prupe.4G201100.1	4	0,8404	0,1998	0,237743931	6,464615385
ZjusHsp-05	1	Prupe.4G201100.3	4	0,8116	0,2002	0,246673238	6,243076923
ZjusHsp-06	1	Prupe.3G034800.1	3	17,9481	12,0326	0,670410796	138,0623077
ZjusHsp-07	1	Prupe.3G034800.1	3	1,094	0,0945	0,086380256	8,415384615
ZjusHsp-10	2	Prupe.6G066400.1	6	1,5767	0,1561	0,099004249	12,12846154
ZjusHsp-10	2	Prupe.6G065900.1	6	1,6244	0,1331	0,081937946	12,49538462
ZjusHsp-10	2	Prupe.6G066500.1	6	1,6174	0,1491	0,092184988	12,44153846
ZjusHsp-10	2	Prupe.2G243400.1	2	3,4881	0,1912	0,054814942	26,83153846
ZjusHsp-10	2	Prupe.6G066100.1	6	1,7784	0,1421	0,079903284	13,68
ZjusHsp-10	2	Prupe.6G066200.1	6	2,1093	0,1465	0,069454321	16,22538462
ZjusHsp-10	2	Prupe.6G066300.1	6	1,9209	0,1373	0,071476912	14,77615385
ZjusHsp-10	2	Prupe.2G243800.1	2	4,2582	0,224	0,052604387	32,75538462
ZjusHsp-11	2	Prupe.6G088800.1	6	1,2255	0,1843	0,150387597	9,426923077
ZjusHsp-12	2	Prupe.6G066400.1	6	1,0234	0,0845	0,082567911	7,872307692
ZjusHsp-12	2	Prupe.6G066500.1	6	1,0457	0,0888	0,084919193	8,043846154
ZjusHsp-12	2	Prupe.2G243400.1	2	4,1830	0,1377	0,032918958	32,17692308
ZjusHsp-12	2	Prupe.6G065900.1	6	1,3003	0,0827	0,063600708	10,00230769
ZjusHsp-12	2	Prupe.6G066300.1	6	1,3202	0,0893	0,067641266	10,15538462
ZjusHsp-12	2	Prupe.6G066100.1	6	1,0912	0,0865	0,079270528	8,393846154
ZjusHsp-12	2	Prupe.6G066200.1	6	1,0873	0,1	0,091970937	8,363846154
ZjusHsp-12	2	Prupe.2G243800.1	2	2,1165	0,1864	0,088069927	16,28076923
ZjusHsp-13	2	Prupe.6G066400.1	6	1,7150	0,1607	0,093702624	13,19230769
ZjusHsp-13	2	Prupe.6G065900.1	6	1,5463	0,1401	0,090603376	11,89461538
ZjusHsp-13	2	Prupe.6G066500.1	6	1,9447	0,1474	0,075795753	14,95923077

Table S3.1 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjusHsp-13	2	Prupe.2G243400.1	2	2,9149	0,1884	0,064633435	22,42230769
ZjusHsp-13	2	Prupe.6G066200.1	6	2,4895	0,1521	0,061096606	19,15
ZjusHsp-13	2	Prupe.6G066300.1	6	1,7201	0,1769	0,102842858	13,23153846
ZjusHsp-13	2	Prupe.6G066100.1	6	1,8761	0,1475	0,078620543	14,43153846
ZjusHsp-13	2	Prupe.2G243800.1	2	3,3558	0,2251	0,067077895	25,81384615
ZjusHsp-14	2	Prupe.6G008800.1	6	1,0798	0,1889	0,174939804	8,306153846
ZjusHsp-15	2	Prupe.6G066200.1	6	1,1725	0,1312	0,111897655	9,019230769
ZjusHsp-16	2	Prupe.6G066400.1	6	1,2332	0,0866	0,070223808	9,486153846
ZjusHsp-16	2	Prupe.2G243400.1	2	5,2345	0,1256	0,023994651	40,26538462
ZjusHsp-16	2	Prupe.6G066500.1	6	1,5157	0,0783	0,051659299	11,65923077
ZjusHsp-16	2	Prupe.6G065900.1	6	1,3622	0,0787	0,057774189	10,47846154
ZjusHsp-16	2	Prupe.6G066100.1	6	1,2341	0,0788	0,0638522	9,493076923
ZjusHsp-16	2	Prupe.6G066300.1	6	1,6394	0,0771	0,047029401	12,61076923
ZjusHsp-16	2	Prupe.6G066200.1	6	1,2166	0,0907	0,07455203	9,358461538
ZjusHsp-16	2	Prupe.2G243800.1	2	1,5268	0,1852	0,12129945	11,74461538
ZjusHsp-17	2	Prupe.6G066400.1	6	1,3494	0,1026	0,076033793	10,38
ZjusHsp-17	2	Prupe.6G066500.1	6	1,1890	0,1018	0,085618167	9,146153846
ZjusHsp-17	2	Prupe.2G243400.1	2	3,4494	0,1562	0,045283238	26,53384615
ZjusHsp-17	2	Prupe.6G066300.1	6	1,4445	0,0954	0,066043614	11,11153846
ZjusHsp-17	2	Prupe.6G065900.1	6	1,5325	0,1	0,065252855	11,78846154
ZjusHsp-17	2	Prupe.6G066100.1	6	1,3298	0,0999	0,075124079	10,22923077
ZjusHsp-17	2	Prupe.2G243800.1	2	1,5665	0,1978	0,126268752	12,05
ZjusHsp-18	2	Prupe.6G066400.1	6	1,2446	0,0796	0,063956291	9,573846154
ZjusHsp-18	2	Prupe.6G066500.1	6	1,0796	0,0784	0,072619489	8,304615385
ZjusHsp-18	2	Prupe.2G243400.1	2	4,0344	0,1471	0,036461432	31,03384615
ZjusHsp-18	2	Prupe.6G066300.1	6	1,6065	0,0848	0,052785559	12,35769231
ZjusHsp-18	2	Prupe.6G065900.1	6	1,4612	0,0788	0,053928278	11,24
ZjusHsp-18	2	Prupe.6G066100.1	6	1,1678	0,0821	0,070303134	8,983076923
ZjusHsp-18	2	Prupe.6G066200.1	6	1,1431	0,0954	0,083457265	8,793076923
ZjusHsp-18	2	Prupe.2G243800.1	2	1,6059	0,1876	0,116819229	12,35307692
ZjusHsp-19	2	Prupe.6G066400.1	6	1,3294	0,108	0,081239657	10,22615385
ZjusHsp-19	2	Prupe.6G066500.1	6	1,1481	0,1139	0,099207386	8,831538462
ZjusHsp-19	2	Prupe.2G243400.1	2	3,5155	0,1704	0,048471057	27,04230769
ZjusHsp-19	2	Prupe.6G065900.1	6	2,1671	0,1132	0,052235707	16,67
ZjusHsp-19	2	Prupe.6G066300.1	6	1,9645	0,1112	0,056604734	15,11153846
ZjusHsp-19	2	Prupe.6G066100.1	6	1,5395	0,1136	0,073790192	11,84230769
ZjusHsp-19	2	Prupe.6G066200.1	6	1,4760	0,1296	0,087804878	11,35384615
ZjusHsp-19	2	Prupe.2G243800.1	2	1,4392	0,1966	0,136603669	11,07076923
ZjusHsp-20	2	Prupe.6G066400.1	6	1,2507	0,0726	0,058047493	9,620769231
ZjusHsp-20	2	Prupe.6G066500.1	6	1,0165	0,0792	0,077914412	7,819230769
ZjusHsp-20	2	Prupe.2G243400.1	2	3,5696	0,1331	0,037287091	27,45846154
ZjusHsp-20	2	Prupe.6G066300.1	6	1,4388	0,0783	0,05442035	11,06769231
ZjusHsp-20	2	Prupe.6G065900.1	6	1,2843	0,0724	0,056373122	9,879230769
ZjusHsp-20	2	Prupe.6G066100.1	6	1,0589	0,0759	0,071678157	8,145384615
ZjusHsp-20	2	Prupe.6G066200.1	6	1,0542	0,0891	0,084519067	8,109230769
ZjusHsp-20	2	Prupe.2G243800.1	2	1,6133	0,1759	0,109031178	12,41
ZjusHsp-21	2	Prupe.6G066400.1	6	1,2993	0,1	0,076964519	9,994615385
ZjusHsp-21	2	Prupe.2G243400.1	2	3,3416	0,1463	0,043781422	25,70461538
ZjusHsp-21	2	Prupe.6G065900.1	6	1,2655	0,0957	0,075622284	9,734615385
ZjusHsp-21	2	Prupe.6G066500.1	6	1,1485	0,0926	0,080626905	8,834615385
ZjusHsp-21	2	Prupe.6G066100.1	6	1,2167	0,0963	0,079148516	9,359230769
ZjusHsp-21	2	Prupe.6G066300.1	6	1,3345	0,0906	0,067890596	10,26538462
ZjusHsp-21	2	Prupe.6G066200.1	6	1,2035	0,1098	0,091233901	9,257692308
ZjusHsp-21	2	Prupe.2G243800.1	2	1,6726	0,1788	0,106899438	12,86615385
ZjusHsp-22	2	Prupe.6G066400.1	6	1,6026	0,0862	0,053787595	12,32769231
ZjusHsp-22	2	Prupe.6G066500.1	6	1,3051	0,078	0,059765535	10,03923077
ZjusHsp-22	2	Prupe.2G243400.1	2	4,2478	0,1398	0,032911154	32,67538462
ZjusHsp-22	2	Prupe.6G065900.1	6	2,0941	0,0856	0,040876749	16,10846154
ZjusHsp-22	2	Prupe.6G066100.1	6	1,4712	0,0888	0,060358891	11,31692308
ZjusHsp-22	2	Prupe.6G066300.1	6	2,1864	0,0905	0,041392243	16,81846154
ZjusHsp-22	2	Prupe.6G066200.1	6	1,3451	0,1021	0,075905137	10,34692308
ZjusHsp-22	2	Prupe.2G243800.1	2	1,7360	0,1928	0,111059908	13,35384615
ZjusHsp-23	2	Prupe.6G066400.1	6	1,4092	0,0831	0,058969628	10,84
ZjusHsp-23	2	Prupe.6G066500.1	6	1,1374	0,075	0,065939863	8,749230769
ZjusHsp-23	2	Prupe.2G243400.1	2	3,8765	0,1365	0,035212176	29,81923077
ZjusHsp-23	2	Prupe.6G066300.1	6	2,2251	0,088	0,039548784	17,11615385
ZjusHsp-23	2	Prupe.6G065900.1	6	2,0775	0,083	0,039951865	15,98076923
ZjusHsp-23	2	Prupe.6G066100.1	6	1,4212	0,086	0,060512243	10,93230769
ZjusHsp-23	2	Prupe.6G066200.1	6	1,2900	0,0992	0,076899225	9,923076923

Table S3.1 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjusHsp-23	2	Prupe.2G243800.1	2	1,7264	0,1887	0,109302595	13,28
ZjusHsp-24	2	Prupe.6G066400.1	6	1,2447	0,1055	0,08475938	9,574615385
ZjusHsp-24	2	Prupe.6G065900.1	6	1,2657	0,1028	0,081219878	9,736153846
ZjusHsp-24	2	Prupe.6G066500.1	6	1,2300	0,0979	0,079593496	9,461538462
ZjusHsp-24	2	Prupe.2G243400.1	2	4,8261	0,1581	0,032759371	37,12384615
ZjusHsp-24	2	Prupe.6G066100.1	6	1,2565	0,1071	0,085236769	9,665384615
ZjusHsp-24	2	Prupe.6G066300.1	6	1,3347	0,106	0,079418596	10,26692308
ZjusHsp-24	2	Prupe.6G066200.1	6	1,2188	0,1201	0,098539547	9,375384615
ZjusHsp-24	2	Prupe.2G243800.1	2	1,7084	0,2006	0,117419808	13,14153846
ZjusHsp-25	2	Prupe.6G066400.1	6	1,4536	0,0811	0,055792515	11,18153846
ZjusHsp-25	2	Prupe.2G243400.1	2	3,9822	0,1495	0,037542062	30,63230769
ZjusHsp-25	2	Prupe.6G065900.1	6	1,5987	0,0826	0,051666979	12,29769231
ZjusHsp-25	2	Prupe.6G066500.1	6	1,3131	0,0898	0,068387785	10,10076923
ZjusHsp-25	2	Prupe.6G066100.1	6	1,2896	0,0861	0,066764888	9,92
ZjusHsp-25	2	Prupe.6G066300.1	6	1,5697	0,0891	0,056762439	12,07461538
ZjusHsp-25	2	Prupe.6G066200.1	6	1,2579	0,0998	0,07933858	9,676153846
ZjusHsp-25	2	Prupe.2G243800.1	2	1,8009	0,1961	0,108889999	13,85307692
ZjusHsp-26	2	Prupe.2G243400.1	2	2,8256	0,1123	0,039743771	21,73538462
ZjusHsp-26	2	Prupe.2G243800.1	2	2,8281	0,1602	0,056645805	21,75461538
ZjusHsp-26	2	Prupe.6G066400.1	6	28,0823	0,1836	0,006537926	216,0176923
ZjusHsp-26	2	Prupe.6G066300.1	6	14,4088	0,181	0,012561768	110,8369231
ZjusHsp-26	2	Prupe.6G066500.1	6	22,3743	0,1742	0,007785718	172,11
ZjusHsp-26	2	Prupe.6G065900.1	6	12,4053	0,1811	0,014598599	95,42538462
ZjusHsp-26	2	Prupe.6G066200.1	6	17,3907	0,1903	0,01094263	133,7746154
ZjusHsp-26	2	Prupe.6G066100.1	6	15,0872	0,1852	0,012275306	116,0553846
ZjusHsp-27	2	Prupe.6G328400.1	6	1,3000	0,3416	0,262769231	10
ZjusHsp-27	2	Prupe.6G328400.6	6	1,3000	0,3416	0,262769231	10
ZjusHsp-27	2	Prupe.7G053900.1	7	1,4799	0,323	0,21825799	11,38384615
ZjusHsp-27	2	Prupe.7G053900.5	7	1,4799	0,323	0,21825799	11,38384615
ZjusHsp-27	2	Prupe.7G053900.4	7	1,4799	0,323	0,21825799	11,38384615
ZjusHsp-27	2	Prupe.7G053900.6	7	1,4799	0,323	0,21825799	11,38384615
ZjusHsp-27	2	Prupe.6G328400.2	6	1,0678	0,3161	0,296029219	8,213846154
ZjusHsp-28	2	Prupe.7G053900.1	7	1,7085	0,2577	0,150834065	13,14230769
ZjusHsp-28	2	Prupe.7G053900.5	7	1,7085	0,2577	0,150834065	13,14230769
ZjusHsp-28	2	Prupe.7G053900.4	7	1,7085	0,2577	0,150834065	13,14230769
ZjusHsp-28	2	Prupe.7G053900.6	7	1,7085	0,2577	0,150834065	13,14230769
ZjusHsp-28	2	Prupe.6G328400.2	6	1,1139	0,3341	0,299937158	8,568461538
ZjusHsp-28	2	Prupe.6G328400.1	6	1,1139	0,3341	0,299937158	8,568461538
ZjusHsp-28	2	Prupe.6G328400.6	6	1,1139	0,3341	0,299937158	8,568461538
ZjusHsp-29	2	Prupe.7G053900.1	7	0,6665	0,1805	0,270817704	5,126923077
ZjusHsp-29	2	Prupe.7G053900.5	7	0,6665	0,1805	0,270817704	5,126923077
ZjusHsp-29	2	Prupe.7G053900.4	7	0,6665	0,1805	0,270817704	5,126923077
ZjusHsp-29	2	Prupe.7G053900.6	7	0,6665	0,1805	0,270817704	5,126923077
ZjusHsp-29	2	Prupe.7G053900.3	7	0,6193	0,2075	0,335055708	4,763846154
ZjusHsp-29	2	Prupe.7G053900.9	7	0,6193	0,2075	0,335055708	4,763846154
ZjusHsp-29	2	Prupe.7G053900.2	7	0,6193	0,2075	0,335055708	4,763846154
ZjusHsp-29	2	Prupe.7G053900.8	7	0,6453	0,2381	0,36897567	4,963846154
ZjusHsp-29	2	Prupe.7G053900.7	7	0,6453	0,2381	0,36897567	4,963846154
ZjusHsp-29	2	Prupe.6G328400.1	6	1,5766	0,386	0,244830648	12,12769231
ZjusHsp-29	2	Prupe.6G328400.6	6	1,5766	0,386	0,244830648	12,12769231
ZjusHsp-29	2	Prupe.6G328400.2	6	1,6385	0,3374	0,205920049	12,60384615
ZjusHsp-31	3	Prupe.2G243800.1	2	2,4633	0,2887	0,117200503	18,94846154
ZjusHsp-31	3	Prupe.2G243400.1	2	2,2833	0,2543	0,111373889	17,56384615
ZjusHsp-31	3	Prupe.6G066400.1	6	2,3330	0,2991	0,128204029	17,94615385
ZjusHsp-32	3	Prupe.2G243800.1	2	1,5511	0,0874	0,056347109	11,93153846
ZjusHsp-32	3	Prupe.2G243400.1	2	2,7735	0,14	0,050477736	21,33461538
ZjusHsp-32	3	Prupe.6G066400.1	6	3,339	0,2009	0,060167715	25,68461538
ZjusHsp-32	3	Prupe.6G066500.1	6	2,885	0,1895	0,065684575	22,19230769
ZjusHsp-32	3	Prupe.6G066300.1	6	2,8593	0,217	0,075892701	21,99461538
ZjusHsp-32	3	Prupe.6G065900.1	6	2,7643	0,1895	0,068552617	21,26384615
ZjusHsp-32	3	Prupe.6G066200.1	6	3,1651	0,2104	0,066474993	24,34692308
ZjusHsp-32	3	Prupe.6G066100.1	6	2,4524	0,1985	0,080941119	18,86461538
ZjusHsp-33	3	Prupe.2G243400.1	2	1,632	0,0709	0,043443627	12,55384615
ZjusHsp-33	3	Prupe.2G243800.1	2	2,2603	0,1532	0,067778613	17,38692308
ZjusHsp-33	3	Prupe.6G066400.1	6	52,628	0,1545	0,0029357	404,8307692
ZjusHsp-33	3	Prupe.6G066500.1	6	58,1241	0,1373	0,002362187	447,1084615
ZjusHsp-33	3	Prupe.6G065900.1	6	49,1926	0,1495	0,003039075	378,4046154
ZjusHsp-33	3	Prupe.6G066300.1	6	48,6791	0,1533	0,003149195	374,4546154
ZjusHsp-33	3	Prupe.6G066200.1	6	41,2649	0,1627	0,003942818	317,4223077

Table S3.1 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjusHsp-33	3	Prupe.6G066100.1	6	31,462	0,1545	0,004910686	242,0153846
ZjusHsp-34	3	Prupe.5G071200.1	5	1,9725	0,3224	0,163447402	15,17307692
ZjusHsp-35	3	Prupe.5G071200.1	5	1,7306	0,3127	0,180688778	13,31230769
ZjusHsp-36	3	Prupe.5G071200.1	5	1,9725	0,3224	0,163447402	15,17307692
ZjusHsp-37	3	Prupe.5G071200.1	5	1,7306	0,3127	0,180688778	13,31230769
ZjusHsp-38	3	Prupe.2G317700.1	2	1,4774	0,1495	0,101191282	11,36461538
ZjusHsp-39	4	Prupe.1G237800.1	1	4,8625	0,3835	0,078868895	37,40384615
ZjusHsp-42	4	Prupe.5G004500.1	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-42	4	Prupe.5G004500.3	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-42	4	Prupe.5G004500.2	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-42	4	Prupe.7G187900.2	7	1,5315	0,4134	0,26993144	11,78076923
ZjusHsp-42	4	Prupe.7G187900.1	7	1,5315	0,4134	0,26993144	11,78076923
ZjusHsp-42	4	Prupe.8G182600.1	8	2,1851	0,4824	0,220767928	16,80846154
ZjusHsp-43	4	Prupe.5G004500.1	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-43	4	Prupe.5G004500.3	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-43	4	Prupe.5G004500.2	5	0,7623	0,1829	0,239931785	5,863846154
ZjusHsp-43	4	Prupe.7G187900.2	7	1,5315	0,4134	0,26993144	11,78076923
ZjusHsp-43	4	Prupe.7G187900.1	7	1,5315	0,4134	0,26993144	11,78076923
ZjusHsp-43	4	Prupe.8G182600.1	8	2,1851	0,4824	0,220767928	16,80846154
ZjusHsp-44	4	Prupe.5G004500.1	5	0,7678	0,1822	0,237301381	5,906153846
ZjusHsp-44	4	Prupe.5G004500.3	5	0,7678	0,1822	0,237301381	5,906153846
ZjusHsp-44	4	Prupe.5G004500.2	5	0,7678	0,1822	0,237301381	5,906153846
ZjusHsp-44	4	Prupe.7G187900.2	7	1,5454	0,4144	0,268150641	11,88769231
ZjusHsp-44	4	Prupe.7G187900.1	7	1,5454	0,4144	0,268150641	11,88769231
ZjusHsp-44	4	Prupe.8G182600.1	8	2,1869	0,5006	0,228908501	16,82230769
ZjusHsp-45	4	Prupe.3G108500.1	3	0,7748	0,2213	0,285622096	5,96
ZjusHsp-45	4	Prupe.3G108500.2	3	0,8768	0,2246	0,256158759	6,744615385
ZjusHsp-54	6	Prupe.5G006000.1	5	0,7799	0,2228	0,285677651	5,999230769
ZjusHsp-55	6	Prupe.1G407100.1	1	1,6859	0,1684	0,099887301	12,96846154
ZjusHsp-55	6	Prupe.1G407300.1	1	4,9808	0,168	0,033729521	38,31384615
ZjusHsp-55	6	Prupe.1G407200.1	1	6,0506	0,2749	0,045433511	46,54307692
ZjusHsp-56	6	Prupe.1G407200.1	1	3,467	0,2031	0,058580906	26,66923077
ZjusHsp-57	6	Prupe.1G407300.1	1	1,8464	0,0697	0,037749133	14,20307692
ZjusHsp-57	6	Prupe.1G407100.1	1	6,9407	0,2063	0,029723227	53,39
ZjusHsp-58	6	Prupe.8G031300.1	8	1,72	0,5711	0,332034884	13,23076923
ZjusHsp-59	7	Prupe.1G015400.1	1	1,1561	0,1439	0,124470202	8,893076923
ZjusHsp-60	8	Prupe.7G187900.2	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-60	8	Prupe.7G187900.1	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-60	8	Prupe.5G004500.1	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-60	8	Prupe.5G004500.2	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-60	8	Prupe.5G004500.3	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-60	8	Prupe.8G182600.1	8	2,5583	0,4507	0,176171677	19,67923077
ZjusHsp-61	8	Prupe.7G187900.2	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-61	8	Prupe.7G187900.1	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-61	8	Prupe.5G004500.1	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-61	8	Prupe.5G004500.2	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-61	8	Prupe.5G004500.3	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-61	8	Prupe.8G182600.1	8	2,5583	0,4507	0,176171677	19,67923077
ZjusHsp-62	8	Prupe.8G000400.1	8	0,7358	0,1463	0,198831204	5,66
ZjusHsp-63	8	Prupe.7G187900.2	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-63	8	Prupe.7G187900.1	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-63	8	Prupe.5G004500.1	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-63	8	Prupe.5G004500.2	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-63	8	Prupe.5G004500.3	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-63	8	Prupe.8G182600.1	8	2,5583	0,4507	0,176171677	19,67923077
ZjusHsp-64	8	Prupe.7G187900.2	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-64	8	Prupe.7G187900.1	7	0,7789	0,1824	0,234176403	5,991538462
ZjusHsp-64	8	Prupe.5G004500.1	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-64	8	Prupe.5G004500.2	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-64	8	Prupe.5G004500.3	5	1,6372	0,3012	0,183972636	12,59384615
ZjusHsp-66	10	Prupe.1G237800.1	1	1,2843	0,1859	0,144748112	9,879230769
ZjusHsp-67	12	Prupe.2G243800.1	2	6,2036	0,1342	0,0216326	47,72
ZjusHsp-67	12	Prupe.2G243400.1	2	27,6008	0,1264	0,004579577	212,3138462
ZjusHsp-67	12	Prupe.6G066200.1	6	15,7888	0,21	0,013300567	121,4523077
ZjusHsp-67	12	Prupe.6G066400.1	6	31,3855	0,2094	0,006671871	241,4269231
ZjusHsp-67	12	Prupe.6G066500.1	6	52,4179	0,191	0,003643793	403,2146154
ZjusHsp-67	12	Prupe.6G066300.1	6	18,0103	0,1951	0,01083269	138,5407692
Mean				4,0036	0,239201293	0,126517637	30,7972878

Table S3.2 Calculation of divergence time rates and Ka/Ks ratios of orthologous *ZjuHsp40* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Z. jujuba – *A. thaliana*

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-01	1	AT1G28210.1	1	55,2830	0,6450	0,011667239	425,2538462
ZjuHsp40-01	1	AT5G48030.1	5	2,2215	0,2652	0,119378798	17,08846154
ZjuHsp40-01	1	AT1G28210.2	1	55,2090	0,6020	0,010904019	424,6846154
ZjuHsp40-01	1	AT4G39960.1	4	48,3623	0,7637	0,015791226	372,0176923
ZjuHsp40-01	1	AT1G80030.3	1	51,4648	0,8043	0,015628157	395,8830769
ZjuHsp40-01	1	AT1G80030.1	1	51,4616	0,8039	0,015621357	395,8584615
ZjuHsp40-01	1	AT1G80030.2	1	51,4637	0,8044	0,015630435	395,8746154
ZjuHsp40-01	1	AT3G17830.1	3	52,9834	0,7833	0,014783876	407,5646154
ZjuHsp40-03	1	AT1G30280.1	1	5,4163	0,4971	0,09177852	41,66384615
ZjuHsp40-06	1	AT1G61770.1	1	2,3114	0,1859	0,080427447	17,78
ZjuHsp40-08	1	AT3G14200.1	3	3,0720	0,3732	0,121484375	23,63076923
ZjuHsp40-09	1	AT3G14200.1	3	3,0720	0,3732	0,121484375	23,63076923
ZjuHsp40-10	1	AT3G14200.1	3	3,0582	0,3675	0,120168727	23,52461538
ZjuHsp40-11	1	AT3G14200.1	3	2,9363	0,3792	0,129142118	22,58692308
ZjuHsp40-12	1	AT3G14200.1	3	2,8938	0,3822	0,132075472	22,26
ZjuHsp40-13	1	AT3G14200.1	3	3,2626	0,4520	0,138539815	25,09692308
ZjuHsp40-14	1	AT3G14200.1	3	2,7408	0,3562	0,129962055	21,08307692
ZjuHsp40-15	1	AT3G14200.1	3	3,2626	0,4200	0,128731686	25,09692308
ZjuHsp40-16	1	AT3G14200.1	3	3,0878	0,4023	0,130286936	23,75230769
ZjuHsp40-17	1	AT5G25530.1	5	3,4323	0,1204	0,035078519	26,40230769
ZjuHsp40-17	1	AT4G28480.1	4	7,868	0,3075	0,039082359	60,52307692
ZjuHsp40-17	1	AT3G08910.1	3	41,6374	0,2952	0,00708978	320,2876923
ZjuHsp40-17	1	AT1G59725.1	1	10,8899	0,3196	0,029348295	83,76846154
ZjuHsp40-17	1	AT5G01390.1	5	17,2762	0,3032	0,017550156	132,8938462
ZjuHsp40-17	1	AT1G10350.1	1	38,7108	0,3505	0,009054321	297,7753846
ZjuHsp40-17	1	AT3G47940.1	3	15,0719	0,3655	0,024250426	115,9376923
ZjuHsp40-17	1	AT5G01390.4	5	23,0811	0,3081	0,013348584	177,5469231
ZjuHsp40-17	1	AT2G20550.2	2	2,9945	0,4469	0,149240274	23,03461538
ZjuHsp40-17	1	AT2G20550.1	2	2,9945	0,4469	0,149240274	23,03461538
ZjuHsp40-17	1	AT4G28480.2	4	10,4735	0,2679	0,025578842	80,56538462
ZjuHsp40-17	1	AT5G01390.2	5	15,6287	0,3004	0,019221048	120,2207692
ZjuHsp40-17	1	AT1G44160.1	1	54,5258	0,7525	0,013800806	419,4292308
ZjuHsp40-19	1	AT1G80030.3	1	1,7691	0,1772	0,100163925	13,60846154
ZjuHsp40-19	1	AT1G80030.1	1	1,7691	0,1772	0,100163925	13,60846154
ZjuHsp40-19	1	AT1G80030.2	1	1,7691	0,1772	0,100163925	13,60846154
ZjuHsp40-19	1	AT2G22360.1	2	52,3501	0,4766	0,009104009	402,6930769
ZjuHsp40-19	1	AT3G17830.1	3	17,4903	0,4903	0,028032681	134,5407692
ZjuHsp40-19	1	AT4G39960.1	4	53,4867	0,4724	0,008832102	411,4361538
ZjuHsp40-20	2	AT5G59610.1	5	10,1752	0,3992	0,039232644	78,27076923
ZjuHsp40-21	2	AT5G59610.1	5	10,3916	0,4032	0,03880057	79,93538462
ZjuHsp40-22	2	AT1G28210.1	1	2,6371	0,2742	0,103977854	20,28538462
ZjuHsp40-22	2	AT1G28210.2	1	3,0425	0,2851	0,093705834	23,40384615
ZjuHsp40-22	2	AT5G48030.1	5	57,5485	0,5666	0,009845608	442,6807692
ZjuHsp40-22	2	AT1G80030.3	1	54,5697	0,6879	0,012605897	419,7669231
ZjuHsp40-22	2	AT1G80030.1	1	54,5702	0,688	0,012607614	419,7707692
ZjuHsp40-22	2	AT1G80030.2	1	54,5679	0,6879	0,012606313	419,7530769
ZjuHsp40-22	2	AT2G22360.1	2	51,5574	0,7634	0,014806798	396,5953846
ZjuHsp40-22	2	AT4G39960.1	3	18,3253	0,7518	0,041025249	140,9638462
ZjuHsp40-22	2	AT3G17830.1	3	27,3955	0,7303	0,026657663	210,7346154
ZjuHsp40-24	2	AT5G18730.1	5	3,9566	0,6375	0,161123187	30,43538462
ZjuHsp40-24	2	AT3G06340.3	3	5,4935	0,5501	0,100136525	42,25769231
ZjuHsp40-24	2	AT3G06340.2	3	5,4935	0,5501	0,100136525	42,25769231
ZjuHsp40-24	2	AT3G06340.1	3	5,4935	0,5501	0,100136525	42,25769231
ZjuHsp40-24	2	AT3G04960.2	3	55,4653	0,8397	0,015139195	426,6561538
ZjuHsp40-24	2	AT3G04960.4	3	58,076	0,8459	0,014565397	446,7384615
ZjuHsp40-24	2	AT3G04960.1	3	58,5375	0,8677	0,014822977	450,2884615
ZjuHsp40-24	2	AT3G04960.3	3	58,1009	0,8561	0,014734712	446,93
ZjuHsp40-24	2	AT5G27240.1	5	16,2586	0,6386	0,039277675	125,0661538
ZjuHsp40-24	2	AT5G18740.1	5	2,6295	0,698	0,265449705	20,22692308
ZjuHsp40-25	2	AT2G01710.1	2	56,067	0,3208	0,005721726	431,28846154
ZjuHsp40-26	2	AT3G05345.1	6	1,5167	0,2410	0,158897607	11,66692308
ZjuHsp40-27	2	AT5G27240.1	5	5,6288	0,6257	0,11116046	43,29846154
ZjuHsp40-27	2	AT3G04980.1	3	6,0627	0,6599	0,108845894	46,63615385
ZjuHsp40-27	2	AT5G18740.1	5	7,4430	0,6992	0,093940615	57,25384615
ZjuHsp40-27	2	AT5G18730.1	5	51,4466	0,6748	0,013116513	395,7430769
ZjuHsp40-27	2	AT5G18750.1	5	3,0470	0,6206	0,203675747	23,43846154

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-27	2	AT3G06340.3	3	11,0006	0,5816	0,052869843	84,62
ZjuHsp40-27	2	AT3G06340.2	3	11,0054	0,5816	0,052846784	84,65692308
ZjuHsp40-27	2	AT3G06340.1	3	11,0026	0,5816	0,052860233	84,63538462
ZjuHsp40-27	2	AT3G04960.2	3	57,8065	0,801	0,013856573	444,6653846
ZjuHsp40-27	2	AT3G04960.4	3	8,8167	0,8077	0,09161024	67,82076923
ZjuHsp40-27	2	AT3G04960.1	3	20,9094	0,8781	0,041995466	160,8415385
ZjuHsp40-27	2	AT3G04960.3	3	19,38	0,907	0,046800826	149,0769231
ZjuHsp40-27	2	AT3G05110.1	3	6,6636	0,7276	0,109190228	51,25846154
ZjuHsp40-28	2	AT5G27240.1	5	5,6289	0,6257	0,111158486	43,29923077
ZjuHsp40-28	2	AT3G04980.1	3	6,0627	0,6599	0,108845894	46,63615385
ZjuHsp40-28	2	AT5G18740.1	5	7,4418	0,6992	0,093955763	57,24461538
ZjuHsp40-28	2	AT5G18730.1	5	56,9408	0,6746	0,011847392	438,0061538
ZjuHsp40-28	2	AT5G18750.1	5	3,0470	0,6206	0,203675747	23,43846154
ZjuHsp40-28	2	AT3G06340.3	3	11,0031	0,5816	0,052857831	84,63923077
ZjuHsp40-28	2	AT3G06340.2	3	11,0017	0,5816	0,052864557	84,62846154
ZjuHsp40-28	2	AT3G06340.1	3	11,0026	0,5816	0,052860233	84,63538462
ZjuHsp40-28	2	AT3G04960.2	3	57,8011	0,8011	0,013859598	444,6238462
ZjuHsp40-28	2	AT3G04960.4	3	8,8154	0,8077	0,091623749	67,81076923
ZjuHsp40-28	2	AT3G04960.1	3	20,7530	0,8782	0,042316773	159,6384615
ZjuHsp40-28	2	AT3G04960.3	3	19,3454	0,9070	0,046884531	148,8107692
ZjuHsp40-28	2	AT3G05110.1	3	6,6636	0,7276	0,109190228	51,25846154
ZjuHsp40-29	2	AT5G12430.1	5	2,1369	0,4613	0,215873462	16,43769231
ZjuHsp40-29	2	AT2G41520.1	2	3,8963	0,5960	0,152965634	29,97153846
ZjuHsp40-29	2	AT2G41520.2	2	4,4046	0,6146	0,13953594	33,88153846
ZjuHsp40-30	2	AT5G12430.1	5	2,1098	0,4637	0,219783866	16,22923077
ZjuHsp40-30	2	AT2G41520.1	2	3,6147	0,6004	0,166099538	27,80538462
ZjuHsp40-30	2	AT2G41520.2	2	4,0422	0,6195	0,153258127	31,09384615
ZjuHsp40-31	3	AT3G44110.1	3	4,6037	0,0961	0,020874514	35,41307692
ZjuHsp40-31	3	AT5G22060.1	5	4,5926	0,1225	0,026673344	35,32769231
ZjuHsp40-31	3	AT3G44110.2	3	3,0721	0,1012	0,032941636	23,63153846
ZjuHsp40-32	3	AT2G35795.1	2	1,8813	0,0917	0,048742891	14,47153846
ZjuHsp40-32	3	AT5G03030.1	5	4,766	0,1438	0,030172052	36,66153846
ZjuHsp40-32	3	AT3G09700.1	3	5,0623	0,1693	0,033443297	38,94076923
ZjuHsp40-33	3	AT5G53150.1	5	4,7289	0,4245	0,089767176	36,37615385
ZjuHsp40-33	3	AT5G35753.1	5	14,6325	0,6754	0,046157526	112,5576923
ZjuHsp40-33	3	AT2G05230.1	2	5,7495	0,6267	0,109000783	44,22692308
ZjuHsp40-33	3	AT2G05250.1	2	5,7491	0,6267	0,109008367	44,22384615
ZjuHsp40-33	3	AT2G25560.1	2	5,138	0,4903	0,095426236	39,52307692
ZjuHsp40-33	3	AT5G37380.3	5	6,8508	0,4866	0,071028201	52,69846154
ZjuHsp40-33	3	AT5G37380.1	5	6,8519	0,4866	0,071016798	52,70692308
ZjuHsp40-33	3	AT5G37380.5	5	6,8526	0,4866	0,071009544	52,71230769
ZjuHsp40-33	3	AT5G37380.2	5	6,8515	0,4866	0,071020944	52,70384615
ZjuHsp40-33	3	AT5G37380.4	5	48,2478	0,4804	0,009956931	371,1369231
ZjuHsp40-33	3	AT5G50115.1	5	45,1066	0,5678	0,012587958	346,9738462
ZjuHsp40-33	3	AT4G19570.1	4	56,1948	0,7991	0,014220177	432,2676923
ZjuHsp40-34	3	AT5G16650.1	5	2,5942	0,2922	0,11263588	19,95538462
ZjuHsp40-35	3	AT5G16650.1	5	2,1846	0,2688	0,12304312	16,80461538
ZjuHsp40-38	3	AT5G16650.1	5	2,9689	0,2832	0,095388865	22,83769231
ZjuHsp40-39	3	AT5G16650.1	5	2,2037	0,2735	0,124109452	16,95153846
ZjuHsp40-42	4	AT3G47940.1	3	54,5047	0,3799	0,006970041	419,2669231
ZjuHsp40-42	4	AT1G10350.1	1	13,7667	0,4872	0,035389745	105,8976923
ZjuHsp40-42	4	AT5G01390.4	5	26,5719	0,5025	0,018910955	204,3992308
ZjuHsp40-42	4	AT5G01390.1	5	33,1403	0,5219	0,015748198	254,9253846
ZjuHsp40-43	4	AT1G21080.1	1	1,9946	0,1510	0,075704402	15,34307692
ZjuHsp40-43	4	AT1G21080.3	1	2,1110	0,1574	0,074561819	16,23846154
ZjuHsp40-43	4	AT1G76700.1	1	1,6834	0,1569	0,09320423	12,94923077
ZjuHsp40-43	4	AT1G21080.2	1	1,8787	0,1849	0,09841912	14,45153846
ZjuHsp40-43	4	AT1G77020.1	1	30,5624	0,3562	0,011654844	235,0953846
ZjuHsp40-43	4	AT4G39150.1	4	51,8218	0,3872	0,007471759	398,6292308
ZjuHsp40-43	4	AT4G39150.2	4	51,8207	0,3874	0,007475777	398,6207692
ZjuHsp40-43	4	AT2G21510.1	2	16,6815	0,3802	0,022791715	128,3192308
ZjuHsp40-44	5	AT5G53150.1	5	3,4525	0,5650	0,163649529	26,55769231
ZjuHsp40-44	5	AT2G25560.1	2	2,827	0,5226	0,184860276	21,74615385
ZjuHsp40-44	5	AT5G35753.1	5	8,2810	0,6628	0,080038643	63,7
ZjuHsp40-44	5	AT2G05230.1	2	4,9463	0,6699	0,135434567	38,04846154
ZjuHsp40-44	5	AT2G05250.1	2	4,9464	0,6699	0,135431829	38,04923077
ZjuHsp40-44	5	AT5G37380.3	5	0,1700	16,8283	98,99	1,307692308
ZjuHsp40-44	5	AT5G37380.1	5	8,0022	0,5536	0,069180975	61,55538462
ZjuHsp40-44	5	AT5G37380.5	5	8,0025	0,5535	0,069165886	61,55769231

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-44	5	AT5G37380.1	5	8,0008	0,5535	0,069180582	61,54461538
ZjuHsp40-44	5	AT5G37380.5	5	8,0028	0,5535	0,069163293	61,56
ZjuHsp40-44	5	AT5G37380.2	5	8,0006	0,5535	0,069182311	61,54307692
ZjuHsp40-44	5	AT5G37380.4	5	8,0006	0,5535	0,069182311	61,54307692
ZjuHsp40-44	5	AT5G50115.1	5	5,8569	0,5564	0,094999061	45,05307692
ZjuHsp40-45	5	AT1G74250.1	1	5,7649	0,4053	0,070304775	44,34538462
ZjuHsp40-46	5	AT1G74250.1	1	5,7651	0,4053	0,070302336	44,34692308
ZjuHsp40-47	5	AT1G18700.1	1	1,4272	0,3336	0,233744395	10,97846154
ZjuHsp40-47	5	AT1G18700.2	1	1,4666	0,3423	0,233396973	11,28153846
ZjuHsp40-47	5	AT1G18700.4	1	1,4422	0,3359	0,232908057	11,09384615
ZjuHsp40-47	5	AT1G18700.3	1	1,4199	0,3477	0,2448764	10,92230769
ZjuHsp40-51	6	AT1G24120.1	1	1,6181	0,1910	0,118039676	12,44692308
ZjuHsp40-51	6	AT1G68370.1	1	17,939	0,3080	0,017169296	137,9923077
ZjuHsp40-51	6	AT1G59980.1	1	2,3993	0,264	0,110032093	18,45615385
ZjuHsp40-52	6	AT1G24120.1	1	1,6181	0,1910	0,118039676	12,44692308
ZjuHsp40-52	6	AT1G68370.1	1	18,0567	0,3080	0,01705738	138,8976923
ZjuHsp40-52	6	AT1G59980.1	1	2,3997	0,2640	0,110013752	18,45923077
ZjuHsp40-53	6	AT5G21430.1	1	2,5438	0,3451	0,135663181	19,56769231
ZjuHsp40-55	6	AT4G36520.1	4	7,7376	0,8073	0,104334677	59,52
ZjuHsp40-55	6	AT1G75310.1	2	4,1539	0,8142	0,19600857	31,95307692
ZjuHsp40-55	6	AT4G12770.1	4	10,2865	0,8715	0,084722695	79,12692308
ZjuHsp40-55	6	AT4G12770.2	4	10,676	0,8842	0,082821281	82,12307692
ZjuHsp40-55	6	AT4G12780.1	4	8,8476	0,8265	0,093415163	68,05846154
ZjuHsp40-55	6	AT4G12780.2	4	11,1423	0,8191	0,07351265	85,71
ZjuHsp40-55	6	AT1G21660.1	1	61,2743	0,8378	0,013672943	471,3407692
ZjuHsp40-56	6	AT4G36520.1	4	7,7379	0,8073	0,104330632	59,52230769
ZjuHsp40-56	6	AT1G75310.1	1	4,1538	0,8142	0,196013289	31,95230769
ZjuHsp40-56	6	AT4G12770.1	4	10,2861	0,8715	0,084725989	79,12384615
ZjuHsp40-56	6	AT4G12770.2	4	10,6751	0,8843	0,082837631	82,11615385
ZjuHsp40-56	6	AT4G12780.1	4	8,8473	0,8265	0,093418331	68,05615385
ZjuHsp40-56	6	AT4G12780.2	4	10,7398	0,8203	0,076379448	82,61384615
ZjuHsp40-56	6	AT1G21660.1	1	61,2734	0,8377	0,013671512	471,3338462
ZjuHsp40-57	6	AT4G36520.1	4	7,7074	0,8006	0,103874199	59,28769231
ZjuHsp40-57	6	AT1G75310.1	1	4,0189	0,8218	0,204483814	30,91461538
ZjuHsp40-57	6	AT4G12770.1	4	10,2872	0,8715	0,08471693	79,13230769
ZjuHsp40-57	6	AT4G12770.2	4	11,7094	0,8919	0,076169573	90,07230769
ZjuHsp40-57	6	AT4G12780.1	4	8,8477	0,8265	0,093414108	68,05923077
ZjuHsp40-57	6	AT4G12780.2	4	10,7375	0,8203	0,076395809	82,59615385
ZjuHsp40-57	6	AT1G21660.1	1	61,2733	0,8378	0,013673166	471,3330769
ZjuHsp40-58	6	AT1G75100.1	1	3,1176	0,6392	0,20502951	23,98153846
ZjuHsp40-59	6	AT1G75100.1	1	3,0993	0,6283	0,202723196	23,84076923
ZjuHsp40-60	6	AT1G75100.1	1	3,0993	0,6283	0,202723196	23,84076923
ZjuHsp40-63	6	AT4G07990.1	4	1,8256	0,2702	0,148006135	14,04307692
ZjuHsp40-63	6	AT4G07990.2	4	2,2131	0,3013	0,136143871	17,02384615
ZjuHsp40-63	6	AT4G07990.2	4	2,1588	0,2730	0,126459144	16,60615385
ZjuHsp40-63	6	AT4G07990.1	4	2,2184	0,3064	0,138117562	17,06461538
ZjuHsp40-63	6	AT4G07990.1	4	2,2184	0,3064	0,138117562	17,06461538
ZjuHsp40-64	6	AT1G21660.1	1	1,8983	0,2909	0,153242375	14,60230769
ZjuHsp40-64	6	AT4G12780.1	4	2,4600	0,3627	0,147439024	18,92307692
ZjuHsp40-64	6	AT4G12770.1	4	2,0903	0,3916	0,18734153	16,07923077
ZjuHsp40-64	6	AT4G12770.2	4	2,0086	0,3884	0,193368515	15,45076923
ZjuHsp40-64	6	AT4G12780.2	4	2,4412	0,3625	0,148492545	18,77846154
ZjuHsp40-64	6	AT4G36520.1	4	8,1970	0,5182	0,063218251	63,05384615
ZjuHsp40-65	6	AT1G11040.1	1	54,7752	0,6654	0,012147833	421,3476923
ZjuHsp40-66	7	AT5G23240.1	5	2,5922	0,3939	0,151955868	19,94
ZjuHsp40-67	7	AT4G13830.2	4	5,7832	0,3670	0,063459676	44,48615385
ZjuHsp40-68	7	AT3G44110.1	3	5,9378	0,1693	0,028512244	45,67538462
ZjuHsp40-68	7	AT5G22060.1	5	4,4519	0,1950	0,043801523	34,24538462
ZjuHsp40-68	7	AT3G44110.2	3	6,2122	0,1767	0,028444029	47,78615385
ZjuHsp40-69	7	AT3G44110.1	3	5,9384	0,1693	0,028509363	45,68
ZjuHsp40-69	7	AT5G22060.1	5	4,4519	0,1950	0,043801523	34,24538462
ZjuHsp40-69	7	AT3G44110.2	3	6,2121	0,1767	0,028444487	47,78538462
ZjuHsp40-70	7	AT3G44110.1	3	5,9376	0,1693	0,028513204	45,67384615
ZjuHsp40-70	7	AT5G22060.1	5	4,4521	0,1950	0,043799555	34,24692308
ZjuHsp40-71	7	AT3G44110.2	3	6,2084	0,1767	0,028461439	47,75692308
ZjuHsp40-71	7	AT1G77930.1	1	2,2389	0,1725	0,077046764	17,22230769
ZjuHsp40-71	7	AT1G77930.2	1	2,2389	0,1725	0,077046764	17,22230769
ZjuHsp40-72	7	AT1G77020.1	1	3,6818	0,1344	0,036503884	28,32153846
ZjuHsp40-72	7	AT1G76700.1	1	36,5306	0,3252	0,008902126	281,0046154

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-72	7	AT1G21080.3	1	54,5838	0,3662	0,00670895	419,8753846
ZjuHsp40-72	7	AT1G21080.1	1	53,5998	0,3582	0,006682861	412,3061538
ZjuHsp40-72	7	AT2G21510.1	2	56,2570	0,3886	0,006907585	432,7461538
ZjuHsp40-72	7	AT4G39150.1	4	56,1851	0,4134	0,007357823	432,1930769
ZjuHsp40-72	7	AT4G39150.2	4	56,1685	0,4136	0,007363558	432,0653846
ZjuHsp40-72	7	AT1G21080.2	1	52,8479	0,4458	0,008435529	406,5223077
ZjuHsp40-74	8	AT4G36520.1	4	5,3568	0,4961	0,09261126	41,20615385
ZjuHsp40-74	8	AT1G75310.1	1	9,0497	0,8158	0,090146635	69,61307692
ZjuHsp40-74	8	AT4G12770.1	4	7,3805	0,7239	0,098082786	56,77307692
ZjuHsp40-74	8	AT4G12770.2	4	7,4478	0,7157	0,096095491	57,29076923
ZjuHsp40-74	8	AT4G12780.1	4	9,8737	0,7678	0,077762136	75,95153846
ZjuHsp40-74	8	AT4G12780.2	4	7,9948	0,6562	0,082078351	61,49846154
ZjuHsp40-74	8	AT1G21660.1	1	4,7274	0,8467	0,179104793	36,36461538
ZjuHsp40-74	8	AT4G37480.1	4	2,7251	0,3032	0,111261972	20,96230769
ZjuHsp40-76	8	AT4G37480.1	4	2,7334	0,3024	0,110631448	21,02615385
ZjuHsp40-77	8	AT2G22360.1	2	6,0925	0,1511	0,024800985	46,86538462
ZjuHsp40-77	8	AT4G39960.1	4	3,5102	0,1488	0,042390747	27,00153846
ZjuHsp40-77	8	AT1G80030.3	1	27,8007	0,4563	0,016413256	213,8515385
ZjuHsp40-77	8	AT1G80030.1	1	27,9257	0,4564	0,016343368	214,8130769
ZjuHsp40-77	8	AT1G80030.2	1	28,3829	0,4563	0,016076581	218,33
ZjuHsp40-77	8	AT3G17830.1	3	20,7410	0,5158	0,024868618	159,5461538
ZjuHsp40-77	8	AT5G48030.1	5	57,7810	0,6872	0,011893183	444,4692308
ZjuHsp40-78	8	AT4G12780.1	4	4,9263	0,3777	0,076670118	37,89461538
ZjuHsp40-78	8	AT4G12770.2	4	4,9165	0,3777	0,076822943	37,81923077
ZjuHsp40-78	8	AT4G12780.2	4	5,1726	0,4154	0,080307776	39,78923077
ZjuHsp40-78	8	AT1G21660.1	1	6,1948	0,5077	0,081955834	47,65230769
ZjuHsp40-78	8	AT4G36520.1	4	57,3091	0,8393	0,014645144	440,8392308
ZjuHsp40-78	8	AT1G75310.1	1	16,2692	1,0648	0,065448824	125,1476923
ZjuHsp40-81	9	AT4G02100.1	4	3,6405	0,2518	0,069166323	28,00384615
ZjuHsp40-81	9	AT3G62570.1	3	2,4057	0,3000	0,124703828	18,50538462
ZjuHsp40-81	9	AT2G47440.1	2	2,4022	0,2208	0,091915744	18,47846154
ZjuHsp40-81	9	AT1G02650.1	1	2,1413	0,3067	0,143230748	16,47153846
ZjuHsp40-85	9	AT2G47440.1	2	2,4022	0,2208	0,091915744	18,47846154
ZjuHsp40-85	9	AT4G02100.1	4	3,6406	0,2518	0,069164423	28,00461538
ZjuHsp40-85	9	AT3G62570.1	3	2,4057	0,3000	0,124703828	18,50538462
ZjuHsp40-85	9	AT1G02650.1	1	2,1413	0,3067	0,143230748	16,47153846
ZjuHsp40-86	9	AT3G62600.1	3	4,6429	0,1318	0,02838743	35,71461538
ZjuHsp40-88	9	AT4G39150.1	4	2,2727	0,1890	0,083160998	17,48230769
ZjuHsp40-88	9	AT4G39150.2	4	2,2728	0,1890	0,083157339	17,48307692
ZjuHsp40-88	9	AT2G21510.1	2	2,7177	0,1750	0,064392685	20,90538462
ZjuHsp40-88	9	AT1G76700.1	1	15,3309	0,3638	0,023729853	117,93
ZjuHsp40-88	9	AT1G21080.1	1	55,7669	0,3672	0,006584551	428,9761538
ZjuHsp40-88	9	AT1G21080.3	1	55,7836	0,3672	0,00658258	429,1046154
ZjuHsp40-88	9	AT1G77020.1	1	60,3601	0,366	0,006036808	464,3084615
ZjuHsp40-88	9	AT1G21080.2	1	57,2979	0,4135	0,007216669	440,7530769
ZjuHsp40-89	9	AT5G53150.1	5	3,5530	0,4836	0,136110329	27,33076923
ZjuHsp40-89	9	AT2G25560.1	2	2,2518	0,4180	0,185629274	17,32153846
ZjuHsp40-89	9	AT5G35753.1	5	12,3844	0,6693	0,054043797	95,26461538
ZjuHsp40-89	9	AT2G05230.1	2	5,6797	0,6011	0,105833055	43,69
ZjuHsp40-89	9	AT2G05250.1	2	5,6792	0,6011	0,105842372	43,68615385
ZjuHsp40-89	9	AT5G50115.1	5	5,6585	0,5421	0,095802775	43,52692308
ZjuHsp40-89	9	AT5G37380.3	5	3,9130	0,4452	0,113774597	30,1
ZjuHsp40-89	9	AT5G37380.1	5	3,9131	0,4452	0,11377169	30,10076923
ZjuHsp40-89	9	AT5G37380.5	5	3,9130	0,4452	0,113774597	30,1
ZjuHsp40-89	9	AT5G37380.2	5	3,9131	0,4452	0,11377169	30,10076923
ZjuHsp40-89	9	AT5G37380.4	5	3,9131	0,4452	0,11377169	30,10076923
ZjuHsp40-90	9	AT5G23590.2	5	6,2488	0,2667	0,042680195	48,06769231
ZjuHsp40-90	9	AT5G23590.1	5	6,2488	0,2667	0,042680195	48,06769231
ZjuHsp40-95	10	AT3G44110.1	3	54,6380	0,4386	0,00802738	420,2923077
ZjuHsp40-95	10	AT5G22060.1	5	55,2435	0,4843	0,008766642	424,95
ZjuHsp40-96	10	AT1G10350.1	1	5,0341	0,2540	0,050455891	38,72384615
ZjuHsp40-96	10	AT1G59725.1	1	59,680	0,2332	0,003907507	459,0769231
ZjuHsp40-96	10	AT3G47940.1	3	55,9363	0,2938	0,005252403	430,2792308
ZjuHsp40-96	10	AT2G20560.1	2	15,5490	0,3145	0,020226381	119,6076923
ZjuHsp40-96	10	AT3G08910.1	3	5,18340	0,3429	0,06615349	39,87230769
ZjuHsp40-96	10	AT5G01390.1	5	8,2335	0,3552	0,043140827	63,33461538
ZjuHsp40-96	10	AT5G25530.1	5	9,6503	0,3505	0,036320114	74,23307692
ZjuHsp40-96	10	AT5G01390.2	5	16,872	0,3131	0,018557373	129,7846154
ZjuHsp40-96	10	AT5G01390.4	5	11,0103	0,3754	0,034095347	84,69461538

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-96	10	AT2G20550.2	2	4,1349	0,4455	0,107741421	31,80692308
ZjuHsp40-96	10	AT2G20550.1	2	4,1349	0,4455	0,107741421	31,80692308
ZjuHsp40-96	10	AT4G28480.1	4	10,8094	0,3347	0,030963791	83,14923077
ZjuHsp40-96	10	AT4G28480.2	4	16,3991	0,3293	0,02008037	126,1469231
ZjuHsp40-98	10	AT1G71000.1	1	2,1218	0,4257	0,200631539	16,32153846
ZjuHsp40-99	10	AT1G68370.1	1	1,8644	0,0861	0,046181077	14,34153846
ZjuHsp40-99	10	AT1G24120.1	1	21,0045	0,3309	0,015753767	161,5730769
ZjuHsp40-99	10	AT1G59980.1	1	37,8531	0,4015	0,010606793	291,1776923
ZjuHsp40-100	11	AT2G35720.1	2	17,3415	1,0188	0,058749243	133,3961538
ZjuHsp40-101	11	AT3G08970.1	3	6,2536	0,2592	0,041448126	48,10461538
ZjuHsp40-103	12	AT5G12430.1	5	3,3370	0,5856	0,175486964	25,66923077
ZjuHsp40-103	12	AT2G41520.1	2	2,3379	0,5316	0,227383549	17,98384615
ZjuHsp40-103	12	AT2G41520.2	2	2,3023	0,5526	0,240020849	17,71
ZjuHsp40-104	12	AT2G26890.1	2	1,5767	0,1301	0,082514112	12,12846154
ZjuHsp40-105	12	AT2G26890.1	2	1,4699	0,1301	0,088509422	11,30692308
ZjuHsp40-106	12	AT2G05230.1	2	2,5696	0,3560	0,138542964	19,76615385
ZjuHsp40-106	12	AT2G05250.1	2	2,5696	0,3560	0,138542964	19,76615385
ZjuHsp40-106	12	AT5G35753.1	5	2,8899	0,3510	0,12145749	22,23
ZjuHsp40-106	12	AT5G53150.1	5	6,2350	0,6423	0,103015237	47,96153846
ZjuHsp40-107	12	AT2G25560.1	2	5,2081	0,6102	0,117163649	40,06230769
ZjuHsp40-107	12	AT2G05230.1	2	2,6547	0,3749	0,14122123	20,42076923
ZjuHsp40-107	12	AT2G05250.1	2	2,6547	0,3749	0,14122123	20,42076923
ZjuHsp40-107	12	AT5G35753.1	5	3,6560	0,3865	0,10571663	28,12307692
ZjuHsp40-107	12	AT5G53150.1	5	5,6914	0,6928	0,121727519	43,78
ZjuHsp40-107	12	AT2G25560.1	2	0,1738	15,7909	90,85673188	1,336923077
ZjuHsp40-107	12	AT3G12170.1	3	3,2212	0,1748	0,054265491	24,77846154
ZjuHsp40-108	12	AT5G06910.1	5	1,7127	0,2226	0,129970222	13,17461538
ZjuHsp40-109	12	AT5G18140.1	5	1,9897	0,3264	0,164044831	15,30538462
ZjuHsp40-110	12	AT2G35795.1	2	3,2019	0,1698	0,053031013	24,63
ZjuHsp40-1112	12	AT5G03160.1	5	3,0288	0,144	0,047543582	23,29846154
ZjuHsp40-113	12	AT5G49060.1	5	2,9056	0,2813	0,096813051	22,35076923
ZjuHsp40-113	12	AT3G57340.1	3	8,7962	0,5623	0,063925331	67,66307692
ZjuHsp40-113	12	AT3G57340.2	3	8,7955	0,5623	0,063930419	67,65769231
ZjuHsp40-113	12	AT5G05750.1	5	9,1004	0,4810	0,05285482	70,00307692
ZjuHsp40-114	12	AT3G06778.1	3	3,6748	0,4818	0,131109176	28,26769231
ZjuHsp40-116	scaffold	AT1G16680.1	1	1,7813	0,2241	0,125806995	13,70230769
ZjuHsp40-116	scaffold	AT1G79030.1	1	1,6413	0,2167	0,132029489	12,62538462
ZjuHsp40-116	scaffold	AT5G49580.1	5	53,2512	0,6521	0,012245733	409,6246154
ZjuHsp40-118	scaffold	AT1G79940.4	1	1,3991	0,1128	0,080623258	10,76230769
ZjuHsp40-118	scaffold	AT1G79940.1	1	1,3991	0,1128	0,080623258	10,76230769
ZjuHsp40-118	scaffold	AT1G79940.3	1	1,3991	0,1128	0,080623258	10,76230769
ZjuHsp40-118	scaffold	AT1G79940.2	1	1,3991	0,1128	0,080623258	10,76230769
ZjuHsp40-118	scaffold	AT4G21180.1	4	1,8929	0,1924	0,101642982	14,56076923
ZjuHsp40-120	scaffold	AT1G65280.1	1	4,6148	0,2694	0,058377394	35,49846154
ZjuHsp40-122	scaffold	AT5G49580.1	5	1,9269	0,3370	0,174892314	14,82230769
ZjuHsp40-122	scaffold	AT1G16680.1	1	6,5006	0,6346	0,097621758	50,00461538
ZjuHsp40-122	scaffold	AT1G79030.1	1	46,791	0,6048	0,012925563	359,9307692
ZjuHsp40-123	scaffold	AT5G49580.1	5	1,9269	0,3370	0,337	7,692307692
ZjuHsp40-123	scaffold	AT1G16680.1	1	6,5016	0,6346	0,097606743	50,01230769
ZjuHsp40-123	scaffold	AT1G79030.1	1	46,545	0,6047	0,012991728	358,0384615
ZjuHsp40-124	scaffold	AT1G65280.1	1	4,6147	0,2694	0,05837866	35,49769231
ZjuHsp40-125	scaffold	AT1G65280.1	1	11,613	0,1781	0,015336261	89,33076923
ZjuHsp40-126	scaffold	AT1G65280.1	1	4,1993	0,1886	0,044912247	32,30230769
ZjuHsp40-127	scaffold	AT1G16680.1	1	1,7813	0,2241	0,125806995	13,70230769
ZjuHsp40-127	scaffold	AT1G79030.1	1	1,6413	0,2167	0,132029489	12,62538462
ZjuHsp40-127	scaffold	AT5G49580.1	5	53,2515	0,6521	0,012245664	409,6269231
ZjuHsp40-128	scaffold	AT1G16680.1	1	1,7857	0,2241	0,125497004	13,73615385
ZjuHsp40-128	scaffold	AT1G79030.1	1	1,6393	0,2191	0,133654609	12,61
ZjuHsp40-128	scaffold	AT5G49580.1	5	53,2591	0,653	0,012260816	409,6853846
ZjuHsp40-129	scaffold	AT1G16680.1	1	1,8924	0,1831	0,096755443	14,55692308
ZjuHsp40-129	scaffold	AT1G79030.1	1	1,5645	0,1649	0,105401087	12,03461538
ZjuHsp40-129	scaffold	AT5G49580.1	5	53,8691	0,6402	0,011884364	414,3776923
ZjuHsp40-131	scaffold	AT1G65280.1	1	4,6149	0,2694	0,058376129	35,49923077
ZjuHsp40-131	scaffold	AT1G79030.1	1	1,5644	0,1667	0,106558425	12,03384615
ZjuHsp40-132	scaffold	AT5G49580.1	5	53,8671	0,6411	0,011901513	414,3623077
ZjuHsp40-133	scaffold	AT1G65280.1	1	4,6147	0,2694	0,05837866	35,49769231
ZjuHsp40-134	scaffold	AT1G65280.1	1	4,6150	0,2694	0,058374865	35,5
ZjuHsp40-135	scaffold	AT1G16680.1	1	1,8974	0,1830	0,096447771	14,59538462
ZjuHsp40-135	scaffold	AT1G79030.1	1	1,5643	0,1667	0,106565237	12,03307692

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-135	scaffold	AT5G49580.1	5	53,8667	0,6411	0,011901602	414,3592308
ZjuHsp40-135	scaffold	AT1G65280.1	1	4,6147	0,2694	0,05837866	35,49769231
ZjuHsp40-138	scaffold	AT4G39150.1	4	52,2991	1,2809	0,024491817	402,3007692
ZjuHsp40-138	scaffold	AT4G39150.2	4	52,2992	1,2809	0,02449177	402,3015385
ZjuHsp40-140	scaffold	AT3G44110.1	3	3,1691	0,1321	0,041683759	24,37769231
ZjuHsp40-140	scaffold	AT5G22060.1	5	2,8443	0,1398	0,049150933	21,87923077
ZjuHsp40-140	scaffold	AT3G44110.2	3	2,8233	0,1459	0,051677115	21,71769231
ZjuHsp40-141	scaffold	AT1G56300.1	1	1,9945	0,2499	0,12529456	15,34230769
ZjuHsp40-142	scaffold	AT1G65280.1	1	4,6146	0,2694	0,058379925	35,49692308
ZjuHsp40-144	scaffold	AT4G09350.1	4	2,8264	0,3347	0,11841919	21,74153846
ZjuHsp40-145	scaffold	AT5G22080.1	5	2,4521	0,1072	0,04371763	18,86230769
ZjuHsp40-145	scaffold	AT5G22080.2	5	2,5018	0,1113	0,044487969	19,24461538
ZjuHsp40-146	scaffold	AT3G59280.1	3	6,9739	0,1653	0,023702663	53,64538462
ZjuHsp40-146	scaffold	AT5G61880.1	5	3,7959	0,2418	0,063700308	29,19923077
ZjuHsp40-146	scaffold	AT5G61880.2	5	3,7958	0,2418	0,063701986	29,19846154
ZjuHsp40-147	scaffold	AT3G59280.1	3	6,9691	0,1653	0,023718988	53,60846154
ZjuHsp40-147	scaffold	AT5G61880.1	5	3,7959	0,2418	0,063700308	29,19923077
ZjuHsp40-147	scaffold	AT5G61880.2	5	3,7958	0,2418	0,063701986	29,19846154
ZjuHsp40-148	scaffold	AT3G59280.1	3	6,9691	0,1653	0,023718988	53,60846154
ZjuHsp40-148	scaffold	AT5G61880.1	5	3,7959	0,2418	0,063700308	29,19923077
ZjuHsp40-148	scaffold	AT5G61880.2	5	3,7958	0,2418	0,063701986	29,19846154
ZjuHsp40-149	scaffold	AT5G22080.1	5	2,4697	0,1073	0,043446572	18,99769231
ZjuHsp40-149	scaffold	AT5G22080.2	5	2,5280	0,1113	0,044026899	19,44615385
ZjuHsp40-150	scaffold	AT2G35540.1	2	58,5967	0,4536	0,00774105	450,7438462
ZjuHsp40-151	scaffold	AT2G42750.1	2	1,3894	0,2012	0,14481071	10,68769231
ZjuHsp40-152	scaffold	AT2G42750.1	2	1,3894	0,2012	0,14481071	10,68769231
ZjuHsp40-153	scaffold	AT5G49580.1	5	1,9185	0,3381	0,176231431	14,75769231
ZjuHsp40-153	scaffold	AT1G16680.1	1	6,8523	0,6321	0,092246399	52,71
ZjuHsp40-153	scaffold	AT1G79030.1	1	56,0472	0,6023	0,0107463	431,1323077
ZjuHsp40-154	scaffold	AT5G49580.1	5	1,9185	0,3381	0,176231431	14,75769231
ZjuHsp40-154	scaffold	AT1G16680.1	1	6,8523	0,6321	0,092246399	52,71
ZjuHsp40-154	scaffold	AT1G79030.1	1	56,0472	0,6023	0,0107463	431,1323077
ZjuHsp40-155	scaffold	AT5G49580.1	5	1,9185	0,3381	0,176231431	14,75769231
ZjuHsp40-155	scaffold	AT1G16680.1	1	1,9185	0,3381	0,176231431	14,75769231
ZjuHsp40-155	scaffold	AT1G79030.1	1	6,8523	0,6321	0,092246399	52,71
ZjuHsp40-156	scaffold	AT3G17830.1	3	3,1501	0,3529	0,11202819	24,23153846
ZjuHsp40-156	scaffold	AT1G80030.3	1	54,2411	0,5413	0,009979517	417,2392308
ZjuHsp40-156	scaffold	AT1G80030.2	1	54,2413	0,5414	0,009981324	417,2407692
ZjuHsp40-156	scaffold	AT2G22360.1	2	53,7815	0,5867	0,010908956	413,7038462
ZjuHsp40-156	scaffold	AT4G39960.1	4	41,4342	0,5907	0,014256339	318,7246154
ZjuHsp40-157	scaffold	AT2G26890.1	2	0,5581	0,0577	0,10338649	4,293076923
ZjuHsp40-158	scaffold	AT2G26890.1	2	1,4699	0,1244	0,084631608	11,30692308
ZjuHsp40-159	scaffold	AT4G10130.1	4	4,707	0,2918	0,061992777	36,20769231
ZjuHsp40-160	scaffold	AT4G10130.1	4	4,707	0,2918	0,061992777	36,20769231
ZjuHsp40-161	scaffold	AT4G10130.1	4	4,707	0,2918	0,061992777	36,20769231
ZjuHsp40-162	scaffold	AT4G10130.1	4	4,707	0,2918	0,061992777	36,20769231
ZjuHsp40-164	scaffold	AT4G10130.1	4	4,9445	0,3117	0,063039741	38,03461538
ZjuHsp40-165	scaffold	AT3G57340.1	3	4,7554	0,2702	0,056819616	36,58
ZjuHsp40-165	scaffold	AT3G57340.2	3	4,7551	0,2702	0,0568232	36,57769231
ZjuHsp40-165	scaffold	AT5G05750.1	5	5,0130	0,2804	0,05593457	38,56153846
ZjuHsp40-165	scaffold	AT5G49060.1	5	64,0651	0,5424	0,008466388	492,8084615
ZjuHsp40-166	scaffold	AT3G57340.1	3	4,7554	0,2702	0,056819616	36,58
ZjuHsp40-166	scaffold	AT3G57340.2	3	4,7551	0,2702	0,0568232	36,57769231
ZjuHsp40-166	scaffold	AT5G05750.1	5	5,0130	0,2804	0,05593457	38,56153846
ZjuHsp40-166	scaffold	AT5G49060.1	5	64,0651	0,5424	0,008466388	492,8084615
ZjuHsp40-167	scaffold	AT3G57340.1	3	4,7554	0,2702	0,056819616	36,58
ZjuHsp40-167	scaffold	AT3G57340.2	3	4,7551	0,2702	0,0568232	36,57769231
ZjuHsp40-167	scaffold	AT5G05750.1	5	5,0130	0,2804	0,05593457	38,56153846
ZjuHsp40-167	scaffold	AT5G49060.1	5	64,0651	0,5424	0,008466388	492,8084615
ZjuHsp40-168	scaffold	AT3G57340.1	3	4,7554	0,2702	0,056819616	36,58
ZjuHsp40-168	scaffold	AT3G57340.2	3	4,7551	0,2702	0,0568232	36,57769231
ZjuHsp40-168	scaffold	AT5G05750.1	5	5,0130	0,2804	0,05593457	38,56153846
ZjuHsp40-168	scaffold	AT5G49060.1	3	64,0651	0,5424	0,008466388	492,8084615
ZjuHsp40-169	scaffold	AT3G12170.1	3	3,0465	0,1518	0,049827671	23,43461538
ZjuHsp40-169	scaffold	AT5G06910.1	5	1,6006	0,1793	0,112020492	12,31230769
ZjuHsp40-170	scaffold	AT5G06410.1	5	2,0504	0,3941	0,192206399	15,77230769
ZjuHsp40-171	scaffold	AT3G59280.1	3	7,8353	0,1650	0,021058543	60,27153846
ZjuHsp40-171	scaffold	AT5G61880.1	5	4,2241	0,2411	0,057077247	32,49307692
ZjuHsp40-171	scaffold	AT5G61880.2	5	4,2241	0,2411	0,057077247	32,49307692

Table S3.2 Continued

ID	Chromosome	Gene IDS	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-172	scaffold	AT3G59280.1	3	7,8353	0,1650	0,021058543	60,27153846
ZjuHsp40-172	scaffold	AT5G61880.1	5	4,2241	0,2411	0,057077247	32,49307692
ZjuHsp40-172	scaffold	AT5G61880.2	5	4,2241	0,2411	0,057077247	32,49307692
ZjuHsp40-173	scaffold	AT4G37480.1	4	2,7251	0,3032	0,111261972	20,96230769
ZjuHsp40-173	scaffold	AT4G37480.1	4	2,7333	0,3024	0,110635496	21,02538462
	Mean			14,6881	0,5127	0,53295851	112,9679789

Z. jujuba – C. cinensis

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-01	1	orange1.lg012891m	scaffold	15,067	0,577	0,038295613	115,9
ZjuHsp40-01	1	orange1.lg013163m	scaffold	1,4665	0,1979	0,134947153	11,28076923
ZjuHsp40-01	1	orange1.lg011767m	scaffold	12,6071	0,5758	0,045672677	96,97769231
ZjuHsp40-01	1	orange1.lg014884m	scaffold	10,1871	0,5697	0,055923668	78,36230769
ZjuHsp40-01	1	orange1.lg015636m	scaffold	60,5227	0,5954	0,009837631	465,5592308
ZjuHsp40-01	1	orange1.lg0112301m	scaffold	53,7908	0,8359	0,015539832	413,7753846
ZjuHsp40-01	1	orange1.lg010831m	scaffold	53,6271	0,834	0,015551839	412,5161538
ZjuHsp40-01	1	orange1.lg013277m	scaffold	55,215	0,8253	0,014947025	424,7307692
ZjuHsp40-01	1	orange1.lg010330m	scaffold	61,3991	0,7384	0,012026235	472,3007692
ZjuHsp40-02	1	orange1.lg011238m	scaffold	1,5616	0,2788	0,178534836	12,01230769
ZjuHsp40-02	1	orange1.lg011849m	scaffold	1,5526	0,2737	0,176284941	11,94307692
ZjuHsp40-02	1	orange1.lg014604m	scaffold	1,7518	0,3227	0,184210526	13,47538462
ZjuHsp40-03	1	orange1.lg011238m	scaffold	1,5257	0,2892	0,189552337	11,73615385
ZjuHsp40-03	1	orange1.lg011849m	scaffold	1,559	0,2932	0,188069275	11,99230769
ZjuHsp40-03	1	orange1.lg014604m	scaffold	1,7063	0,3364	0,197151732	13,12538462
ZjuHsp40-06	1	orange1.lg022251m	scaffold	0,716	0,1113	0,155446927	5,507692308
ZjuHsp40-06	1	orange1.lg021520m	scaffold	0,7658	0,2045	0,267041003	5,890769231
ZjuHsp40-17	1	orange1.lg019662m	scaffold	1,0939	0,0987	0,090227626	8,414615385
ZjuHsp40-17	1	orange1.lg024880m	scaffold	1,049	0,1112	0,10600572	8,069230769
ZjuHsp40-17	1	orange1.lg019573m	scaffold	4,9993	0,2682	0,053647511	38,45615385
ZjuHsp40-17	1	orange1.lg038604m	scaffold	7,6543	0,3534	0,046170127	58,87923077
ZjuHsp40-17	1	orange1.lg024831m	scaffold	4,1117	0,3334	0,081085682	31,62846154
ZjuHsp40-17	1	orange1.lg022539m	scaffold	27,6393	0,3094	0,011194205	212,61
ZjuHsp40-17	1	orange1.lg028960m	scaffold	50,4673	0,3403	0,00674298	388,21
ZjuHsp40-19	1	orange1.lg010831m	scaffold	0,8407	0,1267	0,150707744	6,466923077
ZjuHsp40-19	1	orange1.lg012301m	scaffold	0,8985	0,1388	0,154479688	6,911538462
ZjuHsp40-19	1	orange1.lg012301m	scaffold	0,9287	0,1505	0,162054485	7,143846154
ZjuHsp40-19	1	orange1.lg017928m	scaffold	0,8986	0,0940	0,104607167	6,912307692
ZjuHsp40-19	1	orange1.lg017928m	scaffold	0,8986	0,0940	0,104607167	6,912307692
ZjuHsp40-19	1	orange1.lg017647m	scaffold	0,8176	0,1189	0,145425636	6,289230769
ZjuHsp40-19	1	orange1.lg010330m	scaffold	58,2573	0,5331	0,009150785	448,1330769
ZjuHsp40-19	1	orange1.lg012541m	scaffold	58,339	0,5445	0,009333379	448,7615385
ZjuHsp40-19	1	orange1.lg011450m	scaffold	56,8804	0,5525	0,009713363	437,5415385
ZjuHsp40-19	1	orange1.lg019562m	scaffold	58,489	0,4852	0,008295577	449,9153846
ZjuHsp40-19	1	orange1.lg019721m	scaffold	55,7689	0,4767	0,008547775	428,9915385
ZjuHsp40-20	2	orange1.lg040804m	scaffold	1,2228	0,2176	0,177952241	9,406153846
ZjuHsp40-21	2	orange1.lg040804m	scaffold	1,2865	0,2262	0,175825884	9,896153846
ZjuHsp40-22	2	orange1.lg001884m	scaffold	1,3194	0,3657	0,277171442	10,14923077
ZjuHsp40-22	2	orange1.lg001885m	scaffold	1,3194	0,3657	0,277171442	10,14923077
ZjuHsp40-22	2	orange1.lg012891m	scaffold	0,9896	0,1967	0,198767179	7,612307692
ZjuHsp40-22	2	orange1.lg011767m	scaffold	1,0532	0,2126	0,201860995	8,101538462
ZjuHsp40-22	2	orange1.lg013183m	scaffold	1,0985	0,2338	0,212835685	8,45
ZjuHsp40-22	2	orange1.lg014884m	scaffold	0,9951	0,1997	0,200683348	7,654615385
ZjuHsp40-22	2	orange1.lg015636m	scaffold	1,2697	0,2627	0,206899268	9,766923077
ZjuHsp40-22	2	orange1.lg013163m	scaffold	58,7972	0,5558	0,009452831	452,2861538
ZjuHsp40-22	2	orange1.lg013277m	scaffold	56,0209	0,7901	0,014103665	430,93
ZjuHsp40-22	2	orange1.lg010330m	scaffold	22,7384	0,7419	0,032627626	174,9107692
ZjuHsp40-23	2	orange1.lg032817m	scaffold	1,8148	0,1264	0,069649548	13,96
ZjuHsp40-24	2	orange1.lg003538m	scaffold	3,4912	0,5984	0,171402383	26,85538462
ZjuHsp40-24	2	orange1.lg003534m	scaffold	3,4912	0,5984	0,171402383	26,85538462
ZjuHsp40-24	2	orange1.lg047376m	scaffold	4,6051	0,6131	0,133135002	35,42384615
ZjuHsp40-25	2	orange1.lg021106m	scaffold	3,3092	0,2656	0,08026109	25,45538462
ZjuHsp40-26	2	orange1.lg024836m	scaffold	1,1100	0,1904	0,171531532	8,538461538
ZjuHsp40-26	2	orange1.lg027943m	scaffold	1,1012	0,2155	0,195695605	8,470769231
ZjuHsp40-27	2	orange1.lg003538m	scaffold	1,6513	0,4736	0,286804336	12,70230769
ZjuHsp40-27	2	orange1.lg003534m	scaffold	1,6513	0,4736	0,286804336	12,70230769
ZjuHsp40-27	2	orange1.lg001884m	scaffold	3,2843	0,5080	0,154675273	25,26384615
ZjuHsp40-27	2	orange1.lg001885m	scaffold	3,2843	0,5080	0,154675273	25,26384615

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-27	2	orange1.1g047376m	scaffold	1,3058	0,4027	0,308393322	10,04461538
ZjuHsp40-27	2	orange1.1g047512m	scaffold	1,6336	0,5008	0,306562194	12,56615385
ZjuHsp40-28	2	orange1.1g003538m	scaffold	1,6513	0,4736	0,286804336	12,70230769
ZjuHsp40-28	2	orange1.1g003534m	scaffold	1,6513	0,4736	0,286804336	12,70230769
ZjuHsp40-28	2	orange1.1g001884m	scaffold	3,2843	0,5080	0,154675273	25,26384615
ZjuHsp40-28	2	orange1.1g001885m	scaffold	3,2843	0,5080	0,154675273	25,26384615
ZjuHsp40-28	2	orange1.1g047376m	scaffold	1,3058	0,4027	0,308393322	10,04461538
ZjuHsp40-28	2	orange1.1g047512m	scaffold	1,6336	0,5008	0,306562194	12,56615385
ZjuHsp40-29	2	orange1.1g039706m	scaffold	1,2657	0,3078	0,243185589	9,736153846
ZjuHsp40-29	2	orange1.1g002199m	scaffold	2,1404	0,5350	0,24995328	16,46461538
ZjuHsp40-30	2	orange1.1g039706m	scaffold	1,3010	0,3413	0,262336664	10,00769231
ZjuHsp40-30	2	orange1.1g002199m	scaffold	2,1248	0,5155	0,242611069	16,34461538
ZjuHsp40-31	3	orange1.1g015690m	scaffold	1,2322	0,0445	0,036114267	9,478461538
ZjuHsp40-31	3	orange1.1g015695m	scaffold	1,2322	0,0445	0,036114267	9,478461538
ZjuHsp40-31	3	orange1.1g015703m	scaffold	1,2322	0,0445	0,036114267	9,478461538
ZjuHsp40-31	3	orange1.1g015732m	scaffold	1,2481	0,0445	0,035654194	9,600769231
ZjuHsp40-31	3	orange1.1g014903m	scaffold	2,6218	0,0558	0,021283088	20,16769231
ZjuHsp40-31	3	orange1.1g016878m	scaffold	1,3185	0,0445	0,033750474	10,14230769
ZjuHsp40-31	3	orange1.1g016833m	scaffold	1,1730	0,0364	0,031031543	9,023076923
ZjuHsp40-31	3	orange1.1g016758m	scaffold	1,2459	0,0589	0,034246002	36,74769231
ZjuHsp40-31	3	orange1.1g014799m	scaffold	4,7772	0,1636	0,034245285	36,74846154
ZjuHsp40-31	3	orange1.1g014800m	scaffold	4,7773	0,1636	0,034245285	36,74846154
ZjuHsp40-31	3	orange1.1g019828m	scaffold	1,1893	0,0349	0,029344993	9,148461538
ZjuHsp40-31	3	orange1.1g019801m	scaffold	2,7919	0,0631	0,022601096	21,47615385
ZjuHsp40-31	3	orange1.1g021275m	scaffold	1,0680	0,0757	0,07088015	8,215384615
ZjuHsp40-31	3	orange1.1g019908m	scaffold	5,8331	0,1788	0,030652655	44,87
ZjuHsp40-31	3	orange1.1g025877m	scaffold	4,0987	0,1568	0,038256032	31,52846154
ZjuHsp40-32	3	orange1.1g040731m	scaffold	0,8568	0,0378	0,044117647	6,590769231
ZjuHsp40-33	3	orange1.1g004014m	scaffold	1,3736	0,2772	0,201805475	10,56615385
ZjuHsp40-33	3	orange1.1g004013m	scaffold	1,3736	0,2772	0,201805475	10,56615385
ZjuHsp40-33	3	orange1.1g003641m	scaffold	2,5527	0,3580	0,140243664	19,63615385
ZjuHsp40-33	3	orange1.1g003634m	scaffold	2,5527	0,3580	0,140243664	19,63615385
ZjuHsp40-33	3	orange1.1g003686m	scaffold	4,8931	0,445	0,090944391	37,63923077
ZjuHsp40-33	3	orange1.1g005584m	scaffold	5,1818	0,5376	0,103747732	39,86
ZjuHsp40-33	3	orange1.1g006401m	scaffold	59,8923	0,7443	0,012427307	460,71
ZjuHsp40-33	3	orange1.1g001884m	scaffold	43,3815	0,7639	0,017608889	333,7038462
ZjuHsp40-33	3	orange1.1g001885m	scaffold	40,9389	0,7641	0,0186644	314,9146154
ZjuHsp40-33	3	orange1.1g033253m	scaffold	2,0114	0,2071	0,10296311	15,47230769
ZjuHsp40-34	3	orange1.1g032533m	scaffold	2,0944	0,2506	0,119652406	16,11076923
ZjuHsp40-34	3	orange1.1g032522m	scaffold	2,0944	0,2506	0,119652406	16,11076923
ZjuHsp40-34	3	orange1.1g032521m	scaffold	2,0944	0,2506	0,119652406	16,11076923
ZjuHsp40-35	3	orange1.1g033253m	scaffold	1,8244	0,1799	0,098607761	14,03384615
ZjuHsp40-35	3	orange1.1g032533m	scaffold	1,8796	0,2225	0,11837625	14,45846154
ZjuHsp40-36	3	orange1.1g032522m	scaffold	1,8796	0,2225	0,11837625	14,45846154
ZjuHsp40-36	3	orange1.1g032521m	scaffold	1,8796	0,2225	0,11837625	14,45846154
ZjuHsp40-36	3	orange1.1g033253m	scaffold	1,5571	0,1563	0,10037891	11,97769231
ZjuHsp40-36	3	orange1.1g032533m	scaffold	1,6592	0,2013	0,121323529	12,76307692
ZjuHsp40-36	3	orange1.1g032522m	scaffold	1,6592	0,2013	0,121323529	12,76307692
ZjuHsp40-36	3	orange1.1g032521m	scaffold	1,6592	0,2013	0,121323529	12,76307692
ZjuHsp40-38	3	orange1.1g033253m	scaffold	2,1795	0,2009	0,092177105	16,76538462
ZjuHsp40-38	3	orange1.1g032533m	scaffold	2,2814	0,2438	0,106864206	17,54923077
ZjuHsp40-38	3	orange1.1g032522m	scaffold	2,2815	0,2438	0,106859522	17,55
ZjuHsp40-38	3	orange1.1g032521m	scaffold	2,2814	0,2438	0,106864206	17,54923077
ZjuHsp40-39	3	orange1.1g033253m	scaffold	1,8254	0,1841	0,100854607	14,04153846
ZjuHsp40-39	3	orange1.1g032533m	scaffold	1,8804	0,2268	0,120612636	14,46461538
ZjuHsp40-39	3	orange1.1g032522m	scaffold	1,8804	0,2268	0,120612636	14,46461538
ZjuHsp40-39	3	orange1.1g032521m	scaffold	1,8804	0,2268	0,120612636	14,46461538
ZjuHsp40-41	4	orange1.1g022195m	scaffold	1,7281	0,2556	0,147908107	13,29307692
ZjuHsp40-41	4	orange1.1g022733m	scaffold	17,468	0,2665	0,015256469	134,3692308
ZjuHsp40-41	4	orange1.1g027429m	scaffold	2,3205	0,3824	0,164792071	17,85
ZjuHsp40-41	4	orange1.1g029849m	scaffold	2,1119	0,2576	0,121975472	16,24538462
ZjuHsp40-41	4	orange1.1g029583m	scaffold	1,1095	0,2846	0,256511942	8,534615385
ZjuHsp40-42	4	orange1.1g038604m	scaffold	8,4919	0,4151	0,048881876	65,32230769
ZjuHsp40-42	4	orange1.1g019573m	scaffold	54,5729	0,5566	0,010199201	419,7915385
ZjuHsp40-42	4	orange1.1g029075m	scaffold	4,0134	0,3722	0,092739323	30,87230769
ZjuHsp40-43	4	orange1.1g015717m	scaffold	0,8565	0,0830	0,096906013	6,588461538
ZjuHsp40-43	4	orange1.1g015692m	scaffold	0,8565	0,0830	0,096906013	6,588461538
ZjuHsp40-43	4	orange1.1g015706m	scaffold	0,8565	0,0830	0,096906013	6,588461538
ZjuHsp40-43	4	orange1.1g015280m	scaffold	0,8679	0,0870	0,096906013	6,588461538

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-43	4	orange1.1g013732m	scaffold	0,8565	0,0830	0,096906013	6,408461538
ZjuHsp40-43	4	orange1.1g016823m	scaffold	0,8331	0,0868	0,104189173	6,408461538
ZjuHsp40-43	4	orange1.1g016408m	scaffold	0,9189	0,1130	0,12297312	7,068461538
ZjuHsp40-43	4	orange1.1g022164m	scaffold	1,1880	0,0690	0,058080808	9,138461538
ZjuHsp40-43	4	orange1.1g048612m	scaffold	35,8939	0,3625	0,010099209	276,1069231
ZjuHsp40-43	4	orange1.1g019496m	scaffold	54,3754	0,3403	0,006258345	418,2723077
ZjuHsp40-43	4	orange1.1g019516m	scaffold	54,2119	0,3438	0,006341781	417,0146154
ZjuHsp40-43	4	orange1.1g017985m	scaffold	54,2116	0,3440	0,006345505	417,0123077
ZjuHsp40-43	4	orange1.1g025799m	scaffold	10,4307	0,3344	0,03205921	80,23615385
ZjuHsp40-43	4	orange1.1g024883m	scaffold	54,2613	0,3899	0,0071856	417,3946154
ZjuHsp40-44	5	orange1.1g003641m	scaffold	2,5316	0,4083	0,161281403	19,47384615
ZjuHsp40-44	5	orange1.1g003634m	scaffold	2,5316	0,4083	0,161281403	19,47384615
ZjuHsp40-44	5	orange1.1g003686m	scaffold	1,2581	0,3542	0,281535649	9,677692308
ZjuHsp40-44	5	orange1.1g004014m	scaffold	2,5998	0,4167	0,16028156	19,99846154
ZjuHsp40-44	5	orange1.1g004013m	scaffold	2,5997	0,4166	0,16024926	19,99769231
ZjuHsp40-44	5	orange1.1g005584m	scaffold	5,2714	0,5396	0,102363698	40,54923077
ZjuHsp40-44	5	orange1.1g003641m	scaffold	2,5316	0,4083	0,161281403	19,47384615
ZjuHsp40-44	5	orange1.1g003634m	scaffold	2,5316	0,4083	0,161281403	19,47384615
ZjuHsp40-44	5	orange1.1g003686m	scaffold	1,2581	0,3542	0,281535649	9,677692308
ZjuHsp40-44	5	orange1.1g004014m	scaffold	2,5997	0,4167	0,160287726	19,99769231
ZjuHsp40-44	5	orange1.1g004013m	scaffold	2,5997	0,4166	0,16024926	19,99769231
ZjuHsp40-45	5	orange1.1g008456m	scaffold	2,4568	0,3061	0,124592966	18,89846154
ZjuHsp40-45	5	orange1.1g008064m	scaffold	2,6762	0,3294	0,123084971	20,58615385
ZjuHsp40-45	5	orange1.1g007551m	scaffold	2,3280	0,2968	0,127491409	17,90769231
ZjuHsp40-45	5	orange1.1g011313m	scaffold	1,9044	0,3418	0,179479101	14,64923077
ZjuHsp40-45	5	orange1.1g009836m	scaffold	1,8742	0,3269	0,174421086	14,41692308
ZjuHsp40-46	5	orange1.1g008456m	scaffold	2,4569	0,3061	0,124587895	18,89923077
ZjuHsp40-46	5	orange1.1g008064m	scaffold	2,6762	0,3294	0,123084971	20,58615385
ZjuHsp40-46	5	orange1.1g007551m	scaffold	2,3280	0,2968	0,127491409	17,90769231
ZjuHsp40-46	5	orange1.1g011313m	scaffold	19,044	0,3418	1,79479E-05	146492,3077
ZjuHsp40-46	5	orange1.1g009836m	scaffold	1,8742	0,3269	0,174421086	14,41692308
ZjuHsp40-47	5	orange1.1g005592m	scaffold	0,9682	0,2449	0,252943607	7,447692308
ZjuHsp40-47	5	orange1.1g005374m	scaffold	0,9665	0,2470	0,255561304	7,434615385
ZjuHsp40-47	5	orange1.1g006171m	scaffold	1,0198	0,2545	0,249558737	7,844615385
ZjuHsp40-47	5	orange1.1g009206m	scaffold	0,9725	0,2235	0,229820051	7,480769231
ZjuHsp40-47	5	orange1.1g011793m	scaffold	0,9745	0,2386	0,244843509	7,496153846
ZjuHsp40-47	5	orange1.1g010886m	scaffold	1,0782	0,2708	0,25115934	8,293846154
ZjuHsp40-47	5	orange1.1g014549m	scaffold	1,0994	0,2269	0,206385301	8,456923077
ZjuHsp40-51	6	orange1.1g015278m	scaffold	1,0311	0,1021	0,099020464	7,931538462
ZjuHsp40-51	6	orange1.1g015255m	scaffold	1,0311	0,1021	0,099020464	7,931538462
ZjuHsp40-51	6	orange1.1g016449m	scaffold	1,0721	0,1047	0,0976588	8,246923077
ZjuHsp40-51	6	orange1.1g022098m	scaffold	1,1364	0,0838	0,07374164	8,741538462
ZjuHsp40-51	6	orange1.1g022105m	scaffold	1,1364	0,0838	0,07374164	8,741538462
ZjuHsp40-51	6	orange1.1g015023m	scaffold	15,1846	0,3109	0,020474691	116,8046154
ZjuHsp40-51	6	orange1.1g015015m	scaffold	15,2150	0,3109	0,020433782	117,0384615
ZjuHsp40-51	6	orange1.1g019080m	scaffold	13,0041	0,3355	0,025799556	100,0315385
ZjuHsp40-51	6	orange1.1g023217m	scaffold	3,3784	0,2438	0,072164338	25,98769231
ZjuHsp40-51	6	orange1.1g023229m	scaffold	3,3783	0,2438	0,072166474	25,98692308
ZjuHsp40-52	6	orange1.1g015278m	scaffold	1,0311	0,1021	0,099020464	7,931538462
ZjuHsp40-52	6	orange1.1g015255m	scaffold	1,0311	0,1021	0,099020464	7,931538462
ZjuHsp40-52	6	orange1.1g016449m	scaffold	1,0721	0,1047	0,0976588	8,246923077
ZjuHsp40-52	6	orange1.1g022098m	scaffold	1,1364	0,0838	0,07374164	8,741538462
ZjuHsp40-52	6	orange1.1g022105m	scaffold	1,1364	0,0838	0,07374164	8,741538462
ZjuHsp40-52	6	orange1.1g015023m	scaffold	15,2617	0,3109	0,020371256	117,3976923
ZjuHsp40-52	6	orange1.1g015015m	scaffold	15,2672	0,3109	0,020363917	117,44
ZjuHsp40-52	6	orange1.1g019080m	scaffold	13,0414	0,3355	0,025725766	100,3184615
ZjuHsp40-52	6	orange1.1g023217m	scaffold	3,3783	0,2438	0,072166474	25,98692308
ZjuHsp40-52	6	orange1.1g023229m	scaffold	3,3784	0,2438	0,072164338	25,98769231
ZjuHsp40-53	6	orange1.1g028038m	scaffold	1,7566	0,3146	0,179095981	13,51230769
ZjuHsp40-54	6	orange1.1g001695m	scaffold	2,0059	0,6427	0,320404806	15,43
ZjuHsp40-54	6	orange1.1g001694m	scaffold	2,0059	0,6427	0,320404806	15,43
ZjuHsp40-55	6	orange1.1g001695m	scaffold	2,0659	0,6315	0,305677913	15,89153846
ZjuHsp40-55	6	orange1.1g001694m	scaffold	2,0659	0,6315	0,305677913	15,89153846
ZjuHsp40-55	6	orange1.1g003099m	scaffold	3,4720	0,6149	0,177102535	26,70769231
ZjuHsp40-55	6	orange1.1g003023m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-55	6	orange1.1g003048m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-55	6	orange1.1g003030m	scaffold	4,0979	0,6261	0,152785573	31,52230769
ZjuHsp40-55	6	orange1.1g002508m	scaffold	57,7464	0,8206	0,01421041	444,2030769
ZjuHsp40-55	6	orange1.1g002109m	scaffold	58,1583	0,8387	0,014420985	447,3715385

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-56	6	orange1.lg001695m	scaffold	2,0659	0,6315	0,305677913	15,89153846
ZjuHsp40-56	6	orange1.lg001694m	scaffold	2,0659	0,6315	0,305677913	15,89153846
ZjuHsp40-56	6	orange1.lg003099m	scaffold	3,4720	0,6149	0,177102535	26,70769231
ZjuHsp40-56	6	orange1.lg003023m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-56	6	orange1.lg003048m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-56	6	orange1.lg003030m	scaffold	4,0979	0,6261	0,152785573	31,52230769
ZjuHsp40-56	6	orange1.lg002508m	scaffold	57,7416	0,8205	0,014209859	444,1661538
ZjuHsp40-56	6	orange1.lg002109m	scaffold	58,2198	0,8383	0,014398881	447,8446154
ZjuHsp40-57	6	orange1.lg001695m	scaffold	1,9151	0,6391	0,333716255	14,73153846
ZjuHsp40-57	6	orange1.lg001694m	scaffold	1,9151	0,6391	0,333716255	14,73153846
ZjuHsp40-57	6	orange1.lg003099m	scaffold	3,5801	0,6161	0,172090165	27,53923077
ZjuHsp40-57	6	orange1.lg003023m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-57	6	orange1.lg003048m	scaffold	3,5633	0,6117	0,171666713	27,41
ZjuHsp40-57	6	orange1.lg003030m	scaffold	4,0979	0,6261	0,152785573	31,52230769
ZjuHsp40-57	6	orange1.lg002508m	scaffold	57,7426	0,8206	0,014211345	444,1738462
ZjuHsp40-57	6	orange1.lg002109m	scaffold	58,1562	0,8388	0,014423226	447,3553846
ZjuHsp40-58	6	orange1.lg005030m	scaffold	1,2074	0,4703	0,38951466	9,287692308
ZjuHsp40-58	6	orange1.lg004773m	scaffold	1,2182	0,4832	0,396650796	9,370769231
ZjuHsp40-58	6	orange1.lg007657m	scaffold	1,2502	0,5562	0,444888818	9,616923077
ZjuHsp40-58	6	orange1.lg004595m	scaffold	1,2354	0,4832	0,391128379	9,503076923
ZjuHsp40-58	6	orange1.lg007759m	scaffold	1,3415	0,5139	0,383078643	10,31923077
ZjuHsp40-59	6	orange1.lg004773m	scaffold	1,2422	0,4832	0,388987281	9,555384615
ZjuHsp40-59	6	orange1.lg005030m	scaffold	1,2311	0,4703	0,382016083	9,47
ZjuHsp40-59	6	orange1.lg004595m	scaffold	1,2377	0,4812	0,388785651	9,520769231
ZjuHsp40-59	6	orange1.lg007657m	scaffold	12,803	0,556	0,043427322	98,48461538
ZjuHsp40-59	6	orange1.lg007759m	scaffold	1,2377	0,5163	0,417144704	9,520769231
ZjuHsp40-60	6	orange1.lg004773m	scaffold	1,2667	0,5088	0,40167364	9,743846154
ZjuHsp40-60	6	orange1.lg005030m	scaffold	1,2567	0,4949	0,393809183	9,666923077
ZjuHsp40-60	6	orange1.lg004595m	scaffold	1,2846	0,5087	0,395998754	9,881538462
ZjuHsp40-60	6	orange1.lg007657m	scaffold	1,3210	0,5971	0,452006056	10,16153846
ZjuHsp40-60	6	orange1.lg007759m	scaffold	1,4139	0,5506	0,389419337	10,87615385
ZjuHsp40-62	6	orange1.lg026279m	scaffold	0,8799	0,1624	0,184566428	6,5438461538
ZjuHsp40-62	6	orange1.lg027143m	scaffold	0,8883	0,1797	0,202296521	6,833076923
ZjuHsp40-62	6	orange1.lg025178m	scaffold	1,0048	0,1995	0,198546975	7,729230769
ZjuHsp40-62	6	orange1.lg029124m	scaffold	1,0450	0,1995	0,190909091	8,038461538
ZjuHsp40-62	6	orange1.lg030027m	scaffold	0,8507	0,1551	0,182320442	6,543846154
ZjuHsp40-62	6	orange1.lg031943m	scaffold	0,9934	0,1310	0,131870344	7,641538462
ZjuHsp40-63	6	orange1.lg027143m	scaffold	0,8968	0,1640	0,182872435	6,898461538
ZjuHsp40-63	6	orange1.lg027143m	scaffold	0,8968	0,1640	0,182872435	6,898461538
ZjuHsp40-63	6	orange1.lg026279m	scaffold	0,9156	0,1753	0,191459152	7,043076923
ZjuHsp40-63	6	orange1.lg029159m	scaffold	1,1277	0,1789	0,158641483	8,674615385
ZjuHsp40-63	6	orange1.lg029124m	scaffold	1,1277	0,1789	0,158641483	8,674615385
ZjuHsp40-63	6	orange1.lg025178m	scaffold	1,0427	0,2959	0,283782488	8,020769231
ZjuHsp40-63	6	orange1.lg031943m	scaffold	0,9934	0,1310	0,131870344	7,641538462
ZjuHsp40-63	6	orange1.lg030027m	scaffold	0,8853	0,1710	0,193154863	6,81
ZjuHsp40-63	6	orange1.lg030027m	scaffold	0,8853	0,1710	0,193154863	6,81
ZjuHsp40-64	6	orange1.lg002508m	scaffold	1,9272	0,3218	0,166977999	14,82461538
ZjuHsp40-64	6	orange1.lg002109m	scaffold	2,1726	0,3572	0,164411304	16,71230769
ZjuHsp40-64	6	orange1.lg003099m	scaffold	4,7099	0,5349	0,11356929	36,23
ZjuHsp40-64	6	orange1.lg003048m	scaffold	3,1614	0,4622	0,14620105	24,31846154
ZjuHsp40-64	6	orange1.lg003023m	scaffold	3,3954	0,4632	0,136419862	26,11846154
ZjuHsp40-65	6	orange1.lg036222m	scaffold	2,1280	0,5178	0,243327068	16,36923077
ZjuHsp40-65	6	orange1.lg014837m	scaffold	3,7411	0,7004	0,187217663	28,77769231
ZjuHsp40-66	7	orange1.lg012925m	scaffold	1,4926	0,3180	0,213051052	11,48153846
ZjuHsp40-67	7	orange1.lg028571m	scaffold	1,6582	0,2528	0,152454469	12,75538462
ZjuHsp40-67	7	orange1.lg028609m	scaffold	1,6566	0,2539	0,153265725	12,74307692
ZjuHsp40-67	7	orange1.lg027814m	scaffold	3,5745	0,4773	0,133529165	27,49615385
ZjuHsp40-68	7	orange1.lg014799m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-68	7	orange1.lg014800m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-68	7	orange1.lg014903m	scaffold	9,526	0,1580	0,016586185	73,27692308
ZjuHsp40-68	7	orange1.lg015690m	scaffold	8,7687	0,1678	0,019136246	67,45153846
ZjuHsp40-68	7	orange1.lg015695m	scaffold	8,7987	0,1678	0,019070999	67,68230769
ZjuHsp40-68	7	orange1.lg015703m	scaffold	8,7665	0,1678	0,019141048	67,43461538
ZjuHsp40-68	7	orange1.lg015732m	scaffold	8,8325	0,1682	0,019043306	67,94230769
ZjuHsp40-68	7	orange1.lg019908m	scaffold	1,2721	0,1007	0,079160443	9,785384615
ZjuHsp40-68	7	orange1.lg016878m	scaffold	8,9510	0,1612	0,018009161	68,85384615
ZjuHsp40-68	7	orange1.lg016833m	scaffold	8,1885	0,1635	0,019967027	62,98846154
ZjuHsp40-68	7	orange1.lg016758m	scaffold	7,2767	0,1884	0,025890857	55,97461538
ZjuHsp40-68	7	orange1.lg019828m	scaffold	4,1536	0,1736	0,041795069	31,95076923

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-68	7	orange1.lg021275m	scaffold	15,2758	0,1815	0,011881538	117,5061538
ZjuHsp40-68	7	orange1.lg019801m	scaffold	7,0756	0,1820	0,0257222	54,42769231
ZjuHsp40-68	7	orange1.lg025877m	scaffold	1,3188	0,0834	0,063239308	10,14461538
ZjuHsp40-69	7	orange1.lg014799m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-69	7	orange1.lg014800m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-69	7	orange1.lg014903m	scaffold	9,5075	0,1580	0,016618459	73,13461538
ZjuHsp40-69	7	orange1.lg015695m	scaffold	8,7776	0,1678	0,019116843	67,52
ZjuHsp40-69	7	orange1.lg015703m	scaffold	8,7792	0,1678	0,019113359	67,53230769
ZjuHsp40-69	7	orange1.lg015732m	scaffold	8,8598	0,1682	0,018984627	68,15230769
ZjuHsp40-69	7	orange1.lg019908m	scaffold	36,409	0,2022	0,005553572	280,0692308
ZjuHsp40-69	7	orange1.lg016878m	scaffold	8,9542	0,1612	0,018002725	68,87846154
ZjuHsp40-69	7	orange1.lg016833m	scaffold	8,1766	0,1635	0,019996086	62,89692308
ZjuHsp40-69	7	orange1.lg016758m	scaffold	7,2811	0,1884	0,025875211	56,00846154
ZjuHsp40-69	7	orange1.lg019828m	scaffold	4,1542	0,1736	0,041789033	31,95538462
ZjuHsp40-69	7	orange1.lg021275m	scaffold	15,0853	0,1815	0,012203158	116,0407692
ZjuHsp40-69	7	orange1.lg019801m	scaffold	7,0780	0,1820	0,025713478	54,44615385
ZjuHsp40-69	7	orange1.lg025877m	scaffold	1,3188	0,0834	0,063239308	10,14461538
ZjuHsp40-70	7	orange1.lg014799m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-70	7	orange1.lg014800m	scaffold	1,0716	0,0910	0,084919746	8,243076923
ZjuHsp40-70	7	orange1.lg014903m	scaffold	9,4905	0,1580	0,016648227	73,00384615
ZjuHsp40-70	7	orange1.lg015690m	scaffold	8,7645	0,1678	0,019145416	67,41923077
ZjuHsp40-70	7	orange1.lg015695m	scaffold	8,7660	0,1678	0,01914214	67,43076923
ZjuHsp40-70	7	orange1.lg015703m	scaffold	8,7865	0,1678	0,019097479	67,58846154
ZjuHsp40-70	7	orange1.lg015732m	scaffold	8,8479	0,1682	0,019010161	68,06076923
ZjuHsp40-70	7	orange1.lg019908m	scaffold	1,2721	0,1007	0,079160443	9,785384615
ZjuHsp40-70	7	orange1.lg016878m	scaffold	8,9577	0,1612	0,017995691	68,90538462
ZjuHsp40-70	7	orange1.lg016833m	scaffold	8,1867	0,1635	0,019971417	62,97461538
ZjuHsp40-70	7	orange1.lg016758m	scaffold	7,2751	0,1884	0,025896551	55,96230769
ZjuHsp40-70	7	orange1.lg019828m	scaffold	4,1537	0,1736	0,041794063	31,95153846
ZjuHsp40-70	7	orange1.lg021275m	scaffold	14,9114	0,1815	0,012171895	114,7030769
ZjuHsp40-70	7	orange1.lg019801m	scaffold	7,0765	0,1821	0,02573306	54,43461538
ZjuHsp40-70	7	orange1.lg025877m	scaffold	1,3188	0,0834	0,063239308	10,14461538
ZjuHsp40-71	7	orange1.lg024429m	scaffold	0,8834	0,1274	0,144215531	6,795384615
ZjuHsp40-71	7	orange1.lg027925m	scaffold	2,3784	0,1906	0,080137908	18,29538462
ZjuHsp40-71	7	orange1.lg027925m	scaffold	0,9560	0,1743	0,182322176	7,353846154
ZjuHsp40-71	7	orange1.lg027187m	scaffold	0,8832	0,1962	0,222146739	6,793846154
ZjuHsp40-72	7	orange1.lg048612m	scaffold	1,1865	0,0703	0,059249895	9,126923077
ZjuHsp40-72	7	orange1.lg015280m	scaffold	53,5654	0,3365	0,00628204	412,0415385
ZjuHsp40-72	7	orange1.lg015717m	scaffold	53,4621	0,3338	0,006243675	411,2469231
ZjuHsp40-72	7	orange1.lg015692m	scaffold	53,4741	0,3336	0,006238534	411,3392308
ZjuHsp40-72	7	orange1.lg015706m	scaffold	53,4765	0,3338	0,006241994	411,3576923
ZjuHsp40-72	7	orange1.lg013732m	scaffold	55,5016	0,3133	0,005644882	426,9353846
ZjuHsp40-72	7	orange1.lg022164m	scaffold	53,0539	0,2539	0,004785699	408,1069231
ZjuHsp40-72	7	orange1.lg016823m	scaffold	52,5849	0,3523	0,006699642	404,4992308
ZjuHsp40-72	7	orange1.lg016408m	scaffold	54,8025	0,3844	0,007014279	421,5576923
ZjuHsp40-72	7	orange1.lg019496m	scaffold	57,5860	0,3537	0,006142118	442,9692308
ZjuHsp40-72	7	orange1.lg019516m	scaffold	57,5857	0,3538	0,006143886	442,9669231
ZjuHsp40-72	7	orange1.lg017985m	scaffold	57,5837	0,3538	0,0061441	442,9515385
ZjuHsp40-72	7	orange1.lg025799m	scaffold	25,5132	0,3122	0,012236803	196,2553846
ZjuHsp40-72	7	orange1.lg024883m	scaffold	57,2693	0,4064	0,007096298	440,5330769
ZjuHsp40-74	8	orange1.lg003023m	scaffold	1,0540	0,3823	0,362713472	8,107692308
ZjuHsp40-74	8	orange1.lg003048m	scaffold	1,0942	0,3953	0,361268507	8,416923077
ZjuHsp40-74	8	orange1.lg003099m	scaffold	1,1184	0,4030	0,360336195	8,603076923
ZjuHsp40-74	8	orange1.lg003030m	scaffold	1,0715	0,4005	0,373775082	8,242307692
ZjuHsp40-74	8	orange1.lg002508m	scaffold	15,1550	0,7020	0,046321346	116,5769231
ZjuHsp40-74	8	orange1.lg002109m	scaffold	60,3291	0,7246	0,012010787	464,07
ZjuHsp40-75	8	orange1.lg015910m	scaffold	1,3034	0,1922	0,147460488	10,02615385
ZjuHsp40-76	8	orange1.lg015910m	scaffold	1,2959	0,1944	0,150011575	9,968461538
ZjuHsp40-77	8	orange1.lg012301m	scaffold	55,3491	0,4598	0,008307271	425,7623077
ZjuHsp40-77	8	orange1.lg010831m	scaffold	55,3545	0,4598	0,008306461	425,8038462
ZjuHsp40-77	8	orange1.lg013277m	scaffold	55,6235	0,4997	0,008983613	427,8730769
ZjuHsp40-77	8	orange1.lg010330m	scaffold	59,1229	0,5574	0,009427819	454,7915385
ZjuHsp40-77	8	orange1.lg017647m	scaffold	55,1309	0,4771	0,008653949	424,0838462
ZjuHsp40-77	8	orange1.lg017928m	scaffold	54,7807	0,4266	0,007787414	421,39
ZjuHsp40-77	8	orange1.lg017925m	scaffold	54,7784	0,4268	0,007791392	421,3723077
ZjuHsp40-77	8	orange1.lg011450m	scaffold	59,0762	0,5650	0,009563919	454,4323077
ZjuHsp40-77	8	orange1.lg012541m	scaffold	56,6700	0,5758	0,010160579	435,9230769
ZjuHsp40-77	8	orange1.lg019562m	scaffold	59,1336	0,5537	0,009363543	454,8738462
ZjuHsp40-77	8	orange1.lg019721m	scaffold	59,1456	0,5469	0,009246673	454,9661538

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-77	8	orange1.1g013163m	scaffold	56,7972	0,7767	0,01367497	436,9015385
ZjuHsp40-77	8	orange1.1g012891m	scaffold	54,2926	0,7698	0,014178728	417,6353846
ZjuHsp40-77	8	orange1.1g014884m	scaffold	54,3260	0,7501	0,013807385	417,8923077
ZjuHsp40-77	8	orange1.1g013183m	scaffold	54,4336	0,7515	0,013805811	418,72
ZjuHsp40-78	8	orange1.1g002508m	scaffold	1,7996	0,2411	0,133974216	13,84307692
ZjuHsp40-78	8	orange1.1g003099m	scaffold	57,2166	0,8027	0,014029145	440,1276923
ZjuHsp40-78	8	orange1.1g003023m	scaffold	57,0649	0,7870	0,013791315	438,9607692
ZjuHsp40-78	8	orange1.1g003048m	scaffold	57,0037	0,7942	0,013932429	438,49
ZjuHsp40-78	8	orange1.1g003030m	scaffold	57,2724	0,8155	0,01423897	440,5569231
ZjuHsp40-80	8	orange1.1g025513m	scaffold	1,7958	0,3872	0,215614211	13,81384615
ZjuHsp40-80	8	orange1.1g026520m	scaffold	1,2993	0,2999	0,230816594	9,994615385
ZjuHsp40-80	8	orange1.1g023167m	scaffold	1,7958	0,3872	0,215614211	13,81384615
ZjuHsp40-81	9	orange1.1g008039m	scaffold	1,8376	0,1258	0,068458859	14,13538462
ZjuHsp40-85	9	orange1.1g008039m	scaffold	1,8376	0,1258	0,068458859	14,13538462
ZjuHsp40-86	9	orange1.1g019162m	scaffold	1,0077	0,0812	0,080579538	7,751538462
ZjuHsp40-86	9	orange1.1g021128m	scaffold	1,1852	0,1182	0,099730003	9,116923077
ZjuHsp40-86	9	orange1.1g026801m	scaffold	0,8639	0,0850	0,098391017	6,645384615
ZjuHsp40-86	9	orange1.1g026559m	scaffold	1,5439	0,1223	0,079214975	11,87615385
ZjuHsp40-86	9	orange1.1g039840m	scaffold	1,3744	0,1839	0,133803842	10,57230769
ZjuHsp40-88	9	orange1.1g019496m	scaffold	0,9783	0,1161	0,118675253	7,525384615
ZjuHsp40-88	9	orange1.1g019516m	scaffold	0,9783	0,1161	0,118675253	7,525384615
ZjuHsp40-88	9	orange1.1g017985m	scaffold	0,9783	0,1161	0,118675253	7,525384615
ZjuHsp40-88	9	orange1.1g024883m	scaffold	1,1148	0,1311	0,117599569	8,575384615
ZjuHsp40-88	9	orange1.1g025799m	scaffold	0,9942	0,1690	0,169985918	7,647692308
ZjuHsp40-88	9	orange1.1g015280m	scaffold	55,9272	0,3522	0,006297472	430,2092308
ZjuHsp40-88	9	orange1.1g015717m	scaffold	55,9243	0,3521	0,006296011	430,1869231
ZjuHsp40-88	9	orange1.1g015692m	scaffold	56,0576	0,3521	0,00628104	431,2123077
ZjuHsp40-88	9	orange1.1g015706m	scaffold	55,9204	0,3524	0,006301815	430,1569231
ZjuHsp40-88	9	orange1.1g013732m	scaffold	22,4389	0,3541	0,015780631	172,6069231
ZjuHsp40-88	9	orange1.1g048612m	scaffold	53,0113	0,3805	0,007177715	407,7792308
ZjuHsp40-88	9	orange1.1g022164m	scaffold	20,5587	0,3364	0,016362902	158,1438462
ZjuHsp40-88	9	orange1.1g016408m	scaffold	56,9457	0,3897	0,006843361	438,0438462
ZjuHsp40-88	9	orange1.1g016823m	scaffold	55,2364	0,3685	0,006671325	424,8953846
ZjuHsp40-89	9	orange1.1g003641m	scaffold	0,9617	0,2095	0,217843402	7,397692308
ZjuHsp40-89	9	orange1.1g003634m	scaffold	0,9617	0,2095	0,217843402	7,397692308
ZjuHsp40-89	9	orange1.1g004014m	scaffold	2,5314	0,3602	0,142292802	19,47230769
ZjuHsp40-89	9	orange1.1g004013m	scaffold	2,5314	0,3602	0,142292802	19,47230769
ZjuHsp40-89	9	orange1.1g003686m	scaffold	2,6016	0,4056	0,155904059	20,01230769
ZjuHsp40-89	9	orange1.1g005584m	scaffold	3,9089	0,4962	0,126941083	30,06846154
ZjuHsp40-89	9	orange1.1g006240m	scaffold	57,1610	0,7575	0,013252042	439,7
ZjuHsp40-90	9	orange1.1g023364m	scaffold	2,1231	0,1859	0,087560642	16,33153846
ZjuHsp40-90	9	orange1.1g022762m	scaffold	2,0864	0,1839	0,088142255	16,04923077
ZjuHsp40-90	9	orange1.1g022790m	scaffold	2,1605	0,1850	0,085628327	16,61923077
ZjuHsp40-90	9	orange1.1g022800m	scaffold	2,1605	0,1850	0,085628327	16,61923077
ZjuHsp40-90	9	orange1.1g022759m	scaffold	2,1605	0,1850	0,085628327	16,61923077
ZjuHsp40-90	9	orange1.1g022780m	scaffold	2,1605	0,1850	0,085628327	16,61923077
ZjuHsp40-95	10	orange1.1g016878m	scaffold	5,7050	0,3256	0,057072743	43,88461538
ZjuHsp40-95	10	orange1.1g019828m	scaffold	5,7048	0,3256	0,057074744	43,88307692
ZjuHsp40-95	10	orange1.1g016758m	scaffold	5,7047	0,3256	0,057075745	43,88230769
ZjuHsp40-95	10	orange1.1g015690m	scaffold	5,7050	0,3256	0,057072743	43,88461538
ZjuHsp40-95	10	orange1.1g015695m	scaffold	5,7048	0,3256	0,057074744	43,88307692
ZjuHsp40-95	10	orange1.1g015703m	scaffold	5,7052	0,3256	0,057070742	43,88615385
ZjuHsp40-95	10	orange1.1g016833m	scaffold	5,7049	0,3256	0,057073744	43,88384615
ZjuHsp40-95	10	orange1.1g015732m	scaffold	5,7049	0,3256	0,057073744	43,88384615
ZjuHsp40-95	10	orange1.1g019801m	scaffold	7,6493	0,3658	0,047821369	58,84076923
ZjuHsp40-95	10	orange1.1g014903m	scaffold	7,6485	0,3658	0,047826371	58,83461538
ZjuHsp40-96	10	orange1.1g019662m	scaffold	9,3040	0,3484	0,03744626	71,56923077
ZjuHsp40-96	10	orange1.1g019573m	scaffold	6,4273	0,3302	0,051374605	49,44076923
ZjuHsp40-96	10	orange1.1g038604m	scaffold	4,2226	0,2963	0,070170037	32,48153846
ZjuHsp40-96	10	orange1.1g022539m	scaffold	2,3890	0,2495	0,104437003	18,37692308
ZjuHsp40-96	10	orange1.1g024880m	scaffold	9,3346	0,4220	0,04520815	71,80461538
ZjuHsp40-96	10	orange1.1g024831m	scaffold	4,8849	0,4030	0,08249913	37,57615385
ZjuHsp40-96	10	orange1.1g028960m	scaffold	6,8134	0,4455	0,065385857	52,41076923
ZjuHsp40-98	10	orange1.1g030216m	scaffold	1,4644	1,4644	1,00	11,26461538
ZjuHsp40-99	10	orange1.1g015023m	scaffold	1,0055	0,0708	0,07041273	7,734615385
ZjuHsp40-99	10	orange1.1g015015m	scaffold	1,0055	0,0708	0,07041273	7,734615385
ZjuHsp40-99	10	orange1.1g019080m	scaffold	1,0533	0,0942	0,08943321	8,102307692
ZjuHsp40-99	10	orange1.1g023217m	scaffold	1,0779	0,0911	0,084516189	8,291538462
ZjuHsp40-99	10	orange1.1g023229m	scaffold	1,0779	0,0911	0,084516189	8,291538462

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-99	10	orange1.1g015278m	scaffold	13,0815	0,3088	0,023605856	100,6269231
ZjuHsp40-99	10	orange1.1g015255m	scaffold	13,0485	0,3088	0,023665555	100,3730769
ZjuHsp40-99	10	orange1.1g016449m	scaffold	13,1532	0,3108	0,023629231	101,1784615
ZjuHsp40-99	10	orange1.1g022098m	scaffold	20,3412	0,3138	0,015426818	156,4707692
ZjuHsp40-99	10	orange1.1g022105m	scaffold	20,2009	0,3138	0,015533961	155,3915385
ZjuHsp40-100	11	orange1.1g024186m	scaffold	51,0090	1,3125	0,025730753	392,3769231
ZjuHsp40-100	11	orange1.1g024177m	scaffold	52,5952	1,3123	0,024950946	404,5784615
ZjuHsp40-100	11	orange1.1g027638m	scaffold	4,6627	1,3265	0,284491818	35,86692308
ZjuHsp40-100	11	orange1.1g027599m	scaffold	4,6626	1,3265	0,28449792	35,86615385
ZjuHsp40-100	11	orange1.1g042966m	scaffold	57,523	0,8007	0,01391965	442,4846154
ZjuHsp40-101	11	orange1.1g013319m	scaffold	1,4105	0,2254	0,159801489	10,85
ZjuHsp40-103	12	orange1.1g002199m	scaffold	1,3626	0,4196	0,307940702	10,48153846
ZjuHsp40-103	12	orange1.1g039706m	scaffold	2,2471	0,5703	0,253793779	17,28538462
ZjuHsp40-104	12	orange1.1g000052m	scaffold	0,8798	0,0776	0,088201864	6,767692308
ZjuHsp40-104	12	orange1.1g000056m	scaffold	0,8864	0,0824	0,092906289	6,818461538
ZjuHsp40-104	12	orange1.1g000065m	scaffold	0,8694	0,0766	0,08810674	6,687692308
ZjuHsp40-105	12	orange1.1g000052m	scaffold	0,8474	0,0747	0,088151994	6,518461538
ZjuHsp40-105	12	orange1.1g000056m	scaffold	0,8533	0,0801	0,093870854	6,563846154
ZjuHsp40-105	12	orange1.1g000065m	scaffold	0,8334	0,0734	0,088072954	6,410769231
ZjuHsp40-106	12	orange1.1g005584m	scaffold	1,1861	0,1754	0,147879605	9,123846154
ZjuHsp40-106	12	orange1.1g003641m	scaffold	5,8769	0,5230	0,088992496	45,20692308
ZjuHsp40-106	12	orange1.1g003634m	scaffold	5,8769	0,5231	0,089009512	45,20692308
ZjuHsp40-106	12	orange1.1g004014m	scaffold	4,7766	0,5485	0,114830633	36,74307692
ZjuHsp40-106	12	orange1.1g004013m	scaffold	4,7766	0,5485	0,114830633	36,74307692
ZjuHsp40-106	12	orange1.1g003686m	scaffold	5,3026	0,5883	0,110945574	40,78923077
ZjuHsp40-107	12	orange1.1g005584m	scaffold	1,2133	0,1871	0,154207533	9,333076923
ZjuHsp40-107	12	orange1.1g003641m	scaffold	5,3978	0,5767	0,106839824	41,52153846
ZjuHsp40-107	12	orange1.1g003634m	scaffold	5,3978	0,5767	0,106839824	41,52153846
ZjuHsp40-107	12	orange1.1g004014m	scaffold	4,5845	0,6059	0,132162722	35,26538462
ZjuHsp40-107	12	orange1.1g004013m	scaffold	4,5845	0,6059	0,132162722	35,26538462
ZjuHsp40-107	12	orange1.1g003686m	scaffold	5,4319	0,6059	0,111544763	41,78384615
ZjuHsp40-108	12	orange1.1g023405m	scaffold	1,0372	0,1051	0,101330505	7,978461538
ZjuHsp40-108	12	orange1.1g021768m	scaffold	1,0372	0,1051	0,101330505	7,978461538
ZjuHsp40-108	12	orange1.1g020536m	scaffold	1,0487	0,2921	0,278535329	8,066923077
ZjuHsp40-108	12	orange1.1g023421m	scaffold	1,2178	0,323	0,265232386	9,367692308
ZjuHsp40-110	12	orange1.1g033628m	scaffold	0,7790	0,1347	0,112913992	5,992307692
ZjuHsp40-110	12	orange1.1g033745m	scaffold	0,7876	0,1247	0,158329101	6,058461538
ZjuHsp40-110	12	orange1.1g034101m	scaffold	0,8505	0,1019	0,119811875	6,542307692
ZjuHsp40-112	12	orange1.1g043837m	scaffold	1,0496	0,0937	0,089272104	8,073846154
ZjuHsp40-113	12	orange1.1g047551m	scaffold	1,9754	0,1803	0,091272654	15,19538462
ZjuHsp40-113	12	orange1.1g018317m	scaffold	58,8510	0,5430	0,009226691	452,7
ZjuHsp40-114	12	orange1.1g042055m	scaffold	1,2546	0,3028	0,241351825	9,650769231
ZjuHsp40-116	scaffold	orange1.1g048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-116	scaffold	orange1.1g007833m	scaffold	53,6354	0,6328	0,011798178	412,58
ZjuHsp40-116	scaffold	orange1.1g006345m	scaffold	53,664	0,6524	0,012157126	412,8
ZjuHsp40-116	scaffold	orange1.1g004641m	scaffold	53,5642	0,6562	0,01225072	412,0323077
ZjuHsp40-116	scaffold	orange1.1g004646m	scaffold	53,5612	0,6563	0,012253273	412,0092308
ZjuHsp40-116	scaffold	orange1.1g004651m	scaffold	53,5597	0,6561	0,012249882	411,9976923
ZjuHsp40-116	scaffold	orange1.1g007732m	scaffold	53,4286	0,6601	0,012354806	410,9892308
ZjuHsp40-116	scaffold	orange1.1g009016m	scaffold	53,4286	0,6601	0,012354806	410,9892308
ZjuHsp40-118	scaffold	orange1.1g030029m	scaffold	1,3561	0,1453	0,107145491	10,43153846
ZjuHsp40-118	scaffold	orange1.1g032733m	scaffold	1,2601	0,0944	0,074914689	9,693076923
ZjuHsp40-118	scaffold	orange1.1g032722m	scaffold	1,2601	0,0944	0,074914689	9,693076923
ZjuHsp40-118	scaffold	orange1.1g011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-120	scaffold	orange1.1g010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-120	scaffold	orange1.1g014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-120	scaffold	orange1.1g021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-120	scaffold	orange1.1g024035m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-121	scaffold	orange1.1g024044m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-122	scaffold	orange1.1g024031m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-122	scaffold	orange1.1g004651m	scaffold	1,0810	0,2409	0,222849214	8,315384615
ZjuHsp40-122	scaffold	orange1.1g004641m	scaffold	1,0828	0,2386	0,220354636	8,329230769
ZjuHsp40-122	scaffold	orange1.1g004646m	scaffold	1,0828	0,2386	0,220354636	8,329230769
ZjuHsp40-122	scaffold	orange1.1g006345m	scaffold	1,1270	0,2643	0,234516415	8,669230769
ZjuHsp40-122	scaffold	orange1.1g007833m	scaffold	1,0147	0,1764	0,173844486	7,805384615
ZjuHsp40-122	scaffold	orange1.1g007732m	scaffold	1,1542	0,2720	0,235661064	8,878461538
ZjuHsp40-122	scaffold	orange1.1g009016m	scaffold	1,2075	0,2926	0,242318841	9,288461538
ZjuHsp40-122	scaffold	orange1.1g011502m	scaffold	1,1006	0,3369	0,30610576	8,466153846
ZjuHsp40-122	scaffold	orange1.1g048085m	scaffold	53,294	0,6433	0,012070777	409,9538462

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-123	scaffold	orange1.lg004651m	scaffold	1,0810	0,2409	0,222849214	8,315384615
ZjuHsp40-123	scaffold	orange1.lg004641m	scaffold	1,0828	0,2386	0,220354636	8,329230769
ZjuHsp40-123	scaffold	orange1.lg004646m	scaffold	1,0828	0,2386	0,220354636	8,329230769
ZjuHsp40-123	scaffold	orange1.lg006345m	scaffold	1,1270	0,1643	0,145785271	8,669230769
ZjuHsp40-123	scaffold	orange1.lg009016m	scaffold	1,2075	0,2926	0,242318841	9,288461538
ZjuHsp40-123	scaffold	orange1.lg011502m	scaffold	1,1239	0,2943	0,261856037	8,645384615
ZjuHsp40-123	scaffold	orange1.lg048085m	scaffold	53,2920	0,6434	0,012073107	409,9384615
ZjuHsp40-124	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-124	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-124	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-124	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-125	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-125	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-125	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-126	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-126	scaffold	orange1.lg014258m	scaffold	1,4431	0,1192	0,082599958	11,10076923
ZjuHsp40-126	scaffold	orange1.lg011584m	scaffold	1,4430	0,1192	0,082605683	11,1
ZjuHsp40-126	scaffold	orange1.lg010253m	scaffold	1,4534	0,1228	0,084491537	11,18
ZjuHsp40-127	scaffold	orange1.lg048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-127	scaffold	orange1.lg007833m	scaffold	53,6369	0,6329	0,011799713	412,5915385
ZjuHsp40-127	scaffold	orange1.lg006345m	scaffold	53,667	0,6524	0,012156446	412,8230769
ZjuHsp40-127	scaffold	orange1.lg004641m	scaffold	53,5614	0,6561	0,012249493	412,0107692
ZjuHsp40-127	scaffold	orange1.lg004646m	scaffold	53,5632	0,6563	0,012252815	412,0246154
ZjuHsp40-127	scaffold	orange1.lg004651m	scaffold	53,5615	0,6561	0,01224947	412,0115385
ZjuHsp40-127	scaffold	orange1.lg007732m	scaffold	53,4178	0,6607	0,012368536	410,9061538
ZjuHsp40-128	scaffold	orange1.lg048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-128	scaffold	orange1.lg007833m	scaffold	53,6554	0,6338	0,011812418	412,7338462
ZjuHsp40-128	scaffold	orange1.lg006345m	scaffold	53,6911	0,6533	0,012167752	413,0084615
ZjuHsp40-128	scaffold	orange1.lg004641m	scaffold	53,589	0,6571	0,012261845	412,2230769
ZjuHsp40-128	scaffold	orange1.lg004646m	scaffold	53,622	0,6554	0,012222595	412,4769231
ZjuHsp40-128	scaffold	orange1.lg004651m	scaffold	53,5875	0,6573	0,01226592	412,2115385
ZjuHsp40-128	scaffold	orange1.lg007732m	scaffold	53,4356	0,6618	0,012385002	411,0430769
ZjuHsp40-128	scaffold	orange1.lg009016m	scaffold	53,6177	0,7136	0,013309038	412,4438462
ZjuHsp40-129	scaffold	orange1.lg048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-129	scaffold	orange1.lg007833m	scaffold	54,705	0,6094	0,01113975	420,8076923
ZjuHsp40-129	scaffold	orange1.lg004651m	scaffold	54,5847	0,6319	0,011576504	419,8823077
ZjuHsp40-129	scaffold	orange1.lg004641m	scaffold	54,6011	0,6283	0,011507094	420,0084615
ZjuHsp40-129	scaffold	orange1.lg004646m	scaffold	54,6002	0,6282	0,011505452	420,0015385
ZjuHsp40-129	scaffold	orange1.lg006345m	scaffold	53,8481	0,6219	0,011549154	414,2161538
ZjuHsp40-129	scaffold	orange1.lg007732m	scaffold	53,2689	0,6711	0,012598345	409,7607692
ZjuHsp40-129	scaffold	orange1.lg009016m	scaffold	53,6036	0,7121	0,013284556	412,3353846
ZjuHsp40-131	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-131	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-131	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-131	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-132	scaffold	orange1.lg048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-132	scaffold	orange1.lg007833m	scaffold	54,7111	0,6102	0,01115313	420,8546154
ZjuHsp40-132	scaffold	orange1.lg004651m	scaffold	54,5978	0,6328	0,011590211	419,9830769
ZjuHsp40-132	scaffold	orange1.lg004641m	scaffold	54,6172	0,6290	0,011516519	420,1323077
ZjuHsp40-132	scaffold	orange1.lg004646m	scaffold	54,6153	0,629	0,011516919	420,1176923
ZjuHsp40-132	scaffold	orange1.lg006345m	scaffold	53,8712	0,6229	0,011562765	414,3938462
ZjuHsp40-132	scaffold	orange1.lg007732m	scaffold	53,2932	0,6721	0,012611365	409,9476923
ZjuHsp40-132	scaffold	orange1.lg009016m	scaffold	53,6198	0,7135	0,013306652	412,46
ZjuHsp40-133	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-133	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-133	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-133	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-134	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-134	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-134	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-134	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-134	scaffold	orange1.lg048085m	scaffold	1,0296	0,1808	0,175602176	7,92
ZjuHsp40-134	scaffold	orange1.lg007833m	scaffold	54,7142	0,6102	0,011152498	420,8784615
ZjuHsp40-135	scaffold	orange1.lg004651m	scaffold	54,5987	0,6327	0,011588188	419,99
ZjuHsp40-135	scaffold	orange1.lg004641m	scaffold	54,6128	0,6290	0,011517446	420,0984615
ZjuHsp40-135	scaffold	orange1.lg004646m	scaffold	54,6137	0,6290	0,011517257	420,1053846
ZjuHsp40-135	scaffold	orange1.lg006345m	scaffold	53,8717	0,6228	0,011560801	414,3976923
ZjuHsp40-135	scaffold	orange1.lg007732m	scaffold	53,2913	0,6722	0,012613691	409,9330769
ZjuHsp40-135	scaffold	orange1.lg009016m	scaffold	0,1585	15,6892	98,98548896	1,219230769

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-137	scaffold	orange1.lg011584m	scaffold	1,1613	0,1781	0,153362611	8,933076923
ZjuHsp40-137	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,97
ZjuHsp40-137	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,886923077
ZjuHsp40-137	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	10,45692308
ZjuHsp40-137	scaffold	orange1.lg024883m	scaffold	52,3398	1,2838	0,024528179	402,6138462
ZjuHsp40-137	scaffold	orange1.lg019496m	scaffold	55,1572	1,1635	0,021094254	424,2861538
ZjuHsp40-137	scaffold	orange1.lg019516m	scaffold	55,1549	1,1636	0,021096947	424,2684615
ZjuHsp40-138	scaffold	orange1.lg017985m	scaffold	53,7500	1,2036	0,022392558	413,4615385
ZjuHsp40-139	scaffold	orange1.lg024044m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-139	scaffold	orange1.lg024035m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-139	scaffold	orange1.lg024031m	scaffold	1,8024	0,3184	0,176653351	13,86461538
ZjuHsp40-140	scaffold	orange1.lg014903m	scaffold	1,5540	0,0776	0,04993565	11,95384615
ZjuHsp40-140	scaffold	orange1.lg016878m	scaffold	2,6390	0,1228	0,046532778	20,30
ZjuHsp40-140	scaffold	orange1.lg015732m	scaffold	2,8519	0,1138	0,039903222	21,93769231
ZjuHsp40-140	scaffold	orange1.lg015690m	scaffold	2,9352	0,1112	0,037884982	21,93769231
ZjuHsp40-140	scaffold	orange1.lg015695m	scaffold	2,9351	0,1112	0,037886273	22,57846154
ZjuHsp40-140	scaffold	orange1.lg015703m	scaffold	2,9353	0,1112	0,037883692	22,57769231
ZjuHsp40-140	scaffold	orange1.lg016833m	scaffold	2,6185	0,1394	0,053236586	22,57923077
ZjuHsp40-140	scaffold	orange1.lg019801m	scaffold	1,6733	0,0955	0,05707285	20,14230769
ZjuHsp40-140	scaffold	orange1.lg016758m	scaffold	3,1091	0,1467	0,047184073	12,87153846
ZjuHsp40-140	scaffold	orange1.lg019828m	scaffold	2,7066	0,1157	0,042747358	23,91615385
ZjuHsp40-140	scaffold	orange1.lg014799m	scaffold	5,1258	0,2135	0,041652035	20,82
ZjuHsp40-140	scaffold	orange1.lg014799m	scaffold	5,1253	0,2135	0,041656098	39,42923077
ZjuHsp40-140	scaffold	orange1.lg014800m	scaffold	5,1253	0,2135	0,041656098	39,42538462
ZjuHsp40-140	scaffold	orange1.lg021275m	scaffold	3,6860	0,1431	0,038822572	39,42538462
ZjuHsp40-140	scaffold	orange1.lg019908m	scaffold	5,9140	0,2474	0,041832939	28,35384615
ZjuHsp40-140	scaffold	orange1.lg025877m	scaffold	4,0662	0,2419	0,059490433	45,49230769
ZjuHsp40-141	scaffold	orange1.lg031476m	scaffold	0,9980	0,1595	0,159819639	31,27846154
ZjuHsp40-141	scaffold	orange1.lg033295m	scaffold	1,2909	0,1777	0,137655899	7,676923077
ZjuHsp40-141	scaffold	orange1.lg032669m	scaffold	1,2508	0,2412	0,192836585	9,93
ZjuHsp40-142	scaffold	orange1.lg032669m	scaffold	1,1613	0,1781	0,153362611	9,621538462
ZjuHsp40-142	scaffold	orange1.lg010253m	scaffold	1,1661	0,1804	0,154703713	8,933076923
ZjuHsp40-142	scaffold	orange1.lg014258m	scaffold	1,1553	0,1576	0,136414784	8,97
ZjuHsp40-142	scaffold	orange1.lg021999m	scaffold	1,3594	0,1158	0,08518464	8,886923077
ZjuHsp40-143	scaffold	orange1.lg032817m	scaffold	2,3780	0,1306	0,054920101	10,45692308
ZjuHsp40-144	scaffold	orange1.lg024973m	scaffold	2,0414	0,2927	0,143381993	18,29230769
ZjuHsp40-145	scaffold	orange1.lg025594m	scaffold	0,9559	0,0667	0,069777173	15,70307692
ZjuHsp40-146	scaffold	orange1.lg033572m	scaffold	1,7445	0,1441	0,082602465	7,353076923
ZjuHsp40-147	scaffold	orange1.lg033572m	scaffold	1,7445	0,1441	0,082602465	13,41923077
ZjuHsp40-148	scaffold	orange1.lg033572m	scaffold	1,7445	0,1441	0,082602465	13,41923077
ZjuHsp40-149	scaffold	orange1.lg025594m	scaffold	0,9556	0,0668	0,069903725	13,41923077
ZjuHsp40-150	scaffold	orange1.lg006401m	scaffold	4,4326	0,2362	0,05328701	7,350769231
ZjuHsp40-150	scaffold	orange1.lg003641m	scaffold	56,7711	0,7406	0,01304537	34,09692308
ZjuHsp40-150	scaffold	orange1.lg003634m	scaffold	56,7693	0,7407	0,013047545	436,7007692
ZjuHsp40-151	scaffold	orange1.lg019486m	scaffold	0,8731	0,1330	0,152330775	436,6869231
ZjuHsp40-151	scaffold	orange1.lg019284m	scaffold	0,8731	0,1330	0,152330775	6,716153846
ZjuHsp40-151	scaffold	orange1.lg019589m	scaffold	0,8622	0,1342	0,155648341	6,716153846
ZjuHsp40-151	scaffold	orange1.lg024126m	scaffold	0,9893	0,1474	0,148994238	7,61
ZjuHsp40-151	scaffold	orange1.lg024095m	scaffold	0,9893	0,1474	0,148994238	7,61
ZjuHsp40-152	scaffold	orange1.lg019486m	scaffold	0,8731	0,1330	0,152330775	6,716153846
ZjuHsp40-152	scaffold	orange1.lg019284m	scaffold	0,8731	0,1330	0,152330775	6,716153846
ZjuHsp40-152	scaffold	orange1.lg019589m	scaffold	0,8622	0,1342	0,155648341	6,632307692
ZjuHsp40-152	scaffold	orange1.lg024126m	scaffold	0,9893	0,1474	0,148994238	7,61
ZjuHsp40-153	scaffold	orange1.lg024095m	scaffold	0,9893	0,1474	0,148994238	7,61
ZjuHsp40-153	scaffold	orange1.lg004651m	scaffold	1,0822	0,2411	0,222786916	8,324615385
ZjuHsp40-153	scaffold	orange1.lg004641m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-153	scaffold	orange1.lg004646m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-153	scaffold	orange1.lg006345m	scaffold	1,1285	0,2644	0,23429331	8,680769231
ZjuHsp40-153	scaffold	orange1.lg007833m	scaffold	1,0126	0,1775	0,175291329	7,789230769
ZjuHsp40-153	scaffold	orange1.lg007732m	scaffold	1,1556	0,2722	0,235548633	8,889230769
ZjuHsp40-153	scaffold	orange1.lg009016m	scaffold	1,2098	0,2927	0,241940817	9,306153846
ZjuHsp40-153	scaffold	orange1.lg011502m	scaffold	1,1021	0,3371	0,305870611	8,477692308
ZjuHsp40-153	scaffold	orange1.lg048085m	scaffold	53,3585	0,6396	0,011986844	410,45
ZjuHsp40-154	scaffold	orange1.lg004651m	scaffold	1,0822	0,2411	0,222786916	8,324615385
ZjuHsp40-154	scaffold	orange1.lg004641m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-154	scaffold	orange1.lg004646m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-154	scaffold	orange1.lg006345m	scaffold	1,1285	0,2644	0,23429331	8,680769231
ZjuHsp40-154	scaffold	orange1.lg007833m	scaffold	1,0126	0,1775	0,175291329	7,789230769
ZjuHsp40-154	scaffold	orange1.lg007732m	scaffold	1,1556	0,2722	0,235548633	8,889230769

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-154	scaffold	orange1.lg009016m	scaffold	1,2098	0,2927	0,241940817	9,306153846
ZjuHsp40-154	scaffold	orange1.lg011502m	scaffold	1,1021	0,3371	0,305870611	8,477692308
ZjuHsp40-154	scaffold	orange1.lg048085m	scaffold	53,3585	0,6396	0,011986844	410,45
ZjuHsp40-155	scaffold	orange1.lg004651m	scaffold	1,0822	0,2411	0,222786916	8,324615385
ZjuHsp40-155	scaffold	orange1.lg004641m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-155	scaffold	orange1.lg004646m	scaffold	1,0840	0,2388	0,220295203	8,338461538
ZjuHsp40-155	scaffold	orange1.lg006345m	scaffold	1,1285	0,2644	0,23429331	8,680769231
ZjuHsp40-155	scaffold	orange1.lg007833m	scaffold	1,0126	0,1775	0,175291329	7,789230769
ZjuHsp40-155	scaffold	orange1.lg007732m	scaffold	1,1556	0,2722	0,235548633	8,889230769
ZjuHsp40-155	scaffold	orange1.lg009016m	scaffold	1,2098	0,2927	0,241940817	9,306153846
ZjuHsp40-155	scaffold	orange1.lg011502m	scaffold	1,1021	0,3371	0,305870611	8,477692308
ZjuHsp40-155	scaffold	orange1.lg048085m	scaffold	53,3585	0,6396	0,011986844	410,45
ZjuHsp40-156	scaffold	orange1.lg010330m	scaffold	1,1250	0,2692	0,239288889	8,653846154
ZjuHsp40-156	scaffold	orange1.lg012541m	scaffold	1,0907	0,2727	0,250022921	8,39
ZjuHsp40-156	scaffold	orange1.lg011450m	scaffold	1,1308	0,2849	0,251945525	8,698461538
ZjuHsp40-156	scaffold	orange1.lg019562m	scaffold	1,1794	0,2202	0,186705104	9,072307692
ZjuHsp40-156	scaffold	orange1.lg019721m	scaffold	1,1251	0,2148	0,190916363	8,654615385
ZjuHsp40-156	scaffold	orange1.lg012301m	scaffold	53,2333	0,5097	0,009574834	409,4869231
ZjuHsp40-156	scaffold	orange1.lg010831m	scaffold	41,6321	0,5380	0,012922721	320,2469231
ZjuHsp40-156	scaffold	orange1.lg013277m	scaffold	42,5914	0,4916	0,011542236	327,6261538
ZjuHsp40-156	scaffold	orange1.lg017928m	scaffold	47,5865	0,5331	0,011202757	366,05
ZjuHsp40-156	scaffold	orange1.lg017925m	scaffold	48,1547	0,5331	0,01107057	370,4207692
ZjuHsp40-156	scaffold	orange1.lg017647m	scaffold	7,5731	0,5031	0,066432505	58,25461538
ZjuHsp40-157	scaffold	orange1.lg000052m	scaffold	0,8798	0,0776	0,088201864	6,767692308
ZjuHsp40-157	scaffold	orange1.lg000056m	scaffold	0,8864	0,0824	0,092960289	6,818461538
ZjuHsp40-157	scaffold	orange1.lg000065m	scaffold	0,8694	0,0766	0,08810674	6,687692308
ZjuHsp40-158	scaffold	orange1.lg000052m	scaffold	0,8474	0,0747	0,088151994	6,518461538
ZjuHsp40-158	scaffold	orange1.lg000056m	scaffold	0,8533	0,0801	0,093870854	6,563846154
ZjuHsp40-158	scaffold	orange1.lg000065m	scaffold	0,8334	0,0734	0,088072954	6,410769231
ZjuHsp40-159	scaffold	orange1.lg041019m	scaffold	1,7092	0,2134	0,124853733	13,14769231
ZjuHsp40-160	scaffold	orange1.lg041019m	scaffold	1,7092	0,2134	0,124853733	13,14769231
ZjuHsp40-161	scaffold	orange1.lg041019m	scaffold	1,7092	0,2134	0,124853733	13,14769231
ZjuHsp40-162	scaffold	orange1.lg041019m	scaffold	1,7092	0,2134	0,124853733	13,14769231
ZjuHsp40-163	scaffold	orange1.lg025877m	scaffold	6,5259	0,1387	0,021253773	50,19923077
ZjuHsp40-164	scaffold	orange1.lg041019m	scaffold	1,6762	0,2305	0,137513423	12,89384615
ZjuHsp40-165	scaffold	orange1.lg018317m	scaffold	5,6060	0,1859	0,033160899	43,12307692
ZjuHsp40-165	scaffold	orange1.lg047551m	scaffold	12,7112	0,5113	0,040224369	97,77846154
ZjuHsp40-166	scaffold	orange1.lg018317m	scaffold	5,6060	0,1859	0,033160899	43,12307692
ZjuHsp40-166	scaffold	orange1.lg047551m	scaffold	12,7112	0,5113	0,040224369	97,77846154
ZjuHsp40-167	scaffold	orange1.lg018317m	scaffold	5,6060	0,1859	0,033160899	43,12307692
ZjuHsp40-167	scaffold	orange1.lg047551m	scaffold	12,7112	0,5113	0,040224369	97,77846154
ZjuHsp40-168	scaffold	orange1.lg018317m	scaffold	5,6060	0,1859	0,033160899	43,12307692
ZjuHsp40-168	scaffold	orange1.lg047551m	scaffold	12,7112	0,5113	0,040224369	97,77846154
ZjuHsp40-169	scaffold	orange1.lg023405m	scaffold	1,0262	0,5113	0,498245956	7,893846154
ZjuHsp40-169	scaffold	orange1.lg021768m	scaffold	10,262	0,5113	4,98246E-05	78938,46154
ZjuHsp40-170	scaffold	orange1.lg024035m	scaffold	1,5937	0,2608	0,16364435	12,25923077
ZjuHsp40-170	scaffold	orange1.lg024044m	scaffold	1,5937	0,2608	0,16364435	12,25923077
ZjuHsp40-170	scaffold	orange1.lg024031m	scaffold	1,5937	0,2608	0,16364435	12,25923077
ZjuHsp40-171	scaffold	orange1.lg033572m	scaffold	1,9157	0,1439	0,075116146	14,73615385
ZjuHsp40-172	scaffold	orange1.lg033572m	scaffold	1,9157	0,1439	0,075116146	14,73615385
ZjuHsp40-173	scaffold	orange1.lg015910m	scaffold	1,3034	0,1922	0,147460488	10,02615385
ZjuHsp40-174	scaffold	orange1.lg015910m	scaffold	1,2959	0,1944	0,150011575	9,968461538
		Mean		57,37598	0,35968	0,328767505	488,7746563

Z. jujuba – *M. accuminata*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-01	1	GSMUA_Achr4T11580_001	4	2,5497	0,2363	0,09267757	19,61307692
ZjuHsp40-01	1	GSMUA_Achr3T00410_001	3	3,703	0,2808	0,075830408	28,48461538
ZjuHsp40-01	1	GSMUA_Achr4T12400_001	4	50,3102	0,3725	0,007404065	387,0015385
ZjuHsp40-01	1	GSMUA_Achr6T02160_001	6	56,0612	0,6383	0,011385771	431,24
ZjuHsp40-01	1	GSMUA_Achr4T20410_001	4	56,0612	0,6383	0,011385771	431,24
ZjuHsp40-01	1	GSMUA_Achr1T15780_001	1	54,377	0,6938	0,012759071	418,2846154
ZjuHsp40-01	1	GSMUA_Achr3T00920_001	3	52,1809	0,7728	0,014810017	401,3915385
ZjuHsp40-01	1	GSMUA_Achr11T06760_001	1	50,7323	0,7866	0,015504915	390,2484615
ZjuHsp40-06	1	GSMUA_Achr11T20030_001	1	1,9312	0,2246	0,116300746	14,85538462
ZjuHsp40-08	1	GSMUA_Achr6T31040_001	6	3,1173	0,3703	0,118788695	23,97923077
ZjuHsp40-08	1	GSMUA_Achr9T18140_001	9	53,0932	0,4081	0,007686483	408,4092308
ZjuHsp40-08	1	GSMUA_Achr8T23700_001	8	53,1217	0,3781	0,007117619	408,6284615

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-09	1	GSMUA_Achr6T31040_001	6	3,1801	0,3573	0,112354957	24,46230769
ZjuHsp40-09	1	GSMUA_Achr9T18140_001	9	53,1768	0,4113	0,007734576	409,0523077
ZjuHsp40-09	1	GSMUA_Achr8T23700_001	8	53,1217	0,3781	0,007117619	408,6284615
ZjuHsp40-10	1	GSMUA_Achr6T31040_001	6	3,0238	0,3505	0,115913751	23,26
ZjuHsp40-10	1	GSMUA_Achr9T18140_001	9	53,1342	0,4046	0,007614681	408,7246154
ZjuHsp40-10	1	GSMUA_Achr8T23700_001	8	54,9363	0,3801	0,006918922	422,5869231
ZjuHsp40-11	1	GSMUA_Achr6T31040_001	6	3,1954	0,3531	0,110502597	24,58
ZjuHsp40-11	1	GSMUA_Achr9T18140_001	9	53,1784	0,3879	0,007294315	409,0646154
ZjuHsp40-11	1	GSMUA_Achr8T23700_001	8	13,7066	0,3666	0,026746239	105,4353846
ZjuHsp40-12	1	GSMUA_Achr6T31040_001	6	3,18	0,3575	0,112421384	24,46153846
ZjuHsp40-12	1	GSMUA_Achr9T18140_001	9	53,1973	0,3931	0,007389473	409,21
ZjuHsp40-12	1	GSMUA_Achr8T23700_001	6	13,5314	0,3695	0,027306857	104,0876923
ZjuHsp40-13	1	GSMUA_Achr6T31040_001	6	10,6733	0,4223	0,03956602	82,10230769
ZjuHsp40-13	1	GSMUA_Achr8T23700_001	8	42,3789	0,3643	0,008596259	325,9915385
ZjuHsp40-14	1	GSMUA_Achr6T31040_001	6	3,0237	0,3505	0,115917584	23,25923077
ZjuHsp40-14	1	GSMUA_Achr9T18140_001	9	53,0201	0,3909	0,007372676	407,8469231
ZjuHsp40-14	1	GSMUA_Achr8T23700_001	8	11,0528	0,3718	0,033638535	85,02153846
ZjuHsp40-15	1	GSMUA_Achr6T31040_001	6	10,6681	0,4223	0,039585306	82,06230769
ZjuHsp40-15	1	GSMUA_Achr9T18140_001	9	58,7928	0,4193	0,007131826	452,2523077
ZjuHsp40-15	1	GSMUA_Achr8T23700_001	8	39,5535	0,3643	0,00921031	304,2576923
ZjuHsp40-16	1	GSMUA_Achr6T31040_001	6	6,7054	0,3919	0,058445432	51,58
ZjuHsp40-16	1	GSMUA_Achr9T18140_001	9	56,4385	0,4275	0,007574617	434,1423077
ZjuHsp40-16	1	GSMUA_Achr8T23700_001	8	9,2188	0,371	0,04024385	70,91384615
ZjuHsp40-17	1	GSMUA_Achr9T23300_001	9	1,917	0,2269	0,118362024	14,74615385
ZjuHsp40-17	1	GSMUA_Achr4T12330_001	4	2,0442	0,2003	0,097984542	15,72461538
ZjuHsp40-17	1	GSMUA_Achr8T16030_001	8	46,6649	0,2551	0,005466636	358,9607692
ZjuHsp40-17	1	GSMUA_Achr2T19740_001	2	12,7268	0,3053	0,023988748	97,89846154
ZjuHsp40-17	1	GSMUA_Achr1T12390_001	11	18,7428	0,2717	0,014496233	144,1753846
ZjuHsp40-17	1	GSMUA_AchrUn_randomT07820_001	chrUn_random	2,4189	0,2578	0,10657737	18,60692308
ZjuHsp40-17	1	GSMUA_Achr3T15480_001	3	48,4922	0,2541	0,005240018	373,0169231
ZjuHsp40-17	1	GSMUA_Achr6T15600_001	6	6,5304	0,2736	0,041896362	50,23384615
ZjuHsp40-19	1	GSMUA_Achr1T06760_001	11	2,2729	0,2379	0,104668045	17,48384615
ZjuHsp40-19	1	GSMUA_Achr9T29030_001	9	36,3788	0,529	0,014541436	279,8369231
ZjuHsp40-19	1	GSMUA_Achr4T20410_001	4	54,7131	0,4632	0,00846598	420,87
ZjuHsp40-19	1	GSMUA_Achr1T15780_001	1	53,9047	0,4377	0,008119886	414,6515385
ZjuHsp40-19	1	GSMUA_Achr3T00920_001	3	52,4929	0,4517	0,008604973	403,7915385
ZjuHsp40-20	2	GSMUA_Achr9T03390_001	9	3,2814	0,3814	0,116230877	25,24153846
ZjuHsp40-21	2	GSMUA_Achr9T03390_001	9	3,1446	0,3782	0,120269669	24,18923077
ZjuHsp40-22	2	GSMUA_Achr6T01660_001	6	3,4637	0,3227	0,093166267	26,64384615
ZjuHsp40-22	2	GSMUA_Achr4T11580_001	4	53,6756	0,5708	0,010634255	412,8892308
ZjuHsp40-22	2	GSMUA_Achr3T00410_001	3	52,6913	0,6303	0,011962127	405,3176923
ZjuHsp40-22	2	GSMUA_Achr4T12400_001	4	17,6478	0,6711	0,038027403	135,7523077
ZjuHsp40-22	2	GSMUA_Achr1T06760_001	11	53,2146	0,6945	0,01305093	409,3430769
ZjuHsp40-22	2	GSMUA_Achr3T00920_001	3	55,7597	0,7654	0,01372676	428,9207692
ZjuHsp40-22	2	GSMUA_Achr9T29030_001	9	35,8371	0,7384	0,020604346	275,67
ZjuHsp40-23	2	GSMUA_Achr10T25050_001	10	6,017	0,2226	0,03699518	46,28461538
ZjuHsp40-24	2	GSMUA_Achr2T02410_001	2	49,225	0,5114	0,01038903	378,6538462
ZjuHsp40-24	2	GSMUA_Achr5T00460_001	5	59,0046	0,5347	0,009062005	453,8815385
ZjuHsp40-24	2	GSMUA_Achr1T14420_001	11	18,6598	0,4995	0,026768776	143,5369231
ZjuHsp40-26	2	GSMUA_Achr9T17610_001	9	19,6743	0,3729	0,01895366	151,3407692
ZjuHsp40-27	2	GSMUA_Achr2T02410_001	2	5,4064	0,5272	0,097514057	41,58769231
ZjuHsp40-27	2	GSMUA_Achr5T00460_001	5	7,9460	0,5520	0,069468915	61,12307692
ZjuHsp40-27	2	GSMUA_Achr1T14420_001	11	3,4460	0,5338	0,154904237	26,50769231
ZjuHsp40-28	2	GSMUA_Achr2T02410_001	2	5,4064	0,5272	0,097514057	41,58769231
ZjuHsp40-28	2	GSMUA_Achr5T00460_001	5	7,9449	0,5520	0,069478533	61,11461538
ZjuHsp40-28	2	GSMUA_Achr1T14420_001	11	3,4460	0,5338	0,154904237	26,50769231
ZjuHsp40-29	2	GSMUA_Achr5T17530_001	5	2,9524	0,5545	0,187813304	22,71076923
ZjuHsp40-30	2	GSMUA_Achr5T17530_001	5	2,9748	0,5386	0,181054189	22,88307692
ZjuHsp40-30	2	GSMUA_Achr9T17770_001	9	3,6910	0,5841	0,158249797	28,39230769
ZjuHsp40-31	3	GSMUA_Achr4T22790_001	4	2,5324	0,0606	0,023929869	19,48
ZjuHsp40-31	3	GSMUA_Achr4T31390_001	4	3,4322	0,0455	0,013256803	26,40153846
ZjuHsp40-31	3	GSMUA_Achr9T25940_001	9	2,3492	0,0603	0,025668313	18,07076923
ZjuHsp40-31	3	GSMUA_Achr6T29960_001	6	4,9335	0,0598	0,012121212	37,95
ZjuHsp40-31	3	GSMUA_Achr7T01290_001	7	2,8501	0,0734	0,025753482	21,92384615
ZjuHsp40-31	3	GSMUA_Achr8T11020_001	8	4,1087	0,1552	0,037773505	31,60538462
ZjuHsp40-31	3	GSMUA_Achr1T04610_001	11	7,1477	0,1477	0,02066399	54,98230769
ZjuHsp40-32	3	GSMUA_Achr1T19660_001	11	2,1514	0,1014	0,0471321	16,54923077
ZjuHsp40-33	3	GSMUA_Achr8T00660_001	8	6,3169	0,3707	0,058683848	48,59153846
ZjuHsp40-33	3	GSMUA_Achr10T05770_001	10	6,8208	0,4025	0,059010673	52,46769231
ZjuHsp40-33	3	GSMUA_Achr6T12230_001	6	7,3041	0,5025	0,068796977	56,18538462
ZjuHsp40-33	3	GSMUA_Achr3T02570_001	3	5,1302	0,4496	0,087637909	39,46307692
ZjuHsp40-33	3	GSMUA_Achr1T08510_001	11	6,0256	0,421	0,069868561	46,35076923
ZjuHsp40-33	3	GSMUA_Achr2T21160_001	2	6,6111	0,4524	0,068430367	50,85461538
ZjuHsp40-33	3	GSMUA_Achr4T05630_001	4	51,4760	0,6641	0,012901158	395,9692308
ZjuHsp40-33	3	GSMUA_Achr2T12110_001	2	1,2209	0,2392	0,195921042	9,391538462

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-35	3	GSMUA_Achr2T12110_001	2	1,1951	0,2259	0,189021839	9,193076923
ZjuHsp40-36	3	GSMUA_Achr2T12110_001	2	1,0411	0,187	0,179617712	8,008461538
ZjuHsp40-38	3	GSMUA_Achr2T12110_001	2	1,2198	0,2441	0,200114773	9,383076923
ZjuHsp40-39	3	GSMUA_Achr2T12110_001	2	1,1931	0,2306	0,193278015	9,177692308
ZjuHsp40-41	3	GSMUA_Achr3T20710_001	3	2,9064	0,3906	0,134393064	22,35692308
ZjuHsp40-42	4	GSMUA_Achr9T23300_001	3	56,2451	0,5122	0,009106571	432,6546154
ZjuHsp40-42	4	GSMUA_Achr8T16030_001	8	60,3182	0,5452	0,009038731	463,9861538
ZjuHsp40-43	4	GSMUA_Achr8T25400_001	8	1,5146	0,1231	0,081275584	11,65076923
ZjuHsp40-43	4	GSMUA_Achr6T12840_001	6	39,7110	0,3335	0,008398177	305,4692308
ZjuHsp40-43	4	GSMUA_AchrUn_randomT23170_001	chrUn_random	19,5924	0,3282	0,016751393	150,7107692
ZjuHsp40-43	4	GSMUA_AchrUn_randomT00170_001	chrUn_random	19,5038	0,3346	0,017155631	150,0292308
ZjuHsp40-43	4	GSMUA_Achr2T06530_001	2	6,8259	0,3609	0,052872149	52,50692308
ZjuHsp40-44	5	GSMUA_Achr8T00660_001	8	7,2625	0,3944	0,054306368	55,86538462
ZjuHsp40-44	5	GSMUA_Achr10T05770_001	10	3,7760	0,4556	0,12065678	29,04615385
ZjuHsp40-44	5	GSMUA_Achr3T02570_001	3	3,2449	0,5002	0,154149589	24,96076923
ZjuHsp40-44	5	GSMUA_Achr6T12230_001	6	6,1544	0,5055	0,082136358	47,34153846
ZjuHsp40-44	5	GSMUA_Achr11T08510_001	11	7,1925	0,4848	0,067403545	55,32692308
ZjuHsp40-44	5	GSMUA_Achr2T21160_001	2	3,0783	0,473	0,153656239	23,67923077
ZjuHsp40-45	5	GSMUA_AchrUn_randomT09890_001	chrUn_random	4,3503	0,4383	0,100751672	33,46384615
ZjuHsp40-46	5	GSMUA_AchrUn_randomT09890_001	chrUn_random	4,3502	0,4383	0,100753988	33,46307692
ZjuHsp40-47	5	GSMUA_Achr2T21950_001	2	2,6044	0,4094	0,157195515	20,03384615
ZjuHsp40-51	6	GSMUA_Achr3T06010_001	3	1,7697	0,2306	0,131040571	13,61307692
ZjuHsp40-51	6	GSMUA_Achr8T31640_001	8	4,8085	0,3258	0,067755017	36,98846154
ZjuHsp40-51	6	GSMUA_Achr4T13770_001	4	11,6113	0,3411	0,029376556	89,31769231
ZjuHsp40-51	6	GSMUA_Achr9T14460_001	9	1,5001	0,2405	0,160322645	11,53923077
ZjuHsp40-51	6	GSMUA_Achr9T21410_001	9	55,3423	0,3866	0,006985615	425,71
ZjuHsp40-52	6	GSMUA_Achr3T06010_001	3	1,7697	0,2306	0,130304571	13,61307692
ZjuHsp40-52	6	GSMUA_Achr8T31640_001	8	4,8085	0,3258	0,067755017	36,98846154
ZjuHsp40-52	6	GSMUA_Achr4T13770_001	4	11,6126	0,3411	0,029373267	89,32769231
ZjuHsp40-52	6	GSMUA_Achr9T14460_001	9	1,5001	0,2405	0,160322645	11,53923077
ZjuHsp40-52	6	GSMUA_Achr9T21410_001	9	55,3291	0,3867	0,006989089	425,6084615
ZjuHsp40-55	6	GSMUA_Achr3T15350_001	3	3,7382	0,3365	0,090016586	28,75538462
ZjuHsp40-55	6	GSMUA_Achr7T25560_001	7	5,6154	0,7813	0,139135235	43,19538462
ZjuHsp40-55	6	GSMUA_Achr1T13920_001	1	5,9074	0,8109	0,137268511	45,44153846
ZjuHsp40-55	6	GSMUA_Achr1T26650_001	1	57,0874	0,8007	0,014025862	439,1338462
ZjuHsp40-55	6	GSMUA_Achr3T24020_001	3	32,8607	0,8629	0,026259331	252,7746154
ZjuHsp40-55	6	GSMUA_Achr11T13890_001	11	55,2268	0,8142	0,014742842	424,8215385
ZjuHsp40-56	6	GSMUA_Achr3T15350_001	3	3,7382	0,3365	0,090016586	28,75538462
ZjuHsp40-56	6	GSMUA_Achr7T25560_001	7	5,6154	0,7813	0,139135235	43,19538462
ZjuHsp40-56	6	GSMUA_Achr1T13920_001	1	5,9074	0,8109	0,137268511	45,44153846
ZjuHsp40-56	6	GSMUA_Achr1T26650_001	1	57,086	0,8006	0,014024454	439,1230769
ZjuHsp40-56	6	GSMUA_Achr3T24020_001	3	33,443	0,8627	0,025796362	257,2515385
ZjuHsp40-56	6	GSMUA_Achr11T13890_001	11	55,2299	0,8143	0,014743825	424,8453846
ZjuHsp40-57	6	GSMUA_Achr3T15350_001	3	3,7382	0,3365	0,090016586	28,75538462
ZjuHsp40-57	6	GSMUA_Achr7T25560_001	7	6,0919	0,7588	0,12455884	46,86076923
ZjuHsp40-57	6	GSMUA_Achr1T13920_001	1	6,0613	0,7965	0,131407454	46,62538462
ZjuHsp40-57	6	GSMUA_Achr1T26650_001	1	57,0897	0,8006	0,014023545	439,1515385
ZjuHsp40-57	6	GSMUA_Achr3T24020_001	3	33,0997	0,8628	0,026066702	254,6130769
ZjuHsp40-57	6	GSMUA_Achr11T13890_001	11	55,2297	0,8143	0,014743879	424,8438462
ZjuHsp40-58	6	GSMUA_Achr7T25970_001	7	4,2352	0,6722	0,158717416	32,57846154
ZjuHsp40-59	6	GSMUA_Achr7T25970_001	7	5,3251	0,6712	0,126044581	40,96230769
ZjuHsp40-60	6	GSMUA_Achr7T25970_001	7	4,0826	0,6938	0,169940724	31,40461538
ZjuHsp40-62	6	GSMUA_Achr1T27050_001	1	2,2833	0,3149	0,137914422	17,56384615
ZjuHsp40-62	6	GSMUA_Achr9T26310_001	9	1,6735	0,3691	0,220555722	12,87307692
ZjuHsp40-63	6	GSMUA_Achr1T27050_001	1	3,0986	0,3330	0,107467889	23,83538462
ZjuHsp40-63	6	GSMUA_Achr9T26310_001	9	1,8792	0,4056	0,215836526	14,45538462
ZjuHsp40-64	6	GSMUA_Achr11T13890_001	11	2,5174	0,3424	0,136013347	19,36461538
ZjuHsp40-64	6	GSMUA_Achr1T26650_001	1	1,8765	0,3676	0,195896616	14,43461538
ZjuHsp40-64	6	GSMUA_Achr3T24020_001	3	2,0390	0,3752	0,18401177	15,68461538
ZjuHsp40-64	6	GSMUA_Achr3T15350_001	3	4,0940	0,4962	0,121201759	31,49230769
ZjuHsp40-64	6	GSMUA_Achr7T25560_001	7	3,9525	0,5610	0,141935484	30,40384615
ZjuHsp40-64	6	GSMUA_Achr1T13920_001	1	3,5950	0,5433	0,151126565	27,65384615
ZjuHsp40-66	7	GSMUA_AchrUn_randomT05380_001	chrUn_random	2,8924	0,4792	0,165675564	22,24923077
ZjuHsp40-67	7	GSMUA_Achr3T17350_001	3	37,6847	0,4223	0,011206139	289,8823077
ZjuHsp40-68	7	GSMUA_Achr8T11020_001	8	3,1450	0,1202	0,038219396	24,19230769
ZjuHsp40-68	7	GSMUA_Achr4T22790_001	4	12,4201	0,1565	0,012600543	95,53923077
ZjuHsp40-68	7	GSMUA_Achr4T31390_001	4	17,8932	0,1555	0,008690452	137,64
ZjuHsp40-68	7	GSMUA_Achr7T01290_001	7	35,5781	0,1772	0,004980592	273,6776923
ZjuHsp40-68	7	GSMUA_Achr6T29960_001	6	36,1120	0,1656	0,004585733	277,7846154
ZjuHsp40-68	7	GSMUA_Achr11T04610_001	11	2,4884	0,1163	0,046736859	19,14153846
ZjuHsp40-68	7	GSMUA_Achr9T25940_001	9	16,4489	0,1653	0,010049304	126,53
ZjuHsp40-68	7	GSMUA_Achr1T01630_001	1	4,1950	0,3271	0,077973778	32,26923077
ZjuHsp40-69	7	GSMUA_Achr8T11020_001	8	3,1447	0,1202	0,038223042	24,19
ZjuHsp40-69	7	GSMUA_Achr4T22790_001	4	12,3725	0,1565	0,01264902	95,17307692
ZjuHsp40-69	7	GSMUA_Achr4T31390_001	4	18,1668	0,1554	0,008554066	139,7446154

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-69	7	GSMUA_Achr7T01290_001	7	35,8248	0,1771	0,004943503	275,5753846
ZjuHsp40-69	7	GSMUA_Achr6T29960_001	6	36,3779	0,1656	0,004552214	279,83
ZjuHsp40-69	7	GSMUA_Achr11T04610_001	11	2,4883	0,1163	0,046738737	19,14076923
ZjuHsp40-69	7	GSMUA_Achr9T25940_001	9	16,4726	0,1653	0,010034846	126,7123077
ZjuHsp40-69	7	GSMUA_Achr1T01630_001	1	4,1944	0,3271	0,077984932	32,26461538
ZjuHsp40-70	7	GSMUA_Achr8T11020_001	8	3,1450	0,1202	0,038219396	24,19230769
ZjuHsp40-70	7	GSMUA_Achr4T22790_001	4	12,3307	0,1565	0,012691899	94,85153846
ZjuHsp40-70	7	GSMUA_Achr4T31390_001	4	17,6724	0,1555	0,008799031	135,9415385
ZjuHsp40-70	7	GSMUA_Achr7T01290_001	7	35,5756	0,1773	0,004983753	273,6584615
ZjuHsp40-70	7	GSMUA_Achr6T29960_001	6	36,6109	0,1654	0,00451778	281,6223077
ZjuHsp40-70	7	GSMUA_Achr11T04610_001	11	24,8840	0,1163	0,004673686	191,4153846
ZjuHsp40-70	7	GSMUA_Achr9T25940_001	9	16,4776	0,1653	0,010031801	126,7507692
ZjuHsp40-70	7	GSMUA_Achr1T01630_001	1	4,1945	0,3271	0,077983073	32,26538462
ZjuHsp40-71	7	GSMUA_AchrUn_randomT21320_001	chrUn_random	2,3784	0,1906	0,080137908	18,29538462
ZjuHsp40-72	7	GSMUA_Achr6T12840_001	6	2,4925	0,1662	0,06668004	19,17307692
ZjuHsp40-72	7	GSMUA_Achr8T25400_001	8	25,1153	0,3063	0,012195753	193,1946154
ZjuHsp40-72	7	GSMUA_AchrUn_randomT00170_001	chrUn_random	33,6455	0,3296	0,009796258	258,8115385
ZjuHsp40-72	7	GSMUA_AchrUn_randomT23170_001	chrUn_random	39,0214	0,3424	0,008774672	300,1646154
ZjuHsp40-72	7	GSMUA_Achr2T06530_001	2	56,5239	0,3646	0,006450369	434,7992308
ZjuHsp40-74	8	GSMUA_Achr3T15350_001	3	5,8123	0,2691	0,046298367	44,71
ZjuHsp40-74	8	GSMUA_Achr7T25560_001	7	6,2175	0,7021	0,112923201	47,82692308
ZjuHsp40-74	8	GSMUA_Achr1T13920_001	1	4,9605	0,7115	0,143433122	38,15769231
ZjuHsp40-74	8	GSMUA_Achr1T26650_001	1	58,6913	0,8057	0,013727759	451,4715385
ZjuHsp40-74	8	GSMUA_Achr3T24020_001	3	9,5916	0,8140	0,084865924	73,78153846
ZjuHsp40-74	8	GSMUA_Achr1T13890_001	11	58,4105	0,6991	0,011968738	449,3115385
ZjuHsp40-74	8	GSMUA_Achr6T30770_001	6	2,7784	0,3625	0,130470775	21,37230769
ZjuHsp40-76	8	GSMUA_Achr6T30770_001	6	2,7501	0,3758	0,136649576	21,15461538
ZjuHsp40-77	8	GSMUA_Achr4T20410_001	4	2,5203	0,1797	0,071301036	19,38692308
ZjuHsp40-77	8	GSMUA_Achr1T15780_001	1	4,6538	0,1846	0,039666509	35,79846154
ZjuHsp40-77	8	GSMUA_Achr3T00920_001	3	2,9016	0,1701	0,058622829	22,32
ZjuHsp40-77	8	GSMUA_Achr1T06760_001	11	0,1721	16,4063	95,33004067	1,323846154
ZjuHsp40-77	8	GSMUA_Achr9T29030_001	9	51,3274	0,6039	0,011765646	394,8261538
ZjuHsp40-77	8	GSMUA_Achr4T11580_001	4	51,9108	0,7099	0,013675382	399,3138462
ZjuHsp40-78	8	GSMUA_Achr1T26650_001	1	3,2363	0,4072	0,125822699	24,89461538
ZjuHsp40-78	8	GSMUA_Achr3T24020_001	3	2,5915	0,4105	0,15840247	19,93461538
ZjuHsp40-78	8	GSMUA_Achr3T15350_001	3	6,7876	0,3715	0,054732159	52,21230769
ZjuHsp40-78	8	GSMUA_Achr7T25560_001	7	9,7785	0,8191	0,083765404	75,21923077
ZjuHsp40-78	8	GSMUA_Achr1T13920_001	1	11,2684	0,8704	0,077242554	86,68
ZjuHsp40-80	8	GSMUA_Achr8T07930_001	8	5,1130	0,5446	0,10651281	39,33076923
ZjuHsp40-81	9	GSMUA_Achr11T20660_001	11	29,2139	0,2551	0,008732145	224,7223077
ZjuHsp40-81	9	GSMUA_Achr5T21230_001	5	22,5908	0,2846	0,012598049	173,7753846
ZjuHsp40-81	9	GSMUA_Achr11T05250_001	11	53,9453	0,2743	0,00508478	414,9638462
ZjuHsp40-81	9	GSMUA_Achr8T10480_001	8	51,8677	0,2807	0,005411846	398,9823077
ZjuHsp40-81	9	GSMUA_Achr1T24820_00	1	52,2886	0,3249	0,006213591	402,22
ZjuHsp40-85	9	GSMUA_Achr11T20660_001	11	29,7049	0,2551	0,008587809	228,4992308
ZjuHsp40-85	9	GSMUA_Achr5T21230_001	5	22,6413	0,2846	0,01256995	174,1638462
ZjuHsp40-85	9	GSMUA_Achr11T05250_001	11	53,9426	0,2742	0,005083181	414,9430769
ZjuHsp40-85	9	GSMUA_Achr8T10480_001	8	51,8776	0,2807	0,005410813	399,0584615
ZjuHsp40-85	9	GSMUA_Achr1T24820_001	1	52,2946	0,3247	0,006209054	402,2661538
ZjuHsp40-86	9	GSMUA_Achr11T13990_001	11	1,7218	0,1252	0,072714601	13,24461538
ZjuHsp40-86	9	GSMUA_Achr8T33890_001	5	1,7068	0,1300	0,076165925	13,12923077
ZjuHsp40-86	9	GSMUA_Achr6T29960_001	6	52,7519	0,6241	0,011830853	405,7838462
ZjuHsp40-88	9	GSMUA_AchrUn_randomT00170_001	chrUn_random	2,3186	0,1688	0,072802553	17,83538462
ZjuHsp40-88	9	GSMUA_AchrUn_randomT23170_001	chrUn_random	1,8876	0,1863	0,098696758	14,52
ZjuHsp40-88	9	GSMUA_Achr2T06530_001	2	3,0171	0,2431	0,080574061	23,20846154
ZjuHsp40-88	9	GSMUA_Achr8T25400_001	8	44,0656	0,3693	0,008380687	338,9661538
ZjuHsp40-88	9	GSMUA_Achr6T12840_001	6	54,0565	0,4202	0,007773348	415,8192308
ZjuHsp40-89	9	GSMUA_Achr8T00660_001	8	3,6391	0,3105	0,085323294	27,99307692
ZjuHsp40-89	9	GSMUA_Achr10T05770_001	10	5,1120	0,3906	0,076408451	39,32307692
ZjuHsp40-89	9	GSMUA_Achr6T12230_001	6	3,8142	0,4454	0,11677416	29,34
ZjuHsp40-89	9	GSMUA_Achr3T02570_001	3	3,5746	0,4319	0,120824708	27,49692308
ZjuHsp40-89	9	GSMUA_Achr2T21160_001	2	3,3451	0,3833	0,114585513	25,73153846
ZjuHsp40-89	9	GSMUA_Achr11T08510_001	11	5,9207	0,3803	0,06423227	45,54384615
ZjuHsp40-89	9	GSMUA_Achr4T05630_001	4	51,3119	0,6314	0,012305138	394,7069231
ZjuHsp40-89	9	GSMUA_Achr2T02410_001	2	13,5269	0,7489	0,055363757	104,0530769
ZjuHsp40-89	9	GSMUA_Achr2T02410_001	2	13,528	0,7489	0,055359255	104,0615385
ZjuHsp40-90	9	GSMUA_Achr8T13140_001	8	48,9800	0,4175	0,008523887	376,7692308
ZjuHsp40-95	10	GSMUA_Achr4T22790_001	4	53,6252	0,3959	0,007382723	412,5015385
ZjuHsp40-95	10	GSMUA_Achr4T31390_001	4	9,8077	0,3275	0,033392131	75,44384615
ZjuHsp40-95	10	GSMUA_Achr9T25940_001	9	47,9738	0,3381	0,007047597	302,0292308
ZjuHsp40-95	10	GSMUA_Achr6T29960_001	6	52,0753	0,3622	0,006955313	400,5792308
ZjuHsp40-95	10	GSMUA_Achr7T01290_001	7	10,0417	0,3861	0,038449665	77,24384615
ZjuHsp40-96	10	GSMUA_AchrUn_randomT21570_001	chrUn_random	13,7994	0,2994	0,021696596	106,1492308
ZjuHsp40-96	10	GSMUA_Achr8T16030_001	8	52,9584	0,3462	0,006537207	407,3723077
ZjuHsp40-96	10	GSMUA_Achr9T23300_001	9	45,2471	0,3573	0,007896639	348,0546154

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-96	10	GSMUA_Achr4T12330_001	4	53,5887	0,3466	0,006467781	412,2207692
ZjuHsp40-96	10	GSMUA_Achr3T15480_001	3	15,9764	0,3273	0,020486468	122,8953846
ZjuHsp40-96	10	GSMUA_Achr2T19740_001	2	35,537	0,3783	0,010645243	273,3615385
ZjuHsp40-96	10	GSMUA_AchrUn_randomT07820_001	chrUn_random	18,0339	0,3558	0,019729509	138,7223077
ZjuHsp40-96	10	GSMUA_Achr11T12390_001	11	54,8692	0,3474	0,006331421	422,0707692
ZjuHsp40-96	10	GSMUA_Achr7T03030_001	7	53,7235	0,6368	0,011853286	413,2576923
ZjuHsp40-96	10	GSMUA_Achr6T15600_001	6	7,1963	0,3236	0,044967553	55,35615385
ZjuHsp40-98	10	GSMUA_Achr3T29020_001	3	5,0544	0,4096	0,081038303	38,88
ZjuHsp40-99	10	GSMUA_Achr8T31640_001	8	2,0916	0,1142	0,05459935	16,08923077
ZjuHsp40-99	10	GSMUA_Achr4T13770_001	4	1,9393	0,1396	0,071984737	14,91769231
ZjuHsp40-99	10	GSMUA_Achr3T06010_001	3	15,5237	0,3042	0,019595844	119,4130769
ZjuHsp40-99	10	GSMUA_Achr9T21410_001	9	2,3793	0,2000	0,084058336	18,30230769
ZjuHsp40-99	10	GSMUA_Achr9T14460_001	9	8,7176	0,3104	0,03560613	67,05846154
ZjuHsp40-100	11	GSMUA_Achr8T11100_001	8	60,0438	0,9767	0,016266459	461,8753846
ZjuHsp40-101	11	GSMUA_Achr5T07360_001	5	2,1590	0,3621	0,167716535	16,60769231
ZjuHsp40-103	12	GSMUA_Achr9T17770_001	9	2,8923	0,6718	0,232271894	22,24846154
ZjuHsp40-103	12	GSMUA_Achr5T17530_001	5	2,9272	0,6718	0,229502596	22,51692308
ZjuHsp40-104	12	GSMUA_Achr11T17880_001	11	1,6980	0,1276	0,075147232	13,06153846
ZjuHsp40-105	12	GSMUA_Achr11T17880_001	11	1,7128	0,1157	0,06755021	13,17538462
ZjuHsp40-106	12	GSMUA_Achr8T00660_001	8	12,3274	0,4734	0,038402258	94,82615385
ZjuHsp40-106	12	GSMUA_Achr6T12230_001	6	5,3279	0,6023	0,113046416	40,98384615
ZjuHsp40-106	12	GSMUA_Achr10T05770_001	10	8,8095	0,4854	0,055099608	67,76538462
ZjuHsp40-106	12	GSMUA_Achr2T21160_001	2	5,4614	0,5797	0,106144945	42,01076923
ZjuHsp40-107	12	GSMUA_Achr8T00660_001	8	10,9176	0,5086	0,04658533	83,98153846
ZjuHsp40-107	12	GSMUA_Achr6T12230_001	6	5,4123	0,6245	0,115385326	41,63307692
ZjuHsp40-108	12	GSMUA_Achr7T06300_001	7	2,5467	0,2475	0,097184592	19,59
ZjuHsp40-109	12	GSMUA_Achr4T17140_001	4	1,8713	0,4329	0,231336504	14,39461538
ZjuHsp40-112	12	GSMUA_Achr2T18990_001	2	2,2794	0,1337	0,058655787	17,53384615
ZjuHsp40-113	12	GSMUA_Achr1T11800_001	1	7,1989	0,4825	0,067024129	55,37615385
ZjuHsp40-113	12	GSMUA_Achr11T05560_001	11	24,1850	0,3767	0,01557577	186,0384615
ZjuHsp40-113	12	GSMUA_Achr4T00770_001	4	16,4221	0,5664	0,034490108	126,3238462
ZjuHsp40-114	12	GSMUA_Achr1T24750_001	2	1,9236	0,5161	0,268299023	14,79692308
ZjuHsp40-114	12	GSMUA_Achr3T24140_001	3	8,8557	0,5534	0,062490825	68,12076923
ZjuHsp40-116	scaffold	GSMUA_Achr6T31290_001	6	1,7916	0,3089	0,172415718	13,78153846
ZjuHsp40-116	scaffold	GSMUA_Achr9T10280_001	9	1,6116	0,3164	0,196326632	12,39692308
ZjuHsp40-116	scaffold	GSMUA_Achr10T08430_001	10	1,6331	0,3595	0,220133488	12,56230769
ZjuHsp40-116	scaffold	GSMUA_Achr8T02940_001	8	1,7830	0,3527	0,197812675	13,71538462
ZjuHsp40-116	scaffold	GSMUA_Achr3T24420_001	3	54,3421	0,6074	0,011177338	418,0161538
ZjuHsp40-118	scaffold	GSMUA_Achr1T25100_001	1	1,3677	0,1326	0,096951086	10,52076923
ZjuHsp40-120	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9352	0,3515	0,071223051	37,96307692
ZjuHsp40-122	scaffold	GSMUA_Achr3T24420_001	3	1,9717	0,3821	0,193792159	15,16692308
ZjuHsp40-122	scaffold	GSMUA_Achr10T08430_001	10	54,1134	0,5824	0,026826584	416,2569231
ZjuHsp40-122	scaffold	GSMUA_Achr8T02940_001	8	53,8102	0,5615	0,010434825	413,9246154
ZjuHsp40-122	scaffold	GSMUA_Achr9T10280_001	9	8,4146	0,6067	0,072100872	64,72769231
ZjuHsp40-122	scaffold	GSMUA_Achr6T31290_001	6	7,5630	0,6163	0,081488827	58,17692308
ZjuHsp40-123	scaffold	GSMUA_Achr3T24420_001	3	1,9717	0,3821	0,193792159	15,16692308
ZjuHsp40-123	scaffold	GSMUA_Achr10T08430_001	10	49,7592	0,5823	0,011702359	382,7630769
ZjuHsp40-123	scaffold	GSMUA_Achr9T10280_001	9	8,4179	0,6067	0,072072607	64,75307692
ZjuHsp40-123	scaffold	GSMUA_Achr8T02940_001	8	53,8085	0,5616	0,010437013	413,9115385
ZjuHsp40-123	scaffold	GSMUA_Achr6T31290_001	6	7,5638	0,6163	0,081480208	58,18307692
ZjuHsp40-124	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9356	0,3515	0,071217279	37,96615385
ZjuHsp40-125	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9352	0,3515	0,071223051	37,96307692
ZjuHsp40-126	scaffold	GSMUA_AchrUn_randomT00130_00	chrUn_random	4,2566	0,1918	0,04509437	32,74307692
ZjuHsp40-127	scaffold	GSMUA_Achr6T31290_001	6	1,7916	0,3089	0,172415718	13,78153846
ZjuHsp40-127	scaffold	GSMUA_Achr9T10280_001	9	1,6116	0,3164	0,196326632	12,39692308
ZjuHsp40-127	scaffold	GSMUA_Achr10T08430_001	10	1,6331	0,3595	0,220133488	12,56230769
ZjuHsp40-127	scaffold	GSMUA_Achr8T02940_001	8	1,7830	0,3527	0,197812675	13,71538462
ZjuHsp40-127	scaffold	GSMUA_Achr3T24420_001	3	54,3431	0,6074	0,011177132	418,0238462
ZjuHsp40-128	scaffold	GSMUA_Achr6T31290_001	6	1,7627	0,3117	0,176830998	13,55923077
ZjuHsp40-128	scaffold	GSMUA_Achr9T10280_001	9	1,5900	0,3191	0,200691824	12,23076923
ZjuHsp40-128	scaffold	GSMUA_Achr10T08430_001	10	1,6300	0,3625	0,222392638	12,53846154
ZjuHsp40-128	scaffold	GSMUA_Achr8T02940_001	8	1,7417	0,3551	0,203881265	13,39769231
ZjuHsp40-128	scaffold	GSMUA_Achr3T24420_001	3	54,3797	0,615	0,011309367	418,3053846
ZjuHsp40-129	scaffold	GSMUA_Achr6T31290_001	6	1,7926	0,2677	0,14933616	13,78923077
ZjuHsp40-129	scaffold	GSMUA_Achr9T10280_001	9	1,6106	0,2745	0,170433379	12,38923077
ZjuHsp40-129	scaffold	GSMUA_Achr10T08430_001	10	1,5621	0,3193	0,204404328	12,01615385
ZjuHsp40-129	scaffold	GSMUA_Achr8T02940_001	8	1,7335	0,2922	0,168560715	13,33461538
ZjuHsp40-129	scaffold	GSMUA_Achr3T24420_001	3	52,9565	0,5960	0,01125452	407,3576923
ZjuHsp40-131	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9352	0,3515	0,071223051	37,96307692
ZjuHsp40-132	scaffold	GSMUA_Achr6T31290_001	6	1,7710	0,2699	0,152399774	13,62307692
ZjuHsp40-132	scaffold	GSMUA_Achr9T10280_001	9	1,5959	0,2766	0,17331913	12,27615385
ZjuHsp40-132	scaffold	GSMUA_Achr10T08430_001	10	1,5608	0,3217	0,20611225	12,00615385
ZjuHsp40-132	scaffold	GSMUA_Achr8T02940_001	8	1,7005	0,2942	0,173007939	13,08076923
ZjuHsp40-132	scaffold	GSMUA_Achr3T24420_001	3	52,9777	0,6020	0,011363272	407,5207692
ZjuHsp40-133	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9357	0,3515	0,071215836	37,96692308

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-134	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9357	0,3515	0,071215836	37,96692308
ZjuHsp40-135	scaffold	GSMUA_Achr6T31290_001	6	1,7710	0,2699	0,152399774	13,62307692
ZjuHsp40-135	scaffold	GSMUA_Achr9T10280_001	9	1,5959	0,2766	0,17331913	12,27615385
ZjuHsp40-135	scaffold	GSMUA_Achr10T08430_001	10	1,5608	0,3217	0,20611225	12,00615385
ZjuHsp40-135	scaffold	GSMUA_Achr8T02940_001	8	1,7005	0,2942	0,173007939	13,08076923
ZjuHsp40-135	scaffold	GSMUA_Achr3T24420_001	3	52,9780	0,602	0,011363207	407,5230769
ZjuHsp40-137	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9355	0,3515	0,071218722	37,96538462
ZjuHsp40-138	scaffold	GSMUA_AchrUn_randomT23170_001	chrUn_random	53,0646	1,1669	0,021990178	408,1892308
ZjuHsp40-138	scaffold	GSMUA_AchrUn_randomT00170_001	chrUn_random	52,4935	1,1389	0,02169602	403,7961538
ZjuHsp40-140	scaffold	GSMUA_Achr4T31390_001	4	3,3374	0,1089	0,032630191	25,67230769
ZjuHsp40-140	scaffold	GSMUA_Achr4T22790_001	4	3,1651	0,1171	0,036997251	24,34692308
ZjuHsp40-140	scaffold	GSMUA_Achr9T25940_001	9	2,5276	0,1189	0,047040671	19,44307692
ZjuHsp40-140	scaffold	GSMUA_Achr6T29960_001	6	2,9990	0,1182	0,039413138	23,06923077
ZjuHsp40-140	scaffold	GSMUA_Achr7T01290_001	7	2,9992	0,1322	0,044078421	23,07076923
ZjuHsp40-140	scaffold	GSMUA_Achr8T11020_001	6	3,5865	0,2152	0,06002788	27,58846154
ZjuHsp40-140	scaffold	GSMUA_Achr11T04610_001	11	2,0076	0,2169	0,10803945	15,44307692
ZjuHsp40-142	scaffold	GSMUA_AchrUn_randomT00130_001	chrUn_random	4,9352	0,3515	0,071223051	37,96307692
ZjuHsp40-143	scaffold	GSMUA_Achr10T25050_001	10	5,0751	0,1857	0,036590412	39,03923077
ZjuHsp40-144	scaffold	GSMUA_Achr6T29190_001	6	25,6202	0,3077	0,012010055	19,44307692
ZjuHsp40-145	scaffold	GSMUA_Achr2T07250_001	2	3,4598	0,0918	0,026533326	26,61384615
ZjuHsp40-149	scaffold	GSMUA_Achr2T07250_001	2	3,5308	0,0919	0,026028096	27,16
ZjuHsp40-150	scaffold	GSMUA_Achr4T05630_001	4	4,5694	0,3441	0,075305292	35,14923077
ZjuHsp40-151	scaffold	GSMUA_Achr9T05590_001	9	3,6369	0,1874	0,0515274	27,97615385
ZjuHsp40-151	scaffold	GSMUA_Achr6T31800_001	6	2,0395	0,2170	0,106398627	15,68846154
ZjuHsp40-152	scaffold	GSMUA_Achr9T05590_001	9	3,6369	0,1874	0,0515274	27,97615385
ZjuHsp40-152	scaffold	GSMUA_Achr6T31800_001	6	2,0395	0,2170	0,106398627	15,68846154
ZjuHsp40-153	scaffold	GSMUA_Achr3T24420_001	3	1,9447	0,3784	0,194580141	14,95923077
ZjuHsp40-153	scaffold	GSMUA_Achr10T08430_001	10	54,0361	0,5803	0,010739117	415,6623077
ZjuHsp40-153	scaffold	GSMUA_Achr9T10280_001	9	9,2843	0,6041	0,065066833	71,41769231
ZjuHsp40-153	scaffold	GSMUA_Achr8T02940_001	8	53,8448	0,5594	0,010389118	414,1907692
ZjuHsp40-153	scaffold	GSMUA_Achr6T31290_001	6	8,1808	0,6137	0,075017113	62,92923077
ZjuHsp40-154	scaffold	GSMUA_Achr3T24420_001	3	1,9447	0,3784	0,194580141	14,95923077
ZjuHsp40-154	scaffold	GSMUA_Achr10T08430_001	10	54,0361	0,5803	0,010739117	415,6623077
ZjuHsp40-154	scaffold	GSMUA_Achr9T10280_001	9	9,2843	0,6041	0,065066833	71,41769231
ZjuHsp40-154	scaffold	GSMUA_Achr8T02940_001	8	53,8448	0,5594	0,010389118	414,1907692
ZjuHsp40-154	scaffold	GSMUA_Achr6T31290_001	6	8,1808	0,6137	0,075017113	62,92923077
ZjuHsp40-155	scaffold	GSMUA_Achr3T24420_001	3	1,9447	0,3784	0,194580141	14,95923077
ZjuHsp40-155	scaffold	GSMUA_Achr10T08430_001	10	54,0361	0,5803	0,010739117	415,6623077
ZjuHsp40-155	scaffold	GSMUA_Achr9T10280_001	9	9,2843	0,6041	0,065066833	71,41769231
ZjuHsp40-155	scaffold	GSMUA_Achr8T02940_001	8	53,8448	0,5594	0,010389118	414,1907692
ZjuHsp40-155	scaffold	GSMUA_Achr6T31290_001	6	8,1808	0,6137	0,075017113	62,92923077
ZjuHsp40-156	scaffold	GSMUA_Achr9T29030_001	9	15,3890	0,4016	0,026096562	118,3769231
ZjuHsp40-156	scaffold	GSMUA_Achr11T06760_001	11	53,2054	0,5350	0,01005537	409,2723077
ZjuHsp40-156	scaffold	GSMUA_Achr3T00920_001	3	12,9197	0,5555	0,01044067	409,2723077
ZjuHsp40-156	scaffold	GSMUA_Achr4T20410_001	4	7,2513	0,5623	0,077544716	55,77923077
ZjuHsp40-156	scaffold	GSMUA_Achr1T15780_001	1	54,7402	0,5700	0,010412823	421,0784615
ZjuHsp40-157	scaffold	GSMUA_Achr11T17880_001	11	1,6980	0,1276	0,075147232	13,06153846
ZjuHsp40-158	scaffold	GSMUA_Achr11T17880_001	11	1,7128	0,1157	0,06755021	13,17538462
ZjuHsp40-163	scaffold	GSMUA_Achr4T22790_001	4	4,7376	0,0556	0,0117359	36,44307692
ZjuHsp40-163	scaffold	GSMUA_Achr7T01290_001	7	1,9857	0,0634	0,031928287	15,27461538
ZjuHsp40-163	scaffold	GSMUA_Achr6T29960_001	6	1,4134	0,0658	0,046554408	10,87230769
ZjuHsp40-163	scaffold	GSMUA_Achr9T25940_001	9	2,0550	0,0616	0,029975669	15,80769231
ZjuHsp40-163	scaffold	GSMUA_Achr4T31390_001	4	5,8793	0,0609	0,010358376	45,22538462
ZjuHsp40-165	scaffold	GSMUA_Achr1T11800_001	1	3,5323	0,2575	0,072898678	27,17153846
ZjuHsp40-165	scaffold	GSMUA_Achr4T00770_001	4	7,8178	0,3905	0,049950114	60,13692308
ZjuHsp40-166	scaffold	GSMUA_Achr1T11800_001	1	3,5323	0,2575	0,072898678	27,17153846
ZjuHsp40-166	scaffold	GSMUA_Achr4T00770_001	4	7,8178	0,3905	0,049950114	60,13692308
ZjuHsp40-167	scaffold	GSMUA_Achr1T11800_001	1	3,5323	0,2575	0,072898678	27,17153846
ZjuHsp40-167	scaffold	GSMUA_Achr4T00770_001	4	7,8178	0,3905	0,049950114	60,13692308
ZjuHsp40-168	scaffold	GSMUA_Achr1T11800_001	1	3,5323	0,2575	0,072898678	27,17153846
ZjuHsp40-168	scaffold	GSMUA_Achr4T00770_001	4	7,8178	0,3905	0,049950114	60,13692308
ZjuHsp40-169	scaffold	GSMUA_Achr7T06300_001	7	2,2993	0,1984	0,086287131	17,68692308
ZjuHsp40-170	scaffold	GSMUA_Achr9T25930_001	9	3,4846	0,3820	0,109625208	26,80461538
ZjuHsp40-173	scaffold	GSMUA_Achr6T30770_001	6	2,7784	0,3625	0,130470775	21,37230769
ZjuHsp40-174	scaffold	GSMUA_Achr6T30770_001	6	2,7501	0,3758	0,136649576	21,15461538
		Mean		17,9991	0,437937	0,0587296	66,9201049

Z. jujuba – P. persica

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-01	1	Prupe.2G007700.1	2	0,6734	0,1233	0,183100683	5,18
ZjuHsp40-01	1	Prupe.1G525700.1	1	54,2923	0,6303	0,011609381	417,6330769
ZjuHsp40-01	1	Prupe.3G078100.1	3	53,4408	0,7173	0,013422329	411,0830769

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-01	1	Prupe.3G078100.2	3	53,4396	0,7172	0,013420759	411,0738462
ZjuHsp40-01	1	Prupe.3G088900.4	3	54,1342	0,8119	0,014997913	416,4169231
ZjuHsp40-01	1	Prupe.3G088900.2	3	53,1828	0,8537	0,016052182	409,0984615
ZjuHsp40-01	1	Prupe.3G088900.1	3	53,0913	0,847	0,01595365	408,3946154
ZjuHsp40-02	1	Prupe.4G085400.1	4	1,126	0,2442	0,21687389	8,661538462
ZjuHsp40-02	1	Prupe.4G085400.2	4	1,1311	0,2459	0,217398992	8,700769231
ZjuHsp40-03	1	Prupe.4G085400.1	4	1,0646	0,2198	0,206462521	8,189230769
ZjuHsp40-03	1	Prupe.4G085400.2	4	1,0688	0,2212	0,206961078	8,221538462
ZjuHsp40-06	1	Prupe.4G026200.1	4	0,5609	0,1153	0,205562489	4,314615385
ZjuHsp40-06	1	Prupe.4G026200.3	4	0,551	0,1345	0,244101633	4,238461538
ZjuHsp40-06	1	Prupe.4G026200.2	4	0,8317	0,2339	0,281231213	6,397692308
ZjuHsp40-08	1	Prupe.3G035500.1	3	1,0383	0,1944	0,187229125	7,986923077
ZjuHsp40-09	1	Prupe.3G035500.1	3	1,0383	0,1944	0,187229125	7,986923077
ZjuHsp40-10	1	Prupe.3G035500.1	3	1,0629	0,1966	0,18496566	8,176153846
ZjuHsp40-11	1	Prupe.3G035500.1	3	1,0383	0,1944	0,187229125	7,986923077
ZjuHsp40-12	1	Prupe.3G035500.1	3	1,0383	0,1944	0,187229125	7,986923077
ZjuHsp40-13	1	Prupe.3G035500.1	3	1,0638	0,2476	0,232750517	8,183076923
ZjuHsp40-14	1	Prupe.3G035500.1	3	1,0629	0,1929	0,181484618	8,176153846
ZjuHsp40-15	1	Prupe.3G035500.1	3	1,0638	0,2476	0,232750517	8,183076923
ZjuHsp40-16	1	Prupe.3G035500.1	3	0,775	0,1619	0,208903226	5,961538462
ZjuHsp40-17	1	Prupe.1G466900.1	1	0,7976	0,0822	0,103059178	6,135384615
ZjuHsp40-17	1	Prupe.1G466900.2	1	0,7986	0,0922	0,115452041	6,143076923
ZjuHsp40-17	1	Prupe.6G277900.1	6	6,3027	0,3239	0,051390674	48,48230769
ZjuHsp40-17	1	Prupe.5G184900.1	5	4,8009	0,3144	0,065487721	36,93
ZjuHsp40-17	1	Prupe.1G265500.2	1	12,9422	0,3079	0,023790391	99,55538462
ZjuHsp40-17	1	Prupe.1G265500.1	1	12,9718	0,3079	0,023736104	99,78307692
ZjuHsp40-17	1	Prupe.6G278000.1	6	3,7449	0,4564	0,121872413	28,80692308
ZjuHsp40-17	1	Prupe.6G278100.1	6	3,8585	0,4811	0,124685759	29,68076923
ZjuHsp40-17	1	Prupe.1G493700.1	1	3,4525	0,6881	0,199304852	26,55769231
ZjuHsp40-18	1	Prupe.3G100300.1	3	0,757	0,1366	0,180449141	5,823076923
ZjuHsp40-19	1	Prupe.3G088900.3	3	0,6618	0,1029	0,155485041	5,090769231
ZjuHsp40-19	1	Prupe.3G088900.1	3	0,6579	0,1028	0,15625475	5,060769231
ZjuHsp40-19	1	Prupe.3G088900.2	3	0,6851	0,0984	0,143628667	5,27
ZjuHsp40-19	1	Prupe.3G088900.4	3	0,6595	0,1014	0,153752843	5,073076923
ZjuHsp40-19	1	Prupe.5G235700.1	5	21,5583	0,5178	0,024018591	165,8330769
ZjuHsp40-19	1	Prupe.5G235700.6	5	19,6458	0,5328	0,027120301	151,1215385
ZjuHsp40-19	1	Prupe.3G078100.1	3	52,9307	0,4576	0,008645266	407,1592308
ZjuHsp40-19	1	Prupe.3G078100.2	3	52,931	0,4577	0,008647107	407,1615385
ZjuHsp40-19	1	Prupe.5G235700.3	5	16,3592	0,5087	0,031095653	125,84
ZjuHsp40-19	1	Prupe.5G235700.2	5	16,4017	0,5087	0,031015078	126,1669231
ZjuHsp40-19	1	Prupe.5G235700.4	5	16,2331	0,5288	0,032575417	124,87
ZjuHsp40-19	1	Prupe.5G235700.5	5	16,2388	0,5288	0,032563983	124,9138462
ZjuHsp40-20	2	Prupe.6G071200.1	6	0,8379	0,1566	0,186895811	6,445384615
ZjuHsp40-20	2	Prupe.6G071200.2	6	0,8746	0,1649	0,188543334	6,727692308
ZjuHsp40-21	2	Prupe.6G071200.2	6	0,8689	0,1612	0,185521924	6,683846154
ZjuHsp40-21	2	Prupe.6G071200.1	6	0,8836	0,1639	0,185491172	6,796923077
ZjuHsp40-21	2	Prupe.2G007700.1	2	18,8028	0,5742	0,030538005	144,6369231
ZjuHsp40-22	2	Prupe.1G525700.1	1	0,7998	0,2011	0,251437859	6,152307692
ZjuHsp40-22	2	Prupe.3G078100.1	3	53,2782	0,7415	0,013917512	409,8323077
ZjuHsp40-22	2	Prupe.3G078100.2	3	53,2793	0,7415	0,013917225	409,8407692
ZjuHsp40-22	2	Prupe.3G088900.4	3	55,9246	0,7414	0,013257136	430,1892308
ZjuHsp40-22	2	Prupe.3G088900.2	3	56,6111	0,7477	0,013207657	435,47
ZjuHsp40-22	2	Prupe.3G088900.3	3	56,8775	0,7377	0,012969979	437,5192308
ZjuHsp40-22	2	Prupe.5G235700.1	5	4,5336	0,7743	0,170791424	34,87384615
ZjuHsp40-22	2	Prupe.5G235700.6	5	4,3288	0,7752	0,179079653	33,29846154
ZjuHsp40-23	2	Prupe.1G528300.1	1	0,8633	0,0674	0,078072512	6,640769231
ZjuHsp40-24	2	Prupe.1G143400.3	1	0,9270	0,3133	0,337971953	7,130769231
ZjuHsp40-24	2	Prupe.1G143400.1	1	0,9270	0,3133	0,337971953	7,130769231
ZjuHsp40-24	2	Prupe.1G143400.4	1	0,9786	0,3554	0,363171878	7,527692308
ZjuHsp40-24	2	Prupe.1G143400.2	1	0,9786	0,3554	0,363171878	7,527692308
ZjuHsp40-24	2	Prupe.6G333800.1	6	3,0373	0,5198	0,17113884	23,36384615
ZjuHsp40-25	2	Prupe.1G531000.1	1	1,5530	0,2649	0,170573084	11,94615385
ZjuHsp40-26	2	Prupe.6G325800.1	6	0,5699	1,1018	1,933321635	4,383846154
ZjuHsp40-27	2	Prupe.6G333800.1	6	0,9120	0,3239	0,355153509	7,015384615
ZjuHsp40-27	2	Prupe.1G143400.3	1	6,0627	0,6599	0,108845894	46,63615385
ZjuHsp40-27	2	Prupe.1G143400.1	1	2,7437	0,5198	0,1894522	21,10538462
ZjuHsp40-27	2	Prupe.1G143400.4	1	3,0596	0,5789	0,18920774	23,53538462
ZjuHsp40-27	2	Prupe.1G143400.1	1	2,7437	0,5198	0,1894522	21,10538462
ZjuHsp40-28	2	Prupe.6G333800.1	6	0,9120	0,3239	0,355153509	7,015384615
ZjuHsp40-28	2	Prupe.1G143400.3	1	2,7437	0,5198	0,1894522	21,10538462

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-28	2	Prupe.1G143400.1	1	2,7437	0,5198	0,1894522	21,10538462
ZjuHsp40-28	2	Prupe.1G143400.4	1	3,0596	0,5786	0,189109688	23,53538462
ZjuHsp40-28	2	Prupe.1G143400.2	1	3,0596	0,5786	0,189109688	23,53538462
ZjuHsp40-29	2	Prupe.7G052600.1	7	2,5779	0,5183	0,201055122	19,83
ZjuHsp40-29	2	Prupe.7G052600.3	7	2,5779	0,5183	0,201055122	19,83
ZjuHsp40-29	2	Prupe.4G255700.2	4	0,8771	0,2489	0,28377608	6,746923077
ZjuHsp40-29	2	Prupe.4G255700.1	4	0,8771	0,2489	0,28377608	6,746923077
ZjuHsp40-29	2	Prupe.4G255700.3	4	0,8933	0,2465	0,275943132	6,871538462
ZjuHsp40-29	2	Prupe.4G255700.4	4	0,8933	0,2465	0,275943132	6,871538462
ZjuHsp40-29	2	Prupe.7G052600.2	7	2,6213	0,5223	0,199252279	20,16384615
ZjuHsp40-29	2	Prupe.7G052600.4	7	3,0738	0,7124	0,231765242	23,64461538
ZjuHsp40-30	2	Prupe.4G255700.2	4	0,8467	0,2333	0,275540333	6,513076923
ZjuHsp40-30	2	Prupe.4G255700.1	4	0,8467	0,2333	0,275540333	6,513076923
ZjuHsp40-30	2	Prupe.4G255700.3	4	0,8616	0,2307	0,26775766	6,627692308
ZjuHsp40-30	2	Prupe.4G255700.4	4	0,8616	0,2307	0,26775766	6,627692308
ZjuHsp40-30	2	Prupe.7G052600.1	7	2,4789	0,4856	0,19589334	19,06846154
ZjuHsp40-30	2	Prupe.7G052600.3	7	2,4789	0,4856	0,19589334	19,06846154
ZjuHsp40-30	2	Prupe.7G052600.2	7	2,5227	0,4883	0,193562453	19,40538462
ZjuHsp40-30	2	Prupe.7G052600.4	7	2,9260	0,6522	0,222898154	22,50769231
ZjuHsp40-31	3	Prupe.2G072900.5	2	0,8232	0,0253	0,030733722	6,332307692
ZjuHsp40-31	3	Prupe.2G072900.1	2	0,8232	0,0253	0,030733722	6,332307692
ZjuHsp40-31	3	Prupe.2G072900.4	2	0,8285	0,0254	0,030657815	6,373076923
ZjuHsp40-31	3	Prupe.2G072900.3	2	0,8419	0,0246	0,029219622	6,476153846
ZjuHsp40-31	3	Prupe.6G146900.2	6	2,6496	0,0679	0,02562651	20,38153846
ZjuHsp40-31	3	Prupe.6G146900.1	6	2,6790	0,0690	0,025755879	20,60769231
ZjuHsp40-31	3	Prupe.2G123700.2	2	21,1248	0,1897	0,008979967	162,4984615
ZjuHsp40-31	3	Prupe.2G123700.1	2	21,1248	0,1887	0,008932629	162,4984615
ZjuHsp40-31	3	Prupe.2G123700.3	2	21,6233	0,1897	0,008772944	166,3330769
ZjuHsp40-31	3	Prupe.2G072900.2	2	0,9044	0,0819	0,090557276	6,956923077
ZjuHsp40-31	3	Prupe.3G066800.1	3	0,9156	0,1398	0,152686763	7,043076923
ZjuHsp40-32	3	Prupe.2G217700.1	2	0,5948	0,0424	0,071284465	4,575384615
ZjuHsp40-32	3	Prupe.6G240700.1	6	3,0505	0,1341	0,043960007	23,46538462
ZjuHsp40-33	3	Prupe.2G308400.3	2	0,8970	0,2502	0,278929766	6,9
ZjuHsp40-33	3	Prupe.2G308400.1	2	0,8970	0,2502	0,278929766	6,9
ZjuHsp40-33	3	Prupe.2G308400.2	2	0,8970	0,2502	0,278929766	6,9
ZjuHsp40-33	3	Prupe.1G224400.1	1	2,9906	0,3456	0,115562095	23,00461538
ZjuHsp40-33	3	Prupe.5G150300.1	5	5,0803	0,4428	0,087160207	39,07923077
ZjuHsp40-33	3	Prupe.3G200300.1	3	6,5931	0,5293	0,0802809	50,71615385
ZjuHsp40-33	3	Prupe.3G200300.2	3	6,5929	0,5293	0,080283335	50,71461538
ZjuHsp40-33	3	Prupe.8G141600.2	8	58,4624	0,7311	0,012505474	449,7107692
ZjuHsp40-33	3	Prupe.8G141600.1	8	58,4611	0,7311	0,012505752	449,7007692
ZjuHsp40-33	3	Prupe.8G141600.5	8	58,4630	0,7310	0,012503635	449,7153846
ZjuHsp40-33	3	Prupe.8G141600.4	8	58,4572	0,7311	0,012506586	449,6707692
ZjuHsp40-33	3	Prupe.8G141600.3	8	58,4609	0,7310	0,012504084	449,6992308
ZjuHsp40-33	3	Prupe.8G141600.6	8	58,4557	0,7311	0,012506907	449,6592308
ZjuHsp40-34	3	Prupe.2G328700.1	2	1,0913	0,2189	0,200586457	8,394615385
ZjuHsp40-34	3	Prupe.2G328700.2	2	1,0913	0,2189	0,200586457	8,394615385
ZjuHsp40-35	3	Prupe.2G328700.1	2	0,8808	0,2046	0,232288828	6,775384615
ZjuHsp40-35	3	Prupe.2G328700.2	2	0,8808	0,2046	0,232288828	6,775384615
ZjuHsp40-36	3	Prupe.2G328700.1	2	0,7728	0,1482	0,191770186	5,944615385
ZjuHsp40-36	3	Prupe.2G328700.2	2	0,7728	0,1482	0,191770186	5,944615385
ZjuHsp40-38	3	Prupe.2G328700.1	2	1,0953	0,2233	0,203871086	8,425384615
ZjuHsp40-38	3	Prupe.2G328700.2	2	1,0953	0,2233	0,203871086	8,425384615
ZjuHsp40-39	3	Prupe.2G328700.1	2	0,8845	0,2089	0,236178632	6,803846154
ZjuHsp40-39	3	Prupe.2G328700.2	2	0,8845	0,2089	0,236178632	6,803846154
ZjuHsp40-41	4	Prupe.3G289400.1	3	0,8968	0,2449	0,27308207	6,898461538
ZjuHsp40-41	4	Prupe.3G289400.2	3	1,1870	0,2558	0,215501264	9,130769231
ZjuHsp40-41	4	Prupe.3G207200.1	3	1,1095	0,2846	0,256511942	8,534615385
ZjuHsp40-42	4	Prupe.5G184900.1	5	4,3991	0,2727	0,061989952	33,83923077
ZjuHsp40-42	4	Prupe.4G052500.1	4	13,7621	0,5400	0,039238198	105,8623077
ZjuHsp40-43	4	Prupe.7G066900.3	7	0,6769	0,0630	0,093071355	5,206923077
ZjuHsp40-43	4	Prupe.7G066900.1	7	0,6769	0,0630	0,093071355	5,206923077
ZjuHsp40-43	4	Prupe.7G066900.2	7	0,7815	0,1000	0,127959053	6,011538462
ZjuHsp40-43	4	Prupe.8G013200.2	8	55,2811	0,3482	0,006298717	425,2392308
ZjuHsp40-43	4	Prupe.8G013200.1	8	55,3431	0,3464	0,006259136	425,7161538
ZjuHsp40-43	4	Prupe.8G091300.2	8	10,7053	0,3234	0,030209336	82,34846154
ZjuHsp40-43	4	Prupe.8G091300.4	8	10,6990	0,3234	0,030227124	82,3
ZjuHsp40-43	4	Prupe.8G091300.1	8	10,7084	0,3234	0,030200059	82,37230769
ZjuHsp40-43	4	Prupe.8G091300.3	8	15,3299	0,3268	0,021317817	117,9223077

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-43	4	Prupe.8G091400.1	8	6,6587	0,6138	0,092180155	51,22076923
ZjuHsp40-43	4	Prupe.8G091400.2	8	6,6591	0,6138	0,092174618	51,22384615
ZjuHsp40-44	4	Prupe.5G150300.1	5	0,7971	0,2883	0,361686112	6,131538462
ZjuHsp40-44	4	Prupe.1G224400.1	1	2,2409	0,3796	0,169396225	17,23769231
ZjuHsp40-44	5	Prupe.3G200300.1	3	30,8577	0,5142	0,016663588	237,3669231
ZjuHsp40-44	5	Prupe.3G200300.2	3	31,474	0,5142	0,016337294	242,1076923
ZjuHsp40-44	5	Prupe.5G150300.1	5	0,7971	0,2883	0,361686112	6,131538462
ZjuHsp40-44	5	Prupe.1G224400.1	1	2,2409	0,3796	0,169396225	17,23769231
ZjuHsp40-44	5	Prupe.2G308400.3	2	2,7909	0,4397	0,157547744	21,46846154
ZjuHsp40-44	5	Prupe.2G308400.1	2	2,7909	0,4397	0,157547744	21,46846154
ZjuHsp40-44	5	Prupe.2G308400.2	2	2,7909	0,4397	0,157547744	21,46846154
ZjuHsp40-44	5	Prupe.2G308400.2	2	2,7909	0,4397	0,157547744	21,46846154
ZjuHsp40-45	5	Prupe.5G204600.1	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-45	5	Prupe.5G204600.3	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-45	5	Prupe.5G204600.2	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-46	5	Prupe.5G204600.1	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-46	5	Prupe.5G204600.3	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-46	5	Prupe.5G204600.2	5	0,8446	0,2098	0,24840161	6,496923077
ZjuHsp40-47	5	Prupe.5G196200.1	5	0,6824	0,2105	0,308470106	5,249230769
ZjuHsp40-51	6	Prupe.1G260600.1	1	0,6996	0,096	0,137221269	5,381538462
ZjuHsp40-51	6	Prupe.1G260600.2	1	0,7219	0,1029	0,142540518	5,553076923
ZjuHsp40-51	6	Prupe.1G314100.3	1	7,2701	0,3045	0,041883881	55,92384615
ZjuHsp40-51	6	Prupe.1G314100.4	1	7,2672	0,3045	0,041900594	55,90153846
ZjuHsp40-51	6	Prupe.1G314100.4	1	7,2712	0,3045	0,041877544	55,93230769
ZjuHsp40-51	6	Prupe.1G314100.1	1	7,2714	0,3045	0,041876392	55,93384615
ZjuHsp40-51	6	Prupe.1G314100.2	1	7,0272	0,2959	0,04210781	54,05538462
ZjuHsp40-52	6	Prupe.1G260600.1	1	0,6996	0,096	0,137221269	5,381538462
ZjuHsp40-52	6	Prupe.1G260600.2	1	0,7219	0,1029	0,142540518	5,553076923
ZjuHsp40-52	6	Prupe.1G314100.3	1	7,2683	0,3045	0,041894253	55,91
ZjuHsp40-52	6	Prupe.1G314100.4	1	7,2681	0,3045	0,041895406	55,90846154
ZjuHsp40-52	6	Prupe.1G314100.1	1	7,2669	0,3045	0,041902324	55,89923077
ZjuHsp40-52	6	Prupe.1G314100.2	1	7,0251	0,2959	0,042120397	54,03923077
ZjuHsp40-53	6	Prupe.1G405600.1	1	1,1504	0,2362	0,205319889	8,849230769
ZjuHsp40-53	6	Prupe.1G405600.2	1	1,5385	0,3288	0,213714657	11,83461538
ZjuHsp40-54	6	Prupe.1G376600.2	1	1,0313	0,5412	0,524774556	7,933076923
ZjuHsp40-54	6	Prupe.1G376600.1	1	1,0264	0,5407	0,526792673	7,895384615
ZjuHsp40-54	6	Prupe.1G376600.3	1	1,1133	0,5876	0,527800234	8,563846154
ZjuHsp40-55	6	Prupe.1G376600.3	1	1,0503	0,5101	0,485670761	8,079230769
ZjuHsp40-55	6	Prupe.1G376600.1	1	0,9897	0,4773	0,482267354	7,613076923
ZjuHsp40-55	6	Prupe.1G376600.2	1	0,9944	0,4777	0,480390185	7,649230769
ZjuHsp40-55	6	Prupe.7G157600.1	7	3,3235	0,7132	0,214593049	25,56538462
ZjuHsp40-55	6	Prupe.4G277600.2	4	9,1838	0,7632	0,083102855	70,64461538
ZjuHsp40-55	6	Prupe.4G277600.1	4	11,5463	0,8340	0,072230931	88,81769231
ZjuHsp40-55	6	Prupe.1G490900.1	1	14,1235	0,8821	0,06245619	108,6423077
ZjuHsp40-56	6	Prupe.1G376600.3	1	1,0503	0,5101	0,485670761	8,079230769
ZjuHsp40-56	6	Prupe.1G376600.1	1	0,9897	0,4773	0,482267354	7,613076923
ZjuHsp40-56	6	Prupe.1G376600.2	1	0,9944	0,4777	0,480390185	7,649230769
ZjuHsp40-56	6	Prupe.7G157600.1	7	3,3235	0,7132	0,214593049	25,56538462
ZjuHsp40-56	6	Prupe.4G277600.2	4	9,1836	0,7632	0,083104665	70,64307692
ZjuHsp40-56	6	Prupe.4G277600.1	4	11,5467	0,8340	0,072228429	88,82076923
ZjuHsp40-57	6	Prupe.1G490900.1	1	14,1247	0,8821	0,062450884	108,6515385
ZjuHsp40-57	6	Prupe.1G376600.3	1	1,1088	0,5125	0,4622114	8,529230769
ZjuHsp40-57	6	Prupe.1G376600.2	1	1,0336	0,4804	0,464783282	7,950769231
ZjuHsp40-57	6	Prupe.1G376600.1	1	1,0283	0,4800	0,466789847	7,91
ZjuHsp40-57	6	Prupe.7G157600.1	7	3,1422	0,7059	0,224651518	24,17076923
ZjuHsp40-57	6	Prupe.4G277600.2	4	9,1832	0,7632	0,083108285	70,64
ZjuHsp40-57	6	Prupe.4G277600.1	4	11,7076	0,8334	0,07118453	90,05846154
ZjuHsp40-57	6	Prupe.1G490900.1	1	14,1254	0,8821	0,062447789	108,6569231
ZjuHsp40-58	6	Prupe.1G382200.1	1	0,8283	0,3856	0,465531812	6,371538462
ZjuHsp40-58	6	Prupe.1G382200.2	1	0,8301	0,3865	0,465606553	6,385384615
ZjuHsp40-59	6	Prupe.1G382200.1	1	0,8299	0,3896	0,469454151	6,383846154
ZjuHsp40-59	6	Prupe.1G382200.2	1	0,8317	0,3904	0,469400024	6,397692308
ZjuHsp40-60	6	Prupe.1G382200.1	1	0,9687	0,3824	0,394755858	7,451538462
ZjuHsp40-60	6	Prupe.1G382200.2	1	0,9687	0,3824	0,394755858	7,451538462
ZjuHsp40-62	6	Prupe.1G418000.1	1	0,6708	0,1129	0,1683065	5,16
ZjuHsp40-62	6	Prupe.1G418000.2	1	0,7089	0,1356	0,191282268	5,453076923
ZjuHsp40-63	6	Prupe.1G418000.2	1	0,6698	0,1120	0,167214094	5,152307692
ZjuHsp40-63	6	Prupe.1G418000.1	1	0,6922	0,1281	0,185062121	5,324615385
ZjuHsp40-64	6	Prupe.1G490900.1	1	0,6573	0,2455	0,373497642	5,056153846

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-64	6	Prupe.4G277600.2	4	2,3404	0,3224	0,13775423	18,00307692
ZjuHsp40-64	6	Prupe.4G277600.1	4	2,3404	0,3224	0,13775423	18,00307692
ZjuHsp40-64	6	Prupe.1G376600.1	1	14,0906	0,5309	0,037677601	108,3892308
ZjuHsp40-64	6	Prupe.1G376600.2	1	14,0219	0,5309	0,037862201	107,8607692
ZjuHsp40-64	6	Prupe.1G376600.3	1	7,6184	0,5065	0,066483776	58,60307692
ZjuHsp40-65	6	Prupe.1G493700.1	1	1,7295	0,4263	0,246487424	13,30384615
ZjuHsp40-65	6	Prupe.1G571300.1	1	55,2999	0,6795	0,012287545	425,3838462
ZjuHsp40-65	6	Prupe.1G348700.1	1	1,4538	0,3576	0,245976063	11,18307692
ZjuHsp40-67	7	Prupe.1G163300.1	1	0,8957	0,2547	0,284358602	6,89
ZjuHsp40-67	7	Prupe.1G163300.2	1	0,8957	0,2547	0,284358602	6,89
ZjuHsp40-68	7	Prupe.2G123700.2	1	0,7398	0,1166	0,157610165	5,690769231
ZjuHsp40-68	7	Prupe.2G123700.1	2	0,7398	0,1166	0,157610165	5,690769231
ZjuHsp40-68	7	Prupe.2G123700.3	2	0,7398	0,1166	0,157610165	5,690769231
ZjuHsp40-68	7	Prupe.2G072900.4	2	10,1824	0,1631	0,016017835	78,32615385
ZjuHsp40-68	7	Prupe.2G072900.3	2	11,8296	0,1565	0,013229526	90,99692308
ZjuHsp40-68	7	Prupe.2G072900.5	2	10,8960	0,1584	0,014537445	83,81538462
ZjuHsp40-68	7	Prupe.2G072900.1	2	10,9093	0,1584	0,014519722	83,91769231
ZjuHsp40-68	7	Prupe.6G146900.1	6	10,2747	0,1565	0,015231588	79,03615385
ZjuHsp40-68	7	Prupe.6G146900.2	6	10,4701	0,1519	0,01450798	80,53923077
ZjuHsp40-68	7	Prupe.2G072900.2	2	21,5770	0,2115	0,009802104	165,9769231
ZjuHsp40-68	7	Prupe.3G066800.1	3	46,3326	0,2922	0,006306575	356,4046154
ZjuHsp40-69	7	Prupe.2G123700.2	2	0,7398	0,1166	0,157610165	5,690769231
ZjuHsp40-69	7	Prupe.2G123700.1	2	0,7397	0,1166	0,157631472	5,69
ZjuHsp40-69	7	Prupe.2G123700.3	2	0,7397	0,1166	0,157631472	5,69
ZjuHsp40-69	7	Prupe.2G072900.3	2	11,8041	0,1564	0,013249634	90,80076923
ZjuHsp40-69	7	Prupe.2G072900.4	2	10,1903	0,1631	0,016005417	78,38692308
ZjuHsp40-69	7	Prupe.2G072900.5	2	10,9106	0,1584	0,014517992	83,92769231
ZjuHsp40-69	7	Prupe.2G072900.1	2	10,9040	0,1584	0,014526779	83,87692308
ZjuHsp40-69	7	Prupe.6G146900.1	6	10,3276	0,1565	0,015153569	79,44307692
ZjuHsp40-69	7	Prupe.6G146900.2	6	10,5036	0,1519	0,014461708	80,79692308
ZjuHsp40-69	7	Prupe.2G072900.2	2	21,9452	0,2115	0,009637643	168,8092308
ZjuHsp40-69	7	Prupe.3G066800.1	3	44,3854	0,2923	0,006585499	341,4261538
ZjuHsp40-70	7	Prupe.2G123700.2	2	0,7398	0,1166	0,157610165	5,690769231
ZjuHsp40-70	7	Prupe.2G123700.1	2	0,7397	0,1166	0,157631472	5,69
ZjuHsp40-70	7	Prupe.2G123700.3	2	0,7397	0,1166	0,157631472	5,69
ZjuHsp40-70	7	Prupe.2G072900.4	2	10,1321	0,1631	0,016097354	77,93923077
ZjuHsp40-70	7	Prupe.2G072900.3	2	11,9027	0,1564	0,013139876	91,55923077
ZjuHsp40-70	7	Prupe.2G072900.5	2	10,9394	0,1584	0,01447977	84,14923077
ZjuHsp40-70	7	Prupe.2G072900.1	2	10,8801	0,1584	0,01455869	83,69307692
ZjuHsp40-70	7	Prupe.6G146900.1	6	10,2694	0,1565	0,015239449	78,99538462
ZjuHsp40-70	7	Prupe.6G146900.2	6	10,4807	0,1519	0,014493307	80,62076923
ZjuHsp40-70	7	Prupe.2G072900.2	2	21,4060	0,2115	0,009880407	164,6615385
ZjuHsp40-70	7	Prupe.3G066800.1	3	42,3029	0,2922	0,006907328	325,4069231
ZjuHsp40-71	7	Prupe.1G508000.1	1	1,0074	0,1025	0,101747072	7,749230769
ZjuHsp40-72	7	Prupe.8G013200.2	8	0,6843	0,0665	0,0971796	5,263846154
ZjuHsp40-72	7	Prupe.8G013200.1	8	0,6843	0,0665	0,0971796	5,263846154
ZjuHsp40-72	7	Prupe.7G066900.2	7	28,7077	0,3452	0,012024648	220,8284615
ZjuHsp40-72	7	Prupe.7G066900.1	7	43,8919	0,3421	0,007794149	337,63
ZjuHsp40-72	7	Prupe.7G066900.3	7	39,6891	0,3540	0,008919325	305,3007692
ZjuHsp40-72	7	Prupe.8G091300.2	8	40,5847	0,3549	0,008744675	312,19
ZjuHsp40-72	7	Prupe.8G091300.4	8	41,8043	0,3548	0,008487165	321,5715385
ZjuHsp40-72	7	Prupe.8G091300.1	8	41,3039	0,3533	0,008553672	317,7223077
ZjuHsp40-72	7	Prupe.8G091300.3	8	58,0956	0,3427	0,005898898	446,8892308
ZjuHsp40-72	7	Prupe.8G091400.1	8	9,9261	0,5526	0,055671412	76,35461538
ZjuHsp40-72	7	Prupe.8G091400.2	8	9,9261	0,5526	0,055671412	76,35461538
ZjuHsp40-73	8	Prupe.7G168700.1	7	9,9261	0,5526	0,390008638	5,343076923
ZjuHsp40-74	8	Prupe.7G157600.1	7	0,6946	0,2709	0,390008638	5,343076923
ZjuHsp40-74	8	Prupe.1G376600.3	1	4,3739	0,7413	0,169482613	33,64538462
ZjuHsp40-74	8	Prupe.1G376600.2	1	3,9173	0,7381	0,188420596	30,13307692
ZjuHsp40-74	8	Prupe.1G376600.1	1	4,0598	0,7384	0,181880881	31,22923077
ZjuHsp40-74	8	Prupe.4G277600.2	4	5,6175	0,7189	0,127975078	43,21153846
ZjuHsp40-74	8	Prupe.4G277600.1	4	12,6261	0,8221	0,065111159	97,12384615
ZjuHsp40-74	8	Prupe.1G490900.1	1	62,0920	0,8332	0,013418798	477,6307692
ZjuHsp40-75	8	Prupe.6G224500.1	6	0,7558	0,1867	0,247023022	5,813846154
ZjuHsp40-75	8	Prupe.6G224500.13	6	0,7558	0,1867	0,247023022	5,813846154
ZjuHsp40-75	8	Prupe.6G224500.6	6	0,7804	0,1902	0,243721169	6,003076923
ZjuHsp40-75	8	Prupe.6G224500.5	6	0,7722	0,1956	0,253302253	5,94
ZjuHsp40-75	8	Prupe.6G224500.15	6	0,7902	0,1866	0,236142749	6,078461538
ZjuHsp40-75	8	Prupe.6G224500.16	6	0,7236	0,1651	0,228164732	5,566153846

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-75	8	Prupe.6G224500.9	6	0,7236	0,1651	0,228164732	5,566153846
ZjuHsp40-75	8	Prupe.6G224500.4	6	0,8442	0,1964	0,232646292	6,493846154
ZjuHsp40-75	8	Prupe.6G224500.10	6	0,8469	0,1983	0,234148069	6,514615385
ZjuHsp40-75	8	Prupe.6G224500.18	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-75	8	Prupe.6G224500.12	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-75	8	Prupe.6G224500.2	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-75	8	Prupe.6G224500.14	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-75	8	Prupe.6G224500.17	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-75	8	Prupe.6G224500.7	6	0,7470	0,1752	0,234538153	5,746153846
ZjuHsp40-75	8	Prupe.6G224500.11	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-75	8	Prupe.6G224500.3	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-75	8	Prupe.6G224500.8	6	0,8642	0,1877	0,217195094	6,647692308
ZjuHsp40-76	8	Prupe.6G224500.13	6	0,7465	0,1870	0,250502344	5,742307692
ZjuHsp40-76	8	Prupe.6G224500.1	6	0,7465	0,1870	0,250502344	5,742307692
ZjuHsp40-76	8	Prupe.6G224500.6	6	0,7804	0,1902	0,243721169	6,003076923
ZjuHsp40-76	8	Prupe.6G224500.15	6	0,7902	0,1866	0,236142749	6,078461538
ZjuHsp40-76	8	Prupe.6G224500.5	6	0,7625	0,196	0,25704918	5,865384615
ZjuHsp40-76	8	Prupe.6G224500.4	6	0,8442	0,1964	0,232646292	6,493846154
ZjuHsp40-76	8	Prupe.6G224500.18	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-76	8	Prupe.6G224500.16	6	0,7107	0,1655	0,232869002	5,466923077
ZjuHsp40-76	8	Prupe.6G224500.12	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-76	8	Prupe.6G224500.9	6	0,7107	0,1655	0,232869002	5,466923077
ZjuHsp40-76	8	Prupe.6G224500.10	6	0,8469	0,1983	0,234148069	6,514615385
ZjuHsp40-76	8	Prupe.6G224500.2	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-76	8	Prupe.6G224500.14	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-76	8	Prupe.6G224500.17	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-76	8	Prupe.6G224500.7	6	0,7332	0,1757	0,239634479	5,64
ZjuHsp40-76	8	Prupe.6G224500.11	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-76	8	Prupe.6G224500.3	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-76	8	Prupe.6G224500.8	6	0,8642	0,1877	0,217195094	6,647692308
ZjuHsp40-77	8	Prupe.3G078100.1	3	0,6567	0,0677	0,103091214	5,051538462
ZjuHsp40-77	8	Prupe.3G078100.2	3	0,6567	0,0677	0,103091214	5,051538462
ZjuHsp40-77	8	Prupe.3G088900.2	3	23,4449	0,4440	0,018938021	180,3453846
ZjuHsp40-77	8	Prupe.3G088900.4	3	19,6346	0,4404	0,022429792	151,0353846
ZjuHsp40-77	8	Prupe.3G088900.1	3	23,626	0,444	0,018792855	181,7384615
ZjuHsp40-77	8	Prupe.3G088900.3	3	23,3977	0,4440	0,018976224	179,9823077
ZjuHsp40-77	8	Prupe.5G235700.1	5	18,9341	0,5802	0,030643125	145,6469231
ZjuHsp40-77	8	Prupe.5G235700.6	5	18,7724	0,5802	0,030907076	144,4030769
ZjuHsp40-77	8	Prupe.2G007700.1	2	15,2011	0,7113	0,046792666	116,9315385
ZjuHsp40-77	8	Prupe.1G525700.1	1	52,8257	0,7145	0,013525613	406,3515385
ZjuHsp40-77	8	Prupe.5G235700.4	5	37,6533	0,5984	0,015892365	289,6407692
ZjuHsp40-77	8	Prupe.5G235700.5	5	36,6975	0,5984	0,016306288	282,2884615
ZjuHsp40-77	8	Prupe.5G235700.3	5	36,7463	0,5984	0,016284633	282,6638462
ZjuHsp40-77	8	Prupe.5G235700.2	5	37,4913	0,5984	0,015961036	288,3946154
ZjuHsp40-78	8	Prupe.4G277600.1	4	0,7135	0,1408	0,197337071	5,488461538
ZjuHsp40-78	8	Prupe.4G277600.2	4	0,7548	0,1339	0,177397986	5,806153846
ZjuHsp40-78	8	Prupe.1G490900.1	1	2,8557	0,5267	0,184438141	21,96692308
ZjuHsp40-78	8	Prupe.1G376600.3	1	11,4110	0,9276	0,081289983	87,77692308
ZjuHsp40-78	8	Prupe.1G376600.1	1	11,3897	0,9303	0,081679061	87,61307692
ZjuHsp40-78	8	Prupe.1G376600.2	1	11,3914	0,9303	0,081666871	87,62615385
ZjuHsp40-78	8	Prupe.7G157600.1	7	56,7506	0,7196	0,012680042	436,5430769
ZjuHsp40-79	8	Prupe.6G180400.1	6	1,4302	0,2767	0,193469445	11,00153846
ZjuHsp40-80	8	Prupe.6G162400.3	6	0,9199	0,3040	0,330470703	7,076153846
ZjuHsp40-80	8	Prupe.6G162400.1	6	0,9199	0,3040	0,330470703	7,076153846
ZjuHsp40-80	8	Prupe.6G131200.1	6	0,8061	0,3078	0,381838482	6,200769231
ZjuHsp40-80	8	Prupe.6G162400.2	6	1,0847	0,3426	0,3158477	8,343846154
ZjuHsp40-80	8	Prupe.6G162400.4	6	1,0847	0,3426	0,3158477	8,343846154
ZjuHsp40-80	8	Prupe.6G131200.2	6	1,0878	0,3273	0,300882515	8,367692308
ZjuHsp40-80	8	Prupe.6G162400.8	6	1,0357	0,3603	0,34788066	7,966923077
ZjuHsp40-80	8	Prupe.6G162400.5	6	1,0357	0,3603	0,34788066	7,966923077
ZjuHsp40-80	8	Prupe.6G131200.4	6	0,9033	0,3684	0,407837928	6,948461538
ZjuHsp40-80	8	Prupe.6G162400.6	6	1,2852	0,4139	0,322051043	9,886153846
ZjuHsp40-80	8	Prupe.6G162400.7	6	1,2852	0,4139	0,322051043	9,886153846
ZjuHsp40-80	8	Prupe.6G131200.5	6	1,3743	0,3984	0,289893036	10,57153846
ZjuHsp40-81	9	Prupe.8G270600.1	8	1,3647	0,1263	0,092547813	10,49769231
ZjuHsp40-81	9	Prupe.8G270600.2	8	1,5683	0,1454	0,092711854	12,06384615
ZjuHsp40-85	9	Prupe.8G270600.1	8	1,3647	0,1263	0,092547813	10,49769231
ZjuHsp40-85	9	Prupe.8G270600.2	8	1,5684	0,1454	0,092705942	12,06461538
ZjuHsp40-86	9	Prupe.8G270200.1	8	0,8062	0,0764	0,094765567	6,201538462

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-88	9	Prupe.8G091300.2	8	0,6322	0,0990	0,156596014	4,863076923
ZjuHsp40-88	9	Prupe.8G091300.4	8	0,6322	0,0990	0,156596014	4,863076923
ZjuHsp40-88	9	Prupe.8G091300.1	8	0,6322	0,0990	0,156596014	4,863076923
ZjuHsp40-88	9	Prupe.8G091300.3	8	0,6178	0,1171	0,19	4,752307692
ZjuHsp40-88	9	Prupe.7G066900.2	7	54,7318	0,3633	0,006637823	421,0138462
ZjuHsp40-88	9	Prupe.7G066900.3	7	54,7198	0,3634	0,006641106	420,9215385
ZjuHsp40-88	9	Prupe.7G066900.1	7	54,7340	0,3631	0,006633902	421,0307692
ZjuHsp40-88	9	Prupe.8G013200.2	7	57,5402	0,3661	0,006362508	442,6169231
ZjuHsp40-88	9	Prupe.8G013200.1	8	57,5425	0,3661	0,006362254	442,6346154
ZjuHsp40-88	9	Prupe.8G091400.1	8	1,0333	0,4732	0,457950256	7,948461538
ZjuHsp40-88	9	Prupe.8G091400.2	8	10,333	0,4732	4,5795E-05	79484,61538
ZjuHsp40-89	9	Prupe.1G224400.1	1	0,8571	0,1650	0,192509625	6,593076923
ZjuHsp40-89	9	Prupe.5G150300.1	5	2,5015	0,4221	0,168738757	19,24230769
ZjuHsp40-89	9	Prupe.2G308400.3	2	2,2307	0,3778	0,169363877	17,15923077
ZjuHsp40-89	9	Prupe.2G308400.1	2	2,2307	0,3778	0,169363877	17,15923077
ZjuHsp40-89	9	Prupe.2G308400.2	2	2,2307	0,3778	0,169363877	17,15923077
ZjuHsp40-89	9	Prupe.3G200300.1	3	5,5942	0,4849	0,08667906	43,03230769
ZjuHsp40-89	9	Prupe.3G200300.2	3	5,5946	0,4849	0,086672863	43,03538462
ZjuHsp40-89	9	Prupe.8G141600.2	8	56,3182	0,7386	0,013114766	433,2169231
ZjuHsp40-89	9	Prupe.8G141600.1	8	56,3152	0,7386	0,013115464	433,1938462
ZjuHsp40-89	9	Prupe.8G141600.5	8	56,3170	0,7387	0,013116821	433,2076923
ZjuHsp40-89	9	Prupe.8G141600.4	8	56,3157	0,7386	0,013115348	433,1976923
ZjuHsp40-89	9	Prupe.8G141600.3	8	56,3194	0,7386	0,013114486	433,2261538
ZjuHsp40-89	9	Prupe.8G141600.6	8	56,3191	0,7387	0,013116332	433,2238462
ZjuHsp40-90	9	Prupe.8G168900.1	8	1,2638	0,1715	0,135701852	9,721538462
ZjuHsp40-95	10	Prupe.2G072900.3	2	1,9316	0,3091	0,160022779	14,85846154
ZjuHsp40-95	10	Prupe.2G072900.4	2	1,9316	0,3091	0,160022779	14,85846154
ZjuHsp40-95	10	Prupe.2G072900.5	2	1,9316	0,3091	0,160022779	14,85846154
ZjuHsp40-95	10	Prupe.2G072900.1	2	1,9316	0,3091	0,194553738	14,85846154
ZjuHsp40-95	10	Prupe.6G146900.1	6	51,3235	0,3758	0,007322182	394,7961538
ZjuHsp40-95	10	Prupe.6G146900.2	6	52,5857	0,3756	0,007142626	404,5053846
ZjuHsp40-96	10	Prupe.1G265500.2	1	1,4979	0,1692	0,112958141	11,52230769
ZjuHsp40-96	10	Prupe.1G265500.1	1	1,4979	0,1692	0,112958141	11,52230769
ZjuHsp40-96	10	Prupe.5G184900.1	5	3,3404	3,3404	1	25,69538462
ZjuHsp40-96	10	Prupe.1G466900.1	1	9,1321	0,3147	0,034460858	70,24692308
ZjuHsp40-96	10	Prupe.4G052500.1	4	4,6412	0,3065	0,066038955	35,70153846
ZjuHsp40-96	10	Prupe.6G277900.1	6	4,4893	0,3352	0,074666429	34,53307692
ZjuHsp40-96	10	Prupe.1G466900.2	1	8,1795	0,3956	0,048364814	62,91923077
ZjuHsp40-96	10	Prupe.6G278000.1	6	4,9332	0,4334	0,087853726	37,94769231
ZjuHsp40-96	10	Prupe.6G278100.1	6	5,8867	0,5627	0,09558836	45,28230769
ZjuHsp40-98	10	Prupe.1G324300.1	1	0,8744	0,1636	0,187099726	6,726153846
ZjuHsp40-99	10	Prupe.1G314100.3	1	0,6066	0,0563	0,092812397	4,666153846
ZjuHsp40-99	10	Prupe.1G314100.4	1	0,6066	0,0563	0,092812397	4,666153846
ZjuHsp40-99	10	Prupe.1G314100.1	1	0,6066	0,0563	0,092812397	4,666153846
ZjuHsp40-99	10	Prupe.1G314100.2	1	0,6099	0,0525	0,086079685	4,661538462
ZjuHsp40-99	10	Prupe.1G260600.1	1	20,1356	0,3008	0,014938716	154,8892308
ZjuHsp40-99	10	Prupe.1G260600.2	1	16,3921	0,2478	0,015117038	126,0930769
ZjuHsp40-100	11	Prupe.5G069200.1	5	60,6616	0,9495	0,015652406	466,6276923
ZjuHsp40-100	11	Prupe.5G069100.1	5	17,3415	1,0188	0,058749243	133,3961538
ZjuHsp40-100	11	Prupe.5G069200.2	5	7,8765	1,1377	0,144442328	60,58846154
ZjuHsp40-100	11	Prupe.5G069200.3	5	58,1947	0,9521	0,016360596	447,6515385
ZjuHsp40-101	11	Prupe.6G280600.1	6	0,7324	0,1550	0,211632987	5,633846154
ZjuHsp40-101	11	Prupe.6G280600.2	6	0,7324	0,1550	0,211632987	5,633846154
ZjuHsp40-103	12	Prupe.7G052600.1	7	0,7777	0,3769	0,484634178	5,982307692
ZjuHsp40-103	12	Prupe.7G052600.3	7	0,7777	0,3769	0,484634178	5,982307692
ZjuHsp40-103	12	Prupe.7G052600.2	7	0,7810	0,3851	0,493085787	6,007692308
ZjuHsp40-103	12	Prupe.4G255700.2	4	2,5931	0,5477	0,211214377	19,94692308
ZjuHsp40-103	12	Prupe.4G255700.1	4	2,6149	0,5480	0,209568244	20,11461538
ZjuHsp40-103	12	Prupe.4G255700.3	4	2,5945	0,5594	0,215609944	19,95769231
ZjuHsp40-103	12	Prupe.4G255700.4	4	2,6173	0,5597	0,21384633	20,13307692
ZjuHsp40-103	12	Prupe.7G052600.4	7	0,8794	0,4912	0,558562656	6,764615385
ZjuHsp40-104	12	Prupe.7G234400.1	7	0,5590	0,0586	0,104830054	4,3
ZjuHsp40-104	12	Prupe.7G234400.2	7	0,5581	0,0577	0,10338649	4,293076923
ZjuHsp40-105	12	Prupe.7G234400.1	7	0,5558	0,0566	0,101835193	4,275384615
ZjuHsp40-105	12	Prupe.7G234400.2	7	0,5529	0,0568	0,102731054	4,253076923
ZjuHsp40-106	12	Prupe.3G200300.1	3	0,9244	0,1431	0,154803116	7,110769231
ZjuHsp40-106	12	Prupe.3G200300.2	3	0,9244	0,1431	0,154803116	7,110769231
ZjuHsp40-106	12	Prupe.1G224400.1	1	5,4398	0,5249	0,096492518	41,84461538
ZjuHsp40-106	12	Prupe.5G150300.1	5	5,0831	0,5863	0,115342999	39,10076923

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-106	12	Prupe.2G308400.2	2	4,9407	0,5352	0,108324731	38,00538462
ZjuHsp40-106	12	Prupe.2G308400.1	2	4,9409	0,5352	0,108320346	38,00692308
ZjuHsp40-106	12	Prupe.2G308400.3	2	4,9407	0,5352	0,108324731	38,00538462
ZjuHsp40-106	12	Prupe.6G333800.1	6	53,2860	0,7643	0,014343355	409,8923077
ZjuHsp40-106	12	Prupe.8G141600.2	8	8,4283	0,7892	0,093636914	64,83307692
ZjuHsp40-106	12	Prupe.8G141600.1	8	8,4278	0,7892	0,093642469	64,82923077
ZjuHsp40-106	12	Prupe.8G141600.5	8	8,4286	0,7892	0,093633581	64,83538462
ZjuHsp40-106	12	Prupe.8G141600.4	8	8,4281	0,7892	0,093639136	64,83153846
ZjuHsp40-106	12	Prupe.8G141600.3	8	8,4278	0,7892	0,093642469	64,82923077
ZjuHsp40-106	12	Prupe.8G141600.6	8	8,4276	0,7892	0,093644691	64,82769231
ZjuHsp40-107	12	Prupe.3G200300.1	3	0,9538	0,1490	0,156217236	7,336923077
ZjuHsp40-107	12	Prupe.3G200300.2	3	0,9538	0,1490	0,156217236	7,336923077
ZjuHsp40-107	12	Prupe.1G224400.1	1	6,0397	0,5784	0,0957666346	46,45923077
ZjuHsp40-107	12	Prupe.5G150300.1	5	5,0599	0,6331	0,12512105	38,92230769
ZjuHsp40-107	12	Prupe.2G308400.3	2	4,4237	0,5723	0,129371341	34,02846154
ZjuHsp40-107	12	Prupe.2G308400.1	2	4,4237	0,5723	0,129371341	34,02846154
ZjuHsp40-107	12	Prupe.2G308400.2	2	4,4237	0,5723	0,129371341	34,02846154
ZjuHsp40-107	12	Prupe.6G333800.1	6	43,3277	0,8150	0,018810138	333,29
ZjuHsp40-107	12	Prupe.8G141600.2	8	8,2437	0,8136	0,098693548	63,41307692
ZjuHsp40-107	12	Prupe.8G141600.1	8	8,2437	0,8136	0,098693548	63,41307692
ZjuHsp40-107	12	Prupe.8G141600.5	8	8,2438	0,8136	0,098692351	63,41384615
ZjuHsp40-107	12	Prupe.8G141600.4	8	8,2436	0,8136	0,098694745	63,41230769
ZjuHsp40-107	12	Prupe.8G141600.3	8	8,2442	0,8136	0,098687562	63,41692308
ZjuHsp40-107	12	Prupe.8G141600.6	8	8,2440	0,8136	0,098689956	63,41538462
ZjuHsp40-108	12	Prupe.7G068800.1	7	0,6766	0,1428	0,211055276	5,204615385
ZjuHsp40-108	12	Prupe.7G068800.2	7	0,7226	0,1458	0,201771381	5,558461538
ZjuHsp40-109	12	Prupe.7G004300.1	7	0,6102	0,2152	0,352671255	4,693846154
ZjuHsp40-110	12	Prupe.6G240700.1	6	0,7482	0,1242	0,165998396	5,755384615
ZjuHsp40-110	12	Prupe.2G217700.1	2	1,0089	0,1668	0,165328576	7,760769231
ZjuHsp40-112	12	Prupe.6G238400.1	6	0,9352	0,0857	0,091638152	7,193846154
ZjuHsp40-113	12	Prupe.1G134600.2	1	1,0617	0,1586	0,149383065	8,166923077
ZjuHsp40-113	12	Prupe.1G134600.1	1	1,0617	0,1586	0,149383065	8,166923077
ZjuHsp40-113	12	Prupe.7G241200.1	7	12,2093	0,5326	0,043622484	93,91769231
ZjuHsp40-113	12	Prupe.7G241200.2	7	12,2126	0,5326	0,043610697	93,94307692
ZjuHsp40-114	12	Prupe.1G129600.1	1	1,1572	0,2964	0,256135499	8,901538462
ZjuHsp40-116	scaffold	Prupe.4G144000.1	4	0,6221	0,1195	0,192091304	4,785384615
ZjuHsp40-116	scaffold	Prupe.4G144000.2	4	0,6242	0,1217	0,194969561	4,801538462
ZjuHsp40-116	scaffold	Prupe.4G144000.3	4	0,6510	0,1391	0,213671275	5,007692308
ZjuHsp40-116	scaffold	Prupe.1G112900.2	1	54,0368	0,6495	0,012019587	415,6676923
ZjuHsp40-116	scaffold	Prupe.1G112900.4	1	54,0314	0,6496	0,012022639	415,6261538
ZjuHsp40-116	scaffold	Prupe.1G112900.1	1	54,0364	0,6495	0,012019676	415,6646154
ZjuHsp40-116	scaffold	Prupe.1G112900.3	1	53,9808	0,6811	0,012617449	415,2369231
ZjuHsp40-118	scaffold	Prupe.2G302300.1	2	0,6717	0,0703	0,104659818	5,166923077
ZjuHsp40-120	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-120	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-120	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-120	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-120	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-121	scaffold	Prupe.7G091100.1	7	0,8063	0,2781	0,344908843	6,202307692
ZjuHsp40-122	scaffold	Prupe.1G112900.2	1	0,6511	0,1462	0,224543081	5,008461538
ZjuHsp40-122	scaffold	Prupe.1G112900.4	1	0,6511	0,1462	0,224543081	5,008461538
ZjuHsp40-122	scaffold	Prupe.1G112900.1	1	0,6534	0,1445	0,221150903	5,026153846
ZjuHsp40-122	scaffold	Prupe.1G112900.3	1	0,7257	0,1652	0,227642276	5,582307692
ZjuHsp40-122	scaffold	Prupe.4G144000.1	4	3,9567	0,6006	0,151793161	30,43615385
ZjuHsp40-122	scaffold	Prupe.4G144000.2	4	3,3398	0,6450	0,193125337	25,69076923
ZjuHsp40-122	scaffold	Prupe.4G144000.3	4	55,0784	0,6188	0,011234894	423,68
ZjuHsp40-123	scaffold	Prupe.1G112900.2	1	0,6511	0,1462	0,224543081	5,008461538
ZjuHsp40-123	scaffold	Prupe.1G112900.4	1	0,6511	0,1462	0,224543081	5,008461538
ZjuHsp40-123	scaffold	Prupe.1G112900.1	1	0,6534	0,1445	0,221150903	5,026153846
ZjuHsp40-123	scaffold	Prupe.1G112900.3	1	0,7257	0,1652	0,227642276	5,582307692
ZjuHsp40-123	scaffold	Prupe.4G144000.1	4	3,9566	0,6006	0,151796997	30,43538462
ZjuHsp40-123	scaffold	Prupe.4G144000.2	4	3,3398	0,6450	0,193125337	25,69076923
ZjuHsp40-123	scaffold	Prupe.4G144000.3	4	55,0728	0,6189	0,011237852	423,6369231
ZjuHsp40-124	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-124	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-124	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-124	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-124	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-125	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-125	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-125	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-125	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-125	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-126	scaffold	Prupe.8G058000.4	8	1,1504	0,1320	0,114742698	8,849230769
ZjuHsp40-126	scaffold	Prupe.8G058000.1	8	1,1504	0,1320	0,114742698	8,849230769
ZjuHsp40-126	scaffold	Prupe.8G058000.2	8	1,1504	0,1320	0,114742698	8,849230769
ZjuHsp40-126	scaffold	Prupe.3G081100.1	3	1,3065	0,1692	0,129506315	10,05
ZjuHsp40-126	scaffold	Prupe.8G058000.3	8	0,7389	0,1229	0,166328326	5,683846154
ZjuHsp40-127	scaffold	Prupe.4G144000.1	4	0,6221	0,1195	0,192091304	4,785384615
ZjuHsp40-127	scaffold	Prupe.4G144000.2	4	0,6242	0,1217	0,194969561	4,801538462
ZjuHsp40-127	scaffold	Prupe.4G144000.3	4	0,6510	0,1391	0,213671275	5,007692308
ZjuHsp40-127	scaffold	Prupe.1G112900.2	1	54,0326	0,6496	0,012022372	415,6353846
ZjuHsp40-127	scaffold	Prupe.1G112900.4	1	54,0449	0,6491	0,012010384	415,73
ZjuHsp40-127	scaffold	Prupe.1G112900.1	1	54,0360	0,6494	0,012017914	415,6615385
ZjuHsp40-127	scaffold	Prupe.1G112900.3	1	53,9594	0,6821	0,012640986	415,0723077
ZjuHsp40-128	scaffold	Prupe.4G144000.1	4	0,6240	0,1217	0,195032051	4,8
ZjuHsp40-128	scaffold	Prupe.4G144000.2	4	0,6261	0,1239	0,197891711	4,816153846
ZjuHsp40-128	scaffold	Prupe.4G144000.3	4	0,6529	0,1415	0,216725379	5,022307692
ZjuHsp40-128	scaffold	Prupe.1G112900.1	1	54,0372	0,6508	0,012043555	415,6707692
ZjuHsp40-128	scaffold	Prupe.1G112900.2	1	54,0386	0,6506	0,012039542	415,6815385
ZjuHsp40-128	scaffold	Prupe.1G112900.4	1	54,0904	0,6484	0,01198734	416,08
ZjuHsp40-128	scaffold	Prupe.1G112900.3	1	53,9830	0,6823	0,012639164	415,2538462
ZjuHsp40-129	scaffold	Prupe.4G144000.1	4	0,6402	0,0996	0,155576382	0,766153846
ZjuHsp40-129	scaffold	Prupe.4G144000.2	4	0,6353	0,1054	0,165905871	4,886923077
ZjuHsp40-129	scaffold	Prupe.4G144000.3	4	0,6510	0,1391	0,213671275	5,007692308
ZjuHsp40-129	scaffold	Prupe.1G112900.1	1	54,6866	0,6328	0,01157139	420,6661538
ZjuHsp40-129	scaffold	Prupe.1G112900.2	1	54,4548	0,6342	0,011646356	418,8830769
ZjuHsp40-129	scaffold	Prupe.1G112900.4	1	54,4553	0,6343	0,011648086	418,8869231
ZjuHsp40-129	scaffold	Prupe.1G112900.3	1	53,8149	0,6817	0,012667495	413,9607692
ZjuHsp40-130	scaffold	Prupe.1G292900.5	1	0,4840	0,0869	0,179545455	3,723076923
ZjuHsp40-130	scaffold	Prupe.1G292900.3	1	0,4840	0,0869	0,179545455	3,723076923
ZjuHsp40-130	scaffold	Prupe.1G292900.4	1	0,4840	0,0869	0,179545455	3,723076923
ZjuHsp40-130	scaffold	Prupe.1G292900.2	1	0,4840	0,0869	0,179545455	3,723076923
ZjuHsp40-130	scaffold	Prupe.1G292900.1	1	0,4840	0,0869	0,179545455	3,723076923
ZjuHsp40-131	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-131	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-131	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-131	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-131	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-132	scaffold	Prupe.4G144000.1	4	0,6420	0,1013	0,157788162	4,938461538
ZjuHsp40-132	scaffold	Prupe.4G144000.2	4	0,6371	0,1072	0,168262439	4,900769231
ZjuHsp40-132	scaffold	Prupe.4G144000.3	4	0,6529	0,1415	0,216725379	5,022307692
ZjuHsp40-132	scaffold	Prupe.1G112900.1	1	54,6332	0,6322	0,011571718	420,2553846
ZjuHsp40-132	scaffold	Prupe.1G112900.2	1	54,4009	0,6337	0,011648704	418,4684615
ZjuHsp40-132	scaffold	Prupe.1G112900.4	1	54,3988	0,6337	0,011649154	418,4523077
ZjuHsp40-132	scaffold	Prupe.1G112900.3	1	53,8142	0,6831	0,012693676	413,9553846
ZjuHsp40-133	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-133	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-133	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-133	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-133	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-134	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-134	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-134	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-134	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-134	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-135	scaffold	Prupe.4G144000.1	4	0,6420	0,1013	0,157788162	4,938461538
ZjuHsp40-135	scaffold	Prupe.4G144000.2	4	0,6371	0,1072	0,168262439	4,900769231
ZjuHsp40-135	scaffold	Prupe.4G144000.3	4	0,6529	0,1415	0,216725379	5,022307692
ZjuHsp40-135	scaffold	Prupe.1G112900.1	1	54,6314	0,6321	0,011570269	420,2415385
ZjuHsp40-135	scaffold	Prupe.1G112900.2	1	54,3989	0,6336	0,011647294	418,4530769
ZjuHsp40-135	scaffold	Prupe.1G112900.4	1	54,4021	0,6336	0,011646609	418,4776923
ZjuHsp40-135	scaffold	Prupe.1G112900.3	1	53,8156	0,6832	0,012695204	413,9661538
ZjuHsp40-137	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-137	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-137	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-137	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-137	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-138	scaffold	Prupe.8G091300.3	8	13,8060	1,1138	0,080675069	106,2
ZjuHsp40-138	scaffold	Prupe.8G091300.2	8	26,8893	1,1897	0,044244365	206,8407692
ZjuHsp40-138	scaffold	Prupe.8G091300.4	8	26,9179	1,1897	0,044197356	207,0607692
ZjuHsp40-138	scaffold	Prupe.8G091300.1	8	22,1809	1,1780	0,053108756	170,6223077
ZjuHsp40-139	scaffold	Prupe.7G091100.1	7	0,8063	0,2781	0,344908843	6,202307692
ZjuHsp40-140	scaffold	Prupe.2G072900.3	2	3,5832	0,0948	0,026456798	27,56307692
ZjuHsp40-140	scaffold	Prupe.2G072900.4	2	3,7301	0,0866	0,023216536	28,69307692
ZjuHsp40-140	scaffold	Prupe.2G072900.4	2	3,7299	0,0866	0,023217781	28,69153846
ZjuHsp40-140	scaffold	Prupe.2G072900.5	2	3,7049	0,0891	0,024049232	28,49923077
ZjuHsp40-140	scaffold	Prupe.2G072900.1	2	3,7047	0,0891	0,02405053	28,49769231
ZjuHsp40-140	scaffold	Prupe.6G146900.2	6	1,5840	0,0794	0,050126263	12,18461538
ZjuHsp40-140	scaffold	Prupe.6G146900.1	6	1,6040	0,0812	0,050623441	12,33846154
ZjuHsp40-140	scaffold	Prupe.2G123700.2	2	53,6411	0,2316	0,004317585	412,6238462
ZjuHsp40-140	scaffold	Prupe.2G123700.2	2	53,7146	0,2317	0,004313539	413,1892308
ZjuHsp40-140	scaffold	Prupe.2G123700.3	2	56,3022	0,2316	0,004113516	433,0938462
ZjuHsp40-140	scaffold	Prupe.2G072900.2	2	3,5812	0,1644	0,0459064	27,54769231
ZjuHsp40-140	scaffold	Prupe.3G066800.1	3	3,2373	0,2177	0,067247398	24,90230769
ZjuHsp40-141	scaffold	Prupe.6G315800.2	6	0,7190	0,1553	0,215994437	5,530769231
ZjuHsp40-141	scaffold	Prupe.6G315800.3	6	0,6541	0,1410	0,21556337	5,031538462
ZjuHsp40-141	scaffold	Prupe.6G315800.1	6	1,0318	0,3253	0,315274278	7,936923077
ZjuHsp40-142	scaffold	Prupe.8G058000.4	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-142	scaffold	Prupe.8G058000.1	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-142	scaffold	Prupe.8G058000.2	8	1,1539	0,2113	0,183118121	8,876153846
ZjuHsp40-142	scaffold	Prupe.8G058000.3	8	1,0116	0,2356	0,232898379	7,781538462
ZjuHsp40-142	scaffold	Prupe.3G081100.1	3	1,1112	0,2009	0,180795536	8,547692308
ZjuHsp40-143	scaffold	Prupe.1G528300.1	1	0,9545	0,0932	0,097642745	7,342307692
ZjuHsp40-144	scaffold	Prupe.1G51900.1	1	1,3493	0,2513	0,186244719	10,37923077
ZjuHsp40-145	scaffold	Prupe.6G145600.1	6	0,7051	0,0327	0,046376401	5,423846154
ZjuHsp40-145	scaffold	Prupe.6G145500.1	6	1,2926	0,4069	0,314791892	9,943076923
ZjuHsp40-146	scaffold	Prupe.1G182300.1	1	1,2618	0,2182	0,172927564	9,706153846
ZjuHsp40-146	scaffold	Prupe.5G141000.2	5	1,4571	0,2215	0,152014275	11,20846154
ZjuHsp40-146	scaffold	Prupe.5G141000.1	5	1,4571	0,2215	0,152014275	11,20846154
ZjuHsp40-147	scaffold	Prupe.1G182300.1	1	1,2618	0,2182	0,172927564	9,706153846
ZjuHsp40-147	scaffold	Prupe.5G141000.2	5	1,4571	0,2182	0,149749502	11,20846154
ZjuHsp40-147	scaffold	Prupe.5G141000.1	5	1,4571	0,2182	0,149749502	11,20846154
ZjuHsp40-148	scaffold	Prupe.1G182300.1	1	1,2618	0,2182	0,172927564	9,706153846
ZjuHsp40-148	scaffold	Prupe.5G141000.2	5	1,4571	0,2182	0,149749502	11,20846154
ZjuHsp40-148	scaffold	Prupe.5G141000.1	5	1,4571	0,2182	0,149749502	11,20846154
ZjuHsp40-149	scaffold	Prupe.6G145600.1	6	0,7032	0,0327	0,046501706	5,409230769
ZjuHsp40-149	scaffold	Prupe.6G145500.1	6	1,7476	0,4664	0,266880293	13,44307692
ZjuHsp40-150	scaffold	Prupe.8G141600.2	8	1,1087	0,1959	0,176693425	8,528461538
ZjuHsp40-150	scaffold	Prupe.8G141600.1	8	1,1088	0,1959	0,176677489	8,529230769
ZjuHsp40-150	scaffold	Prupe.8G141600.5	8	1,1087	0,1959	0,176693425	8,528461538
ZjuHsp40-150	scaffold	Prupe.8G141600.4	8	1,1088	0,1959	0,176677489	8,529230769
ZjuHsp40-150	scaffold	Prupe.8G141600.3	8	1,1087	0,1959	0,176693425	8,528461538
ZjuHsp40-150	scaffold	Prupe.8G141600.6	8	1,1087	0,1959	0,176693425	8,528461538
ZjuHsp40-151	scaffold	Prupe.3G113500.1	3	0,7430	0,1228	0,165275908	5,715384615
ZjuHsp40-152	scaffold	Prupe.3G113500.1	3	0,7430	0,1228	0,165275908	5,715384615
ZjuHsp40-153	scaffold	Prupe.1G112900.2	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-153	scaffold	Prupe.1G112900.4	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-153	scaffold	Prupe.1G112900.1	1	0,6534	0,1446	0,221303949	5,026153846
ZjuHsp40-153	scaffold	Prupe.1G112900.3	1	0,7260	0,1653	0,22768595	5,584615385
ZjuHsp40-153	scaffold	Prupe.4G144000.1	4	4,1187	0,5980	0,145191444	31,68230769
ZjuHsp40-153	scaffold	Prupe.4G144000.2	4	3,4174	0,6424	0,187979165	26,28769231
ZjuHsp40-153	scaffold	Prupe.4G144000.3	4	55,1229	0,6161	0,011176843	424,0223077
ZjuHsp40-154	scaffold	Prupe.1G112900.2	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-154	scaffold	Prupe.1G112900.4	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-154	scaffold	Prupe.1G112900.1	1	0,6534	0,1446	0,221303949	5,026153846
ZjuHsp40-154	scaffold	Prupe.1G112900.3	1	0,7260	0,1653	0,22768595	5,584615385
ZjuHsp40-154	scaffold	Prupe.4G144000.1	4	4,1187	0,5980	0,145191444	31,68230769
ZjuHsp40-154	scaffold	Prupe.4G144000.2	4	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-154	scaffold	Prupe.4G144000.3	4	55,1229	0,6161	0,011176843	424,0223077
ZjuHsp40-155	scaffold	Prupe.1G112900.2	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-155	scaffold	Prupe.1G112900.4	1	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-155	scaffold	Prupe.1G112900.1	1	0,6534	0,1446	0,221303949	5,026153846
ZjuHsp40-155	scaffold	Prupe.1G112900.3	1	0,7260	0,1653	0,22768595	5,584615385
ZjuHsp40-155	scaffold	Prupe.4G144000.1	4	4,1187	0,5980	0,145191444	31,68230769
ZjuHsp40-155	scaffold	Prupe.4G144000.2	4	0,6511	0,1463	0,224696667	5,008461538
ZjuHsp40-155	scaffold	Prupe.4G144000.3	4	55,1229	0,6161	0,011176843	424,0223077

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-156	scaffold	Prupe.5G235700.1	5	0,7652	0,2502	0,32697334	5,886153846
ZjuHsp40-156	scaffold	Prupe.5G235700.6	5	0,7446	0,2520	0,338436745	5,727692308
ZjuHsp40-156	scaffold	Prupe.5G235700.3	5	0,7502	0,2257	0,300853106	5,770769231
ZjuHsp40-156	scaffold	Prupe.5G235700.2	5	0,7502	0,2257	0,300853106	5,770769231
ZjuHsp40-156	scaffold	Prupe.5G235700.4	5	0,7215	0,2279	0,315869716	5,55
ZjuHsp40-156	scaffold	Prupe.5G235700.5	5	0,7215	0,2279	0,315869716	5,55
ZjuHsp40-156	scaffold	Prupe.3G088900.2	3	56,4131	0,4809	0,008524616	433,9469231
ZjuHsp40-156	scaffold	Prupe.3G088900.4	3	7,9057	0,4760	0,060209722	60,81307692
ZjuHsp40-156	scaffold	Prupe.3G088900.3	3	56,1243	0,5153	0,009181406	431,7253846
ZjuHsp40-156	scaffold	Prupe.3G088900.1	3	55,8794	0,5203	0,009311124	429,8415385
ZjuHsp40-156	scaffold	Prupe.3G078100.1	3	53,9641	0,5565	0,010312411	415,1084615
ZjuHsp40-156	scaffold	Prupe.3G078100.2	3	53,9652	0,5564	0,010310348	415,1169231
ZjuHsp40-157	scaffold	Prupe.7G234400.1	7	0,5590	0,0586	0,104830054	4,3
ZjuHsp40-157	scaffold	Prupe.7G234400.2	7	0,5581	0,0577	0,10338649	4,293076923
ZjuHsp40-158	scaffold	Prupe.7G234400.1	7	0,5558	0,0566	0,101835193	4,275384615
ZjuHsp40-158	scaffold	Prupe.7G234400.2	7	0,5529	0,0568	0,102731054	4,253076923
ZjuHsp40-159	scaffold	Prupe.1G438600.1	1	0,6500	0,1720	0,264615385	5
ZjuHsp40-160	scaffold	Prupe.1G438600.1	1	0,6500	0,1720	0,264615385	5
ZjuHsp40-161	scaffold	Prupe.1G438600.1	1	0,6500	0,1720	0,264615385	5
ZjuHsp40-162	scaffold	Prupe.1G438600.1	1	0,6500	0,1720	0,264615385	5
ZjuHsp40-163	scaffold	Prupe.2G072900.4	2	2,7038	0,0463	0,017124048	20,79846154
ZjuHsp40-163	scaffold	Prupe.2G072900.2	2	2,5336	0,0464	0,018313862	19,48923077
ZjuHsp40-163	scaffold	Prupe.2G072900.3	2	3,1250	0,0483	0,015456	24,03846154
ZjuHsp40-163	scaffold	Prupe.2G072900.5	2	2,5338	0,0464	0,018312416	19,49076923
ZjuHsp40-163	scaffold	Prupe.2G072900.1	2	2,5336	0,0464	0,018313862	19,48923077
ZjuHsp40-164	scaffold	Prupe.1G438600.1	1	0,6609	0,1794	0,271448025	5,083846154
ZjuHsp40-165	scaffold	Prupe.7G241200.1	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-165	scaffold	Prupe.7G241200.2	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-165	scaffold	Prupe.1G134600.2	1	7,7543	0,5263	0,067872019	59,64846154
ZjuHsp40-165	scaffold	Prupe.1G134600.1	1	7,7539	0,5263	0,067875521	59,64538462
ZjuHsp40-166	scaffold	Prupe.7G241200.1	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-166	scaffold	Prupe.7G241200.2	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-166	scaffold	Prupe.1G134600.2	1	7,7543	0,5263	0,067872019	59,64846154
ZjuHsp40-166	scaffold	Prupe.1G134600.1	1	7,7539	0,5263	0,067875521	59,64538462
ZjuHsp40-167	scaffold	Prupe.7G241200.1	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-167	scaffold	Prupe.7G241200.2	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-167	scaffold	Prupe.1G134600.2	1	7,7543	0,5263	0,067872019	59,64846154
ZjuHsp40-167	scaffold	Prupe.1G134600.1	1	7,7539	0,5263	0,067875521	59,64538462
ZjuHsp40-168	scaffold	Prupe.7G241200.1	7	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-168	scaffold	Prupe.7G241200.2	1	0,9090	0,1239	0,13630363	6,992307692
ZjuHsp40-168	scaffold	Prupe.1G134600.2	1	7,7543	0,5263	0,067872019	59,64846154
ZjuHsp40-168	scaffold	Prupe.1G134600.1	7	7,7539	0,5263	0,067875521	59,64538462
ZjuHsp40-169	scaffold	Prupe.7G068800.1	7	0,5938	0,0964	0,162344224	4,567692308
ZjuHsp40-169	scaffold	Prupe.7G068800.2	7	0,6358	0,0959	0,150833595	4,890769231
ZjuHsp40-170	scaffold	Prupe.7G091100.1	7	0,7463	0,2110	0,282728125	5,740769231
ZjuHsp40-171	scaffold	Prupe.1G182300.1	1	1,3577	0,2177	0,160344701	10,44384615
ZjuHsp40-171	scaffold	Prupe.5G141000.2	5	1,5723	0,2214	0,140812822	12,09461538
ZjuHsp40-171	scaffold	Prupe.5G141000.1	5	1,5723	0,2214	0,140812822	12,09461538
ZjuHsp40-172	scaffold	Prupe.1G182300.1	1	1,3577	0,2177	0,160344701	10,44384615
ZjuHsp40-172	scaffold	Prupe.5G141000.2	5	1,5723	0,2214	0,140812822	12,09461538
ZjuHsp40-172	scaffold	Prupe.5G141000.1	5	1,5723	0,2214	0,140812822	12,09461538
ZjuHsp40-173	scaffold	Prupe.6G224500.13	6	0,7558	0,1867	0,247023022	5,813846154
ZjuHsp40-173	scaffold	Prupe.6G224500.1	6	0,7558	0,1867	0,247023022	5,813846154
ZjuHsp40-173	scaffold	Prupe.6G224500.6	6	0,7804	0,1902	0,243721169	6,003076923
ZjuHsp40-173	scaffold	Prupe.6G224500.5	6	0,7722	0,1956	0,253302253	5,94
ZjuHsp40-173	scaffold	Prupe.6G224500.15	6	0,7902	0,1866	0,236142749	6,078461538
ZjuHsp40-173	scaffold	Prupe.6G224500.16	6	0,7236	0,1651	0,228164732	5,566153846
ZjuHsp40-173	scaffold	Prupe.6G224500.9	6	0,7236	0,1651	0,228164732	5,566153846
ZjuHsp40-173	scaffold	Prupe.6G224500.4	6	0,8442	0,1964	0,232646292	6,493846154
ZjuHsp40-173	scaffold	Prupe.6G224500.10	6	0,8469	0,1983	0,234148069	6,514615385
ZjuHsp40-173	scaffold	Prupe.6G224500.18	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-173	scaffold	Prupe.6G224500.12	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-173	scaffold	Prupe.6G224500.2	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-173	scaffold	Prupe.6G224500.14	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-173	scaffold	Prupe.6G224500.17	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-173	scaffold	Prupe.6G224500.7	6	0,7470	0,1752	0,234538153	5,746153846
ZjuHsp40-173	scaffold	Prupe.6G224500.11	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-173	scaffold	Prupe.6G224500.3	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-173	scaffold	Prupe.6G224500.8	6	0,8642	0,1877	0,217195094	6,647692308

Table S3.2 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp40-174	scaffold	Prupe.6G224500.13	6	0,7465	0,1870	0,250502344	5,742307692
ZjuHsp40-174	scaffold	Prupe.6G224500.1	6	0,7465	0,1870	0,250502344	5,742307692
ZjuHsp40-174	scaffold	Prupe.6G224500.6	6	0,7804	0,1902	0,243721169	6,003076923
ZjuHsp40-174	scaffold	Prupe.6G224500.15	6	0,7902	0,1866	0,236142749	6,078461538
ZjuHsp40-174	scaffold	Prupe.6G224500.5	6	0,7722	0,1956	0,253302253	5,94
ZjuHsp40-174	scaffold	Prupe.6G224500.4	6	0,8442	0,1964	0,232646292	6,493846154
ZjuHsp40-174	scaffold	Prupe.6G224500.18	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-174	scaffold	Prupe.6G224500.16	6	0,7107	0,1655	0,232869002	5,466923077
ZjuHsp40-174	scaffold	Prupe.6G224500.12	6	0,8444	0,1921	0,227498816	6,495384615
ZjuHsp40-174	scaffold	Prupe.6G224500.9	6	0,7107	0,1655	0,232869002	5,466923077
ZjuHsp40-174	scaffold	Prupe.6G224500.10	6	0,8469	0,1983	0,234148069	6,514615385
ZjuHsp40-174	scaffold	Prupe.6G224500.2	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-174	scaffold	Prupe.6G224500.14	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-174	scaffold	Prupe.6G224500.17	6	0,8647	0,2078	0,24031456	6,651538462
ZjuHsp40-174	scaffold	Prupe.6G224500.7	6	0,7332	0,1757	0,239634479	5,64
ZjuHsp40-174	scaffold	Prupe.6G224500.11	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-174	scaffold	Prupe.6G224500.3	6	0,8994	0,2169	0,241160774	6,918461538
ZjuHsp40-174	scaffold	Prupe.6G224500.8	6	0,8642	0,1877	0,217195094	6,647692308
Mean				24,39160463	0,338407725	0,157703044	187,5221521

Table S3.3 Calculation of divergence time rates and Ka/Ks ratios of orthologous *ZjuHsp60* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Z. jujuba – *A. thaliana*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-01	1	AT1G34260.1	1	6,6624	0,6744	0,101224784	51,24923077
ZjuHsp60-01	1	AT1G71010.1	1	1,8976	0,2876	0,151559865	14,59692308
ZjuHsp60-01	1	AT3G14270.1	3	8,5285	0,5061	0,059342206	65,60384615
ZjuHsp60-01	1	AT4G33240.1	4	10,5927	0,5014	0,047334485	81,48230769
ZjuHsp60-01	1	AT4G33240.2	4	10,8045	0,5009	0,046360313	83,11153846
ZjuHsp60-01	1	AT4G33240.3	4	10,5125	0,502	0,047752675	80,86538462
ZjuHsp60-02	1	AT5G20890.1	5	1,9325	0,0472	0,024424321	14,86538462
ZjuHsp60-02	1	AT3G20050.1	3	19,3904	0,7301	0,037652653	149,1569231
ZjuHsp60-02	1	AT3G11830.1	3	53,3272	0,7191	0,013484676	410,2092308
ZjuHsp60-02	1	AT3G11830.2	3	53,3223	0,722	0,013540301	410,1715385
ZjuHsp60-02	1	AT3G18190.1	3	51,7433	0,7166	0,013849136	398,0253846
ZjuHsp60-02	1	AT1G24510.1	1	51,9864	0,7775	0,014955835	399,8953846
ZjuHsp60-02	1	AT1G24510.2	1	52,1931	0,8246	0,015799023	401,4853846
ZjuHsp60-02	1	AT3G02530.1	3	51,7831	0,8421	0,016262062	398,3315385
ZjuHsp60-02	1	AT5G16070.1	5	50,9543	0,8729	0,017131037	391,9561538
ZjuHsp60-02	1	AT5G26360.1	5	53,7698	0,844	0,015696543	413,6138462
ZjuHsp60-02	1	AT3G03960.1	3	49,555	0,9751	0,019677126	381,1923077
ZjuHsp60-03	1	AT3G14270.1	3	1,8491	0,2491	0,134714185	14,22384615
ZjuHsp60-03	1	AT1G71010.1	1	10,9487	0,4873	0,044507567	84,22076923
ZjuHsp60-03	1	AT4G33240.2	4	3,6381	0,3135	0,086171353	27,98538462
ZjuHsp60-03	1	AT4G33240.1	4	3,6378	0,3135	0,08617846	27,98307692
ZjuHsp60-03	1	AT1G34260.1	1	10,2899	0,6085	0,059135657	79,15307692
ZjuHsp60-03	1	AT4G33240.3	4	3,5616	0,3156	0,08861186	27,39692308
ZjuHsp60-04	1	AT3G14270.1	3	1,8608	0,2528	0,135855546	14,31384615
ZjuHsp60-04	1	AT1G71010.1	1	12,6834	0,5222	0,041171926	97,56461538
ZjuHsp60-04	1	AT4G33240.2	4	3,3265	0,3229	0,097068991	25,58846154
ZjuHsp60-04	1	AT4G33240.1	4	3,2967	0,3248	0,098522765	25,35923077
ZjuHsp60-04	1	AT4G33240.3	4	3,2367	0,3267	0,100936139	24,89769231
ZjuHsp60-04	1	AT1G34260.1	1	10,1815	0,6276	0,061641212	78,31923077
ZjuHsp60-05	2	AT3G11830.1	3	1,8088	0,0407	0,022501106	13,91384615
ZjuHsp60-05	2	AT3G11830.2	3	1,8125	0,0408	0,022510345	13,94230769
ZjuHsp60-05	2	AT3G20050.1	3	51,7513	0,7164	0,013843131	398,0869231
ZjuHsp60-05	2	AT5G20890.1	5	38,6093	0,7213	0,018682027	296,9946154
ZjuHsp60-05	2	AT5G26360.1	5	54,2288	0,801	0,014770749	417,1446154
ZjuHsp60-05	2	AT3G18190.1	3	52,9695	0,7417	0,014002398	407,4576923
ZjuHsp60-05	2	AT1G24510.1	1	55,2924	0,8568	0,015495801	425,3261538
ZjuHsp60-05	2	AT3G03960.1	3	49,7723	0,9281	0,018646918	382,8638462
ZjuHsp60-05	2	AT1G24510.2	1	55,2954	0,8567	0,015493151	425,3492308
ZjuHsp60-05	2	AT3G02530.1	3	52,4166	0,959	0,018295731	403,2046154
ZjuHsp60-05	2	AT5G16070.1	5	52,3463	0,9595	0,018329853	402,6638462
ZjuHsp60-06	2	AT3G11830.1	3	1,8089	0,0407	0,022499862	13,91461538
ZjuHsp60-06	2	AT3G11830.2	3	1,8126	0,0408	0,022509103	13,94307692

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-06	2	AT3G20050.1	3	51,751	0,7162	0,013839346	398,0846154
ZjuHsp60-06	2	AT5G20890.1	5	38,578	0,7212	0,018694593	296,7538462
ZjuHsp60-06	2	AT5G26360.1	5	54,2305	0,801	0,014770286	417,1576923
ZjuHsp60-06	2	AT3G18190.1	3	50,4412	0,7420	0,014710197	388,0092308
ZjuHsp60-06	2	AT1G24510.1	1	53,889	0,8109	0,015047598	414,5307692
ZjuHsp60-06	2	AT3G03960.1	3	49,7724	0,9280	0,018644871	382,8646154
ZjuHsp60-06	2	AT1G24510.2	1	55,295	0,8567	0,015493263	425,3461538
ZjuHsp60-06	2	AT3G02530.1	3	52,4191	0,9589	0,01829295	403,2238462
ZjuHsp60-06	2	AT5G16070.1	5	52,3453	0,9594	0,018328293	402,6561538
ZjuHsp60-09	2	AT2G28000.1	2	4,2154	0,0795	0,01885942	32,42615385
ZjuHsp60-09	2	AT5G18820.1	5	30,4822	0,3101	0,01017315	32,42615385
ZjuHsp60-09	2	AT5G56500.2	5	52,8725	0,4643	0,008781503	406,7115385
ZjuHsp60-09	2	AT5G56500.1	5	50,6966	0,4642	0,009156433	389,9738462
ZjuHsp60-09	2	AT1G55490.1	1	49,4368	0,4625	0,009355379	380,2830769
ZjuHsp60-09	2	AT1G55490.2	1	49,4393	0,4626	0,009356929	380,3023077
ZjuHsp60-09	2	AT3G13470.1	1	46,5139	0,4648	0,009992712	357,7992308
ZjuHsp60-09	2	AT1G26230.1	1	49,8981	0,5511	0,011044509	383,8315385
ZjuHsp60-09	2	AT2G33210.1	2	50,1093	0,5565	0,011105723	385,4561538
ZjuHsp60-09	2	AT1G26230.2	1	49,354	0,5241	0,0106192	379,6461538
ZjuHsp60-09	2	AT2G33210.2	2	50,0117	0,5558	0,011113399	384,7053846
ZjuHsp60-09	2	AT3G23990.1	3	50,2573	0,5643	0,01122822	386,5946154
ZjuHsp60-09	2	AT3G13860.1	3	49,8019	0,5805	0,011656182	383,0915385
ZjuHsp60-10	4	AT3G13470.1	3	2,4884	0,0708	0,028452017	19,14153846
ZjuHsp60-10	4	AT1G55490.1	1	4,7675	0,0775	0,016255899	36,67307692
ZjuHsp60-10	4	AT5G56500.2	5	5,2664	0,0883	0,016766672	40,51076923
ZjuHsp60-10	4	AT1G55490.2	1	4,7676	0,0775	0,016255558	36,67384615
ZjuHsp60-10	4	AT5G56500.1	5	5,2665	0,0883	0,016766353	40,51153846
ZjuHsp60-10	4	AT1G26230.1	1	5,8886	0,2381	0,040434059	45,29692308
ZjuHsp60-10	4	AT1G26230.2	1	5,9192	0,2247	0,037961211	45,53230769
ZjuHsp60-10	4	AT2G28000.1	2	40,9509	0,4871	0,011894732	315,0069231
ZjuHsp60-10	4	AT2G33210.1	2	51,0265	0,5586	0,010947253	392,5115385
ZjuHsp60-10	4	AT3G23990.1	3	51,1976	0,5642	0,011020048	393,8276923
ZjuHsp60-10	4	AT2G33210.2	2	51,0182	0,5584	0,010945114	392,4476923
ZjuHsp60-10	4	AT3G13860.1	3	50,0918	0,5705	0,01138909	385,3215385
ZjuHsp60-10	4	AT5G18820.1	5	50,2446	0,5490	0,010926547	386,4969231
ZjuHsp60-11	4	AT5G26360.1	5	2,2454	0,0389	0,017324307	17,27230769
ZjuHsp60-11	4	AT1G24510.1	1	55,1799	0,7098	0,01286338	424,4607692
ZjuHsp60-11	4	AT3G18190.1	3	51,4433	0,8264	0,016064288	395,7176923
ZjuHsp60-11	4	AT1G24510.2	1	55,8768	0,7438	0,013311428	429,8215385
ZjuHsp60-11	4	AT3G20050.1	3	49,5093	0,809	0,016340364	380,8407692
ZjuHsp60-11	4	AT3G03960.1	3	50,8601	0,8886	0,017471456	391,2315385
ZjuHsp60-11	4	AT5G20890.1	5	51,7567	0,8426	0,016280018	398,1284615
ZjuHsp60-11	4	AT5G16070.1	5	51,7116	0,8925	0,017259184	397,7815385
ZjuHsp60-11	4	AT3G02530.1	3	51,3665	0,9259	0,018025367	395,1269231
ZjuHsp60-12	4	AT3G02530.1	3	1,8152	0,0774	0,042639929	13,96307692
ZjuHsp60-12	4	AT5G16070.1	5	2,8388	0,0853	0,030047908	21,83692308
ZjuHsp60-13	5	AT3G18190.1	3	5,1657	0,054	0,010453569	39,73615385
ZjuHsp60-13	5	AT1G24510.1	1	0,2375	16,1813	68,13178947	1,826923077
ZjuHsp60-13	5	AT3G20050.1	3	47,4814	0,7782	0,016389576	365,2415385
ZjuHsp60-13	5	AT5G20890.1	5	49,7078	0,7509	0,015106281	382,3676923
ZjuHsp60-13	5	AT1G24510.2	1	54,6482	0,6642	0,012154106	420,3707692
ZjuHsp60-13	5	AT3G11830.1	3	50,9314	0,7903	0,01551695	391,78
ZjuHsp60-13	5	AT3G11830.2	3	50,843	0,795	0,015636371	391,1
ZjuHsp60-13	5	AT5G26360.1	5	48,8402	0,8613	0,017635063	375,6938462
ZjuHsp60-13	5	AT3G03960.1	3	48,8859	0,8948	0,018303846	376,0453846
ZjuHsp60-13	5	AT5G16070.1	5	0,1286	12,7326	99,00933126	0,989230769
ZjuHsp60-13	5	AT3G02530.1	3	48,4534	0,8875	0,018316568	372,7184615
ZjuHsp60-14	6	AT1G34260.1	1	2,2359	0,4145	0,185383962	17,19923077
ZjuHsp60-14	6	AT4G33240.3	4	30,4717	0,6468	0,021226253	234,3976923
ZjuHsp60-14	6	AT4G33240.1	4	31,1833	0,6533	0,020950316	239,8715385
ZjuHsp60-14	6	AT4G33240.2	4	40,1726	0,6497	0,016172715	309,02
ZjuHsp60-14	6	AT3G14270.1	3	9,8899	0,6223	0,06292278	76,07615385
ZjuHsp60-14	6	AT1G71010.1	1	9,4956	0,688	0,072454611	73,04307692
ZjuHsp60-15	8	AT3G14270.1	3	2,3195	0,2954	0,127355033	17,84230769
ZjuHsp60-15	8	AT4G33240.2	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-15	8	AT4G33240.1	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-15	8	AT4G33240.3	4	1,7548	0,2873	0,163722362	13,49846154
ZjuHsp60-15	8	AT1G71010.1	1	6,8691	0,5395	0,078540129	52,83923077
ZjuHsp60-16	8	AT1G71010.1	1	6,8686	0,5395	0,078545846	52,83538462

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-16	8	AT3G14270.1	3	2,3195	0,2954	0,127355033	17,84230769
ZjuHsp60-16	8	AT4G33240.2	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-16	8	AT4G33240.1	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-16	8	AT4G33240.3	4	1,7548	0,2873	0,163722362	13,49846154
ZjuHsp60-16	8	AT1G34260.1	1	17,0877	0,6612	0,0386945	131,4438462
ZjuHsp60-17	8	AT1G71010.1	1	6,8695	0,5395	0,078535556	52,84230769
ZjuHsp60-17	8	AT3G14270.1	3	2,3195	0,2954	0,127355033	17,84230769
ZjuHsp60-17	8	AT4G33240.2	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-17	8	AT4G33240.1	4	1,755	0,2873	0,163703704	13,5
ZjuHsp60-17	8	AT4G33240.3	4	1,7548	0,2873	0,163722362	13,49846154
ZjuHsp60-17	8	AT1G34260.1	3	17,0588	0,6612	0,038760053	131,2215385
ZjuHsp60-18	8	AT3G20050.1	3	2,1823	0,0556	0,025477707	16,78692308
ZjuHsp60-18	8	AT3G11830.1	3	52,0696	0,7122	0,013677847	400,5353846
ZjuHsp60-18	8	AT3G11830.2	3	52,1897	0,708	0,013565895	401,4592308
ZjuHsp60-18	8	AT3G18190.1	3	50,2426	0,735	0,01462902	386,4815385
ZjuHsp60-18	8	AT5G20890.1	5	27,1146	0,7388	0,027247313	208,5738462
ZjuHsp60-18	8	AT5G26360.1	5	51,4476	0,825	0,016035733	395,7507692
ZjuHsp60-18	8	AT1G24510.1	1	51,218	0,8316	0,016236479	393,9846154
ZjuHsp60-18	8	AT3G03960.1	3	48,4443	0,9041	0,01866267	372,6484615
ZjuHsp60-18	8	AT3G02530.1	3	31,987	0,906	0,028324007	246,0538462
ZjuHsp60-18	8	AT5G16070.1	5	43,2844	0,9266	0,021407251	332,9569231
ZjuHsp60-19	8	AT3G13860.1	3	2,5882	0,1332	0,051464338	19,90923077
ZjuHsp60-19	8	AT3G23990.1	3	7,1290	0,1843	0,025852153	54,83846154
ZjuHsp60-19	8	AT2G33210.1	2	10,6765	0,204	0,019107385	82,12692308
ZjuHsp60-19	8	AT2G33210.2	2	11,0743	0,2036	0,018384909	85,18692308
ZjuHsp60-19	8	AT5G56500.2	5	53,5088	0,6161	0,011513994	411,6061538
ZjuHsp60-19	8	AT5G56500.1	5	53,5065	0,6162	0,011516358	411,5884615
ZjuHsp60-19	8	AT1G55490.1	1	50,213	0,6088	0,01212435	386,2538462
ZjuHsp60-19	8	AT1G55490.2	1	50,2132	0,6089	0,012126293	386,2553846
ZjuHsp60-19	8	AT3G13470.1	3	50,2238	0,6048	0,0120421	386,3369231
ZjuHsp60-19	8	AT1G26230.1	1	51,7266	0,619	0,011966764	397,8969231
ZjuHsp60-19	8	AT1G26230.2	1	51,046	0,5991	0,011736473	392,6615385
ZjuHsp60-19	8	AT2G28000.1	2	51,3891	0,6084	0,011839086	395,3007692
ZjuHsp60-19	8	AT5G18820.1	5	50,9817	0,7014	0,013757878	392,1669231
ZjuHsp60-20	9	AT3G23990.1	3	2,3096	0,0711	0,030784551	17,76615385
ZjuHsp60-20	9	AT2G33210.1	2	3,6442	0,0907	0,024888864	28,03230769
ZjuHsp60-20	9	AT2G33210.2	2	3,6632	0,0905	0,024705176	28,17846154
ZjuHsp60-20	9	AT3G13860.1	3	6,2003	0,1956	0,031546861	47,69461538
ZjuHsp60-20	9	AT5G56500.2	5	53,291	0,5332	0,010005442	409,9307692
ZjuHsp60-20	9	AT5G56500.1	5	53,2926	0,5334	0,010008894	409,9430769
ZjuHsp60-20	9	AT3G13470.1	3	51,1927	0,5503	0,01074958	393,79
ZjuHsp60-20	9	AT1G55490.1	1	51,0753	0,5385	0,010543257	392,8869231
ZjuHsp60-20	9	AT1G55490.2	1	51,0768	0,5385	0,010542947	392,8984615
ZjuHsp60-20	9	AT1G26230.1	1	52,0819	0,5765	0,011069105	400,63
ZjuHsp60-20	9	AT1G26230.2	1	51,2295	0,5409	0,01055837	394,0730769
ZjuHsp60-20	9	AT2G28000.1	2	51,1867	0,5648	0,011034116	393,7438462
ZjuHsp60-20	9	AT5G18820.1	5	13,6626	0,6568	0,048072841	105,0969231
ZjuHsp60-21	10	AT1G24510.1	1	2,0125	0,0513	0,025490683	15,48076923
ZjuHsp60-21	10	AT1G24510.2	1	1,8649	0,0484	0,025953134	14,34538462
ZjuHsp60-21	10	AT3G18190.1	3	53,7815	0,6623	0,012314644	413,7038462
ZjuHsp60-21	10	AT5G26360.1	5	54,9394	0,756	0,013760616	422,6107692
ZjuHsp60-21	10	AT5G20890.1	5	51,1467	0,7619	0,014896367	393,4361538
ZjuHsp60-21	10	AT3G20050.1	3	50,4904	0,8263	0,016365487	388,3876923
ZjuHsp60-21	10	AT3G11830.1	3	30,1795	0,8169	0,027068043	232,15
ZjuHsp60-21	10	AT3G11830.2	3	34,1522	0,8059	0,023597309	262,7092308
ZjuHsp60-21	10	AT5G16070.1	5	52,0478	0,9093	0,017470479	400,3676923
ZjuHsp60-21	10	AT3G02530.1	3	52,1901	0,9077	0,017392187	401,4623077
ZjuHsp60-21	10	AT3G03960.1	3	51,8389	0,9521	0,018366516	398,7607692
ZjuHsp60-22	10	AT1G24510.1	1	2,0125	0,0513	0,025490683	15,48076923
ZjuHsp60-22	10	AT1G24510.2	1	1,865	0,0484	0,025951743	14,34615385
ZjuHsp60-22	10	AT3G18190.1	3	53,7859	0,6623	0,012313636	413,7376923
ZjuHsp60-22	10	AT5G26360.1	5	54,9412	0,756	0,013760165	422,6246154
ZjuHsp60-22	10	AT5G20890.1	5	51,1476	0,7619	0,014896105	393,4430769
ZjuHsp60-22	10	AT3G20050.1	3	50,4907	0,8264	0,016367371	388,39
ZjuHsp60-22	10	AT3G11830.1	3	29,9599	0,817	0,027269784	230,4607692
ZjuHsp60-22	10	AT3G11830.2	3	34,0941	0,8059	0,023637521	262,2623077
ZjuHsp60-22	10	AT5G16070.1	5	52,0477	0,9094	0,017472434	400,3669231
ZjuHsp60-22	10	AT3G02530.1	3	52,1893	0,9078	0,01739437	401,4561538
ZjuHsp60-22	10	AT3G03960.1	3	51,8384	0,9521	0,018366693	398,7569231

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-23	10	AT3G14470.1	3	52,1405	0,5841	0,011202424	401,0807692
ZjuHsp60-24	10	AT1G26230.1	1	2,3622	0,184	0,077893489	18,17076923
ZjuHsp60-24	10	AT1G26230.2	1	2,6568	0,1796	0,06760012	20,43692308
ZjuHsp60-24	10	AT1G55490.1	1	19,2868	0,231	0,011977104	148,36
ZjuHsp60-24	10	AT1G55490.2	1	19,4394	0,231	0,011883083	149,5338462
ZjuHsp60-24	10	AT3G13470.1	3	13,5767	0,2448	0,018030891	104,4361538
ZjuHsp60-24	10	AT5G56500.2	5	23,3696	0,2487	0,010642031	179,7661538
ZjuHsp60-24	10	AT5G56500.1	5	23,1341	0,2487	0,010750364	177,9546154
ZjuHsp60-24	10	AT2G28000.1	2	0,1697	16,5628	97,60047142	1,305384615
ZjuHsp60-24	10	AT3G23990.1	3	53,6616	0,5783	0,010776794	412,7815385
ZjuHsp60-24	10	AT2G33210.1	2	21,7921	0,6045	0,02773941	167,6315385
ZjuHsp60-24	10	AT2G33210.2	2	17,7256	0,5984	0,033759083	136,3507692
ZjuHsp60-24	10	AT3G13860.1	3	51,9435	0,6063	0,011672298	399,5653846
ZjuHsp60-24	10	AT5G18820.1	5	51,9289	0,5525	0,010639548	399,4530769
ZjuHsp60-25	10	AT1G26230.1	1	2,0638	0,1617	0,078350615	15,87538462
ZjuHsp60-25	10	AT1G26230.2	1	2,1317	0,1552	0,072805742	16,39769231
ZjuHsp60-25	10	AT1G55490.1	1	19,9836	0,228	0,011409356	153,72
ZjuHsp60-25	10	AT1G55490.2	1	20,0149	0,228	0,011391513	153,9607692
ZjuHsp60-25	10	AT3G13470.1	3	14,3893	0,2409	0,016741607	110,6869231
ZjuHsp60-25	10	AT5G56500.2	5	17,765	0,2448	0,013779904	136,6538462
ZjuHsp60-25	10	AT5G56500.1	5	17,7786	0,2448	0,013769363	136,7584615
ZjuHsp60-25	10	AT2G28000.1	2	52,3032	0,5028	0,009613179	402,3323077
ZjuHsp60-25	10	AT3G23990.1	3	54,4252	0,5684	0,010443692	418,6553846
ZjuHsp60-25	10	AT2G33210.1	2	27,7061	0,5771	0,020829348	213,1238462
ZjuHsp60-25	10	AT2G33210.2	2	26,3421	0,5698	0,021630774	202,6315385
ZjuHsp60-25	10	AT3G13860.1	3	52,974	0,5857	0,011056367	407,4923077
ZjuHsp60-25	10	AT5G18820.1	5	52,9942	0,5591	0,010550211	407,6476923
ZjuHsp60-28	12	AT3G03960.1	3	1,6091	0,0942	0,058542042	12,37769231
ZjuHsp60-29	scaffold	AT3G23990.1	3	1,7021	0,0516	0,030315493	13,09307692
ZjuHsp60-29	scaffold	AT2G33210.1	2	2,8287	0,0678	0,023968607	21,75923077
ZjuHsp60-29	scaffold	AT2G33210.2	2	2,8658	0,0675	0,023553632	22,04461538
ZjuHsp60-29	scaffold	AT3G13860.1	3	6,6447	0,1966	0,029587491	51,11307692
ZjuHsp60-29	scaffold	AT5G56500.2	5	53,6914	0,5385	0,010029539	413,0107692
ZjuHsp60-29	scaffold	AT5G56500.1	5	53,6909	0,5386	0,010031495	413,0069231
ZjuHsp60-29	scaffold	AT5G56500.1	5	53,6917	0,5386	0,010031346	413,0130769
ZjuHsp60-29	scaffold	AT3G13470.1	3	51,2435	0,5511	0,010754535	394,1807692
ZjuHsp60-29	scaffold	AT1G55490.1	1	51,0779	0,5471	0,01071109	392,9069231
ZjuHsp60-29	scaffold	AT1G55490.2	1	51,0758	0,5472	0,010713489	392,8907692
ZjuHsp60-29	scaffold	AT2G28000.1	2	52,194	0,553	0,010595088	401,4923077
ZjuHsp60-29	scaffold	AT1G26230.1	1	51,8294	0,5959	0,011497335	398,6876923
ZjuHsp60-29	scaffold	AT1G26230.2	1	51,1623	0,5572	0,010890832	393,5561538
ZjuHsp60-29	scaffold	AT5G18820.1	5	51,3513	0,6455	0,012570276	395,01
ZjuHsp60-30	scaffold	AT3G03960.1	3	1,4957	0,0893	0,059704486	11,50538462
ZjuHsp60-30	scaffold	AT3G18190.1	3	51,3484	0,859	0,016728856	394,9876923
ZjuHsp60-30	scaffold	AT3G20050.1	3	48,3217	0,8723	0,018051931	371,7053846
ZjuHsp60-30	scaffold	AT3G11830.1	3	50,7035	0,9058	0,017864644	390,0269231
ZjuHsp60-30	scaffold	AT5G26360.1	5	52,805	0,8916	0,016884765	406,1923077
ZjuHsp60-30	scaffold	AT3G11830.2	3	50,7135	0,9071	0,017886756	390,1038462
ZjuHsp60-30	scaffold	AT1G24510.1	1	53,5225	0,9239	0,017261899	411,7115385
ZjuHsp60-31	scaffold	AT3G03960.1	3	1,4957	0,0893	0,059704486	11,50538462
ZjuHsp60-31	scaffold	AT3G18190.1	3	51,3467	0,8591	0,016731358	394,9746154
ZjuHsp60-31	scaffold	AT3G20050.1	3	48,3208	0,8724	0,018054337	371,6984615
ZjuHsp60-31	scaffold	AT3G11830.1	3	50,7026	0,9059	0,017866934	390,02
ZjuHsp60-31	scaffold	AT5G26360.1	5	52,8037	0,8916	0,01688518	406,1823077
ZjuHsp60-31	scaffold	AT3G11830.2	3	50,7144	0,9071	0,017886439	390,1107692
ZjuHsp60-31	scaffold	AT1G24510.1	1	53,5211	0,9239	0,017262351	411,7007692
ZjuHsp60-32	scaffold	AT5G20720.2	5	2,2837	0,1488	0,06515742	17,56692308
ZjuHsp60-32	scaffold	AT5G20720.1	5	2,2837	0,1488	0,06515742	17,56692308
ZjuHsp60-32	scaffold	AT5G20720.3	5	2,2837	0,1488	0,06515742	17,56692308
ZjuHsp60-36	scaffold	AT5G20720.2	5	2,2522	0,1489	0,066113134	17,32461538
ZjuHsp60-36	scaffold	AT5G20720.1	5	2,2522	0,1489	0,066113134	17,32461538
ZjuHsp60-36	scaffold	AT5G20720.3	5	2,2522	0,1489	0,066113134	17,32461538
ZjuHsp60-37	scaffold	AT3G60210.1	3	2,7371	0,1728	0,063132513	21,05461538
ZjuHsp60-37	scaffold	AT2G44650.1	2	2,6336	0,197	0,074802552	20,25846154
ZjuHsp60-38	scaffold	AT5G18820.1	5	2,5706	0,1716	0,066754843	19,77384615
ZjuHsp60-38	scaffold	AT2G28000.1	2	51,3505	0,2915	0,005676673	395,0038462
ZjuHsp60-38	scaffold	AT1G55490.1	1	52,3686	0,5272	0,010067101	402,8353846
ZjuHsp60-38	scaffold	AT1G55490.2	1	52,3675	0,5271	0,010065403	402,8269231
ZjuHsp60-38	scaffold	AT5G56500.2	5	56,3197	0,5024	0,008920502	433,2284615

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-38	scaffold	AT5G56500.1	5	56,3171	0,5026	0,008924465	433,2084615
ZjuHsp60-38	scaffold	AT3G13470.1	3	52,2436	0,5408	0,010351507	401,8738462
ZjuHsp60-38	scaffold	AT1G26230.1	1	52,5981	0,5814	0,011053631	404,6007692
ZjuHsp60-38	scaffold	AT1G26230.2	1	52,6273	0,5557	0,010559158	404,8253846
ZjuHsp60-38	scaffold	AT3G23990.1	3	52,994	0,6305	0,011897573	407,6461538
ZjuHsp60-38	scaffold	AT2G33210.1	2	52,6535	0,621	0,011794088	405,0269231
ZjuHsp60-38	scaffold	AT2G33210.2	2	52,5697	0,6201	0,011795768	404,3823077
ZjuHsp60-38	scaffold	AT3G13860.1	3	52,988	0,647	0,012210312	407,6
ZjuHsp60-39	scaffold	AT5G18820.1	5	3,8256	0,2351	0,061454412	29,42769231
ZjuHsp60-39	scaffold	AT2G28000.1	2	51,976	0,3381	0,006504925	399,8153846
ZjuHsp60-39	scaffold	AT5G56500.2	5	56,9331	0,5704	0,010018776	437,9469231
ZjuHsp60-39	scaffold	AT5G56500.1	5	56,9309	0,5704	0,010019164	437,93
ZjuHsp60-39	scaffold	AT1G55490.1	1	53,3607	0,5734	0,010745736	410,4669231
ZjuHsp60-39	scaffold	AT1G55490.2	1	53,3604	0,5733	0,010743922	410,4646154
ZjuHsp60-39	scaffold	AT3G13470.1	3	53,0387	0,5922	0,011165432	407,99
ZjuHsp60-39	scaffold	AT1G26230.1	1	52,9114	0,6459	0,012207199	407,0107692
ZjuHsp60-39	scaffold	AT3G23990.1	3	54,5048	0,6826	0,012523668	419,2676923
ZjuHsp60-39	scaffold	AT1G26230.2	1	53,0175	0,6228	0,011747065	407,8269231
ZjuHsp60-39	scaffold	AT2G33210.1	2	53,8932	0,6905	0,012812377	414,5630769
ZjuHsp60-39	scaffold	AT2G33210.2	2	53,7666	0,6901	0,012835106	413,5892308
ZjuHsp60-39	scaffold	AT3G13860.1	3	53,8501	0,7069	0,013127181	414,2315385
Mean				32,8711	0,69085	0,021016775	252,8548661

Z. jujuba – *C. cinensis*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-01	1	orange1.1g002527m	scaffold	5,8268	0,6063	0,104053683	44,82153846
ZjuHsp60-01	1	orange1.1g000391m	scaffold	6,1236	0,7073	0,115503952	47,10461538
ZjuHsp60-01	1	orange1.1g000362m	scaffold	5,5584	0,6466	0,11632844	42,75692308
ZjuHsp60-01	1	orange1.1g000317m	scaffold	5,6865	0,6656	0,117049151	43,74230769
ZjuHsp60-01	1	orange1.1g000313m	scaffold	5,8155	0,6636	0,114108847	44,73461538
ZjuHsp60-01	1	orange1.1g000311m	scaffold	5,8156	0,6636	0,114106885	44,73538462
ZjuHsp60-01	1	orange1.1g000312m	scaffold	5,8154	0,6636	0,114110809	44,73384615
ZjuHsp60-01	1	orange1.1g000300m	scaffold	5,8369	0,6637	0,113707619	44,89923077
ZjuHsp60-01	1	orange1.1g000298m	scaffold	5,7453	0,663	0,115398674	44,19461538
ZjuHsp60-01	1	orange1.1g000606m	scaffold	0,9629	0,1525	0,15837574	7,406923077
ZjuHsp60-01	1	orange1.1g000605m	scaffold	0,9629	0,1525	0,15837574	7,406923077
ZjuHsp60-01	1	orange1.1g000604m	scaffold	0,9629	0,1525	0,15837574	7,406923077
ZjuHsp60-01	1	orange1.1g000862m	scaffold	0,9712	0,1806	0,185955519	7,470769231
ZjuHsp60-01	1	orange1.1g000863m	scaffold	0,9712	0,1806	0,185955519	7,470769231
ZjuHsp60-01	1	orange1.1g000222m	scaffold	8,3649	0,5201	0,062176476	64,34538462
ZjuHsp60-01	1	orange1.1g000223m	scaffold	8,3621	0,5201	0,062197295	64,32384615
ZjuHsp60-01	1	orange1.1g000226m	scaffold	8,362	0,5201	0,062198039	64,32307692
ZjuHsp60-01	1	orange1.1g000225m	scaffold	8,3618	0,5201	0,062199526	64,32153846
ZjuHsp60-01	1	orange1.1g000278m	scaffold	8,894	0,4687	0,052698448	68,41538462
ZjuHsp60-02	1	orange1.1g009718m	scaffold	0,6296	0,0207	0,032878018	4,843076923
ZjuHsp60-02	1	orange1.1g009923m	scaffold	0,8904	0,0225	0,025269542	6,849230769
ZjuHsp60-02	1	orange1.1g010585m	scaffold	0,9383	0,0195	0,020782266	7,217692308
ZjuHsp60-02	1	orange1.1g009216m	scaffold	54,0358	0,7204	0,013331902	415,66
ZjuHsp60-02	1	orange1.1g008702m	scaffold	54,2214	0,7304	0,013470696	417,0876923
ZjuHsp60-02	1	orange1.1g008527m	scaffold	54,0255	0,7312	0,01353435	415,5807692
ZjuHsp60-02	1	orange1.1g011829m	scaffold	55,1698	0,7106	0,012880235	424,3830769
ZjuHsp60-02	1	orange1.1g009425m	scaffold	51,2478	0,7674	0,014974301	394,2138462
ZjuHsp60-02	1	orange1.1g009431m	scaffold	48,8145	0,7302	0,01495867	375,4961538
ZjuHsp60-02	1	orange1.1g014593m	scaffold	14,4011	0,7181	0,049864246	110,7776923
ZjuHsp60-02	1	orange1.1g009426m	scaffold	50,8208	0,8613	0,016947785	390,9292308
ZjuHsp60-02	1	orange1.1g008703m	scaffold	53,0337	0,8503	0,016033202	407,9515385
ZjuHsp60-02	1	orange1.1g008712m	scaffold	53,0338	0,8503	0,016033171	407,9523077
ZjuHsp60-02	1	orange1.1g036490m	scaffold	53,1583	0,8571	0,01612354	408,91
ZjuHsp60-02	1	orange1.1g012122m	scaffold	50,8033	0,8846	0,017412255	390,7946154
ZjuHsp60-02	1	orange1.1g015935m	scaffold	29,2035	0,8163	0,027952129	224,6423077
ZjuHsp60-02	1	orange1.1g016953m	scaffold	31,5295	0,7856	0,024916348	242,5346154
ZjuHsp60-03	1	orange1.1g000278m	scaffold	1,0715	0,1889	0,176294914	8,242307692
ZjuHsp60-03	1	orange1.1g000222m	scaffold	1,8685	0,2485	0,132994381	14,37307692
ZjuHsp60-03	1	orange1.1g000223m	scaffold	1,8685	0,2485	0,132994381	14,37307692
ZjuHsp60-03	1	orange1.1g000225m	scaffold	1,8685	0,2485	0,132994381	14,37307692
ZjuHsp60-03	1	orange1.1g000226m	scaffold	1,8568	0,2467	0,13286299	14,28307692
ZjuHsp60-03	1	orange1.1g000606m	scaffold	9,9083	0,4227	0,042661203	76,21769231

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-03	1	orange1.1g000605m	scaffold	9,9092	0,4227	0,042657329	76,22461538
ZjuHsp60-03	1	orange1.1g000862m	scaffold	10,9589	0,4818	0,043964266	84,29923077
ZjuHsp60-03	1	orange1.1g000604m	scaffold	9,91	0,4227	0,042653885	76,23076923
ZjuHsp60-03	1	orange1.1g000863m	scaffold	10,9607	0,4818	0,043957047	84,31307692
ZjuHsp60-03	1	orange1.1g000313m	scaffold	7,7666	0,6085	0,078348312	59,74307692
ZjuHsp60-03	1	orange1.1g000311m	scaffold	7,7653	0,6085	0,078361428	59,73307692
ZjuHsp60-03	1	orange1.1g000312m	scaffold	7,7662	0,6085	0,078352347	59,74
ZjuHsp60-03	1	orange1.1g000317m	scaffold	7,7655	0,6085	0,07835941	59,73461538
ZjuHsp60-03	1	orange1.1g000362m	scaffold	7,8699	0,61	0,077510515	60,53769231
ZjuHsp60-03	1	orange1.1g000862m	scaffold	7,8378	0,6092	0,077725892	60,29076923
ZjuHsp60-03	1	orange1.1g000298m	scaffold	7,7923	0,6085	0,078089909	59,94076923
ZjuHsp60-03	1	orange1.1g000391m	scaffold	7,8867	0,6361	0,080654773	60,66692308
ZjuHsp60-03	1	orange1.1g002527m	scaffold	7,1555	0,5775	0,080707148	55,04230769
ZjuHsp60-04	1	orange1.1g000278m	scaffold	1,0192	0,1774	0,174058085	7,84
ZjuHsp60-04	1	orange1.1g000222m	scaffold	1,8042	0,2546	0,141115176	13,87846154
ZjuHsp60-04	1	orange1.1g000223m	scaffold	1,8042	0,2546	0,141115176	13,87846154
ZjuHsp60-04	1	orange1.1g000225m	scaffold	1,8042	0,2546	0,141115176	13,87846154
ZjuHsp60-04	1	orange1.1g000226m	scaffold	1,783	0,2543	0,14262479	13,71538462
ZjuHsp60-04	1	orange1.1g000606m	scaffold	9,648	0,4246	0,044009121	74,21538462
ZjuHsp60-04	1	orange1.1g000605m	scaffold	9,6442	0,4246	0,044026462	74,18615385
ZjuHsp60-04	1	orange1.1g000604m	scaffold	9,6431	0,4246	0,044031484	74,17769231
ZjuHsp60-04	1	orange1.1g000863m	scaffold	10,7043	0,4827	0,045094028	82,34076923
ZjuHsp60-04	1	orange1.1g000317m	scaffold	8,2916	0,6263	0,075534276	63,78153846
ZjuHsp60-04	1	orange1.1g000313m	scaffold	8,3836	0,628	0,074908154	64,48923077
ZjuHsp60-04	1	orange1.1g000311m	scaffold	8,3849	0,628	0,07489654	64,49923077
ZjuHsp60-04	1	orange1.1g000362m	scaffold	7,3151	0,6098	0,083361813	56,27
ZjuHsp60-04	1	orange1.1g000312m	scaffold	8,3841	0,628	0,074903687	64,49307692
ZjuHsp60-04	1	orange1.1g000300m	scaffold	8,4593	0,6287	0,07432057	65,07153846
ZjuHsp60-04	1	orange1.1g000862m	scaffold	10,7101	0,4827	0,045069607	82,38538462
ZjuHsp60-04	1	orange1.1g000298m	scaffold	8,413	0,628	0,074646381	64,71538462
ZjuHsp60-04	1	orange1.1g000391m	scaffold	8,0527	0,6647	0,082543743	61,94384615
ZjuHsp60-04	1	orange1.1g002527m	scaffold	9,2431	0,5606	0,060650648	71,10076923
ZjuHsp60-05	2	orange1.1g008702m	scaffold	0,9869	0,0363	0,036781842	7,591538462
ZjuHsp60-05	2	orange1.1g009216m	scaffold	0,9862	0,0511	0,051815048	7,586153846
ZjuHsp60-05	2	orange1.1g008527m	scaffold	1,0352	0,0655	0,063272798	7,963076923
ZjuHsp60-05	2	orange1.1g011829m	scaffold	0,9446	0,0417	0,04414567	7,266153846
ZjuHsp60-05	2	orange1.1g014593m	scaffold	1,0135	0,0497	0,049037987	7,796153846
ZjuHsp60-05	2	orange1.1g009718m	scaffold	53,814	0,7148	0,013282789	413,9538462
ZjuHsp60-05	2	orange1.1g010585m	scaffold	53,7988	0,6993	0,012998431	413,8369231
ZjuHsp60-05	2	orange1.1g009923m	scaffold	53,6002	0,7239	0,013505547	412,3092308
ZjuHsp60-05	2	orange1.1g008703m	scaffold	54,4127	0,8147	0,014972607	418,5592308
ZjuHsp60-05	2	orange1.1g008712m	scaffold	54,4126	0,8147	0,014972635	418,5584615
ZjuHsp60-05	2	orange1.1g036490m	scaffold	54,6249	0,8201	0,0150133	420,1915385
ZjuHsp60-05	2	orange1.1g009431m	scaffold	50,8091	0,7587	0,014932364	390,8392308
ZjuHsp60-05	2	orange1.1g010272m	scaffold	54,8611	0,8362	0,01524213	422,0084615
ZjuHsp60-05	2	orange1.1g012157m	scaffold	54,3808	0,8169	0,015021846	418,3138462
ZjuHsp60-05	2	orange1.1g015935m	scaffold	54,2206	0,7067	0,013033792	417,0815385
ZjuHsp60-05	2	orange1.1g016953m	scaffold	28,719	0,681	0,023712525	220,9153846
ZjuHsp60-05	2	orange1.1g008377m	scaffold	53,0519	0,9265	0,017464031	408,0915385
ZjuHsp60-05	2	orange1.1g009082m	scaffold	52,5825	0,9152	0,01740503	404,4807692
ZjuHsp60-05	2	orange1.1g009026m	scaffold	15,2769	0,9241	0,060490021	117,5146154
ZjuHsp60-05	2	orange1.1g009426m	scaffold	52,0992	0,9301	0,017852481	400,7630769
ZjuHsp60-06	2	orange1.1g008702m	scaffold	0,9869	0,0363	0,036781842	7,591538462
ZjuHsp60-06	2	orange1.1g009216m	scaffold	0,9862	0,0511	0,051815048	7,586153846
ZjuHsp60-06	2	orange1.1g008527m	scaffold	1,0352	0,0655	0,063272798	7,963076923
ZjuHsp60-06	2	orange1.1g011829m	scaffold	0,9446	0,0417	0,04414567	7,266153846
ZjuHsp60-06	2	orange1.1g014593m	scaffold	1,0135	0,0497	0,049037987	7,796153846
ZjuHsp60-06	2	orange1.1g009718m	scaffold	53,8152	0,7148	0,013282493	413,9630769
ZjuHsp60-06	2	orange1.1g010585m	scaffold	53,7976	0,6993	0,012998721	413,8276923
ZjuHsp60-06	2	orange1.1g009923m	scaffold	53,6008	0,7238	0,01350353	412,3138462
ZjuHsp60-06	2	orange1.1g008703m	scaffold	54,4109	0,8148	0,014974941	418,5453846
ZjuHsp60-06	2	orange1.1g008712m	scaffold	54,4132	0,8147	0,01497247	418,5630769
ZjuHsp60-06	2	orange1.1g036490m	scaffold	54,6239	0,8201	0,015013575	420,1838462
ZjuHsp60-06	2	orange1.1g009425m	scaffold	11,642	0,8037	0,06903453	89,55384615
ZjuHsp60-06	2	orange1.1g009431m	scaffold	50,8108	0,7586	0,014929897	390,8523077
ZjuHsp60-06	2	orange1.1g010272m	scaffold	54,8642	0,8362	0,015241268	422,0323077
ZjuHsp60-06	2	orange1.1g012157m	scaffold	54,3809	0,8168	0,015019979	418,3146154
ZjuHsp60-06	2	orange1.1g015935m	scaffold	54,2193	0,7068	0,013035948	417,0715385
ZjuHsp60-06	2	orange1.1g016953m	scaffold	28,8517	0,6810	0,023603462	221,9361538

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-06	2	orange1.1g008377m	scaffold	53,0529	0,9265	0,017463701	408,0992308
ZjuHsp60-06	2	orange1.1g009082m	scaffold	52,5806	0,9153	0,017407561	404,4661538
ZjuHsp60-06	2	orange1.1g009026m	scaffold	15,3322	0,9241	0,060271846	117,94
ZjuHsp60-06	2	orange1.1g009426m	scaffold	52,0994	0,9301	0,017852413	400,7646154
ZjuHsp60-09	2	orange1.1g007985m	scaffold	1,2165	0,0598	0,049157419	9,357692308
ZjuHsp60-09	2	orange1.1g011794m	scaffold	1,1938	0,0466	0,039035014	9,183076923
ZjuHsp60-09	2	orange1.1g011926m	scaffold	1,2095	0,0619	0,051178173	9,303846154
ZjuHsp60-09	2	orange1.1g007834m	scaffold	17,6601	0,3017	0,017083708	135,8469231
ZjuHsp60-09	2	orange1.1g007981m	scaffold	17,0395	0,301	0,017664838	131,0730769
ZjuHsp60-09	2	orange1.1g014061m	scaffold	18,8572	0,2968	0,015739346	145,0553846
ZjuHsp60-09	2	orange1.1g007313m	scaffold	50,575	0,4797	0,009484923	389,0384615
ZjuHsp60-09	2	orange1.1g007488m	scaffold	50,6083	0,4734	0,009354197	389,2946154
ZjuHsp60-09	2	orange1.1g008279m	scaffold	51,5164	0,4695	0,009113603	396,28
ZjuHsp60-09	2	orange1.1g007643m	scaffold	51,4858	0,4574	0,008884003	396,0446154
ZjuHsp60-09	2	orange1.1g009575m	scaffold	50,609	0,4566	0,009022111	389,3
ZjuHsp60-09	2	orange1.1g009601m	scaffold	51,6205	0,4566	0,008845323	397,0807692
ZjuHsp60-09	2	orange1.1g011103m	scaffold	50,4913	0,5331	0,010558255	388,3946154
ZjuHsp60-09	2	orange1.1g010494m	scaffold	50,6187	0,5405	0,010677872	389,3746154
ZjuHsp60-09	2	orange1.1g008181m	scaffold	50,7774	0,5892	0,011603587	390,5953846
ZjuHsp60-09	2	orange1.1g015120m	scaffold	50,0069	0,4997	0,009992621	384,6684615
ZjuHsp60-09	2	orange1.1g013743m	scaffold	51,3332	0,5499	0,010712365	394,8707692
ZjuHsp60-09	2	orange1.1g015737m	scaffold	50,3581	0,5697	0,011312976	387,37
ZjuHsp60-09	2	orange1.1g016787m	scaffold	52,4651	0,5235	0,009978062	403,5776923
ZjuHsp60-09	2	orange1.1g016809m	scaffold	52,4634	0,5234	0,009976479	403,5646154
ZjuHsp60-09	2	orange1.1g023832m	scaffold	53,5208	0,5317	0,009934455	411,6984615
ZjuHsp60-10	4	orange1.1g007313m	scaffold	2,6413	0,0685	0,025934199	20,31769231
ZjuHsp60-10	4	orange1.1g007488m	scaffold	3,4428	0,0724	0,021029395	26,48307692
ZjuHsp60-10	4	orange1.1g007643m	scaffold	2,7526	0,0702	0,025503161	21,17384615
ZjuHsp60-10	4	orange1.1g009575m	scaffold	3,9641	0,0743	0,01874322	30,49307692
ZjuHsp60-10	4	orange1.1g008279m	scaffold	3,7905	0,0742	0,019575254	29,15769231
ZjuHsp60-10	4	orange1.1g009601m	scaffold	3,9771	0,0744	0,018707098	30,59307692
ZjuHsp60-10	4	orange1.1g015120m	scaffold	1,2747	0,0353	0,02769279	9,805384615
ZjuHsp60-10	4	orange1.1g010494m	scaffold	4,8235	0,2353	0,048782005	37,10384615
ZjuHsp60-10	4	orange1.1g011103m	scaffold	4,1244	0,2256	0,054698865	31,72615385
ZjuHsp60-10	4	orange1.1g015737m	scaffold	3,5168	0,2527	0,071855096	27,05230769
ZjuHsp60-10	4	orange1.1g007985m	scaffold	50,825	0,4617	0,009084112	390,9615385
ZjuHsp60-10	4	orange1.1g007834m	scaffold	51,0152	0,5249	0,01028909	392,4246154
ZjuHsp60-10	4	orange1.1g007981m	scaffold	51,0269	0,5182	0,010155428	392,5146154
ZjuHsp60-10	4	orange1.1g011794m	scaffold	51,3870	0,4568	0,008889408	395,2846154
ZjuHsp60-10	4	orange1.1g008181m	scaffold	50,4549	0,6018	0,011927484	388,1146154
ZjuHsp60-10	4	orange1.1g011926m	scaffold	51,6194	0,4658	0,009023739	397,0723077
ZjuHsp60-10	4	orange1.1g013743m	scaffold	52,4383	0,5729	0,010925221	403,3715385
ZjuHsp60-10	4	orange1.1g014061m	scaffold	51,3536	0,5543	0,010793791	395,0276923
ZjuHsp60-10	4	orange1.1g016787m	scaffold	54,3393	0,5398	0,009933878	417,9946154
ZjuHsp60-10	4	orange1.1g016809m	scaffold	54,3387	0,5397	0,009932148	417,99
ZjuHsp60-10	4	orange1.1g023832m	scaffold	51,2795	0,5678	0,011072651	394,4576923
ZjuHsp60-10	4	orange1.1g013808m	scaffold	52,4121	0,8002	0,015267467	403,17
ZjuHsp60-10	4	orange1.1g013822m	scaffold	52,4119	0,8001	0,015265617	403,1684615
ZjuHsp60-10	4	orange1.1g012693m	scaffold	52,4811	0,8262	0,01574281	403,7007692
ZjuHsp60-10	4	orange1.1g012313m	scaffold	52,3278	0,8467	0,016180692	402,5215385
ZjuHsp60-10	4	orange1.1g016236m	scaffold	53,0333	0,8111	0,015294164	407,9484615
ZjuHsp60-10	4	orange1.1g016246m	scaffold	53,0325	0,8111	0,015294395	407,9423077
ZjuHsp60-10	4	orange1.1g011729m	scaffold	52,2033	0,8487	0,016257593	401,5638462
ZjuHsp60-10	4	orange1.1g012868m	scaffold	51,9849	0,8386	0,016131607	399,8838462
ZjuHsp60-10	4	orange1.1g012481m	scaffold	51,9143	0,8553	0,016475229	399,3407692
ZjuHsp60-10	4	orange1.1g011725m	scaffold	52,427	0,8748	0,016686059	403,2846154
ZjuHsp60-11	4	orange1.1g008703m	scaffold	1,1576	0,0252	0,021769178	8,904615385
ZjuHsp60-11	4	orange1.1g008712m	scaffold	1,1576	0,0252	0,021769178	8,904615385
ZjuHsp60-11	4	orange1.1g036490m	scaffold	1,3327	0,0293	0,021985443	10,25153846
ZjuHsp60-11	4	orange1.1g010272m	scaffold	1,086	0,0246	0,022651934	8,353846154
ZjuHsp60-11	4	orange1.1g012157m	scaffold	1,2842	0,0281	0,021881327	9,878461538
ZjuHsp60-11	4	orange1.1g012945m	scaffold	52,4571	0,8626	0,016443913	403,5161538
ZjuHsp60-11	4	orange1.1g009425m	scaffold	53,515	0,7294	0,013629823	411,6538462
ZjuHsp60-11	4	orange1.1g008702m	scaffold	53,6956	0,8337	0,015526412	413,0430769
ZjuHsp60-11	4	orange1.1g009216m	scaffold	53,488	0,823	0,015386629	411,4461538
ZjuHsp60-11	4	orange1.1g008527m	scaffold	53,5979	0,8338	0,01555658	412,2915385
ZjuHsp60-11	4	orange1.1g009431m	scaffold	7,6315	0,8338	0,109257682	58,70384615
ZjuHsp60-11	4	orange1.1g011829m	scaffold	53,9939	0,8355	0,01547397	415,3376923
ZjuHsp60-11	4	orange1.1g009426m	scaffold	50,6075	0,8956	0,017696982	389,2884615

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-11	4	orange1.1g009082m	scaffold	53,3185	0,8045	0,015088572	410,1423077
ZjuHsp60-11	4	orange1.1g009026m	scaffold	53,2934	0,8126	0,015247667	409,9492308
ZjuHsp60-11	4	orange1.1g009718m	scaffold	52,9524	0,8200	0,015485606	407,3261538
ZjuHsp60-11	4	orange1.1g014593m	scaffold	53,6729	0,813	0,015147309	412,8684615
ZjuHsp60-11	4	orange1.1g008377m	scaffold	53,6129	0,8651	0,016136042	412,4069231
ZjuHsp60-11	4	orange1.1g010585m	scaffold	53,1643	0,7996	0,015040168	408,9561538
ZjuHsp60-11	4	orange1.1g009923m	scaffold	52,7189	0,8322	0,01578561	405,53
ZjuHsp60-12	4	orange1.1g009426m	scaffold	1,1689	0,067	0,057318847	8,991538462
ZjuHsp60-12	4	orange1.1g012122m	scaffold	1,1475	0,081	0,070588235	8,826923077
ZjuHsp60-13	5	orange1.1g009431m	scaffold	2,6733	0,0491	0,018366813	20,56384615
ZjuHsp60-13	5	orange1.1g009425m	scaffold	16,7401	0,6351	0,037938841	128,77
ZjuHsp60-13	5	orange1.1g009718m	scaffold	48,8426	0,7261	0,014866121	375,7123077
ZjuHsp60-13	5	orange1.1g010585m	scaffold	49,6024	0,6994	0,014100124	381,5569231
ZjuHsp60-13	5	orange1.1g009923m	scaffold	48,7584	0,732	0,015012798	375,0646154
ZjuHsp60-13	5	orange1.1g009216m	scaffold	51,21	0,7883	0,015393478	393,9230769
ZjuHsp60-13	5	orange1.1g008702m	scaffold	51,2105	0,7884	0,01539528	393,9269231
ZjuHsp60-13	5	orange1.1g008527m	scaffold	51,2325	0,7861	0,015343776	394,0961538
ZjuHsp60-13	5	orange1.1g008703m	scaffold	49,2306	0,8273	0,016804589	378,6969231
ZjuHsp60-13	5	orange1.1g008712m	scaffold	49,1704	0,833	0,016941087	378,2307692
ZjuHsp60-13	5	orange1.1g036490m	scaffold	49,1745	0,8188	0,016650906	378,2653846
ZjuHsp60-13	5	orange1.1g011829m	scaffold	51,7865	0,7833	0,015125564	398,3576923
ZjuHsp60-13	5	orange1.1g009026m	scaffold	0,1777	17,5881	98,97636466	1,366923077
ZjuHsp60-13	5	orange1.1g012157m	scaffold	48,5265	0,8504	0,017524445	373,2807692
ZjuHsp60-13	5	orange1.1g008377m	scaffold	50,0265	0,9124	0,018238334	384,8192308
ZjuHsp60-13	5	orange1.1g009082m	scaffold	49,6914	0,9247	0,018608854	382,2415385
ZjuHsp60-13	5	orange1.1g010272m	scaffold	50,8338	0,8319	0,016365096	391,0292308
ZjuHsp60-13	5	orange1.1g014593m	scaffold	51,1694	0,8118	0,015864951	393,6107692
ZjuHsp60-13	5	orange1.1g015935m	scaffold	48,8989	0,8101	0,016566835	376,1453846
ZjuHsp60-13	5	orange1.1g016953m	scaffold	49,2185	0,8036	0,016327194	378,6038462
ZjuHsp60-13	5	orange1.1g009426m	scaffold	47,1382	0,9672	0,020518391	362,6015385
ZjuHsp60-14	6	orange1.1g000313m	scaffold	1,2162	0,2674	0,219865154	9,355384615
ZjuHsp60-14	6	orange1.1g000311m	scaffold	1,2162	0,2674	0,219865154	9,355384615
ZjuHsp60-14	6	orange1.1g000312m	scaffold	1,2162	0,2674	0,219865154	9,355384615
ZjuHsp60-14	6	orange1.1g000317m	scaffold	1,2141	0,2683	0,220986739	9,339230769
ZjuHsp60-14	6	orange1.1g000298m	scaffold	1,2162	0,2675	0,219947377	9,355384615
ZjuHsp60-14	6	orange1.1g000300m	scaffold	1,2128	0,2675	0,220563984	9,329230769
ZjuHsp60-14	6	orange1.1g000362m	scaffold	1,2034	0,2637	0,219129134	9,256923077
ZjuHsp60-14	6	orange1.1g000391m	scaffold	1,1709	0,2809	0,239900931	9,006923077
ZjuHsp60-14	6	orange1.1g002527m	scaffold	1,2227	0,2934	0,239960743	9,405384615
ZjuHsp60-14	6	orange1.1g000278m	scaffold	6,5789	0,6136	0,093267872	50,60692308
ZjuHsp60-14	6	orange1.1g000606m	scaffold	6,4776	0,5985	0,092395332	49,82769231
ZjuHsp60-4	6	orange1.1g000605m	scaffold	6,4770	0,5985	0,092403891	49,82307692
ZjuHsp60-14	6	orange1.1g000604m	scaffold	6,5633	0,5978	0,09108223	50,48692308
ZjuHsp60-14	6	orange1.1g000862m	scaffold	5,4623	0,6697	0,122604031	42,01769231
ZjuHsp60-14	6	orange1.1g000863m	scaffold	5,4624	0,6697	0,122601787	42,01846154
ZjuHsp60-14	6	orange1.1g000226m	scaffold	10,817	0,6219	0,057492835	83,20769231
ZjuHsp60-14	6	orange1.1g000222m	scaffold	11,213	0,6222	0,055489164	86,25384615
ZjuHsp60-14	6	orange1.1g000223m	scaffold	11,2133	0,6222	0,05548768	86,25615385
ZjuHsp60-14	6	orange1.1g000225m	scaffold	11,2258	0,6222	0,055425894	86,35230769
ZjuHsp60-15	8	orange1.1g000222m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-15	8	orange1.1g000223m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-15	8	orange1.1g000225m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-15	8	orange1.1g000226m	scaffold	0,9537	0,1981	0,207717312	7,336153846
ZjuHsp60-15	8	orange1.1g000278m	scaffold	1,5758	0,2455	0,155793882	12,12153846
ZjuHsp60-15	8	orange1.1g000606m	scaffold	15,9187	0,4346	0,027301224	122,4515385
ZjuHsp60-15	8	orange1.1g000604m	scaffold	15,9786	0,4346	0,027198878	122,9123077
ZjuHsp60-15	8	orange1.1g000605m	scaffold	16,3027	0,4346	0,026658161	125,4053846
ZjuHsp60-15	8	orange1.1g000862m	scaffold	13,3643	0,503	0,037637587	102,8023077
ZjuHsp60-15	8	orange1.1g000863m	scaffold	13,2233	0,503	0,038038916	101,7176923
ZjuHsp60-15	8	orange1.1g002527m	scaffold	10,074	0,6129	0,060839786	77,49230769
ZjuHsp60-15	8	orange1.1g000362m	scaffold	7,429	0,618	0,083187508	57,14615385
ZjuHsp60-15	8	orange1.1g000313m	scaffold	9,4265	0,636	0,067469368	72,51153846
ZjuHsp60-15	8	orange1.1g000311m	scaffold	9,4299	0,636	0,067445042	72,53769231
ZjuHsp60-15	8	orange1.1g000312m	scaffold	9,4271	0,636	0,067465074	72,51615385
ZjuHsp60-15	8	orange1.1g000317m	scaffold	9,6718	0,6362	0,065778862	74,39846154
ZjuHsp60-15	8	orange1.1g000298m	scaffold	9,458	0,636	0,067244661	72,75384615
ZjuHsp60-15	8	orange1.1g000300m	scaffold	9,4691	0,6373	0,067303123	72,83923077
ZjuHsp60-15	8	orange1.1g000391m	scaffold	8,6127	0,6666	0,077397332	66,25153846
ZjuHsp60-16	8	orange1.1g000222m	scaffold	0,9519	0,1981	0,208110096	7,322307692

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-16	8	orange1.1g000223m	scaffold	0,9519	0,1981	0,208110096	7,322307692
ZjuHsp60-16	8	orange1.1g000225m	scaffold	0,9519	0,1981	0,208110096	7,322307692
ZjuHsp60-16	8	orange1.1g000226m	scaffold	0,9537	0,1981	0,207717312	7,336153846
ZjuHsp60-16	8	orange1.1g000278m	scaffold	1,5758	0,2455	0,155793882	12,12153846
ZjuHsp60-16	8	orange1.1g000606m	scaffold	15,7594	0,4347	0,027583537	121,2261538
ZjuHsp60-16	8	orange1.1g000604m	scaffold	16,0091	0,4346	0,02714706	123,1469231
ZjuHsp60-16	8	orange1.1g000605m	scaffold	15,929	0,4347	0,027289849	122,5307692
ZjuHsp60-16	8	orange1.1g000862m	scaffold	13,2679	0,503	0,037911048	102,0607692
ZjuHsp60-16	8	orange1.1g000863m	scaffold	13,2203	0,503	0,038047548	101,6946154
ZjuHsp60-16	8	orange1.1g002527m	scaffold	10,0705	0,6129	0,06086093	77,46538462
ZjuHsp60-16	8	orange1.1g000362m	scaffold	7,4295	0,618	0,08318191	57,15
ZjuHsp60-16	8	orange1.1g000313m	scaffold	9,4297	0,636	0,067446472	72,53615385
ZjuHsp60-16	8	orange1.1g000311m	scaffold	9,4294	0,636	0,067448618	72,53384615
ZjuHsp60-16	8	orange1.1g000312m	scaffold	9,4303	0,636	0,067442181	72,54076923
ZjuHsp60-16	8	orange1.1g000317m	scaffold	9,6698	0,6362	0,065792467	74,38307692
ZjuHsp60-16	8	orange1.1g000298m	scaffold	9,4557	0,636	0,067261017	72,73615385
ZjuHsp60-16	8	orange1.1g000300m	scaffold	9,4657	0,6373	0,067327298	72,81307692
ZjuHsp60-16	8	orange1.1g000391m	scaffold	8,612	0,6666	0,077403623	66,24615385
ZjuHsp60-17	8	orange1.1g000222m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-17	8	orange1.1g000223m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-17	8	orange1.1g000225m	scaffold	0,9519	0,1980	0,208005043	7,322307692
ZjuHsp60-17	8	orange1.1g000226m	scaffold	0,9537	0,1981	0,207717312	7,336153846
ZjuHsp60-17	8	orange1.1g000278m	scaffold	1,5758	0,2455	0,155793882	12,12153846
ZjuHsp60-17	8	orange1.1g000606m	scaffold	16,0156	0,4346	0,027136042	123,1969231
ZjuHsp60-17	8	orange1.1g000604m	scaffold	15,979	0,4346	0,027198198	122,9153846
ZjuHsp60-17	8	orange1.1g000605m	scaffold	15,7491	0,4347	0,027601577	121,1469231
ZjuHsp60-17	8	orange1.1g000862m	scaffold	13,3398	0,503	0,037706712	102,6138462
ZjuHsp60-17	8	orange1.1g000863m	scaffold	13,2408	0,503	0,037988641	101,8523077
ZjuHsp60-17	8	orange1.1g002527m	scaffold	10,0693	0,6129	0,060868183	77,45615385
ZjuHsp60-17	8	orange1.1g000362m	scaffold	7,4285	0,618	0,083193108	57,14230769
ZjuHsp60-17	8	orange1.1g000313m	scaffold	9,427	0,636	0,06746579	72,51538462
ZjuHsp60-17	8	orange1.1g000311m	scaffold	9,4264	0,6360	0,067470084	72,51076923
ZjuHsp60-17	8	orange1.1g000312m	scaffold	9,4262	0,6360	0,067471516	72,50923077
ZjuHsp60-17	8	orange1.1g000317m	scaffold	9,6705	0,6362	0,065787705	74,38846154
ZjuHsp60-17	8	orange1.1g000298m	scaffold	9,4566	0,636	0,067254616	72,74307692
ZjuHsp60-17	8	orange1.1g000300m	scaffold	9,4702	0,6373	0,067295305	72,84769231
ZjuHsp60-17	8	orange1.1g000391m	scaffold	8,6142	0,6666	0,077383855	66,26307692
ZjuHsp60-18	8	orange1.1g016953m	scaffold	1,2015	0,0551	0,045859342	9,242307692
ZjuHsp60-18	8	orange1.1g015935m	scaffold	1,3008	0,0827	0,063576261	10,00615385
ZjuHsp60-18	8	orange1.1g024330m	scaffold	1,2614	0,0477	0,037815126	9,703076923
ZjuHsp60-18	8	orange1.1g042442m	scaffold	1,8127	0,1904	0,105036686	13,94384615
ZjuHsp60-18	8	orange1.1g008702m	scaffold	52,0216	0,7216	0,013871161	400,1661538
ZjuHsp60-18	8	orange1.1g009216m	scaffold	51,7203	0,7321	0,014154984	397,8484615
ZjuHsp60-18	8	orange1.1g008527m	scaffold	51,797	0,7256	0,014008533	398,4846153
ZjuHsp60-18	8	orange1.1g011829m	scaffold	48,6853	0,7056	0,014493081	374,5023077
ZjuHsp60-18	8	orange1.1g009718m	scaffold	50,7718	0,746	0,014693196	390,5523077
ZjuHsp60-18	8	orange1.1g010585m	scaffold	50,8671	0,7265	0,014282316	391,2853846
ZjuHsp60-18	8	orange1.1g009923m	scaffold	50,6254	0,7545	0,014903586	389,4261538
ZjuHsp60-18	8	orange1.1g009431m	scaffold	0,1214	10,0002	82,37397035	0,933846154
ZjuHsp60-18	8	orange1.1g014593m	scaffold	25,8372	0,6916	0,026767606	198,7476923
ZjuHsp60-18	8	orange1.1g009425m	scaffold	50,7158	0,7991	0,015756431	390,1215385
ZjuHsp60-18	8	orange1.1g008703m	scaffold	51,6096	0,8081	0,01565794	396,9969231
ZjuHsp60-18	8	orange1.1g008712m	scaffold	51,6097	0,8081	0,015657909	396,9976923
ZjuHsp60-18	8	orange1.1g036490m	scaffold	51,8356	0,8151	0,015724714	398,7353846
ZjuHsp60-18	8	orange1.1g012157m	scaffold	51,3675	0,7871	0,015322918	395,1346154
ZjuHsp60-18	8	orange1.1g010272m	scaffold	52,5953	0,8144	0,015484273	404,5792308
ZjuHsp60-18	8	orange1.1g009026m	scaffold	50,4896	0,8897	0,017621451	388,3815385
ZjuHsp60-18	8	orange1.1g008377m	scaffold	50,7974	0,8905	0,017530425	390,7492308
ZjuHsp60-18	8	orange1.1g009082m	scaffold	50,4651	0,8885	0,017606227	388,1930769
ZjuHsp60-18	8	orange1.1g009426m	scaffold	50,1465	0,9122	0,018190701	385,7423077
ZjuHsp60-19	8	orange1.1g008181m	scaffold	1,0435	0,1011	0,096885482	8,026923077
ZjuHsp60-19	8	orange1.1g016787m	scaffold	5,8743	0,1658	0,02822464	45,18692308
ZjuHsp60-19	8	orange1.1g016809m	scaffold	5,8740	0,1658	0,028226081	45,18461538
ZjuHsp60-19	8	orange1.1g013743m	scaffold	6,3617	0,1595	0,025071915	48,93615385
ZjuHsp60-19	8	orange1.1g007313m	scaffold	51,4229	0,6067	0,011798246	395,5607692
ZjuHsp60-19	8	orange1.1g007488m	scaffold	51,5513	0,6048	0,011732003	396,5484615
ZjuHsp60-19	8	orange1.1g008279m	scaffold	51,864	0,5931	0,011435678	398,9538462
ZjuHsp60-19	8	orange1.1g023832m	scaffold	5,6019	0,1643	0,029329335	43,09153846
ZjuHsp60-19	8	orange1.1g007643m	scaffold	51,1851	0,6075	0,011868688	393,7315385

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-19	8	orange1.1g009601m	scaffold	51,665	0,5824	0,011272622	397,4230769
ZjuHsp60-19	8	orange1.1g009575m	scaffold	51,6017	0,5829	0,011296139	396,9361538
ZjuHsp60-19	8	orange1.1g007985m	scaffold	51,8018	0,576	0,011119305	398,4753846
ZjuHsp60-19	8	orange1.1g010494m	scaffold	52,6652	0,6132	0,011643362	405,1169231
ZjuHsp60-19	8	orange1.1g007834m	scaffold	52,9471	0,6647	0,01255404	407,2853846
ZjuHsp60-19	8	orange1.1g011103m	scaffold	52,4114	0,6079	0,011598622	403,1646154
ZjuHsp60-19	8	orange1.1g007981m	scaffold	52,8217	0,6606	0,012506224	406,3207692
ZjuHsp60-19	8	orange1.1g012313m	scaffold	12,9667	0,4824	0,037202989	99,74384615
ZjuHsp60-19	8	orange1.1g013808m	scaffold	8,1285	0,4656	0,057279941	62,52692308
ZjuHsp60-19	8	orange1.1g013822m	scaffold	8,1326	0,4656	0,057251064	62,55846154
ZjuHsp60-19	8	orange1.1g012693m	scaffold	14,3416	0,4761	0,033197133	110,32
ZjuHsp60-19	8	orange1.1g016236m	scaffold	7,7588	0,4296	0,055369387	59,68307692
ZjuHsp60-19	8	orange1.1g016246m	scaffold	7,7577	0,4296	0,055377238	59,67461538
ZjuHsp60-19	8	orange1.1g011794m	scaffold	51,9558	0,5418	0,010428095	399,66
ZjuHsp60-19	8	orange1.1g011729m	scaffold	12,8032	0,4842	0,03781867	98,48615385
ZjuHsp60-19	8	orange1.1g012868m	scaffold	13,3826	0,4807	0,035919776	102,9430769
ZjuHsp60-19	8	orange1.1g012481m	scaffold	12,1196	0,4872	0,040199347	93,22769231
ZjuHsp60-19	8	orange1.1g015120m	scaffold	51,2556	0,5963	0,011633851	394,2738462
ZjuHsp60-19	8	orange1.1g011926m	scaffold	51,939	0,5491	0,010572017	399,53807692
ZjuHsp60-19	8	orange1.1g011725m	scaffold	15,4748	0,54	0,034895443	119,0369231
ZjuHsp60-19	8	orange1.1g012945m	scaffold	13,8556	0,514	0,037096914	106,5815385
ZjuHsp60-19	8	orange1.1g013203m	scaffold	11,5154	0,4886	0,042430137	88,58
ZjuHsp60-19	8	orange1.1g014070m	scaffold	13,5044	0,4980	0,03687687	103,88
ZjuHsp60-19	8	orange1.1g015737m	scaffold	51,9387	0,6580	0,012668781	399,5284615
ZjuHsp60-19	8	orange1.1g019867m	scaffold	9,6097	0,4408	0,045870319	73,92076923
ZjuHsp60-19	8	orange1.1g014061m	scaffold	0,2343	16,4557	70,23346137	1,802307692
ZjuHsp60-19	8	orange1.1g018642m	scaffold	9,3763	0,4874	0,051982125	72,12538462
ZjuHsp60-19	8	orange1.1g040169m	scaffold	6,9546	0,5488	0,078911799	53,49692308
ZjuHsp60-19	8	orange1.1g024036m	scaffold	54,1118	0,4590	0,008482438	416,2446154
ZjuHsp60-20	9	orange1.1g008181m	scaffold	6,2378	0,2080	0,03334509	47,98307692
ZjuHsp60-20	9	orange1.1g013743m	scaffold	1,699	0,0598	0,035197175	13,06923077
ZjuHsp60-20	9	orange1.1g016787m	scaffold	1,523	0,0661	0,043401182	11,71538462
ZjuHsp60-20	9	orange1.1g016809m	scaffold	1,523	0,0661	0,043401182	11,71538462
ZjuHsp60-20	9	orange1.1g023832m	scaffold	1,5605	0,0702	0,044985582	12,00384615
ZjuHsp60-20	9	orange1.1g007488m	scaffold	52,1643	0,5202	0,009972337	401,2638462
ZjuHsp60-20	9	orange1.1g007313m	scaffold	52,3082	0,5268	0,010071079	402,3707692
ZjuHsp60-20	9	orange1.1g008279m	scaffold	52,3912	0,512	0,009772634	403,0092308
ZjuHsp60-20	9	orange1.1g007643m	scaffold	52,1065	0,5275	0,010123497	400,8192308
ZjuHsp60-20	9	orange1.1g007985m	scaffold	50,9172	0,5294	0,010397272	391,6707692
ZjuHsp60-20	9	orange1.1g009601m	scaffold	52,1453	0,5052	0,009688313	401,1176923
ZjuHsp60-20	9	orange1.1g009575m	scaffold	52,0666	0,5056	0,00971064	400,5123077
ZjuHsp60-20	9	orange1.1g013808m	scaffold	1,2071	0,3697	0,306271229	9,285384615
ZjuHsp60-20	9	orange1.1g013822m	scaffold	1,2071	0,3697	0,306271229	9,285384615
ZjuHsp60-20	9	orange1.1g012313m	scaffold	1,1697	0,3799	0,324784133	8,997692308
ZjuHsp60-20	9	orange1.1g007834m	scaffold	53,0306	0,5933	0,01118788	407,9276923
ZjuHsp60-20	9	orange1.1g012693m	scaffold	1,181	0,3749	0,317442845	9,084615385
ZjuHsp60-20	9	orange1.1g016236m	scaffold	1,1551	0,3268	0,282919228	8,885384615
ZjuHsp60-20	9	orange1.1g016246m	scaffold	1,1551	0,3268	0,282919228	8,885384615
ZjuHsp60-20	9	orange1.1g011794m	scaffold	50,8994	0,5091	0,010002083	391,5338462
ZjuHsp60-20	9	orange1.1g010494m	scaffold	43,5692	0,5722	0,013133131	335,1476923
ZjuHsp60-20	9	orange1.1g007981m	scaffold	53,0664	0,5906	0,011129453	408,2030769
ZjuHsp60-20	9	orange1.1g011729m	scaffold	1,1697	0,3799	0,324784133	8,997692308
ZjuHsp60-20	9	orange1.1g011103m	scaffold	48,4078	0,5651	0,011673739	372,3676923
ZjuHsp60-20	9	orange1.1g012481m	scaffold	1,1548	0,3816	0,330446831	8,883076923
ZjuHsp60-20	9	orange1.1g011926m	scaffold	51,0447	0,5197	0,010181272	392,6515385
ZjuHsp60-20	9	orange1.1g012868m	scaffold	1,1658	0,3765	0,322954195	8,967692308
ZjuHsp60-20	9	orange1.1g011725m	scaffold	1,2961	0,4348	0,335467942	9,97
ZjuHsp60-20	9	orange1.1g012945m	scaffold	1,1358	0,398	0,350413805	8,736923077
ZjuHsp60-20	9	orange1.1g015120m	scaffold	53,378	0,5382	0,010082806	410,6
ZjuHsp60-20	9	orange1.1g013203m	scaffold	1,1618	0,3862	0,332415218	8,936923077
ZjuHsp60-20	9	orange1.1g014070m	scaffold	1,1687	0,3889	0,332762899	8,99
ZjuHsp60-20	9	orange1.1g019867m	scaffold	1,154	0,3442	0,298266898	8,876923077
ZjuHsp60-20	9	orange1.1g015737m	scaffold	51,8922	0,5878	0,011327329	399,1707692
ZjuHsp60-20	9	orange1.1g014061m	scaffold	54,4456	0,5835	0,010717119	418,8123077
ZjuHsp60-20	9	orange1.1g040169m	scaffold	1,385	0,4639	0,334945848	10,65384615
ZjuHsp60-20	9	orange1.1g018642m	scaffold	1,443	0,4076	0,282467082	11,1
ZjuHsp60-20	9	orange1.1g024036m	scaffold	1,4308	0,3445	0,240774392	11,00615385
ZjuHsp60-21	10	orange1.1g009425m	scaffold	1,0611	0,0389	0,03666007	8,162307692
ZjuHsp60-21	10	orange1.1g009431m	scaffold	51,7633	0,6709	0,01296092	398,1792308

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-21	10	orange1.1g009718m	scaffold	51,4149	0,7327	0,014250733	395,4992308
ZjuHsp60-21	10	orange1.1g010585m	scaffold	51,4524	0,713	0,013857468	395,7876923
ZjuHsp60-21	10	orange1.1g009718m	scaffold	51,4369	0,7386	0,014359341	395,6684615
ZjuHsp60-21	10	orange1.1g008703m	scaffold	54,6693	0,7518	0,013751777	420,5330769
ZjuHsp60-21	10	orange1.1g008712m	scaffold	54,7171	0,7476	0,013663005	420,9007692
ZjuHsp60-21	10	orange1.1g036490m	scaffold	54,7829	0,7567	0,013812704	421,4069231
ZjuHsp60-21	10	orange1.1g009216m	scaffold	53,1218	0,829	0,015605646	408,6292308
ZjuHsp60-21	10	orange1.1g008702m	scaffold	53,2231	0,8241	0,015483878	409,4084615
ZjuHsp60-21	10	orange1.1g008527m	scaffold	53,1515	0,828	0,015578112	408,8576923
ZjuHsp60-21	10	orange1.1g012157m	scaffold	53,9958	0,7415	0,01373255	415,3523077
ZjuHsp60-21	10	orange1.1g010272m	scaffold	55,345	0,7621	0,013769988	425,7307692
ZjuHsp60-21	10	orange1.1g011829m	scaffold	53,4878	0,8116	0,015173554	411,4446154
ZjuHsp60-21	10	orange1.1g014593m	scaffold	52,7826	0,7737	0,01465824	406,02
ZjuHsp60-21	10	orange1.1g009426m	scaffold	51,6102	0,8807	0,017064456	397,0015385
ZjuHsp60-22	10	orange1.1g009425m	scaffold	1,0611	0,0389	0,03666007	8,162307692
ZjuHsp60-22	10	orange1.1g009431m	scaffold	51,764	0,6709	0,012960745	398,1846154
ZjuHsp60-22	10	orange1.1g009718m	scaffold	51,4154	0,7326	0,014248649	395,5030769
ZjuHsp60-22	10	orange1.1g010585m	scaffold	51,4516	0,7131	0,013859627	395,7815385
ZjuHsp60-22	10	orange1.1g009923m	scaffold	51,4371	0,7386	0,014359285	395,67
ZjuHsp60-22	10	orange1.1g008703m	scaffold	54,6704	0,7518	0,0137515	420,5415385
ZjuHsp60-22	10	orange1.1g008712m	scaffold	54,6687	0,7518	0,013751928	420,5284615
ZjuHsp60-22	10	orange1.1g036490m	scaffold	54,7848	0,7566	0,0138104	421,4215385
ZjuHsp60-22	10	orange1.1g009216m	scaffold	53,1232	0,829	0,015605235	408,64
ZjuHsp60-22	10	orange1.1g008702m	scaffold	53,2247	0,824	0,015481534	409,4207692
ZjuHsp60-22	10	orange1.1g008527m	scaffold	53,1519	0,8279	0,015576113	408,8607692
ZjuHsp60-22	10	orange1.1g012157m	scaffold	53,9954	0,7417	0,013736355	415,3492308
ZjuHsp60-22	10	orange1.1g010272m	scaffold	55,3473	0,762	0,013767609	425,7484615
ZjuHsp60-22	10	orange1.1g011829m	scaffold	53,4879	0,8115	0,015171656	411,4453846
ZjuHsp60-22	10	orange1.1g014593m	scaffold	52,7858	0,7737	0,014657351	406,0446154
ZjuHsp60-22	10	orange1.1g009426m	scaffold	51,6093	0,8807	0,017064754	396,9946154
ZjuHsp60-23	10	orange1.1g000782m	scaffold	2,1613	0,5594	0,258825707	16,62538462
ZjuHsp60-23	10	orange1.1g045318m	scaffold	3,8027	0,5295	0,139243169	29,25153846
ZjuHsp60-23	10	orange1.1g000660m	scaffold	3,6122	0,5225	0,144648691	27,78615385
ZjuHsp60-23	10	orange1.1g040015m	scaffold	2,6318	0,529	0,201003116	20,24461538
ZjuHsp60-23	10	orange1.1g048507m	scaffold	53,0043	0,5141	0,009699213	407,7253846
ZjuHsp60-23	10	orange1.1g046770m	scaffold	3,5494	0,5673	0,15982983	27,30307692
ZjuHsp60-23	10	orange1.1g000568m	scaffold	2,8919	0,4923	0,170234102	22,24538462
ZjuHsp60-23	10	orange1.1g047584m	scaffold	6,7143	0,5453	0,081214721	51,64846154
ZjuHsp60-23	10	orange1.1g042037m	scaffold	3,5566	0,5683	0,159787437	27,35846154
ZjuHsp60-23	10	orange1.1g042986m	scaffold	3,5612	0,5107	0,143406717	27,39384615
ZjuHsp60-23	10	orange1.1g036079m	scaffold	5,0168	0,5406	0,107757933	38,59076923
ZjuHsp60-23	10	orange1.1g037733m	scaffold	3,0303	0,5579	0,184107184	23,31
ZjuHsp60-23	10	orange1.1g043647m	scaffold	2,6232	0,5413	0,206351022	20,17846154
ZjuHsp60-23	10	orange1.1g035550m	scaffold	3,5099	0,4451	0,12681273	26,99923077
ZjuHsp60-23	10	orange1.1g043855m	scaffold	52,7819	0,5492	0,010405082	406,0146154
ZjuHsp60-23	10	orange1.1g044085m	scaffold	4,071	0,5561	0,136600344	31,31538462
ZjuHsp60-23	10	orange1.1g000427m	scaffold	3,2539	0,5187	0,15940871	25,03
ZjuHsp60-23	10	orange1.1g045303m	scaffold	3,3138	0,5383	0,16244191	25,49076923
ZjuHsp60-23	10	orange1.1g037340m	scaffold	2,9381	0,5772	0,19645349	22,60076923
ZjuHsp60-23	10	orange1.1g000692m	scaffold	39,5396	0,5558	0,014056794	304,1507692
ZjuHsp60-23	10	orange1.1g047894m	scaffold	2,3339	0,6135	0,262864733	17,95307692
ZjuHsp60-23	10	orange1.1g000803m	scaffold	2,1944	0,6053	0,275838498	16,88
ZjuHsp60-23	10	orange1.1g007817m	scaffold	2,3386	0,5989	0,256093389	17,98923077
ZjuHsp60-23	10	orange1.1g040735m	scaffold	3,4343	0,5662	0,164866203	26,41769231
ZjuHsp60-23	10	orange1.1g001281m	scaffold	2,9199	0,6159	0,210931881	22,46076923
ZjuHsp60-23	10	orange1.1g039283m	scaffold	3,0434	0,5664	0,186107643	23,41076923
ZjuHsp60-23	10	orange1.1g000471m	scaffold	2,7946	0,5663	0,202640807	21,49692308
ZjuHsp60-23	10	orange1.1g006107m	scaffold	2,2224	0,6321	0,284422246	17,09538462
ZjuHsp60-23	10	orange1.1g045012m	scaffold	4,5603	0,6513	0,142819551	35,07923077
ZjuHsp60-23	10	orange1.1g042296m	scaffold	2,8733	0,5858	0,203877075	22,10230769
ZjuHsp60-23	10	orange1.1g000594m	scaffold	3,1003	0,5913	0,190723478	23,84846154
ZjuHsp60-23	10	orange1.1g047556m	scaffold	2,4792	0,6357	0,256413359	19,07076923
ZjuHsp60-24	10	orange1.1g010494m	scaffold	0,8149	0,1167	0,143207756	6,268461538
ZjuHsp60-24	10	orange1.1g011103m	scaffold	0,8011	0,1055	0,131693921	6,162307692
ZjuHsp60-24	10	orange1.1g007488m	scaffold	12,6342	0,2146	0,016985642	97,18615385
ZjuHsp60-24	10	orange1.1g007313m	scaffold	12,306	0,2145	0,017430522	94,66153846
ZjuHsp60-24	10	orange1.1g007643m	scaffold	11,8089	0,215	0,018206607	90,83769231
ZjuHsp60-24	10	orange1.1g008279m	scaffold	11,0251	0,2122	0,019246991	84,80846154
ZjuHsp60-24	10	orange1.1g009575m	scaffold	9,7957	0,2046	0,020886716	75,35153846

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-24	10	orange1.1g009601m	scaffold	9,7814	0,2037	0,02082524	75,24153846
ZjuHsp60-24	10	orange1.1g015737m	scaffold	0,8497	0,141	0,16594092	6,536153846
ZjuHsp60-24	10	orange1.1g015120m	scaffold	14,3921	0,2011	0,013972943	110,7084615
ZjuHsp60-24	10	orange1.1g007985m	scaffold	25,3937	0,5124	0,020178233	195,3361538
ZjuHsp60-24	10	orange1.1g007834m	scaffold	52,8181	0,5541	0,010490722	406,2930769
ZjuHsp60-24	10	orange1.1g007981m	scaffold	52,8518	0,547	0,010349695	406,5523077
ZjuHsp60-24	10	orange1.1g011794m	scaffold	33,1618	0,4899	0,014773022	255,0907692
ZjuHsp60-24	10	orange1.1g008181m	scaffold	33,3345	0,6104	0,018311359	256,4192308
ZjuHsp60-24	10	orange1.1g011926m	scaffold	24,6413	0,4993	0,02026273	189,5484615
ZjuHsp60-24	10	orange1.1g013743m	scaffold	27,4918	0,5651	0,02055522	211,4753846
ZjuHsp60-24	10	orange1.1g014061m	scaffold	52,6667	0,5983	0,011360119	405,1284615
ZjuHsp60-24	10	orange1.1g016787m	scaffold	55,6894	0,5489	0,009856454	428,38
ZjuHsp60-24	10	orange1.1g016809m	scaffold	55,6004	0,5493	0,009879425	427,6953846
ZjuHsp60-24	10	orange1.1g023832m	scaffold	25,2254	0,5723	0,02268745	194,0415385
ZjuHsp60-24	10	orange1.1g013808m	scaffold	55,073	0,7856	0,014264703	423,6384615
ZjuHsp60-24	10	orange1.1g013822m	scaffold	55,0741	0,7856	0,014264418	423,6469231
ZjuHsp60-24	10	orange1.1g012693m	scaffold	56,1797	0,8161	0,014526599	432,1515385
ZjuHsp60-25	10	orange1.1g010494m	scaffold	0,8149	0,1167	0,143207756	6,268461538
ZjuHsp60-25	10	orange1.1g011103m	scaffold	0,8011	0,1055	0,131693921	6,162307692
ZjuHsp60-25	10	orange1.1g008279m	scaffold	10,9066	0,2093	0,019190215	83,89692308
ZjuHsp60-25	10	orange1.1g007313m	scaffold	10,9154	0,2109	0,019321326	83,96461538
ZjuHsp60-25	10	orange1.1g007488m	scaffold	10,9206	0,2109	0,019312126	84,00461538
ZjuHsp60-25	10	orange1.1g007643m	scaffold	10,5184	0,2114	0,020098114	80,91076923
ZjuHsp60-25	10	orange1.1g009575m	scaffold	9,8006	0,2046	0,020876273	75,38923077
ZjuHsp60-25	10	orange1.1g009601m	scaffold	9,7804	0,2037	0,020827369	75,23384615
ZjuHsp60-25	10	orange1.1g015737m	scaffold	0,8497	0,141	0,16594092	6,536153846
ZjuHsp60-25	10	orange1.1g015120m	scaffold	12,8467	0,1945	0,015140075	98,82076923
ZjuHsp60-25	10	orange1.1g007985m	scaffold	25,5507	0,5125	0,020058159	196,5438462
ZjuHsp60-25	10	orange1.1g007834m	scaffold	53,8334	0,5504	0,010224136	414,1030769
ZjuHsp60-25	10	orange1.1g007981m	scaffold	53,9189	0,5425	0,010061407	414,7607692
ZjuHsp60-25	10	orange1.1g008181m	scaffold	34,0776	0,598	0,017548184	262,1353846
ZjuHsp60-25	10	orange1.1g011794m	scaffold	32,4302	0,488	0,015047702	249,6707692
ZjuHsp60-25	10	orange1.1g011926m	scaffold	25,5152	0,4984	0,019533455	196,2707692
ZjuHsp60-25	10	orange1.1g013743m	scaffold	22,7252	0,5328	0,023445338	174,8092308
ZjuHsp60-25	10	orange1.1g014061m	scaffold	52,6619	0,5985	0,011364953	405,0915385
ZjuHsp60-25	10	orange1.1g016787m	scaffold	56,6372	0,511	0,009022339	435,6707692
ZjuHsp60-25	10	orange1.1g016809m	scaffold	56,6454	0,5109	0,009019267	435,7338462
ZjuHsp60-25	10	orange1.1g023832m	scaffold	25,5197	0,5723	0,022425812	196,3053846
ZjuHsp60-25	10	orange1.1g013808m	scaffold	54,9416	0,7746	0,014098607	422,6276923
ZjuHsp60-25	10	orange1.1g013822m	scaffold	54,9407	0,7747	0,014100658	422,6207692
ZjuHsp60-25	10	orange1.1g012693m	scaffold	55,8797	0,8164	0,014609957	429,8438462
ZjuHsp60-25	10	orange1.1g012313m	scaffold	55,8797	0,8164	0,014609957	429,8438462
ZjuHsp60-28	12	orange1.1g009026m	scaffold	1,0251	0,0425	0,04145937	7,885384615
ZjuHsp60-28	12	orange1.1g009082m	scaffold	1,0800	0,0428	0,03962963	8,307692308
ZjuHsp60-28	12	orange1.1g008377m	scaffold	1,1901	0,0800	0,067221242	9,154615385
ZjuHsp60-28	12	orange1.1g013893m	scaffold	1,0335	0,0377	0,036477987	7,95
ZjuHsp60-28	12	orange1.1g013920m	scaffold	1,0335	0,0377	0,036477987	7,95
ZjuHsp60-29	scaffold	orange1.1g013743m	scaffold	1,0746	0,0365	0,033966127	8,266153846
ZjuHsp60-29	scaffold	orange1.1g008181m	scaffold	7,4988	0,2032	0,027097669	57,68307692
ZjuHsp60-29	scaffold	orange1.1g016787m	scaffold	1,0698	0,0416	0,038885773	8,229230769
ZjuHsp60-29	scaffold	orange1.1g016809m	scaffold	1,0698	0,0416	0,038885773	8,229230769
ZjuHsp60-29	scaffold	orange1.1g023832m	scaffold	1,2943	0,0438	0,033840686	9,956153846
ZjuHsp60-29	scaffold	orange1.1g007488m	scaffold	52,3967	0,5249	0,010017806	403,0515385
ZjuHsp60-29	scaffold	orange1.1g007313m	scaffold	52,5034	0,5323	0,010138391	403,8723077
ZjuHsp60-29	scaffold	orange1.1g008279m	scaffold	52,7745	0,5119	0,00969976	405,9576923
ZjuHsp60-29	scaffold	orange1.1g007643m	scaffold	52,1873	0,5332	0,010217045	401,4407692
ZjuHsp60-29	scaffold	orange1.1g007985m	scaffold	51,9744	0,5252	0,010104975	399,8030769
ZjuHsp60-29	scaffold	orange1.1g009601m	scaffold	52,8646	0,5026	0,009507307	406,6507692
ZjuHsp60-29	scaffold	orange1.1g009575m	scaffold	52,7796	0,503	0,009530197	405,9969231
ZjuHsp60-29	scaffold	orange1.1g007834m	scaffold	52,9596	0,6168	0,011646614	407,3815385
ZjuHsp60-29	scaffold	orange1.1g013808m	scaffold	1,9807	0,3793	0,191497955	15,23615385
ZjuHsp60-29	scaffold	orange1.1g013822m	scaffold	1,9807	0,3793	0,191497955	15,23615385
ZjuHsp60-29	scaffold	orange1.1g007981m	scaffold	52,9438	0,6165	0,011644423	407,26
ZjuHsp60-29	scaffold	orange1.1g012313m	scaffold	1,7248	0,3938	0,228316327	13,26769231
ZjuHsp60-29	scaffold	orange1.1g012693m	scaffold	1,7684	0,3922	0,221782402	13,60307692
ZjuHsp60-29	scaffold	orange1.1g016236m	scaffold	1,9863	0,3369	0,169611841	15,27923077
ZjuHsp60-29	scaffold	orange1.1g016246m	scaffold	1,9863	0,3369	0,169611841	15,27923077
ZjuHsp60-29	scaffold	orange1.1g011794m	scaffold	52,1388	0,5064	0,009712537	401,0676923
ZjuHsp60-29	scaffold	orange1.1g010494m	scaffold	53,0893	0,5817	0,01095701	408,3792308

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-29	scaffold	orange1.1g011729m	scaffold	1,7248	0,3938	0,228316327	13,26769231
ZjuHsp60-29	scaffold	orange1.1g011103m	scaffold	53,0148	0,5758	0,010861118	407,8061538
ZjuHsp60-29	scaffold	orange1.1g012481m	scaffold	1,6753	0,3953	0,235957739	12,88692308
ZjuHsp60-29	scaffold	orange1.1g011926m	scaffold	52,2304	0,5173	0,009904194	401,7723077
ZjuHsp60-29	scaffold	orange1.1g012868m	scaffold	1,7155	0,3937	0,229495774	13,19615385
ZjuHsp60-29	scaffold	orange1.1g011725m	scaffold	1,7884	0,4421	0,247204205	13,75692308
ZjuHsp60-29	scaffold	orange1.1g012945m	scaffold	1,7751	0,417	0,234916343	13,65461538
ZjuHsp60-29	scaffold	orange1.1g013203m	scaffold	1,7467	0,3958	0,226598729	13,43615385
ZjuHsp60-29	scaffold	orange1.1g015120m	scaffold	53,2824	0,5586	0,010483762	409,8646154
ZjuHsp60-29	scaffold	orange1.1g014070m	scaffold	1,6781	0,4045	0,241046422	12,90846154
ZjuHsp60-29	scaffold	orange1.1g040169m	scaffold	2,1481	0,4512	0,210046087	16,52384615
ZjuHsp60-29	scaffold	orange1.1g014061m	scaffold	54,2686	0,6201	0,011426497	417,4507692
ZjuHsp60-29	scaffold	orange1.1g019867m	scaffold	2,2135	0,3579	0,161689632	17,02692308
ZjuHsp60-29	scaffold	orange1.1g015737m	scaffold	52,5782	0,6033	0,011474337	404,4476923
ZjuHsp60-29	scaffold	orange1.1g018642m	scaffold	3,2238	0,4354	0,135058006	24,79846154
ZjuHsp60-29	scaffold	orange1.1g024036m	scaffold	3,5128	0,3794	0,10800501	27,02153846
ZjuHsp60-30	scaffold	orange1.1g009026m	scaffold	1,0563	0,0446	0,042222853	8,125384615
ZjuHsp60-30	scaffold	orange1.1g009082m	scaffold	1,0962	0,0448	0,040868455	8,432307692
ZjuHsp60-30	scaffold	orange1.1g008377m	scaffold	1,1769	0,0715	0,060752825	9,053076923
ZjuHsp60-30	scaffold	orange1.1g013893m	scaffold	1,0726	0,042	0,039157188	8,250769231
ZjuHsp60-30	scaffold	orange1.1g013920m	scaffold	1,0726	0,042	0,039157188	8,250769231
ZjuHsp60-30	scaffold	orange1.1g009431m	scaffold	49,4334	0,8817	0,017836119	380,2569231
ZjuHsp60-30	scaffold	orange1.1g009216m	scaffold	50,728	0,9224	0,018183252	390,2153846
ZjuHsp60-30	scaffold	orange1.1g008702m	scaffold	50,8735	0,9047	0,017783325	391,3346154
ZjuHsp60-30	scaffold	orange1.1g008527m	scaffold	51,1133	0,9207	0,018012924	393,1792308
ZjuHsp60-30	scaffold	orange1.1g008703m	scaffold	53,3027	0,8858	0,016618295	410,0207692
ZjuHsp60-30	scaffold	orange1.1g008712m	scaffold	53,3024	0,8857	0,016616513	410,0184615
ZjuHsp60-30	scaffold	orange1.1g036490m	scaffold	53,4541	0,8803	0,016468335	411,1853846
ZjuHsp60-30	scaffold	orange1.1g009425m	scaffold	52,3745	0,9218	0,017600168	402,8807692
ZjuHsp60-30	scaffold	orange1.1g010272m	scaffold	53,9859	0,9066	0,016793274	415,2761538
ZjuHsp60-30	scaffold	orange1.1g010585m	scaffold	49,482	0,983	0,01986581	380,6307692
ZjuHsp60-30	scaffold	orange1.1g009718m	scaffold	49,3683	1,005	0,020357193	379,7561538
ZjuHsp60-30	scaffold	orange1.1g011829m	scaffold	51,31	0,9108	0,017750926	394,6923077
ZjuHsp60-30	scaffold	orange1.1g009923m	scaffold	49,1762	1,0122	0,020583128	378,2784615
ZjuHsp60-31	scaffold	orange1.1g009026m	scaffold	1,0563	0,0446	0,042222853	8,125384615
ZjuHsp60-31	scaffold	orange1.1g009082m	scaffold	1,0962	0,0448	0,040868455	8,432307692
ZjuHsp60-31	scaffold	orange1.1g008377m	scaffold	1,1769	0,0715	0,060752825	9,053076923
ZjuHsp60-31	scaffold	orange1.1g013893m	scaffold	1,0726	0,042	0,039157188	8,250769231
ZjuHsp60-31	scaffold	orange1.1g013920m	scaffold	1,0726	0,042	0,039157188	8,250769231
ZjuHsp60-31	scaffold	orange1.1g009431m	scaffold	49,4333	0,8817	0,017836115	380,2561538
ZjuHsp60-31	scaffold	orange1.1g009216m	scaffold	50,7633	0,9188	0,01809969	390,4869231
ZjuHsp60-31	scaffold	orange1.1g008702m	scaffold	50,8739	0,9047	0,017783185	391,3376923
ZjuHsp60-31	scaffold	orange1.1g008527m	scaffold	51,1152	0,9206	0,018010298	393,1938462
ZjuHsp60-31	scaffold	orange1.1g008703m	scaffold	53,3024	0,8857	0,016616513	410,0184615
ZjuHsp60-31	scaffold	orange1.1g008712m	scaffold	53,3021	0,8858	0,016618482	410,0161538
ZjuHsp60-31	scaffold	orange1.1g036490m	scaffold	53,4547	0,8804	0,01647002	411,19
ZjuHsp60-31	scaffold	orange1.1g009425m	scaffold	52,3754	0,9219	0,017601775	402,8876923
ZjuHsp60-31	scaffold	orange1.1g010272m	scaffold	53,9855	0,9065	0,016791546	415,2730769
ZjuHsp60-31	scaffold	orange1.1g010585m	scaffold	49,4949	0,9815	0,019830326	380,73
ZjuHsp60-31	scaffold	orange1.1g009718m	scaffold	49,369	1,005	0,020356904	379,7615385
ZjuHsp60-31	scaffold	orange1.1g011829m	scaffold	51,3098	0,9107	0,017749046	394,6907692
ZjuHsp60-31	scaffold	orange1.1g009923m	scaffold	49,1761	1,0121	0,020581136	378,2776923
ZjuHsp60-32	scaffold	orange1.1g025446m	scaffold	1,1632	0,0981	0,084336314	8,947692308
ZjuHsp60-32	scaffold	orange1.1g025453m	scaffold	1,1632	0,0981	0,084336314	8,947692308
ZjuHsp60-32	scaffold	orange1.1g025502m	scaffold	1,1632	0,0981	0,084336314	8,947692308
ZjuHsp60-32	scaffold	orange1.1g025388m	scaffold	1,1632	0,0981	0,084336314	8,947692308
ZjuHsp60-32	scaffold	orange1.1g027479m	scaffold	1,2472	0,1836	0,14720975	9,593846154
ZjuHsp60-36	scaffold	orange1.1g025446m	scaffold	1,1854	0,098	0,082672516	9,118461538
ZjuHsp60-36	scaffold	orange1.1g025453m	scaffold	1,1854	0,0980	0,082672516	9,118461538
ZjuHsp60-36	scaffold	orange1.1g025502m	scaffold	1,1854	0,0980	0,082672516	9,118461538
ZjuHsp60-36	scaffold	orange1.1g025388m	scaffold	1,1854	0,0980	0,082672516	9,118461538
ZjuHsp60-36	scaffold	orange1.1g027479m	scaffold	1,2747	0,1836	0,14403389	9,805384615
ZjuHsp60-37	scaffold	orange1.1g032685m	scaffold	1,0422	0,1825	0,175110344	8,016923077
ZjuHsp60-38	scaffold	orange1.1g007834m	scaffold	0,9529	0,1302	0,136635534	7,33
ZjuHsp60-38	scaffold	orange1.1g007981m	scaffold	0,9696	0,1327	0,136860561	7,458461538
ZjuHsp60-38	scaffold	orange1.1g007985m	scaffold	17,4567	0,2722	0,015592867	134,2823077
ZjuHsp60-38	scaffold	orange1.1g014061m	scaffold	1,0156	0,1320	0,12997243	7,812307692
ZjuHsp60-38	scaffold	orange1.1g011794m	scaffold	16,1483	0,2373	0,014695045	124,2176923
ZjuHsp60-38	scaffold	orange1.1g011926m	scaffold	14,2007	0,2537	0,017865316	109,2361538

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-38	scaffold	orange1.1g007313m	scaffold	53,7702	0,5565	0,010349599	413,6169231
ZjuHsp60-38	scaffold	orange1.1g007488m	scaffold	54,0061	0,5558	0,01029143	415,4315385
ZjuHsp60-38	scaffold	orange1.1g008279m	scaffold	54,8889	0,5612	0,010224289	422,2223077
ZjuHsp60-38	scaffold	orange1.1g007643m	scaffold	53,6013	0,5703	0,010639667	412,3176923
ZjuHsp60-38	scaffold	orange1.1g009575m	scaffold	54,3834	0,5523	0,010155673	418,3338462
ZjuHsp60-38	scaffold	orange1.1g009601m	scaffold	54,5245	0,5497	0,010081706	419,4192308
ZjuHsp60-38	scaffold	orange1.1g015120m	scaffold	53,8571	0,5130	0,009525207	414,2853846
ZjuHsp60-38	scaffold	orange1.1g010494m	scaffold	53,3105	0,5692	0,010677071	410,0807692
ZjuHsp60-38	scaffold	orange1.1g011103m	scaffold	52,8981	0,5670	0,010718721	406,9084615
ZjuHsp60-38	scaffold	orange1.1g008181m	scaffold	53,811	0,6782	0,012603371	413,9307692
ZjuHsp60-38	scaffold	orange1.1g013743m	scaffold	53,7737	0,6147	0,011431239	413,6438462
ZjuHsp60-38	scaffold	orange1.1g016787m	scaffold	55,2212	0,5875	0,01063903	424,7784615
ZjuHsp60-38	scaffold	orange1.1g016809m	scaffold	55,221	0,5875	0,010639068	424,7769231
ZjuHsp60-38	scaffold	orange1.1g015737m	scaffold	52,4297	0,6181	0,01178912	403,3053846
ZjuHsp60-38	scaffold	orange1.1g023832m	scaffold	55,2729	0,6356	0,011499306	425,1761538
ZjuHsp60-39	scaffold	orange1.1g007834m	scaffold	1,0794	0,1924	0,178247174	8,303076923
ZjuHsp60-39	scaffold	orange1.1g007981m	scaffold	1,1024	0,1961	0,177884615	8,48
ZjuHsp60-39	scaffold	orange1.1g014061m	scaffold	1,0156	0,1320	0,12997243	7,812307692
ZjuHsp60-39	scaffold	orange1.1g007985m	scaffold	23,1818	0,3059	0,013195697	178,3215385
ZjuHsp60-39	scaffold	orange1.1g011794m	scaffold	23,1778	0,2733	0,011791456	178,2907692
ZjuHsp60-39	scaffold	orange1.1g011926m	scaffold	20,4845	0,2929	0,014298616	157,5730769
ZjuHsp60-39	scaffold	orange1.1g009601m	scaffold	54,4186	0,5824	0,010702223	418,6046154
ZjuHsp60-39	scaffold	orange1.1g009575m	scaffold	54,6513	0,5935	0,01085976	420,3946154
ZjuHsp60-39	scaffold	orange1.1g008279m	scaffold	54,8665	0,617	0,011245478	422,05
ZjuHsp60-39	scaffold	orange1.1g007488m	scaffold	54,9584	0,6205	0,011290358	422,7569231
ZjuHsp60-39	scaffold	orange1.1g007313m	scaffold	54,9568	0,6206	0,011292506	422,7446154
ZjuHsp60-39	scaffold	orange1.1g007643m	scaffold	54,7934	0,6388	0,011658338	421,4876923
ZjuHsp60-39	scaffold	orange1.1g011103m	scaffold	53,215	0,5789	0,010878512	409,3461538
ZjuHsp60-39	scaffold	orange1.1g010494m	scaffold	53,3612	0,5982	0,011210393	410,4707692
ZjuHsp60-39	scaffold	orange1.1g008181m	scaffold	54,7107	0,7599	0,013889422	420,8515385
ZjuHsp60-39	scaffold	orange1.1g015120m	scaffold	56,0192	0,6001	0,010712399	430,9169231
ZjuHsp60-39	scaffold	orange1.1g015737m	scaffold	52,4282	0,6180	0,011787549	403,2938462
ZjuHsp60-39	scaffold	orange1.1g013743m	scaffold	55,3988	0,6965	0,012572474	426,1446154
ZjuHsp60-39	scaffold	orange1.1g016787m	scaffold	57,6948	0,6754	0,011706428	443,8061538
ZjuHsp60-39	scaffold	orange1.1g016809m	scaffold	57,6953	0,6752	0,01170286	443,81
ZjuHsp60-39	scaffold	orange1.1g023832m	scaffold	55,2747	0,6356	0,011498932	425,19
		Mean		26,66866079	0,585746349	0,021963846	205,1435446

Z. jujuba – *M. accuminata*

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-01	1	GSMUA_Achr8T32500_001	8	5,4122	0,622	0,114925539	41,63230769
ZjuHsp60-01	1	GSMUA_Achr1T16950_001	1	5,4622	0,5274	0,096554502	42,01692308
ZjuHsp60-01	1	GSMUA_Achr8T32500_001	8	5,4119	0,622	0,114931909	41,63
ZjuHsp60-01	1	GSMUA_Achr1T16950_001	1	5,4622	0,5274	0,096554502	42,01692308
ZjuHsp60-01	1	GSMUA_Achr6T10860_001	6	7,2144	0,4818	0,0667831	55,49538462
ZjuHsp60-01	1	GSMUA_Achr9T14260_001	9	11,092	0,4728	0,042625316	85,32307692
ZjuHsp60-01	1	GSMUA_Achr3T05780_001	3	9,4846	0,469	0,04944858	72,95846154
ZjuHsp60-01	1	GSMUA_Achr10T29980_001	10	2,7248	0,3847	0,141184674	20,96
ZjuHsp60-01	1	GSMUA_Achr7T18690_001	7	2,6491	0,3517	0,13276207	20,37769231
ZjuHsp60-02	1	GSMUA_Achr2T01800_001	2	2,587	0,0452	0,017471975	19,9
ZjuHsp60-02	1	GSMUA_Achr3T24440_001	3	2,2148	0,0578	0,026097165	17,03692308
ZjuHsp60-02	1	GSMUA_Achr8T16590_001	8	52,9661	0,7152	0,013502976	407,4315385
ZjuHsp60-02	1	GSMUA_Achr11T16330_001	11	52,2065	0,7164	0,013722429	401,5884615
ZjuHsp60-02	1	GSMUA_Achr2T21510_001	2	54,2244	0,7168	0,013219141	417,1107692
ZjuHsp60-02	1	GSMUA_AchrUn_randomT20660_001	scaffold	52,0413	0,7681	0,014759431	400,3176923
ZjuHsp60-02	1	GSMUA_Achr6T06770_001	6	54,2136	0,7687	0,014179099	417,0276923
ZjuHsp60-02	1	GSMUA_Achr4T16540_001	4	49,8677	0,8526	0,017097239	383,5976923
ZjuHsp60-02	1	GSMUA_Achr1T14710_001	1	50,4457	0,8677	0,017200673	388,0438462
ZjuHsp60-02	1	GSMUA_Achr6T23290_001	6	52,7334	0,8634	0,016372925	405,6415385
ZjuHsp60-02	1	GSMUA_Achr3T25570_001	3	48,8289	1,008	0,020643512	375,6069231
ZjuHsp60-02	1	GSMUA_Achr8T04580_001	8	48,9599	0,9927	0,020275777	376,6146154
ZjuHsp60-02	1	GSMUA_Achr5T09040_001	5	53,4843	0,8362	0,015634495	411,4176923
ZjuHsp60-02	1	GSMUA_Achr2T01090_001	2	54,4907	0,7561	0,013875762	419,1592308
ZjuHsp60-03	1	GSMUA_Achr9T14260_001	9	3,1247	0,2714	0,086856338	24,03615385
ZjuHsp60-03	1	GSMUA_Achr3T05780_001	3	4,4446	0,2599	0,058475453	34,18923077
ZjuHsp60-03	1	GSMUA_Achr6T10860_001	6	2,7597	0,2685	0,097293184	21,22846154
ZjuHsp60-03	1	GSMUA_Achr7T18690_001	7	32,5107	0,4176	0,012845002	250,0823077
ZjuHsp60-03	1	GSMUA_Achr8T32500_001	8	46,6562	0,5954	0,012761434	358,8938462
ZjuHsp60-03	1	GSMUA_Achr10T29980_001	10	12,8958	0,4321	0,033507033	99,19846154
ZjuHsp60-03	1	GSMUA_Achr1T16950_001	1	7,8741	0,5099	0,064756607	60,57

Table S3.3 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-04	1	GSMUA_Achr9T14260_001	9	2,9734	0,2815	0,094672765	22,87230769
ZjuHsp60-04	1	GSMUA_Achr6T10860_001	6	2,5315	0,2734	0,10799921	19,47307692
ZjuHsp60-04	1	GSMUA_Achr3T05780_001	3	3,9367	0,2658	0,06751848	30,28230769
ZjuHsp60-04	1	GSMUA_Achr7T18690_001	7	14,5198	0,4788	0,032975661	111,6907692
ZjuHsp60-04	1	GSMUA_Achr8T32500_001	8	46,0123	0,5916	0,012857432	353,9407692
ZjuHsp60-04	1	GSMUA_Achr10T29980_001	10	13,1171	0,4721	0,035991187	100,9007692
ZjuHsp60-04	1	GSMUA_Achr1T16950_001	1	7,6172	0,4928	0,064695689	58,59384615
ZjuHsp60-05	2	GSMUA_Achr8T16590_001	8	2,2548	0,0356	0,01578854	17,34461538
ZjuHsp60-05	2	GSMUA_Achr2T21510_001	2	2,3731	0,0367	0,015465004	18,25461538
ZjuHsp60-05	2	GSMUA_Achr11T16330_001	11	54,0662	0,6906	0,01277323	415,8938462
ZjuHsp60-05	2	GSMUA_Achr2T01800_001	2	31,6543	0,7347	0,023210117	243,4946154
ZjuHsp60-05	2	GSMUA_Achr3T24440_001	3	53,9943	0,7336	0,013586619	415,3407692
ZjuHsp60-05	2	GSMUA_Achr6T06770_001	6	23,1564	0,774	0,033424885	178,1261538
ZjuHsp60-05	2	GSMUA_Achr8T04580_001	8	50,3647	0,9051	0,01797092	387,4207692
ZjuHsp60-05	2	GSMUA_Achr3T25570_001	3	50,0211	0,9225	0,018442217	384,7776923
ZjuHsp60-05	2	GSMUA_Achr1T14710_001	1	50,4712	0,9428	0,01867996	388,24
ZjuHsp60-05	2	GSMUA_Achr4T16540_001	4	49,7001	0,9389	#DEGER!	382,3084615
ZjuHsp60-05	2	GSMUA_Achr2T01090_001	2	52,7676	0,7157	0,013563247	405,9046154
ZjuHsp60-06	2	GSMUA_Achr8T16590_001	8	2,2549	0,0356	0,01578784	17,34538462
ZjuHsp60-06	2	GSMUA_Achr2T21510_001	2	2,3734	0,0367	0,015463049	18,25692308
ZjuHsp60-06	2	GSMUA_Achr11T16330_001	11	54,0645	0,6906	0,012773631	415,8807692
ZjuHsp60-06	2	GSMUA_Achr2T01800_001	2	31,4707	0,7347	0,023345525	242,0823077
ZjuHsp60-06	2	GSMUA_Achr3T24440_001	3	53,9945	0,7336	0,013586569	415,3423077
ZjuHsp60-06	2	GSMUA_Achr6T23290_001	6	53,2317	0,8307	0,015605363	409,4746154
ZjuHsp60-06	2	GSMUA_Achr5T09040_001	5	53,2043	0,8139	0,015297636	409,2638462
ZjuHsp60-06	2	GSMUA_AchrUn_randomT20660_001	scaffold	19,1466	0,8061	0,04210147	147,2815385
ZjuHsp60-06	2	GSMUA_Achr6T06770_001	6	23,265	0,774	0,033268859	178,9615385
ZjuHsp60-06	2	GSMUA_Achr8T04580_001	8	50,3658	0,9051	0,017970528	387,4292308
ZjuHsp60-06	2	GSMUA_Achr3T25570_001	3	50,0206	0,9225	0,018442402	384,7738462
ZjuHsp60-06	2	GSMUA_Achr1T14710_001	1	50,4718	0,9428	0,018679738	388,2446154
ZjuHsp60-06	2	GSMUA_Achr4T16540_001	4	49,701	0,9388	0,018888956	382,3153846
ZjuHsp60-06	2	GSMUA_Achr2T01090_001	2	52,7677	0,7157	0,013563221	405,9053846
ZjuHsp60-06	2	GSMUA_Achr8T21710_001	8	2,5807	0,0798	0,030921843	19,85153846
ZjuHsp60-06	2	GSMUA_AchrUn_randomT14130_001	scaffold	2,5905	0,1296	0,050028952	19,92692308
ZjuHsp60-08	2	GSMUA_Achr4T10770_001	4	1,2896	0,1138	0,088244417	9,92
ZjuHsp60-09	2	GSMUA_Achr11T22050_001	11	6,0884	0,0827	0,013583207	46,83384615
ZjuHsp60-09	2	GSMUA_AchrUn_randomT08730_001	scaffold	3,4756	0,1014	0,029174819	26,73538462
ZjuHsp60-09	2	GSMUA_Achr10T20970_001	10	31,3079	0,2844	0,009083969	240,83
ZjuHsp60-09	2	GSMUA_Achr9T23240_001	9	50,3808	0,4546	0,009023279	387,5446154
ZjuHsp60-09	2	GSMUA_Achr3T27620_001	3	50,5212	0,4512	0,008930904	388,6246154
ZjuHsp60-09	2	GSMUA_Achr11T06270_001	11	51,0389	0,4649	0,009108739	392,6069231
ZjuHsp60-09	2	GSMUA_Achr9T18480_001	9	49,6084	0,5343	0,010770353	381,6030769
ZjuHsp60-09	2	GSMUA_Achr1T11160_001	1	48,9992	0,5475	0,011173652	376,9169231
ZjuHsp60-09	2	GSMUA_Achr10T08040_001	10	48,9989	0,5488	0,011200251	376,9146154
ZjuHsp60-09	2	GSMUA_Achr7T24090_001	7	51,3328	0,5611	0,010930633	394,8676923
ZjuHsp60-09	2	GSMUA_Achr1T06560_001	1	2,4417	0,4791	0,015625751	18,78230769
ZjuHsp60-10	4	GSMUA_Achr9T23240_001	9	6,1701	0,0829	0,013435763	47,46230769
ZjuHsp60-10	4	GSMUA_Achr3T27620_001	3	7,2392	0,0792	0,010940435	55,68615385
ZjuHsp60-10	4	GSMUA_Achr11T06270_001	11	12,791	0,0859	0,006715659	98,39230769
ZjuHsp60-10	4	GSMUA_Achr9T18480_001	9	11,5516	0,2423	0,020975449	88,85846154
ZjuHsp60-10	4	GSMUA_Achr11T22050_001	11	48,6177	0,4776	0,009823583	373,9823077
ZjuHsp60-10	4	GSMUA_AchrUn_randomT08730_001	scaffold	48,905	0,4696	0,00960229	376,1923077
ZjuHsp60-10	4	GSMUA_Achr1T11160_001	1	50,6701	0,5298	0,01045587	389,77
ZjuHsp60-10	4	GSMUA_Achr10T08040_001	10	50,1778	0,5276	0,01051461	385,9830769
ZjuHsp60-10	4	GSMUA_Achr10T20970_001	10	49,3386	0,5465	0,01107652	379,5276923
ZjuHsp60-10	4	GSMUA_Achr7T24090_001	7	52,1316	0,5575	0,01069409	401,0123077
ZjuHsp60-10	4	GSMUA_Achr8T14600_001	8	52,0406	0,2887	0,005547592	400,3123077
ZjuHsp60-11	4	GSMUA_Achr6T23290_001	6	2,3470	0,0413	0,017596932	18,05384615
ZjuHsp60-11	4	GSMUA_Achr5T09040_001	5	1,8097	0,0523	0,028899818	13,92076923
ZjuHsp60-11	4	GSMUA_AchrUn_randomT20660_001	scaffold	54,5713	0,7236	0,013259717	419,7792308
ZjuHsp60-11	4	GSMUA_Achr6T06770_001	6	56,2717	0,7183	0,012764853	432,8592308
ZjuHsp60-11	4	GSMUA_Achr2T21510_001	2	53,1281	0,8408	0,0158259	408,6776923
ZjuHsp60-11	4	GSMUA_Achr11T16330_001	11	51,7612	0,8168	0,01578016	398,1630769
ZjuHsp60-11	4	GSMUA_Achr3T25570_001	3	50,3917	0,8777	0,017417551	387,6284615
ZjuHsp60-11	4	GSMUA_Achr4T16540_001	4	50,1846	0,8802	0,017539245	386,0353846
ZjuHsp60-11	4	GSMUA_Achr1T14710_001	1	50,4023	0,8823	0,017505154	387,71
ZjuHsp60-11	4	GSMUA_Achr1T14710_001	1	50,4024	0,8823	0,017505119	387,7107692
ZjuHsp60-11	4	GSMUA_Achr8T04580_001	8	51,144	0,8726	0,01706163	393,4153846
ZjuHsp60-11	4	GSMUA_Achr2T01800_001	2	53,4272	0,8093	0,015147715	410,9784615
ZjuHsp60-11	4	GSMUA_Achr3T24440_001	3	52,7768	0,7981	0,015122175	405,9753846
ZjuHsp60-12	4	GSMUA_Achr1T14710_001	1	1,7864	0,0764	0,041965312	7,692307692
ZjuHsp60-12	4	GSMUA_Achr4T16540_001	4	1,8277	0,0767	0,041965312	30,76923077
ZjuHsp60-13	5	GSMUA_Achr6T09540_001	6	49,9397	0,1403	0,002809388	384,1515385
ZjuHsp60-13	5	GSMUA_Achr3T20910_001	3	7,6166	0,095	0,012472757	58,58923077
ZjuHsp60-13	5	GSMUA_AchrUn_randomT20660_001	scaffold	24,498	0,6352	0,025928647	188,4461538

Table S3.3 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-13	5	GSMUA_Achr6T06770_001	6	23,7039	0,6075	0,025628694	182,3376923
ZjuHsp60-13	5	GSMUA_Achr2T01800_001	2	49,6968	0,7259	0,014606574	382,2830769
ZjuHsp60-13	5	GSMUA_Achr8T16590_001	8	50,5839	0,7428	0,014684514	389,1069231
ZjuHsp60-13	5	GSMUA_Achr11T16330_001	11	49,1372	0,7734	0,015739603	377,9784615
ZjuHsp60-13	5	GSMUA_Achr3T24440_001	3	47,8275	0,7846	0,016404788	367,9038462
ZjuHsp60-13	5	GSMUA_Achr6T23290_001	6	48,7094	0,8304	0,017048044	374,6876923
ZjuHsp60-13	5	GSMUA_Achr5T09040_001	5	49,1626	0,8146	0,016569506	378,1738462
ZjuHsp60-13	5	GSMUA_Achr2T21510_001	2	51,0012	0,7518	0,01474083	392,3169231
ZjuHsp60-13	5	GSMUA_Achr8T04580_001	8	48,6204	0,9095	0,01870614	374,0030769
ZjuHsp60-13	5	GSMUA_Achr3T25570_001	3	48,8832	0,9188	0,018795824	376,0246154
ZjuHsp60-13	5	GSMUA_Achr4T16540_001	4	47,2729	0,8968	0,0189707	363,6376923
ZjuHsp60-13	5	GSMUA_Achr1T14710_001	1	48,2579	0,8896	0,018434287	371,2146154
ZjuHsp60-14	6	GSMUA_Achr8T32500_001	8	2,5012	0,5226	0,208939709	19,24
ZjuHsp60-14	6	GSMUA_Achr1T16950_001	1	2,3842	0,4378	0,183625535	18,34
ZjuHsp60-14	6	GSMUA_Achr9T14260_001	9	22,8893	0,5676	0,024797613	176,0715385
ZjuHsp60-14	6	GSMUA_Achr3T05780_001	3	34,2217	0,5622	0,016428173	263,2438462
ZjuHsp60-14	6	GSMUA_Achr6T10860_001	6	6,1896	0,5988	0,096742924	47,61230769
ZjuHsp60-14	6	GSMUA_Achr7T18690_001	7	9,5993	0,6289	0,065515194	73,84076923
ZjuHsp60-14	6	GSMUA_Achr7T18690_001	7	9,5981	0,6289	0,065523385	73,83153846
ZjuHsp60-15	8	GSMUA_Achr9T14260_001	9	2,7661	0,279	0,100864032	21,27769231
ZjuHsp60-15	8	GSMUA_Achr3T05780_001	3	2,6599	0,2683	0,100868454	20,46076923
ZjuHsp60-15	8	GSMUA_Achr6T10860_001	6	2,0434	0,2606	0,127532544	15,71846154
ZjuHsp60-15	8	GSMUA_Achr7T18690_001	7	26,9109	0,4727	0,017565373	207,0069231
ZjuHsp60-15	8	GSMUA_Achr10T29980_001	10	7,8001	0,4735	0,06070435	60,00076923
ZjuHsp60-15	8	GSMUA_Achr8T32500_001	8	11,3422	0,5913	0,052132743	87,24769231
ZjuHsp60-15	8	GSMUA_Achr1T16950_001	1	8,0813	0,5229	0,064704936	62,16384615
ZjuHsp60-16	8	GSMUA_Achr9T14260_001	9	2,7662	0,279	0,100860386	21,27846154
ZjuHsp60-16	8	GSMUA_Achr3T05780_001	3	2,6598	0,2683	0,100872246	20,46
ZjuHsp60-16	8	GSMUA_Achr6T10860_001	6	2,0434	0,2606	0,127532544	15,71846154
ZjuHsp60-16	8	GSMUA_Achr7T18690_001	7	26,9404	0,4727	0,017546139	207,2338462
ZjuHsp60-16	8	GSMUA_Achr10T29980_001	10	7,8029	0,4735	0,060682567	60,02230769
ZjuHsp60-16	8	GSMUA_Achr8T32500_001	8	11,3467	0,5913	0,052112068	87,28230769
ZjuHsp60-16	8	GSMUA_Achr1T16950_001	1	8,0820	0,5229	0,064699332	62,16923077
ZjuHsp60-17	8	GSMUA_Achr9T14260_001	9	2,7662	0,2790	0,100860386	21,27846154
ZjuHsp60-17	8	GSMUA_Achr3T05780_001	3	2,6598	0,2683	0,100872246	20,46
ZjuHsp60-17	8	GSMUA_Achr6T10860_001	6	2,0434	0,2606	0,127532544	15,71846154
ZjuHsp60-17	8	GSMUA_Achr7T18690_001	7	27,226	0,4727	0,01736208	209,4307692
ZjuHsp60-17	8	GSMUA_Achr10T29980_001	10	7,7997	0,4735	0,060707463	59,99769231
ZjuHsp60-17	8	GSMUA_Achr8T32500_001	8	11,3465	0,5913	0,052112986	87,28076923
ZjuHsp60-17	8	GSMUA_Achr1T16950_001	1	8,081	0,5229	0,064707338	62,16153846
ZjuHsp60-18	8	GSMUA_Achr11T16330_001	11	2,7667	0,0478	0,0172769	21,28230769
ZjuHsp60-18	8	GSMUA_Achr2T01090_001	2	2,9150	0,1566	0,053722127	22,42307692
ZjuHsp60-18	8	GSMUA_Achr2T01100_001	2	4,1091	0,1333	0,032440194	31,60846154
ZjuHsp60-18	8	GSMUA_Achr8T16590_001	8	51,9798	0,6865	0,013207054	399,8446154
ZjuHsp60-18	8	GSMUA_Achr2T21510_001	2	52,8976	0,6776	0,012809655	406,9046154
ZjuHsp60-18	8	GSMUA_Achr2T01800_001	2	51,3316	0,7315	0,014250481	394,8584615
ZjuHsp60-18	8	GSMUA_Achr3T24440_001	3	51,1112	0,7363	0,014405845	393,1630769
ZjuHsp60-18	8	GSMUA_AchrUn_randomT20660_001	scaffold	51,2176	0,8029	0,015676252	393,9815385
ZjuHsp60-18	8	GSMUA_Achr6T23290_001	6	50,3268	0,8241	0,016374973	387,1292308
ZjuHsp60-18	8	GSMUA_Achr3T25570_001	3	47,960	0,8944	0,018648874	368,9230769
ZjuHsp60-18	8	GSMUA_Achr5T09040_001	5	50,6519	0,8263	0,016313307	389,63
ZjuHsp60-18	8	GSMUA_Achr8T04580_001	8	48,2282	0,8841	0,018331599	370,9861538
ZjuHsp60-18	8	GSMUA_Achr6T06770_001	6	52,7335	0,8216	0,015580229	405,6423077
ZjuHsp60-18	8	GSMUA_Achr1T14710_001	1	49,1374	0,9042	0,018401462	377,98
ZjuHsp60-18	8	GSMUA_Achr4T16540_001	4	12,5795	0,9282	0,073786716	96,76538462
ZjuHsp60-19	8	GSMUA_Achr7T24090_001	7	3,3975	0,1175	0,034584253	26,13461538
ZjuHsp60-19	8	GSMUA_Achr1T1160_001	1	6,3202	0,1951	0,030869276	48,61692308
ZjuHsp60-19	8	GSMUA_Achr10T08040_001	10	6,7912	0,1962	0,028890329	52,24
ZjuHsp60-19	8	GSMUA_Achr9T23240_001	9	0,5945	0,0115	0,019343987	4,573076923
ZjuHsp60-19	8	GSMUA_Achr3T27620_001	3	51,3196	0,6002	0,011695337	394,7661538
ZjuHsp60-19	8	GSMUA_Achr11T06270_001	11	52,3337	0,6152	0,011755332	402,5669231
ZjuHsp60-19	8	GSMUA_Achr11T22050_001	11	49,3446	0,6145	0,012453237	379,5738462
ZjuHsp60-19	8	GSMUA_AchrUn_randomT08730_001	scaffold	48,6116	0,6236	0,012828214	373,9353846
ZjuHsp60-19	8	GSMUA_Achr9T18480_001	9	51,8997	0,6254	0,012050166	399,2284615
ZjuHsp60-19	8	GSMUA_Achr10T20970_001	10	51,1184	0,6307	0,012338023	393,2184615
ZjuHsp60-20	9	GSMUA_Achr10T08040_001	10	2,4410	0,0750	0,030725113	18,77692308
ZjuHsp60-20	9	GSMUA_Achr1T1160_001	1	2,0193	0,0767	0,03798346	15,53307692
ZjuHsp60-20	9	GSMUA_Achr7T24090_001	7	5,6544	0,1535	0,027147001	43,49538462
ZjuHsp60-20	9	GSMUA_Achr9T23240_001	9	51,9955	0,5287	0,010168188	399,9653846
ZjuHsp60-20	9	GSMUA_Achr11T06270_001	11	52,4612	0,5454	0,010396255	403,5476923
ZjuHsp60-20	9	GSMUA_Achr3T27620_001	3	52,0187	0,5468	0,010511604	400,1438462
ZjuHsp60-20	9	GSMUA_Achr11T22050_001	11	49,1883	0,534	0,01085624	378,3715385
ZjuHsp60-20	9	GSMUA_AchrUn_randomT08730_001	scaffold	48,88	0,564	0,011538462	376
ZjuHsp60-20	9	GSMUA_Achr9T18480_001	9	52,5685	0,5935	0,011290031	404,3730769
ZjuHsp60-20	9	GSMUA_Achr10T20970_001	10	50,8867	0,5959	0,011710329	391,4361538

Table S3.3 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-21	10	GSMUA_AchrUn_randomT20660_001	scaffold	2,0103	0,0534	0,0265632	15,46384615
ZjuHsp60-21	10	GSMUA_Achr6T06770_001	6	1,7145	0,0455	0,026538349	13,18846154
ZjuHsp60-21	10	GSMUA_Achr6T23290_001	6	53,7977	0,7543	0,014021046	413,8284615
ZjuHsp60-21	10	GSMUA_Achr2T01800_001	2	18,8626	0,7206	0,038202581	145,0969231
ZjuHsp60-21	10	GSMUA_Achr5T09040_001	5	54,3326	0,7465	0,013739449	417,9430769
ZjuHsp60-21	10	GSMUA_Achr3T24440_001	3	50,5705	0,7271	0,014377948	389,0038462
ZjuHsp60-21	10	GSMUA_Achr8T16590_001	8	12,5489	0,8348	0,066523759	96,53
ZjuHsp60-21	10	GSMUA_Achr11T16330_001	11	52,3275	0,8000	0,015288328	402,5192308
ZjuHsp60-21	10	GSMUA_Achr2T21510_001	2	53,1716	0,8219	0,0154575	409,0123077
ZjuHsp60-21	10	GSMUA_Achr1T14710_001	1	52,03	0,8985	0,017268883	400,2307692
ZjuHsp60-21	10	GSMUA_Achr4T16540_001	4	51,0773	0,9000	0,017620352	392,9023077
ZjuHsp60-21	10	GSMUA_Achr3T25570_001	3	51,0005	0,9368	0,018368447	392,3115385
ZjuHsp60-21	10	GSMUA_Achr8T04580_001	8	50,9138	0,9233	0,018134573	391,6446154
ZjuHsp60-22	10	GSMUA_AchrUn_randomT20660_001	scaffold	2,0103	0,0534	0,0265632	15,46384615
ZjuHsp60-22	10	GSMUA_Achr6T06770_001	6	1,7145	0,0455	0,026538349	13,18846154
ZjuHsp60-22	10	GSMUA_Achr6T23290_001	6	53,8013	0,7543	0,014020107	413,8561538
ZjuHsp60-22	10	GSMUA_Achr2T01800_001	2	18,8272	0,7207	0,038279723	144,8246154
ZjuHsp60-22	10	GSMUA_Achr5T09040_001	5	54,4106	0,7437	0,013668293	418,5430769
ZjuHsp60-22	10	GSMUA_Achr3T24440_001	3	50,5714	0,7272	0,014379669	389,0107692
ZjuHsp60-22	10	GSMUA_Achr8T16590_001	8	12,5433	0,8348	0,066553459	96,48692308
ZjuHsp60-22	10	GSMUA_Achr11T16330_001	11	52,3192	0,8008	0,015306044	402,4553846
ZjuHsp60-22	10	GSMUA_Achr2T21510_001	2	53,1716	0,8219	0,0154575	409,0123077
ZjuHsp60-22	10	GSMUA_Achr1T14710_001	1	52,0294	0,8985	0,017269082	400,2261538
ZjuHsp60-22	10	GSMUA_Achr4T16540_001	4	51,0764	0,9000	0,017620662	392,8953846
ZjuHsp60-22	10	GSMUA_Achr3T25570_001	3	50,9998	0,9367	0,018366739	392,3061538
ZjuHsp60-22	10	GSMUA_Achr8T04580_001	8	50,9149	0,9233	0,018134181	391,6530769
ZjuHsp60-23	10	GSMUA_Achr10T29330_001	10	3,6216	0,5991	0,165424122	27,85846154
ZjuHsp60-23	10	GSMUA_Achr7T21400_001	7	7,1059	0,5787	0,081439367	54,66076923
ZjuHsp60-24	10	GSMUA_Achr9T18480_001	9	1,7701	0,1727	0,097565109	13,161615385
ZjuHsp60-24	10	GSMUA_Achr9T23240_001	9	7,2454	0,2211	0,030515914	55,73384615
ZjuHsp60-24	10	GSMUA_Achr3T27620_001	3	8,3284	0,216	0,025935354	64,06461538
ZjuHsp60-24	10	GSMUA_Achr11T06270_001	11	10,5392	0,2212	0,02098831	81,07076923
ZjuHsp60-24	10	GSMUA_Achr11T22050_001	11	49,7021	0,4929	0,009917086	382,3238462
ZjuHsp60-24	10	GSMUA_AchrUn_randomT08730_001	scaffold	49,4665	0,5085	0,010279684	380,5115385
ZjuHsp60-24	10	GSMUA_Achr1T11160_001	1	52,8595	0,5716	0,010813572	406,6115385
ZjuHsp60-24	10	GSMUA_Achr10T08040_001	10	52,5784	0,5613	0,010675487	404,4492308
ZjuHsp60-24	10	GSMUA_Achr10T20970_001	10	50,863	0,5556	0,010923461	391,2538462
ZjuHsp60-24	10	GSMUA_Achr7T24090_001	7	9,3795	0,6061	0,064619649	72,15
ZjuHsp60-24	10	GSMUA_Achr8T14600_001	8	54,4649	0,4142	0,007604898	418,9607692
ZjuHsp60-25	10	GSMUA_Achr9T18480_001	9	2,0029	0,156	0,077887064	15,40692308
ZjuHsp60-25	10	GSMUA_Achr9T23240_001	9	6,6741	0,2203	0,033008196	51,33923077
ZjuHsp60-25	10	GSMUA_Achr3T27620_001	3	8,5938	0,215	0,025018036	66,10615385
ZjuHsp60-25	10	GSMUA_Achr11T06270_001	11	8,5927	0,215	0,025021239	66,09769231
ZjuHsp60-25	10	GSMUA_Achr11T22050_001	11	50,5821	0,4841	0,009570579	389,0930769
ZjuHsp60-25	10	GSMUA_AchrUn_randomT08730_001	scaffold	50,3653	0,4897	0,009722964	387,4253846
ZjuHsp60-25	10	GSMUA_Achr1T11160_001	1	53,5419	0,5542	0,010350772	411,8607692
ZjuHsp60-25	10	GSMUA_Achr10T08040_001	10	53,2469	0,5484	0,010299191	409,5915385
ZjuHsp60-25	10	GSMUA_Achr10T20970_001	10	51,9764	0,5632	0,010835687	399,8184615
ZjuHsp60-25	10	GSMUA_Achr7T24090_001	7	13,1699	0,579	0,043963887	101,3069231
ZjuHsp60-25	10	GSMUA_Achr8T14600_001	8	25,7447	0,4153	0,016131476	198,0361538
ZjuHsp60-26	10	GSMUA_Achr8T21710_001	8	7,1811	0,1376	0,01916141	55,23923077
ZjuHsp60-28	12	GSMUA_Achr8T04580_001	8	1,9808	0,0582	0,029382068	15,23692308
ZjuHsp60-28	12	GSMUA_Achr3T25570_001	3	1,5948	0,0571	0,035803863	12,26769231
ZjuHsp60-29	scaffold	GSMUA_Achr10T08040_001	10	1,6225	0,0534	0,032912173	12,48076923
ZjuHsp60-29	scaffold	GSMUA_Achr1T11160_001	1	2,0458	0,0555	0,027128752	15,73692308
ZjuHsp60-29	scaffold	GSMUA_Achr7T24090_001	7	5,0895	0,1592	0,031280086	39,15
ZjuHsp60-29	scaffold	GSMUA_Achr3T27620_001	3	52,3849	0,5465	0,010432396	402,9607692
ZjuHsp60-29	scaffold	GSMUA_Achr9T23240_001	9	52,5662	0,5412	0,010295589	404,3553846
ZjuHsp60-29	scaffold	GSMUA_Achr11T06270_001	11	53,0305	0,5455	0,010286533	407,9269231
ZjuHsp60-29	scaffold	GSMUA_Achr11T22050_001	11	50,355	0,5237	0,010400159	387,3461538
ZjuHsp60-29	scaffold	GSMUA_AchrUn_randomT08730_001	scaffold	49,6109	0,5664	0,011416846	381,6223077
ZjuHsp60-29	scaffold	GSMUA_Achr9T18480_001	9	53,5901	0,5901	0,011011362	412,2315385
ZjuHsp60-29	scaffold	GSMUA_Achr10T20970_001	10	50,6567	0,6035	0,011913528	389,6669231
ZjuHsp60-30	scaffold	GSMUA_Achr8T04580_001	8	1,7099	0,0524	0,030645067	13,15307692
ZjuHsp60-30	scaffold	GSMUA_Achr3T25570_001	3	1,5552	0,0515	0,033114712	11,96307692
ZjuHsp60-30	scaffold	GSMUA_Achr8T16590_001	8	50,4716	0,9049	0,017928895	388,2430769
ZjuHsp60-30	scaffold	GSMUA_Achr11T16330_001	11	50,5656	0,8831	0,017464442	388,9661538
ZjuHsp60-30	scaffold	GSMUA_Achr6T23290_001	6	52,2883	0,8709	0,016655734	402,2176923
ZjuHsp60-30	scaffold	GSMUA_Achr5T09040_001	5	51,9864	0,8752	0,016835172	399,8953846
ZjuHsp60-30	scaffold	GSMUA_AchrUn_randomT20660_001	scaffold	53,6228	0,8889	0,016576904	412,4830769
ZjuHsp60-30	scaffold	GSMUA_Achr2T01800_001	2	50,5068	0,9803	0,019409268	388,5138462
ZjuHsp60-30	scaffold	GSMUA_Achr2T21510_001	2	51,6875	0,9375	0,018137848	397,5961538
ZjuHsp60-31	scaffold	GSMUA_Achr8T04580_001	8	1,7099	0,0524	0,030645067	13,15307692
ZjuHsp60-31	scaffold	GSMUA_Achr3T25570_001	3	1,5551	0,0515	0,033116841	11,96230769
ZjuHsp60-31	scaffold	GSMUA_Achr8T16590_001	8	50,4732	0,9048	0,017926345	388,2553846

Table S3.3 Continued

ID	Chromos.	Gene IDs	Chromos.	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-31	scaffold	GSMUA_Achr11T16330_001	11	50,5665	0,8832	0,017466109	388,9730769
ZjuHsp60-31	scaffold	GSMUA_Achr6T23290_001	6	52,2879	0,8707	0,016652036	402,2146154
ZjuHsp60-31	scaffold	GSMUA_Achr5T09040_001	5	51,9874	0,8753	0,016836772	399,9030769
ZjuHsp60-31	scaffold	GSMUA_AchrUn_randomT20660_001	scaffold	53,6217	0,8888	0,016575379	412,4746154
ZjuHsp60-31	scaffold	GSMUA_Achr2T01800_001	2	50,5054	0,9803	0,019409806	388,5030769
ZjuHsp60-31	scaffold	GSMUA_Achr2T21510_001	2	51,6885	0,9374	0,018135562	397,6038462
ZjuHsp60-32	scaffold	GSMUA_Achr11T09270_001	11	3,3409	0,1969	0,058936215	25,69923077
ZjuHsp60-32	scaffold	GSMUA_Achr2T00670_001	2	2,721	0,1881	0,069128997	20,93076923
ZjuHsp60-32	scaffold	GSMUA_Achr3T02000_001	3	4,5081	0,207	0,045917349	34,67769231
ZjuHsp60-32	scaffold	GSMUA_Achr5T05150_001	5	2,5604	0,206	0,080456179	19,69538462
ZjuHsp60-34	scaffold	GSMUA_Achr8T21710_001	8	2,6429	0,0799	0,030231942	20,33
ZjuHsp60-34	scaffold	GSMUA_AchrUn_randomT14130_001	scaffold	2,6064	0,1296	0,049723757	20,04923077
ZjuHsp60-34	scaffold	GSMUA_Achr4T10770_001	4	1,4892	0,1145	0,076886919	11,45538462
ZjuHsp60-36	scaffold	GSMUA_Achr11T09270_001	11	3,3323	0,197	0,059118327	25,63307692
ZjuHsp60-36	scaffold	GSMUA_Achr2T00670_001	2	2,6846	0,1881	0,070066304	20,65076923
ZjuHsp60-36	scaffold	GSMUA_Achr3T02000_001	3	4,4958	0,2071	0,046065216	34,58307692
ZjuHsp60-36	scaffold	GSMUA_Achr5T05150_001	5	2,5299	0,2061	0,081465671	19,46076923
ZjuHsp60-38	scaffold	GSMUA_Achr10T20970_001	10	2,8552	0,2253	0,078908658	21,96307692
ZjuHsp60-38	scaffold	GSMUA_AchrUn_randomT08730_001	scaffold	25,9734	0,2537	0,009767685	199,7953846
ZjuHsp60-38	scaffold	GSMUA_Achr11T22050_001	11	49,4505	0,2738	0,00553685	380,3884615
ZjuHsp60-38	scaffold	GSMUA_Achr3T27620_001	3	53,7215	0,5059	0,009417086	413,2423077
ZjuHsp60-38	scaffold	GSMUA_Achr9T23240_001	9	52,9384	0,5055	0,009548834	407,2184615
ZjuHsp60-38	scaffold	GSMUA_Achr11T06270_001	11	53,9436	0,5279	0,009786147	414,9507692
ZjuHsp60-38	scaffold	GSMUA_Achr9T18480_001	9	53,2159	0,5509	0,010352169	409,3530769
ZjuHsp60-38	scaffold	GSMUA_Achr1T1160_001	1	52,8007	0,6171	0,011687345	406,1592308
ZjuHsp60-38	scaffold	GSMUA_Achr10T08040_001	10	52,378	0,6181	0,011800756	402,9076923
ZjuHsp60-38	scaffold	GSMUA_Achr7T24090_001	7	54,7732	0,646	0,011794089	421,3323077
ZjuHsp60-38	scaffold	GSMUA_Achr1T06560_001	1	42,7792	0,5663	0,013237742	329,0707692
ZjuHsp60-39	scaffold	GSMUA_Achr10T20970_001	10	2,5504	0,792	0,310539523	19,61846154
ZjuHsp60-39	scaffold	GSMUA_Achr11T22050_001	11	50,203	0,3195	0,006364162	386,1769231
ZjuHsp60-39	scaffold	GSMUA_AchrUn_randomT08730_001	scaffold	30,3577	0,3133	0,010320281	233,5207692
ZjuHsp60-39	scaffold	GSMUA_Achr3T27620_001	3	54,873	0,5687	0,010363931	422,1
ZjuHsp60-39	scaffold	GSMUA_Achr9T23240_001	9	53,8373	0,5765	0,010708189	414,1330769
ZjuHsp60-39	scaffold	GSMUA_Achr11T06270_001	11	54,5986	0,5613	0,010280483	419,9892308
ZjuHsp60-39	scaffold	GSMUA_Achr9T18480_001	9	53,8367	0,5987	0,011120667	414,1284615
ZjuHsp60-39	scaffold	GSMUA_Achr1T1160_001	1	53,9801	0,7058	0,013075189	415,2315385
ZjuHsp60-39	scaffold	GSMUA_Achr10T08040_001	10	53,2843	0,705	0,013230914	409,8792308
ZjuHsp60-39	scaffold	GSMUA_Achr7T24090_001	7	56,1392	0,7357	0,013104925	431,84
ZjuHsp60-39	scaffold	GSMUA_Achr1T06560_001	1	39,9621	0,5745	0,014376121	307,4007692
		Mean		31,4459378	0,5251	0,01669908	241,891829

Z. jujuba – P. persica

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-01	1	Prupe.7G191000.6	7	8,1614	0,4148	0,050824613	62,78
ZjuHsp60-01	1	Prupe.7G191000.5	7	7,273	0,4694	0,06454008	55,94615385
ZjuHsp60-01	1	Prupe.7G191000.7	7	7,2738	0,4694	0,064532981	55,95230769
ZjuHsp60-01	1	Prupe.7G191000.11	7	8,1647	0,504	0,061729151	62,80538462
ZjuHsp60-01	1	Prupe.7G191000.8	7	7,6728	0,4834	0,063001772	59,02153846
ZjuHsp60-01	1	Prupe.7G191000.1	7	7,6712	0,4834	0,063014913	59,00923077
ZjuHsp60-01	1	Prupe.7G191000.13	7	7,6718	0,4834	0,063009985	59,01384615
ZjuHsp60-01	1	Prupe.7G191000.3	7	7,6707	0,4834	0,06301902	59,00538462
ZjuHsp60-01	1	Prupe.7G191000.10	7	7,6708	0,4834	0,063018199	59,00615385
ZjuHsp60-01	1	Prupe.7G191000.2	7	7,6701	0,4834	0,06302395	59,00076923
ZjuHsp60-01	1	Prupe.7G191000.9	7	7,6701	0,4834	0,06302395	59,00076923
ZjuHsp60-01	1	Prupe.7G191000.4	7	7,6717	0,4834	0,063010806	59,01307692
ZjuHsp60-01	1	Prupe.7G191000.12	7	7,6709	0,4834	0,063017377	59,00692308
ZjuHsp60-01	1	Prupe.8G050600.1	8	7,3014	0,6228	0,08529871	56,16461538
ZjuHsp60-01	1	Prupe.8G050600.1	8	7,3005	0,6228	0,085309225	56,15769231
ZjuHsp60-01	1	Prupe.1G323700.1	1	0,7374	0,1366	0,185245457	5,672307692
ZjuHsp60-01	1	Prupe.1G323700.2	1	0,7606	0,1265	0,166316066	5,850769231
ZjuHsp60-01	1	Prupe.3G031400.1	3	6,1579	0,4936	0,080157196	47,36846154
ZjuHsp60-01	1	Prupe.3G031400.3	3	6,2548	0,4871	0,077876191	48,11384615
ZjuHsp60-01	1	Prupe.3G031400.6	3	6,1579	0,4936	0,080157196	47,36846154
ZjuHsp60-01	1	Prupe.3G031400.2	3	6,255	0,4871	0,077873701	48,11538462
ZjuHsp60-01	1	Prupe.3G031400.4	3	6,1586	0,4936	0,080148086	47,37384615
ZjuHsp60-01	1	Prupe.3G031400.5	3	6,1579	0,4936	0,080157196	47,36846154
ZjuHsp60-01	1	Prupe.3G031400.7	3	6,2556	0,4871	0,077866232	48,12
ZjuHsp60-02	1	Prupe.1G357200.1	1	0,6296	0,0207	0,032878018	4,843076923
ZjuHsp60-02	1	Prupe.6G154400.1	6	53,5513	0,7361	0,013745698	411,9330769
ZjuHsp60-02	1	Prupe.5G058100.1	5	28,2618	0,754	0,026679122	217,3984615
ZjuHsp60-02	1	Prupe.6G154400.2	6	54,2388	0,7055	0,013007294	417,2215385
ZjuHsp60-02	1	Prupe.5G227000.1	5	48,8492	0,7278	0,014898913	375,7630769

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-02	1	Prupe.1G240000.1	1	50,0438	0,7545	0,015076793	384,9523077
ZjuHsp60-02	1	Prupe.3G238800.1	3	50,3006	0,8402	0,016703578	386,9276923
ZjuHsp60-02	1	Prupe.4G141000.1	4	52,722	0,8881	0,01684496	405,5538462
ZjuHsp60-03	1	Prupe.3G031400.6	3	0,7426	0,147	0,197953138	5,712307692
ZjuHsp60-03	1	Prupe.3G031400.4	3	0,7426	0,147	0,197953138	5,712307692
ZjuHsp60-03	1	Prupe.3G031400.5	3	0,7426	0,1470	0,197953138	5,712307692
ZjuHsp60-03	1	Prupe.3G031400.3	3	0,7581	0,1541	0,203271336	5,831538462
ZjuHsp60-03	1	Prupe.3G031400.2	3	0,7581	0,1541	0,203271336	5,831538462
ZjuHsp60-03	1	Prupe.3G031400.7	3	0,7581	0,1541	0,203271336	5,831538462
ZjuHsp60-03	1	Prupe.3G031400.1	3	0,7426	0,147	0,197953138	5,712307692
ZjuHsp60-03	1	Prupe.7G191000.11	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.8	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.1	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.13	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.3	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.10	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.2	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.9	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.4	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.12	7	1,8276	0,241	0,131866929	14,05846154
ZjuHsp60-03	1	Prupe.7G191000.6	7	1,7917	0,2262	0,126248814	13,78230769
ZjuHsp60-03	1	Prupe.7G191000.5	7	1,7917	0,2262	0,126248814	13,78230769
ZjuHsp60-03	1	Prupe.7G191000.7	7	1,7917	0,2262	0,126248814	13,78230769
ZjuHsp60-03	1	Prupe.1G323700.1	1	12,3211	0,4493	0,0364659	94,77769231
ZjuHsp60-03	1	Prupe.1G323700.2	1	12,2159	0,4226	0,034594258	93,96846154
ZjuHsp60-03	1	Prupe.8G050600.1	8	6,6306	0,6059	0,091379362	51,00461538
ZjuHsp60-04	1	Prupe.3G031400.1	3	0,7304	0,1486	0,203450164	5,618461538
ZjuHsp60-04	1	Prupe.3G031400.6	3	0,7304	0,1486	0,203450164	5,618461538
ZjuHsp60-04	1	Prupe.3G031400.4	3	0,7304	0,1486	0,203450164	5,618461538
ZjuHsp60-04	1	Prupe.3G031400.5	3	0,7304	0,1486	0,203450164	5,618461538
ZjuHsp60-04	1	Prupe.3G031400.3	3	0,7247	0,147	0,202842556	5,574615385
ZjuHsp60-04	1	Prupe.3G031400.2	3	0,7247	0,147	0,202842556	5,574615385
ZjuHsp60-04	1	Prupe.3G031400.7	3	0,7247	0,147	0,202842556	5,574615385
ZjuHsp60-04	1	Prupe.7G191000.11	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.8	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.1	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.13	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.3	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.10	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.2	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.9	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.4	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.12	7	1,7534	0,2425	0,138302726	13,48769231
ZjuHsp60-04	1	Prupe.7G191000.6	7	1,7205	0,2294	0,133333333	13,23461538
ZjuHsp60-04	1	Prupe.7G191000.5	7	1,7205	0,2294	0,133333333	13,23461538
ZjuHsp60-04	1	Prupe.7G191000.7	7	1,7205	0,2294	0,133333333	13,23461538
ZjuHsp60-04	1	Prupe.1G323700.1	1	16,2125	0,4915	0,030316114	124,7115385
ZjuHsp60-04	1	Prupe.1G323700.2	1	12,43	0,4225	0,033990346	95,61538462
ZjuHsp60-04	1	Prupe.8G050600.1	8	6,2242	0,6144	0,098711481	47,87846154
ZjuHsp60-05	2	Prupe.6G154400.1	6	0,7602	0,0266	0,034990792	5,847692308
ZjuHsp60-05	2	Prupe.6G154400.2	6	0,8315	0,0297	0,035718581	6,396153846
ZjuHsp60-05	2	Prupe.5G058100.1	5	53,7324	0,7025	0,013074048	413,3261538
ZjuHsp60-05	2	Prupe.1G357200.1	1	52,7792	0,7204	0,013649316	405,9938462
ZjuHsp60-05	2	Prupe.1G240000.1	1	96,471	0,8081	0,008376611	742,0846154
ZjuHsp60-05	2	Prupe.5G227000.1	5	50,6664	0,7556	0,014913236	389,7415385
ZjuHsp60-05	2	Prupe.3G114000.1	3	49,6569	0,9487	0,019105099	381,9761538
ZjuHsp60-05	2	Prupe.3G113600.1	3	50,1313	0,9483	0,018916326	385,6253846
ZjuHsp60-05	2	Prupe.3G238800.1	3	51,1766	0,9434	0,018434206	393,6661538
ZjuHsp60-06	2	Prupe.6G154400.1	6	0,7602	0,0266	0,034990792	5,847692308
ZjuHsp60-06	2	Prupe.6G154400.2	6	0,8315	0,0297	0,035718581	6,396153846
ZjuHsp60-06	2	Prupe.5G058100.1	5	53,7324	0,7025	0,013074048	413,3261538
ZjuHsp60-06	2	Prupe.1G357200.1	1	52,7800	0,7204	0,01364911	406
ZjuHsp60-06	2	Prupe.4G141000.1	4	53,9093	0,7709	0,014299945	414,6869231
ZjuHsp60-06	2	Prupe.1G240000.1	1	9,6477	0,8081	0,083760896	74,21307692
ZjuHsp60-06	2	Prupe.5G227000.1	5	50,6648	0,7556	0,014913707	389,7292308
ZjuHsp60-06	2	Prupe.3G114000.1	3	49,6562	0,9487	0,019105369	381,9707692
ZjuHsp60-06	2	Prupe.3G113600.1	3	50,1315	0,9483	0,01891625	385,6269231
ZjuHsp60-06	2	Prupe.3G238800.1	3	51,1753	0,9434	0,018434675	393,6561538
ZjuHsp60-08	2	Prupe.7G030600.1	7	1,6101	0,1124	0,069809329	12,38538462

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-08	2	Prupe.3G151700.1	3	1,1392	0,1361	0,119469803	8,763076923
ZjuHsp60-09	2	Prupe.6G106800.1	6	0,7567	0,0524	0,069248051	5,820769231
ZjuHsp60-09	2	Prupe.4G112900.1	4	11,1136	0,2933	0,026391088	85,48923077
ZjuHsp60-09	2	Prupe.4G112900.2	4	7,1018	0,2496	0,035146019	54,62923077
ZjuHsp60-09	2	Prupe.6G002500.2	6	49,7961	0,4707	0,009452547	383,0469231
ZjuHsp60-09	2	Prupe.6G002500.1	6	49,7984	0,4708	0,009454119	383,0646154
ZjuHsp60-09	2	Prupe.1G298500.1	1	50,7548	0,4997	0,009845374	390,4215385
ZjuHsp60-09	2	Prupe.1G056300.1	1	51,2921	0,5482	0,010687806	394,5546154
ZjuHsp60-09	2	Prupe.8G209200.2	8	49,498	0,5357	0,01082266	380,7538462
ZjuHsp60-09	2	Prupe.1G298500.2	1	51,1972	0,494	0,009648965	393,8246154
ZjuHsp60-09	2	Prupe.3G049300.1	3	50,4182	0,5703	0,011311392	387,8323077
ZjuHsp60-10	4	Prupe.6G002500.2	6	1,022	0,0466	0,045596869	7,861538462
ZjuHsp60-10	4	Prupe.6G002500.1	6	1,022	0,0466	0,045596869	7,861538462
ZjuHsp60-10	4	Prupe.1G298500.1	1	6,4127	0,2427	0,037846773	49,32846154
ZjuHsp60-10	4	Prupe.1G298500.2	1	5,7962	0,2322	0,040060729	44,58615385
ZjuHsp60-10	4	Prupe.6G106800.1	6	50,0931	0,4614	0,009210849	385,3315385
ZjuHsp60-10	4	Prupe.1G056300.1	1	51,3721	0,5506	0,01071788	395,17
ZjuHsp60-10	4	Prupe.8G209200.1	8	50,6594	0,5600	0,011054217	389,6876923
ZjuHsp60-10	4	Prupe.8G209200.2	8	50,9041	0,5662	0,011122876	391,57
ZjuHsp60-10	4	Prupe.4G112900.1	4	51,0018	0,5553	0,010887851	392,3215385
ZjuHsp60-10	4	Prupe.3G049300.1	3	51,387	0,5902	0,011485395	395,2846154
ZjuHsp60-10	4	Prupe.4G112900.2	4	53,1577	0,5443	0,010239344	408,9053846
ZjuHsp60-11	4	Prupe.4G141000.1	4	1,1134	0,0355	0,031884318	8,564615385
ZjuHsp60-11	4	Prupe.6G064200.1	6	1,4044	0,0573	0,040800342	10,80307692
ZjuHsp60-11	4	Prupe.2G068500.2	2	1,4682	0,0639	0,043522681	11,29384615
ZjuHsp60-11	4	Prupe.2G068500.1	2	1,4682	0,0639	0,043522681	11,29384615
ZjuHsp60-11	4	Prupe.1G240000.1	1	53,3015	0,8319	0,015607441	410,0115385
ZjuHsp60-11	4	Prupe.6G154400.2	6	53,3146	0,8222	0,015421667	410,1123077
ZjuHsp60-11	4	Prupe.5G227000.1	5	9,6508	0,825	0,085485141	74,23692308
ZjuHsp60-11	4	Prupe.5G058100.1	5	51,5858	0,8477	0,016432817	396,8138462
ZjuHsp60-11	4	Prupe.1G357200.1	1	52,1474	0,821	0,015743834	401,1338462
ZjuHsp60-11	4	Prupe.3G113600.1	3	50,499	0,8994	0,017810254	388,4538462
ZjuHsp60-11	4	Prupe.3G238800.1	3	50,1831	0,8889	0,017713135	386,0238462
ZjuHsp60-11	4	Prupe.3G114000.1	3	50,1622	0,8907	0,017756398	385,8630769
ZjuHsp60-12	4	Prupe.3G238800.1	3	1,0098	0,0698	0,069122599	7,767692308
ZjuHsp60-13	5	Prupe.5G227000.1	5	1,3206	0,041	0,031046494	10,15846154
ZjuHsp60-13	5	Prupe.1G240000.1	1	39,3233	0,6574	0,016717824	302,4869231
ZjuHsp60-13	5	Prupe.1G357200.1	1	47,4755	0,7382	0,015549073	365,1961538
ZjuHsp60-13	5	Prupe.5G058100.1	5	48,6862	0,7834	0,016090802	374,5092308
ZjuHsp60-13	5	Prupe.6G154400.1	6	51,1415	0,7845	0,015339793	393,3961538
ZjuHsp60-13	5	Prupe.6G154400.2	6	51,824	0,7675	0,014809741	398,6461538
ZjuHsp60-13	5	Prupe.4G141000.1	4	48,7993	0,8516	0,01745107	375,3792308
ZjuHsp60-13	5	Prupe.3G113600.1	3	48,3392	0,9033	0,018686697	371,84
ZjuHsp60-13	5	Prupe.3G114000.1	3	48,5702	0,9096	0,018727533	373,6169231
ZjuHsp60-14	6	Prupe.8G050600.1	8	0,7844	0,1976	0,25191229	6,033846154
ZjuHsp60-14	6	Prupe.3G031400.3	3	8,5736	0,6039	0,070437156	65,95076923
ZjuHsp60-14	6	Prupe.3G031400.2	3	8,5755	0,6039	0,07042155	65,96538462
ZjuHsp60-14	6	Prupe.3G031400.7	3	8,5793	0,6039	0,070390358	65,99461538
ZjuHsp60-14	6	Prupe.3G031400.1	3	10,1805	0,6021	0,059142478	78,31153846
ZjuHsp60-14	6	Prupe.3G031400.6	3	10,1809	0,6021	0,059140155	78,31461538
ZjuHsp60-14	6	Prupe.3G031400.4	3	10,1955	0,6021	0,059055466	78,42692308
ZjuHsp60-14	6	Prupe.3G031400.5	3	10,1842	0,6021	0,059120991	78,34
ZjuHsp60-14	6	Prupe.1G323700.2	1	6,0941	0,6009	0,098603567	46,87769231
ZjuHsp60-14	6	Prupe.1G323700.1	1	6,5958	0,6575	0,099684648	50,73692308
ZjuHsp60-14	6	Prupe.7G191000.6	7	40,1753	0,6004	0,014944506	309,0407692
ZjuHsp60-14	6	Prupe.7G191000.5	7	40,2133	0,6004	0,014930384	309,3330769
ZjuHsp60-14	6	Prupe.7G191000.7	7	40,3302	0,6004	0,014887107	310,2323077
ZjuHsp60-14	6	Prupe.7G191000.11	7	31,04	0,6055	0,019507088	238,7692308
ZjuHsp60-14	6	Prupe.7G191000.8	7	30,6777	0,6055	0,019737464	235,9823077
ZjuHsp60-14	6	Prupe.7G191000.1	7	30,835	0,6055	0,019636776	237,1923077
ZjuHsp60-14	6	Prupe.7G191000.13	7	32,1239	0,6054	0,018845781	247,1069231
ZjuHsp60-14	6	Prupe.7G191000.3	7	30,7942	0,6055	0,019662794	236,8784615
ZjuHsp60-14	6	Prupe.7G191000.10	7	30,7553	0,6055	0,019687664	236,5792308
ZjuHsp60-14	6	Prupe.7G191000.2	7	31,154	0,6055	0,019435706	239,6461538
ZjuHsp60-14	6	Prupe.7G191000.9	7	33,0803	0,6053	0,018297899	254,4638462
ZjuHsp60-14	6	Prupe.7G191000.4	7	31,1692	0,6055	0,019426228	239,7630769
ZjuHsp60-14	6	Prupe.7G191000.12	7	32,5245	0,6053	0,018610586	250,1884615
ZjuHsp60-15	8	Prupe.7G191000.11	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.8	7	0,6601	0,1444	0,218754734	5,077692308

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-15	8	Prupe.7G191000.1	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.13	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.3	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.10	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.2	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.9	7	54,9225	0,1429	0,002601848	422,4807692
ZjuHsp60-15	8	Prupe.7G191000.4	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.7G191000.12	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-15	8	Prupe.3G031400.1	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-15	8	Prupe.3G031400.6	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-15	8	Prupe.3G031400.4	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-15	8	Prupe.3G031400.5	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-15	8	Prupe.3G031400.3	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-15	8	Prupe.3G031400.2	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-15	8	Prupe.3G031400.7	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-15	8	Prupe.7G191000.6	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-15	8	Prupe.7G191000.5	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-15	8	Prupe.7G191000.7	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-15	8	Prupe.1G323700.2	1	11,6104	0,426	0,036691242	89,31076923
ZjuHsp60-15	8	Prupe.1G323700.1	1	8,1519	0,4981	0,06110232	62,70692308
ZjuHsp60-15	8	Prupe.8G050600.1	8	16,1692	0,6009	0,037163249	124,3784615
ZjuHsp60-16	8	Prupe.7G191000.11	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.8	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.1	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.13	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.3	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.10	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.2	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.9	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.4	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.7G191000.12	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-16	8	Prupe.3G031400.1	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-16	8	Prupe.3G031400.6	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-16	8	Prupe.3G031400.4	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-16	8	Prupe.3G031400.5	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-16	8	Prupe.3G031400.3	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-16	8	Prupe.3G031400.2	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-16	8	Prupe.7G191000.6	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-16	8	Prupe.3G031400.7	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-16	8	Prupe.7G191000.5	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-16	8	Prupe.7G191000.7	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-16	8	Prupe.1G323700.2	1	11,6086	0,426	0,036696932	89,29692308
ZjuHsp60-16	8	Prupe.1G323700.1	1	8,1498	0,4981	0,061118064	62,69076923
ZjuHsp60-16	8	Prupe.8G050600.1	8	16,3006	0,6008	0,036857539	125,3892308
ZjuHsp60-17	8	Prupe.7G191000.11	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.8	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.1	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.13	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.3	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.10	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.2	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.9	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.4	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.7G191000.12	7	0,6601	0,1444	0,218754734	5,077692308
ZjuHsp60-17	8	Prupe.3G031400.1	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-17	8	Prupe.3G031400.6	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-17	8	Prupe.3G031400.4	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-17	8	Prupe.3G031400.5	3	1,5108	0,2424	0,160444797	11,62153846
ZjuHsp60-17	8	Prupe.3G031400.3	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-17	8	Prupe.3G031400.2	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-17	8	Prupe.3G031400.7	3	1,4873	0,2414	0,162307537	11,44076923
ZjuHsp60-17	8	Prupe.7G191000.6	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-17	8	Prupe.7G191000.5	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-17	8	Prupe.7G191000.7	7	0,6657	0,1385	0,208051675	5,120769231
ZjuHsp60-17	8	Prupe.1G323700.2	1	11,6211	0,426	0,036657459	89,39307692
ZjuHsp60-17	8	Prupe.1G323700.1	1	8,1505	0,4981	0,061112815	62,69615385
ZjuHsp60-17	8	Prupe.8G050600.1	8	16,1766	0,6009	0,037146248	124,4353846
ZjuHsp60-18	8	Prupe.5G058100.1	5	0,6926	0,0464	0,066993936	5,327692308
ZjuHsp60-18	8	Prupe.6G154400.1	6	51,477	0,713	0,013850846	395,9769231

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-18	8	Prupe.6G154400.2	6	51,5574	0,6861	0,013307498	396,5953846
ZjuHsp60-18	8	Prupe.1G357200.1	1	30,8314	0,7442	0,02413773	237,1646154
ZjuHsp60-18	8	Prupe.5G227000.1	5	47,3322	0,7727	0,016325039	364,0938462
ZjuHsp60-18	8	Prupe.4G141000.1	4	50,9144	0,804	0,01579121	391,6492308
ZjuHsp60-18	8	Prupe.1G240000.1	1	49,6346	0,8182	0,016484468	381,8046154
ZjuHsp60-18	8	Prupe.3G113600.1	3	48,9251	0,8933	0,018258522	376,3469231
ZjuHsp60-18	8	Prupe.3G114000.1	3	48,831	0,8825	0,018072536	375,6230769
ZjuHsp60-18	8	Prupe.3G238800.1	3	0,1222	12,0935	98,96481178	0,94
ZjuHsp60-19	8	Prupe.3G049300.1	3	0,6694	0,0793	0,118464296	5,149230769
ZjuHsp60-19	8	Prupe.1G056300.1	1	6,2533	0,1783	0,028512945	48,10230769
ZjuHsp60-19	8	Prupe.8G209200.1	8	4,5092	0,181	0,040140158	34,68615385
ZjuHsp60-19	8	Prupe.8G209200.2	8	4,6458	0,1851	0,039842438	35,73692308
ZjuHsp60-19	8	Prupe.6G002500.2	6	50,6573	0,6313	0,012462172	389,6715385
ZjuHsp60-19	8	Prupe.6G002500.1	6	50,6584	0,6314	0,012463876	389,68
ZjuHsp60-19	8	Prupe.1G298500.1	1	52,4196	0,5903	0,011261055	403,2276923
ZjuHsp60-19	8	Prupe.6G106800.1	6	51,7286	0,6067	0,011728522	397,9123077
ZjuHsp60-19	8	Prupe.1G298500.2	1	52,381	0,5882	0,011229263	402,9307692
ZjuHsp60-19	8	Prupe.4G112900.1	4	53,4358	0,6541	0,012240857	411,0446154
ZjuHsp60-19	8	Prupe.4G112900.2	4	53,3289	0,6673	0,012512915	410,2223077
ZjuHsp60-20	9	Prupe.8G209200.1	8	0,656	0,0575	0,087652439	5,046153846
ZjuHsp60-20	9	Prupe.1G056300.1	1	1,7308	0,0706	0,040790386	13,31384615
ZjuHsp60-20	9	Prupe.8G209200.2	8	0,6655	0,0581	0,08730278	5,119230769
ZjuHsp60-20	9	Prupe.3G049300.1	3	4,5028	0,1812	0,040241627	34,63692308
ZjuHsp60-20	9	Prupe.6G002500.2	6	51,3271	0,5674	0,011054589	394,8238462
ZjuHsp60-20	9	Prupe.6G002500.1	6	51,3299	0,5675	0,011055934	394,8453846
ZjuHsp60-20	9	Prupe.6G106800.1	6	51,1744	0,5485	0,01071825	393,6492308
ZjuHsp60-20	9	Prupe.1G298500.1	1	32,1698	0,554	0,01722112	247,46
ZjuHsp60-20	9	Prupe.1G298500.2	1	27,4513	0,5472	0,019933482	211,1638462
ZjuHsp60-20	9	Prupe.4G112900.1	4	30,819	0,636	0,02063662	237,0692308
ZjuHsp60-20	9	Prupe.4G112900.2	4	50,612	0,6328	0,012502964	389,3230769
ZjuHsp60-21	10	Prupe.1G240000.1	1	0,6981	0,0396	0,056725398	5,37
ZjuHsp60-21	10	Prupe.5G227000.1	5	35,2905	0,6491	0,018393052	271,4653846
ZjuHsp60-21	10	Prupe.1G357200.1	1	49,9976	0,7668	0,015336736	384,5969231
ZjuHsp60-21	10	Prupe.6G154400.1	6	53,1881	0,8091	0,015212049	409,1392308
ZjuHsp60-21	10	Prupe.6G154400.2	6	52,9598	0,7771	0,014673394	407,3830769
ZjuHsp60-21	10	Prupe.5G058100.1	5	50,9756	0,8377	0,016433352	392,12
ZjuHsp60-21	10	Prupe.3G238800.1	3	50,7908	0,9068	0,017853627	390,6984615
ZjuHsp60-21	10	Prupe.3G113600.1	3	0,1913	16,1973	84,66962886	1,471538462
ZjuHsp60-21	10	Prupe.3G114000.1	3	50,6287	0,9263	0,018295947	389,4515385
ZjuHsp60-22	10	Prupe.1G240000.1	1	0,6981	0,0396	0,056725398	5,37
ZjuHsp60-22	10	Prupe.5G227000.1	5	34,2685	0,6492	0,018944512	263,6038462
ZjuHsp60-22	10	Prupe.1G357200.1	1	49,999	0,7668	0,015336307	384,6076923
ZjuHsp60-22	10	Prupe.6G154400.1	6	53,1664	0,8098	0,015231424	408,9723077
ZjuHsp60-22	10	Prupe.4G141000.1	4	53,9427	0,7771	0,014406027	414,9438462
ZjuHsp60-22	10	Prupe.6G154400.2	6	52,9597	0,7771	0,014673421	407,3823077
ZjuHsp60-22	10	Prupe.5G058100.1	5	50,9764	0,8378	0,016435056	392,1261538
ZjuHsp60-22	10	Prupe.3G238800.1	3	50,7884	0,9069	0,01785644	390,68
ZjuHsp60-22	10	Prupe.3G113600.1	3	50,7221	0,957	0,018867515	390,17
ZjuHsp60-22	10	Prupe.3G114000.1	3	50,6297	0,9261	0,018291635	389,4592308
ZjuHsp60-23	10	Prupe.6G129800.1	6	1,7999	0,4205	0,23362409	13,84538462
ZjuHsp60-23	10	Prupe.6G130000.1	6	2,6072	0,4574	0,175437251	20,05538462
ZjuHsp60-23	10	Prupe.6G130000.2	6	2,6072	0,4574	0,175437251	20,05538462
ZjuHsp60-23	10	Prupe.2G046000.1	2	2,0556	0,4772	0,232146332	15,81230769
ZjuHsp60-23	10	Prupe.2G043200.1	2	1,9921	0,4639	0,232869836	15,32384615
ZjuHsp60-23	10	Prupe.2G040500.1	2	1,8058	0,4733	0,2620999	13,89076923
ZjuHsp60-23	10	Prupe.2G046400.1	2	1,8359	0,4837	0,263467509	14,12230769
ZjuHsp60-23	10	Prupe.2G046400.2	2	1,8359	0,4837	0,263467509	14,12230769
ZjuHsp60-23	10	Prupe.2G046300.1	2	2,014	0,4884	0,242502483	15,49230769
ZjuHsp60-23	10	Prupe.2G037800.2	2	1,922	0,483	0,251300728	14,78461538
ZjuHsp60-23	10	Prupe.2G037800.3	2	1,922	0,483	0,251300728	14,78461538
ZjuHsp60-23	10	Prupe.2G046900.1	2	2,1608	0,5094	0,23574602	16,62153846
ZjuHsp60-23	10	Prupe.2G040700.1	2	2,0232	0,4925	0,243426255	15,56307692
ZjuHsp60-23	10	Prupe.2G052200.1	2	2,0012	0,5002	0,24995003	15,39384615
ZjuHsp60-23	10	Prupe.2G046700.1	2	1,8849	0,5076	0,269298106	14,49923077
ZjuHsp60-23	10	Prupe.2G054500.1	2	2,1377	0,5092	0,238199935	16,44384615
ZjuHsp60-23	10	Prupe.2G051100.1	2	2,2769	0,5313	0,233343581	17,51461538
ZjuHsp60-23	10	Prupe.2G037800.1	2	1,9757	0,551	0,278888495	15,19769231
ZjuHsp60-23	10	Prupe.2G037800.4	2	1,9757	0,551	0,278888495	15,19769231
ZjuHsp60-23	10	Prupe.2G054300.4	2	2,3668	0,5324	0,224945074	18,20615385

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-23	10	Prupe.2G054300.3	2	2,3668	0,5324	0,224945074	18,20615385
ZjuHsp60-23	10	Prupe.2G054300.1	2	2,3668	0,5324	0,224945074	18,20615385
ZjuHsp60-23	10	Prupe.2G054300.2	2	2,3668	0,5324	0,224945074	18,20615385
ZjuHsp60-23	10	Prupe.4G286000.2	4	1,7911	0,5344	0,298364134	13,77769231
ZjuHsp60-23	10	Prupe.4G286000.3	4	1,7911	0,5344	0,298364134	13,77769231
ZjuHsp60-23	10	Prupe.4G286000.1	4	1,7911	0,5344	0,298364134	13,77769231
ZjuHsp60-23	10	Prupe.2G053700.1	2	1,8823	0,5762	0,306114859	14,47923077
ZjuHsp60-23	10	Prupe.2G053800.1	2	2,0186	0,5764	0,285544437	15,52769231
ZjuHsp60-23	10	Prupe.2G023500.1	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-23	10	Prupe.2G023500.3	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-23	10	Prupe.2G023500.5	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-23	10	Prupe.2G023500.4	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-23	10	Prupe.2G023500.6	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-23	10	Prupe.2G023500.2	2	2,3835	0,6379	0,267631634	18,33461538
ZjuHsp60-24	10	Prupe.1G298500.1	1	0,668	0,117	0,175149701	5,138461538
ZjuHsp60-24	10	Prupe.1G298500.2	1	0,6811	0,0949	0,139333431	5,239230769
ZjuHsp60-24	10	Prupe.6G002500.2	6	7,5761	0,2212	0,02919708	58,27769231
ZjuHsp60-24	10	Prupe.6G002500.1	6	7,5763	0,2212	0,02919631	58,27923077
ZjuHsp60-24	10	Prupe.6G106800.1	6	48,9715	0,5016	0,010242692	376,7038462
ZjuHsp60-24	10	Prupe.8G209200.1	8	52,5022	0,5537	0,010546225	403,8630769
ZjuHsp60-24	10	Prupe.1G056300.1	1	53,9188	0,5697	0,010565888	414,76
ZjuHsp60-24	10	Prupe.8G209200.2	8	52,8695	0,5537	0,010472957	406,6884615
ZjuHsp60-24	10	Prupe.4G112900.1	4	38,4118	0,5484	0,014276863	295,4753846
ZjuHsp60-24	10	Prupe.3G049300.1	3	53,4283	0,6172	0,01155193	410,9869231
ZjuHsp60-24	10	Prupe.4G112900.2	4	26,6724	0,5342	0,020028194	205,1723077
ZjuHsp60-25	10	Prupe.1G298500.1	1	0,6704	0,0926	0,138126492	5,156923077
ZjuHsp60-25	10	Prupe.1G298500.2	1	0,6811	0,0949	0,139333431	5,239230769
ZjuHsp60-25	10	Prupe.6G002500.2	6	6,8633	0,2164	0,031530022	52,79461538
ZjuHsp60-25	10	Prupe.6G002500.1	6	6,8639	0,2164	0,031527266	52,79923077
ZjuHsp60-25	10	Prupe.6G106800.1	6	37,6633	0,5002	0,013280833	289,7176923
ZjuHsp60-25	10	Prupe.8G209200.1	8	47,7054	0,5368	0,011252395	366,9646154
ZjuHsp60-25	10	Prupe.1G056300.1	1	49,2379	0,553	0,011231186	378,7530769
ZjuHsp60-25	10	Prupe.8G209200.2	8	47,9538	0,5364	0,011185766	368,8753846
ZjuHsp60-25	10	Prupe.4G112900.1	4	53,8351	0,5395	0,010021343	414,1161538
ZjuHsp60-25	10	Prupe.3G049300.1	3	54,2361	0,5947	0,010965021	417,2007692
ZjuHsp60-25	10	Prupe.4G112900.2	4	49,1543	0,522	0,01061962	378,11
ZjuHsp60-26	10	Prupe.1G326400.1	1	0,6546	0,0741	0,1131989	5,035384615
ZjuHsp60-26	10	Prupe.1G326400.2	1	0,6546	0,0741	0,1131989	5,035384615
ZjuHsp60-26	10	Prupe.3G151700.1	3	4,3026	0,1541	0,035815553	33,09692308
ZjuHsp60-28	12	Prupe.3G113600.1	3	0,6026	0,037	0,061400597	4,635384615
ZjuHsp60-28	12	Prupe.3G114000.1	3	0,6131	0,0416	0,0678519	4,716153846
ZjuHsp60-29	scaffold	Prupe.1G056300.1	1	0,7869	0,0371	0,047147033	6,053076923
ZjuHsp60-29	scaffold	Prupe.8G209200.1	8	1,417	0,0509	0,03592096	10,9
ZjuHsp60-29	scaffold	Prupe.8G209200.2	8	1,4439	0,0523	0,036221345	11,10692308
ZjuHsp60-29	scaffold	Prupe.3G049300.1	3	7,8507	0,1818	0,023157171	60,39
ZjuHsp60-29	scaffold	Prupe.6G002500.2	6	51,8161	0,5642	0,010888508	398,5853846
ZjuHsp60-29	scaffold	Prupe.6G002500.1	6	51,7793	0,5678	0,010965772	398,3023077
ZjuHsp60-29	scaffold	Prupe.6G106800.1	6	52,0313	0,5518	0,010605155	400,2407692
ZjuHsp60-29	scaffold	Prupe.1G298500.1	1	53,1143	0,5764	0,010852068	408,5715385
ZjuHsp60-29	scaffold	Prupe.1G298500.2	1	53,4831	0,5475	0,010236879	411,4084615
ZjuHsp60-29	scaffold	Prupe.4G112900.1	4	53,0549	0,6471	0,0121968	408,1146154
ZjuHsp60-29	scaffold	Prupe.4G112900.2	4	53,0445	0,6373	0,012014441	408,0346154
ZjuHsp60-30	scaffold	Prupe.3G113600.1	3	0,679	0,0354	0,052135493	5,223076923
ZjuHsp60-30	scaffold	Prupe.3G114000.1	3	0,6936	0,0386	0,055651672	5,335384615
ZjuHsp60-30	scaffold	Prupe.5G227000.1	5	48,8403	0,8871	0,018163279	375,6946154
ZjuHsp60-30	scaffold	Prupe.6G154400.1	6	50,9485	0,9003	0,017670785	391,9115385
ZjuHsp60-30	scaffold	Prupe.5G058100.1	5	49,6355	0,8745	0,017618438	381,8115385
ZjuHsp60-30	scaffold	Prupe.4G141000.1	4	52,0123	0,8554	0,01644611	400,0946154
ZjuHsp60-30	scaffold	Prupe.1G240000.1	1	51,8559	0,9134	0,017614196	398,8915385
ZjuHsp60-30	scaffold	Prupe.6G154400.2	6	51,0569	0,8944	0,017517711	392,7453846
ZjuHsp60-31	scaffold	Prupe.3G113600.1	3	0,6791	0,0354	0,052127816	5,223846154
ZjuHsp60-31	scaffold	Prupe.3G114000.1	3	0,6936	0,0386	0,055651672	5,335384615
ZjuHsp60-31	scaffold	Prupe.5G227000.1	5	0,1399	13,8519	99,01286633	1,076153846
ZjuHsp60-31	scaffold	Prupe.6G154400.1	6	50,9473	0,9003	0,017671201	391,9023077
ZjuHsp60-31	scaffold	Prupe.5G058100.1	5	49,6363	0,8746	0,017620169	381,8176923
ZjuHsp60-31	scaffold	Prupe.4G141000.1	4	52,013	0,8555	0,016447811	400,1
ZjuHsp60-31	scaffold	Prupe.1G240000.1	1	51,856	0,9135	0,017616091	398,8923077
ZjuHsp60-31	scaffold	Prupe.6G154400.2	6	51,0591	0,8943	0,017514997	392,7623077
ZjuHsp60-32	scaffold	Prupe.7G194300.1	7	0,9343	0,0977	0,104570267	7,186923077

Table S3.3 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp60-34	scaffold	Prupe.7G030600.1	7	1,8099	0,1064	0,058787778	13,92230769
ZjuHsp60-34	scaffold	Prupe.3G151700.1	3	1,1575	0,1361	0,117580994	8,903846154
ZjuHsp60-36	scaffold	Prupe.7G194300.1	7	0,929	0,0978	0,105274489	7,146153846
ZjuHsp60-37	scaffold	Prupe.2G116500.1	2	0,6771	0,0681	0,100575986	5,208461538
ZjuHsp60-38	scaffold	Prupe.4G112900.1	4	0,5979	0,092	0,153871885	4,599230769
ZjuHsp60-38	scaffold	Prupe.4G112900.2	4	0,6267	0,0765	0,122067975	4,820769231
ZjuHsp60-38	scaffold	Prupe.6G106800.1	6	26,0082	0,2736	0,010519759	200,0630769
ZjuHsp60-38	scaffold	Prupe.6G002500.2	6	53,1067	0,5314	0,01000627	408,5130769
ZjuHsp60-38	scaffold	Prupe.6G002500.1	6	53,107	0,5315	0,010008097	408,5153846
ZjuHsp60-38	scaffold	Prupe.1G298500.1	1	53,2823	0,5498	0,010318624	409,8638462
ZjuHsp60-38	scaffold	Prupe.1G056300.1	1	53,6916	0,6183	0,011515768	413,0123077
ZjuHsp60-38	scaffold	Prupe.8G209200.1	8	52,4105	0,6246	0,011917459	403,1576923
ZjuHsp60-38	scaffold	Prupe.8G209200.2	8	52,7564	0,6233	0,01181468	405,8184615
ZjuHsp60-38	scaffold	Prupe.1G298500.2	1	53,5345	0,5446	0,010172879	411,8038462
ZjuHsp60-38	scaffold	Prupe.3G049300.1	3	54,0959	0,6404	0,011838235	416,1223077
ZjuHsp60-39	scaffold	Prupe.4G112900.1	4	0,6371	0,1617	0,25380631	4,900769231
ZjuHsp60-39	scaffold	Prupe.6G106800.1	6	33,3368	0,3200	0,009599002	256,4369231
ZjuHsp60-39	scaffold	Prupe.4G112900.2	4	0,6839	0,1643	0,240239801	5,260769231
ZjuHsp60-39	scaffold	Prupe.6G002500.2	6	53,3536	0,5807	0,010883989	410,1223077
ZjuHsp60-39	scaffold	Prupe.6G002500.1	6	53,3402	0,5806	0,010884849	410,3092308
ZjuHsp60-39	scaffold	Prupe.1G298500.2	1	53,7654	0,831	0,015456037	413,58
ZjuHsp60-39	scaffold	Prupe.1G298500.1	1	53,8766	0,5931	0,01100849	414,4353846
ZjuHsp60-39	scaffold	Prupe.1G056300.1	1	54,8419	0,6821	0,012437571	421,8607692
ZjuHsp60-39	scaffold	Prupe.8G209200.1	8	53,7249	0,679	0,01263846	413,2684615
ZjuHsp60-39	scaffold	Prupe.8G209200.2	8	54,1582	0,6793	0,012542884	416,6015385
ZjuHsp60-39	scaffold	Prupe.3G049300.1	3	0,1939	16,3434	84,2877772	1,491538462
		Mean		20,22752275	0,63581478	0,0314332	155,59633

Table S3.4 Calculation of divergence time rates and Ka/Ks ratios of orthologous *ZjuHsp70* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Z. jujuba – *A. thaliana*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-01	1	AT3G12580.1	3	73,687	0,0782	0,001061246	566,8230769
ZjuHsp70-01	1	AT1G16030.1	1	4,8176	0,0791	0,016418964	37,05846154
ZjuHsp70-01	1	AT5G02500.1	5	34,8971	0,09	0,002579011	268,4392308
ZjuHsp70-01	1	AT3G09440.2	3	37,0972	0,0919	0,002477276	285,3630769
ZjuHsp70-01	1	AT3G09440.1	3	52,9861	0,0918	0,00173253	407,5853846
ZjuHsp70-01	1	AT5G02490.1	5	28,37	0,0985	0,003471977	218,2307692
ZjuHsp70-01	1	AT1G56410.1	1	27,2492	0,0986	0,003618455	209,6092308
ZjuHsp70-01	1	AT5G28540.1	5	215	0,2966	0,001377747	1655,992308
ZjuHsp70-01	1	AT5G42020.1	5	31,3762	0,2976	0,009484896	241,3553846
ZjuHsp70-01	1	AT1G09080.1	1	32,1367	0,2967	0,009232435	247,2053846
ZjuHsp70-01	1	AT1G09080.2	1	31,4669	0,2966	0,009425778	242,0530769
ZjuHsp70-01	1	AT5G02500.2	5	45,8915	0,1007	0,002194306	353,0115385
ZjuHsp70-01	1	AT5G42020.2	5	18,1198	0,3048	0,016821378	139,3830769
ZjuHsp70-01	1	AT4G37910.1	4	12,0724	0,4612	0,038202843	92,86461538
ZjuHsp70-01	1	AT5G09590.1	5	11,2931	0,4537	0,040174974	86,87
ZjuHsp70-01	1	AT4G24280.1	4	50,4672	0,5294	0,010489982	388,2092308
ZjuHsp70-01	1	AT5G49910.1	5	51,1489	0,5321	0,010402961	393,4530769
ZjuHsp70-02	1	AT1G11660.1	1	3,7565	0,2547	0,067802476	28,89615385
ZjuHsp70-02	1	AT1G79930.1	1	16,3568	0,384	0,023476475	125,8215385
ZjuHsp70-02	1	AT1G79930.2	1	14,1889	6,4455	0,454263544	109,1453846
ZjuHsp70-02	1	AT4G16660.1	4	5,6033	4,3611	0,778309211	43,10230769
ZjuHsp70-02	1	AT5G42020.1	5	5,4138	0,8804	0,162621449	41,64461538
ZjuHsp70-02	1	AT1G16030.1	1	55,1468	0,8543	0,015491379	424,2061538
ZjuHsp70-02	1	AT5G28540.1	5	6,4280	0,8826	0,137305538	49,44615385
ZjuHsp70-02	1	AT3G12580.1	3	22,557	0,898	0,039810258	173,5153846
ZjuHsp70-02	1	AT5G02500.1	5	36,7274	0,8713	0,023723433	282,5184615
ZjuHsp70-02	1	AT3G09440.2	3	16,8515	0,8462	0,050215114	129,6269231
ZjuHsp70-02	1	AT3G09440.1	3	16,8541	0,8462	0,050207368	129,6469231
ZjuHsp70-02	1	AT1G09080.2	1	21,5163	0,8303	0,038589349	165,51
ZjuHsp70-02	1	AT1G09080.1	1	21,5932	0,8324	0,038549173	166,1015385
ZjuHsp70-02	1	AT5G42020.2	5	5,6116	0,8575	0,152808468	43,16615385
ZjuHsp70-02	1	AT5G02490.1	5	20,9618	0,8852	0,042229198	161,2446154
ZjuHsp70-02	1	AT1G56410.1	1	12,6204	0,8678	0,068761687	97,08
ZjuHsp70-02	1	AT5G02500.2	5	17,239	0,8699	0,050461164	132,6076923

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-02	1	AT5G09590.1	5	10,7127	0,9078	0,084740542	82,40538462
ZjuHsp70-02	1	AT4G37910.1	4	26,575	0,9223	0,03470555	204,4230769
ZjuHsp70-03	1	AT1G79930.2	1	3,0291	0,0923	0,030471097	23,30076923
ZjuHsp70-03	1	AT1G11660.1	1	27,1045	0,3790	0,013982918	208,4961538
ZjuHsp70-03	1	AT1G16030.1	1	53,4351	0,8140	0,015233433	411,0392308
ZjuHsp70-03	1	AT5G02500.1	5	52,9297	0,7992	0,015099273	407,1515385
ZjuHsp70-03	1	AT3G12580.1	3	53,2525	0,8012	0,015045303	409,6346154
ZjuHsp70-03	1	AT5G02500.2	5	52,0130	0,7841	0,015075077	400,1
ZjuHsp70-03	1	AT3G09440.2	3	52,6587	0,7951	0,015099119	405,0669231
ZjuHsp70-03	1	AT3G09440.1	3	52,6605	0,7952	0,015100502	405,0807692
ZjuHsp70-03	1	AT5G02490.1	5	52,5449	0,8898	0,016934089	404,1915385
ZjuHsp70-03	1	AT1G56410.1	1	53,5666	0,7800	0,014561312	412,0507692
ZjuHsp70-03	1	AT1G09080.2	1	53,5666	0,7799	0,014559446	412,0507692
ZjuHsp70-03	1	AT1G09080.1	1	54,2593	0,7733	0,014251935	417,3792308
ZjuHsp70-03	1	AT5G42020.2	5	25,6668	0,8024	0,031262175	197,4369231
ZjuHsp70-03	1	AT5G28540.1	5	53,8082	0,8257	0,015345245	413,9092308
ZjuHsp70-03	1	AT4G16660.1	4	54,5570	0,9468	0,017354327	419,6692308
ZjuHsp70-04	1	AT1G16030.1	1	8,3952	0,0834	0,009934248	64,57846154
ZjuHsp70-04	1	AT5G02500.1	5	14,0745	0,0941	0,00668585	108,2653846
ZjuHsp70-04	1	AT3G12580.1	3	10,8105	0,0940	0,00869525	83,15769231
ZjuHsp70-04	1	AT3G09440.2	3	21,6757	0,1001	0,004618075	166,7361538
ZjuHsp70-04	1	AT3G09440.1	3	21,2792	0,1001	0,004704124	163,6861538
ZjuHsp70-04	1	AT5G02490.1	5	15,3329	0,1080	0,007043677	117,9453846
ZjuHsp70-04	1	AT1G56410.1	1	13,0622	0,1131	0,008658572	100,4784615
ZjuHsp70-04	1	AT5G28540.1	5	53,5427	0,2921	0,005455459	411,8669231
ZjuHsp70-04	1	AT5G42020.1	5	52,7767	0,3005	0,0056938	405,9746154
ZjuHsp70-04	1	AT1G09080.2	1	52,5825	0,2983	0,00567299	404,4807692
ZjuHsp70-04	1	AT1G09080.1	1	52,5718	0,2983	0,005674145	404,3984615
ZjuHsp70-04	1	AT5G02500.2	5	17,3727	0,1026	0,005905818	133,6361538
ZjuHsp70-04	1	AT5G42020.2	5	52,2312	0,3074	0,005885371	401,7784615
ZjuHsp70-04	1	AT4G37910.1	4	26,4664	0,4708	0,017788592	203,5876923
ZjuHsp70-04	1	AT5G09590.1	5	52,2792	0,4569	0,008739613	402,1476923
ZjuHsp70-04	1	AT4G24280.1	4	50,3463	0,5192	0,010312575	387,2792308
ZjuHsp70-04	1	AT5G49910.1	5	23,7112	0,5215	0,021993826	182,3938462
ZjuHsp70-05	1	AT1G16030.1	1	4,6909	0,0830	0,017693833	36,08384615
ZjuHsp70-05	1	AT3G12580.1	3	6,6033	0,0797	0,012069723	50,79461538
ZjuHsp70-05	1	AT5G02500.1	5	4,7509	0,0840	0,01768086	36,54538462
ZjuHsp70-05	1	AT3G09440.2	3	5,1533	0,0890	0,017270487	39,64076923
ZjuHsp70-05	1	AT3G09440.1	3	5,1517	0,0890	0,017275851	39,62846154
ZjuHsp70-05	1	AT5G02490.1	5	6,8860	0,0914	0,013273308	52,96923077
ZjuHsp70-05	1	AT1G56410.1	1	4,0704	0,0985	0,024199096	31,31076923
ZjuHsp70-05	1	AT5G42020.1	5	24,5882	0,2966	0,012062697	189,14
ZjuHsp70-05	1	AT5G28540.1	5	18,2092	0,2921	0,016041342	140,0707692
ZjuHsp70-05	1	AT1G09080.2	1	52,7431	0,3030	0,005744827	405,7161538
ZjuHsp70-05	1	AT1G09080.1	1	52,7526	0,3028	0,005740001	405,7892308
ZjuHsp70-05	1	AT5G02500.2	5	5,5577	0,0927	0,016679562	42,75153846
ZjuHsp70-05	1	AT5G42020.2	5	14,4679	0,3029	0,020936003	111,2915385
ZjuHsp70-05	1	AT4G37910.1	4	21,4298	0,4838	0,022576039	164,8446154
ZjuHsp70-05	1	AT5G09590.1	5	47,0180	0,4594	0,009770726	361,6769231
ZjuHsp70-05	1	AT5G49910.1	5	17,1763	0,5227	0,030431467	132,1253846
ZjuHsp70-05	1	AT4G24280.1	4	50,8178	0,5096	0,010027982	390,9061538
ZjuHsp70-06	2	AT5G02500.1	5	6,4673	0,0433	0,006695221	49,74846154
ZjuHsp70-06	2	AT3G12580.1	3	9,0774	0,0452	0,004979399	69,82615385
ZjuHsp70-06	2	AT5G02490.1	5	5,9263	0,0627	0,010579957	45,58692308
ZjuHsp70-06	2	AT3G09440.2	3	6,7258	0,0552	0,008207202	51,73692308
ZjuHsp70-06	2	AT3G09440.1	3	6,7274	0,0551	0,008190386	51,74923077
ZjuHsp70-06	2	AT1G16030.1	1	13,0434	0,1039	0,007965714	100,3338462
ZjuHsp70-06	2	AT1G56410.1	1	8,7453	0,0715	0,00817582	67,27153846
ZjuHsp70-06	2	AT5G28540.1	5	50,4525	0,2870	0,005688519	388,0961538
ZjuHsp70-06	2	AT5G42020.1	5	53,2555	0,2975	0,005586277	409,6576923
ZjuHsp70-06	2	AT5G02500.2	5	6,8438	0,0486	0,007101318	52,64461538
ZjuHsp70-06	2	AT1G09080.1	1	15,0675	0,3035	0,020142691	115,9038462
ZjuHsp70-06	2	AT1G09080.2	1	15,0497	0,3035	0,020166515	115,7669231
ZjuHsp70-06	2	AT5G42020.2	5	43,0699	0,3021	0,007014179	331,3069231
ZjuHsp70-06	2	AT5G09590.1	5	51,5703	0,4398	0,008528164	396,6946154
ZjuHsp70-06	2	AT4G37910.1	4	10,3634	0,4527	0,043682575	79,71846154
ZjuHsp70-06	2	AT4G24280.1	4	24,1638	0,4987	0,02063831	185,8753846
ZjuHsp70-06	2	AT5G49910.1	5	18,2285	0,5023	0,027555751	140,2192308
ZjuHsp70-06	2	AT5G28540.1	5	11,8141	0,0950	0,008041239	90,87769231

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-06	2	AT5G42020.1	5	12,4341	0,0981	0,007889594	95,64692308
ZjuHsp70-08	2	AT1G09080.1	1	8,0272	0,1064	0,013254933	61,74769231
ZjuHsp70-08	2	AT1G09080.2	1	8,1964	0,1081	0,013188717	63,04923077
ZjuHsp70-08	2	AT5G42020.2	5	13,5531	0,0992	0,007319359	104,2546154
ZjuHsp70-08	2	AT3G12580.1	3	19,0069	0,2922	0,015373364	146,2069231
ZjuHsp70-08	2	AT5G02500.1	5	48,3956	0,2978	0,006153452	372,2738462
ZjuHsp70-08	2	AT1G16030.1	1	35,4179	0,2897	0,00817948	272,4453846
ZjuHsp70-08	2	AT3G09440.2	3	15,3075	0,2867	0,018729381	117,75
ZjuHsp70-08	2	AT3G09440.1	3	15,3970	0,2868	0,018627005	118,4384615
ZjuHsp70-08	2	AT5G02490.1	5	17,2661	0,2987	0,017299796	132,8161538
ZjuHsp70-08	2	AT1G56410.1	1	23,9132	0,2961	0,012382283	183,9476923
ZjuHsp70-08	2	AT4G37910.1	4	37,8311	0,4688	0,012391921	291,0084615
ZjuHsp70-08	2	AT4G24280.1	4	38,3642	0,5259	0,013708092	295,1092308
ZjuHsp70-08	2	AT5G49910.1	5	51,8682	0,5209	0,010042762	398,9861538
ZjuHsp70-09	2	AT5G28540.1	5	27,4335	0,1254	0,004571054	211,0269231
ZjuHsp70-09	2	AT5G42020.1	5	13,7943	0,1288	0,00933719	106,11
ZjuHsp70-09	2	AT1G09080.1	1	5,4482	0,1270	0,023310451	41,90923077
ZjuHsp70-09	2	AT1G09080.2	1	5,4481	0,1270	0,023310879	41,90846154
ZjuHsp70-09	2	AT5G42020.2	5	31,0227	0,1281	0,004129234	238,6361538
ZjuHsp70-09	2	AT1G16030.1	1	11,4840	0,3081	0,026828631	88,33846154
ZjuHsp70-09	2	AT3G12580.1	3	18,1701	0,3195	0,017583833	139,77
ZjuHsp70-09	2	AT5G02500.1	5	34,6237	0,3249	0,009383746	266,3361538
ZjuHsp70-09	2	AT3G09440.2	3	20,9032	0,3140	0,015021623	160,7938462
ZjuHsp70-09	2	AT3G09440.1	3	20,8455	0,3140	0,015063203	160,35
ZjuHsp70-09	2	AT5G02490.1	5	22,2208	0,3257	0,014657438	170,9292308
ZjuHsp70-09	2	AT1G56410.1	1	20,7413	0,3248	0,015659578	159,5484615
ZjuHsp70-09	2	AT4G37910.1	4	8,6602	0,4811	0,05555299	66,61692308
ZjuHsp70-09	2	AT5G09590.1	5	52,4117	0,5088	0,009707756	403,1669231
ZjuHsp70-09	2	AT4G24280.1	4	53,0587	0,5190	0,009781619	408,1438462
ZjuHsp70-09	2	AT5G02500.2	5	51,1872	0,3309	0,006464507	393,7476923
ZjuHsp70-09	2	AT5G49910.1	5	54,1720	0,5360	0,00989441	416,7076923
ZjuHsp70-10	2	AT5G49910.1	5	2,5190	0,1023	0,040611354	19,37692308
ZjuHsp70-10	2	AT4G24280.1	4	2,3588	0,0929	0,039384433	18,14461538
ZjuHsp70-10	2	AT5G09590.1	5	49,4431	0,4217	0,008528996	380,3315385
ZjuHsp70-10	2	AT4G37910.1	4	25,5924	0,4361	0,017040215	196,8646154
ZjuHsp70-10	2	AT5G28540.1	5	51,7097	0,5445	0,010529939	397,7669231
ZjuHsp70-10	2	AT5G42020.1	5	51,1869	0,5507	0,010758612	393,7453846
ZjuHsp70-10	2	AT5G02490.1	5	52,1113	0,4846	0,009299327	400,8561538
ZjuHsp70-10	2	AT3G12580.1	3	52,0457	0,4937	0,009485894	400,3515385
ZjuHsp70-10	2	AT5G02500.1	5	52,2817	0,4996	0,009555925	402,1669231
ZjuHsp70-10	2	AT3G09440.2	3	51,7582	0,4946	0,009555974	398,14
ZjuHsp70-10	2	AT3G09440.1	3	51,7600	0,4946	0,009555641	398,1538462
ZjuHsp70-10	2	AT1G16030.1	1	52,8475	0,5143	0,009731775	406,5192308
ZjuHsp70-10	2	AT1G56410.1	1	52,7942	0,4955	0,009385501	406,1092308
ZjuHsp70-10	2	AT1G09080.2	1	51,4482	0,5643	0,010968314	395,7553846
ZjuHsp70-10	2	AT1G09080.1	1	51,4954	0,5668	0,011006808	396,1184615
ZjuHsp70-10	2	AT5G42020.2	5	49,9142	0,5785	0,011589888	383,9553846
ZjuHsp70-10	2	AT5G02500.2	5	52,3829	0,5729	0,010936775	402,9453846
ZjuHsp70-11	3	AT5G02500.1	5	8,1682	0,1010	0,012365025	62,83230769
ZjuHsp70-11	3	AT3G12580.1	3	5,2987	0,0992	0,018721573	40,75923077
ZjuHsp70-11	3	AT5G02490.1	5	11,9296	0,1216	0,010193133	91,76615385
ZjuHsp70-11	3	AT3G09440.2	3	4,9126	0,1199	0,024406628	37,78923077
ZjuHsp70-11	3	AT3G09440.1	3	4,9130	0,1199	0,024404641	37,79230769
ZjuHsp70-11	3	AT1G56410.1	1	10,4269	0,1165	0,011173024	80,20692308
ZjuHsp70-11	3	AT1G16030.1	1	55,2528	0,1639	0,002966366	425,0215385
ZjuHsp70-11	3	AT5G02500.2	5	17,9077	0,1174	0,006555839	137,7515385
ZjuHsp70-11	3	AT5G28540.1	5	52,4839	0,3378	0,00643626	403,7223077
ZjuHsp70-11	3	AT5G42020.1	5	52,3791	0,3437	0,006561778	402,9161538
ZjuHsp70-11	3	AT1G09080.1	1	52,7806	0,3405	0,006451234	406,0046154
ZjuHsp70-11	3	AT1G09080.2	1	52,8180	0,3404	0,006444773	406,2923077
ZjuHsp70-11	3	AT5G42020.2	5	50,8861	0,3561	0,006997982	391,4315385
ZjuHsp70-11	3	AT5G09590.1	5	43,9534	0,4703	0,010699969	338,1030769
ZjuHsp70-11	3	AT4G24280.1	4	14,0850	0,5424	0,038509052	108,3461538
ZjuHsp70-11	3	AT5G49910.1	5	19,7335	0,5357	0,02714673	151,7961538
ZjuHsp70-11	3	AT4G37910.1	4	38,0418	0,4818	0,012665016	292,6292308
ZjuHsp70-12	3	AT5G02500.1	5	4,8948	0,0359	0,007334314	37,65230769
ZjuHsp70-12	3	AT3G12580.1	3	3,5757	0,0397	0,011102721	27,50538462
ZjuHsp70-12	3	AT5G02490.1	5	7,8548	0,0456	0,005805367	60,42153846
ZjuHsp70-12	3	AT3G09440.2	3	4,3426	0,0420	0,009671625	33,40461538

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-12	3	AT3G09440.1	3	4,3385	0,0420	0,009680765	33,37307692
ZjuHsp70-12	3	AT1G56410.1	1	7,0047	0,0604	0,008622782	53,88230769
ZjuHsp70-12	3	AT1G16030.1	1	12,9675	0,1057	0,008151147	99,75
ZjuHsp70-12	3	AT5G28540.1	5	54,6580	0,2897	0,005300231	420,4461538
ZjuHsp70-12	3	AT5G42020.1	5	54,0687	0,2930	0,005419032	415,9130769
ZjuHsp70-12	3	AT5G02500.2	5	4,7174	0,0415	0,008797219	36,28769231
ZjuHsp70-12	3	AT1G09080.1	1	53,2362	0,2972	0,005582667	409,5092308
ZjuHsp70-12	3	AT1G09080.2	1	49,3396	0,2978	0,00603572	379,5353846
ZjuHsp70-12	3	AT5G42020.2	5	49,7587	0,2948	0,005924592	382,7592308
ZjuHsp70-12	3	AT5G09590.1	5	50,8305	0,4423	0,008701469	391,0038462
ZjuHsp70-12	3	AT4G37910.1	4	35,5953	0,4750	0,013344458	273,81
ZjuHsp70-12	3	AT4G24280.1	4	20,2991	0,5053	0,024892729	156,1469231
ZjuHsp70-12	3	AT5G49910.1	5	22,7166	0,5157	0,022701461	174,7430769
ZjuHsp70-13	3	AT5G02500.1	5	5,0689	0,0376	0,007417783	38,99153846
ZjuHsp70-13	3	AT3G12580.1	3	4,4208	0,0376	0,008505248	34,00615385
ZjuHsp70-13	3	AT5G02490.1	5	9,2929	0,0484	0,005208277	71,48384615
ZjuHsp70-13	3	AT3G09440.2	3	4,9383	0,0464	0,009395946	37,98692308
ZjuHsp70-13	3	AT3G09440.1	3	4,9395	0,0464	0,009393663	37,99615385
ZjuHsp70-13	3	AT1G56410.1	1	4,4346	0,0617	0,013913318	34,11230769
ZjuHsp70-13	3	AT1G16030.1	1	15,1383	0,1082	0,007147434	116,4484615
ZjuHsp70-13	3	AT5G28540.1	5	54,4232	0,2913	0,005352497	418,64
ZjuHsp70-13	3	AT5G42020.1	5	53,9557	0,2943	0,005454475	415,0438462
ZjuHsp70-13	3	AT5G02500.2	5	5,3147	0,0418	0,007864978	40,88230769
ZjuHsp70-13	3	AT1G09080.1	1	52,9312	0,3059	0,0057792	407,1630769
ZjuHsp70-13	3	AT1G09080.2	1	52,9181	0,3061	0,00578441	407,0623077
ZjuHsp70-13	3	AT5G42020.2	5	53,0765	0,2965	0,005586276	408,2807692
ZjuHsp70-13	3	AT5G09590.1	5	50,5217	0,4509	0,008924878	388,6284615
ZjuHsp70-13	3	AT4G24280.1	4	23,0712	0,4989	0,021624363	177,4707692
ZjuHsp70-13	3	AT5G49910.1	5	22,5499	0,5068	0,022474601	173,4607692
ZjuHsp70-13	3	AT4G37910.1	4	31,1058	0,4729	0,015202953	239,2753846
ZjuHsp70-14	4	AT4G16660.1	4	2,6688	0,1941	0,072729317	20,52923077
ZjuHsp70-14	4	AT1G79930.2	1	33,3579	0,9089	0,027246919	256,5992308
ZjuHsp70-14	4	AT1G79930.1	1	28,6607	0,9296	0,032434658	220,4669231
ZjuHsp70-14	4	AT1G09080.2	1	33,7217	0,8366	0,024808951	259,3976923
ZjuHsp70-14	4	AT1G09080.1	1	24,7663	0,8356	0,033739396	190,51
ZjuHsp70-14	4	AT5G28540.1	5	50,4934	0,8895	0,017616164	388,4107692
ZjuHsp70-14	4	AT3G12580.1	3	8,2363	0,8513	0,103359518	63,35615385
ZjuHsp70-14	4	AT1G16030.1	1	8,3277	0,8950	0,107472652	64,05923077
ZjuHsp70-14	4	AT3G09440.2	3	17,3814	0,8648	0,049754335	133,7030769
ZjuHsp70-14	4	AT3G09440.1	3	17,3655	0,8648	0,049799891	133,5807692
ZjuHsp70-14	4	AT5G42020.1	5	49,7575	0,8838	0,017762146	382,75
ZjuHsp70-14	4	AT5G42020.2	5	52,5458	0,8275	0,015748166	404,1984615
ZjuHsp70-14	4	AT1G56410.1	1	25,4387	0,8397	0,033008762	195,6823077
ZjuHsp70-14	4	AT5G02500.2	5	18,9444	0,8095	0,042730306	145,7261538
ZjuHsp70-14	4	AT5G02490.1	5	25,5210	0,8644	0,033870146	196,3153846
ZjuHsp70-14	4	AT5G02500.1	5	14,7691	0,8561	0,057965617	113,6084615
ZjuHsp70-15	7	AT2G32120.2	2	3,9792	0,1400	0,035182951	30,60923077
ZjuHsp70-15	7	AT2G32120.1	2	3,9799	0,1400	0,035176763	30,61461538
ZjuHsp70-15	7	AT3G12580.1	3	48,0674	0,7133	0,014839579	369,7492308
ZjuHsp70-15	7	AT1G16030.1	1	48,4633	0,7175	0,014805017	372,7946154
ZjuHsp70-15	7	AT5G02500.1	5	47,7764	0,7183	0,01503462	367,5107692
ZjuHsp70-15	7	AT3G12580.1	3	48,0690	0,7132	0,014837005	369,7615385
ZjuHsp70-15	7	AT1G16030.1	1	48,4655	0,7174	0,014802282	372,8115385
ZjuHsp70-15	7	AT5G02500.1	5	47,7749	0,7183	0,015035092	367,4992308
ZjuHsp70-15	7	AT3G09440.2	3	42,600	0,7159	0,016805164	327,6923077
ZjuHsp70-15	7	AT3G09440.1	3	41,0170	0,7160	0,017456177	315,5153846
ZjuHsp70-15	7	AT5G02490.1	5	47,9165	0,7250	0,015130487	368,5884615
ZjuHsp70-15	7	AT1G56410.1	1	0,1837	18,1835	98,98475776	1,413076923
ZjuHsp70-15	7	AT1G09080.2	1	12,7079	0,7671	0,060364026	97,75307692
ZjuHsp70-15	7	AT1G09080.1	1	17,6354	0,7739	0,043883326	135,6569231
ZjuHsp70-15	7	AT5G42020.2	5	47,9340	0,8252	0,017215338	368,7230769
ZjuHsp70-15	7	AT5G42020.1	5	48,3783	0,8144	0,016833994	372,1407692
ZjuHsp70-15	7	AT5G28540.1	5	49,2083	0,8032	0,01632245	378,5253846
ZjuHsp70-15	7	AT5G09590.1	5	8,8946	0,8602	0,096710364	68,42
ZjuHsp70-15	7	AT4G37910.1	4	11,9487	0,8332	0,069731435	91,91307692
ZjuHsp70-15	7	AT5G49910.1	5	49,5049	0,9142	0,018466859	380,8069231
ZjuHsp70-15	7	AT4G24280.1	4	48,2217	0,9215	0,019109654	370,9361538
ZjuHsp70-15	7	AT5G02500.2	5	48,7972	0,8435	0,017285828	375,3630769
ZjuHsp70-16	9	AT1G09080.1	1	4,6069	0,3398	0,073758927	35,43769231

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-16	9	AT1G09080.2	1	3,7079	0,3478	0,093799725	28,52230769
ZjuHsp70-16	9	AT5G42020.2	5	56,3277	0,3646	0,006472837	433,29
ZjuHsp70-16	9	AT5G28540.1	5	57,0505	0,3581	0,006276895	438,85
ZjuHsp70-16	9	AT5G42020.1	5	56,3313	0,3645	0,006470648	433,3176923
ZjuHsp70-16	9	AT1G16030.1	1	3,4517	0,5247	0,152012052	26,55153846
ZjuHsp70-16	9	AT5G02500.2	5	53,9302	0,5365	0,009948044	414,8476923
ZjuHsp70-16	9	AT3G12580.1	3	7,7243	0,5239	0,067824916	59,41769231
ZjuHsp70-16	9	AT5G02500.1	5	54,0852	0,5307	0,009812296	416,04
ZjuHsp70-16	9	AT1G56410.1	1	22,1637	0,5117	0,0230873	170,49
ZjuHsp70-16	9	AT3G09440.2	3	20,2707	0,5208	0,025692255	155,9284615
ZjuHsp70-16	9	AT3G09440.1	3	20,2083	0,5208	0,025771589	155,4484615
ZjuHsp70-16	9	AT5G02490.1	5	19,8085	0,5428	0,027402378	152,3730769
ZjuHsp70-16	9	AT4G37910.1	4	6,5961	0,6433	0,097527327	50,73923077
ZjuHsp70-16	9	AT5G09590.1	5	1,4572	0,6971	0,478383201	11,20923077
ZjuHsp70-16	9	AT4G24280.1	4	16,0820	0,7503	0,046654645	123,7076923
ZjuHsp70-16	9	AT5G49910.1	5	54,2652	0,7639	0,014077162	417,4246154
ZjuHsp70-17	9	AT5G09590.1	5	3,0555	0,0854	0,027949599	23,50384615
ZjuHsp70-17	9	AT4G37910.1	4	2,9995	0,1271	0,042373729	23,07307692
ZjuHsp70-17	9	AT4G24280.1	4	50,0843	0,4158	0,008302003	385,2638462
ZjuHsp70-17	9	AT5G49910.1	5	51,8530	0,4179	0,008059322	398,8692308
ZjuHsp70-17	9	AT5G28540.1	5	54,0185	0,4905	0,009080223	415,5269231
ZjuHsp70-17	9	AT5G42020.1	5	53,2164	0,4960	0,009320435	409,3569231
ZjuHsp70-17	9	AT5G02500.1	5	53,4287	0,4443	0,008315755	410,99
ZjuHsp70-17	9	AT3G12580.1	3	54,5116	0,4421	0,0081102	419,32
ZjuHsp70-17	9	AT3G09440.1	3	53,4229	0,4402	0,008239912	410,9453846
ZjuHsp70-17	9	AT1G56410.1	1	54,1236	0,4404	0,008136931	416,3353846
ZjuHsp70-17	9	AT5G02490.1	5	53,8884	0,4414	0,008191002	414,5261538
ZjuHsp70-17	9	AT1G09080.1	1	53,6739	0,5362	0,009989958	412,8761538
ZjuHsp70-17	9	AT1G09080.2	1	53,7912	0,5134	0,009544312	413,7784615
ZjuHsp70-17	9	AT1G16030.1	1	53,4413	0,4632	0,008667454	411,0869231
ZjuHsp70-17	9	AT5G42020.2	5	36,5654	0,5023	0,01373703	281,2723077
ZjuHsp70-17	9	AT5G02500.2	5	53,6408	0,5263	0,009811561	412,6215385
ZjuHsp70-18	11	AT5G28540.1	5	2,2498	0,0529	0,023513201	17,30615385
ZjuHsp70-18	11	AT5G42020.1	5	1,9931	0,0525	0,026340876	15,33153846
ZjuHsp70-18	11	AT1G09080.1	1	39,1391	0,1142	0,002917798	301,07
ZjuHsp70-18	11	AT5G42020.2	5	1,9393	0,0537	0,027690404	14,91769231
ZjuHsp70-18	11	AT1G09080.2	1	38,2174	0,1487	0,003890898	293,98
ZjuHsp70-18	11	AT5G02500.1	5	55,2892	0,3001	0,005427823	425,3015385
ZjuHsp70-18	11	AT3G12580.1	3	24,5719	0,2895	0,011781751	189,0146154
ZjuHsp70-18	11	AT3G09440.2	3	54,0745	0,2917	0,00539441	415,9576923
ZjuHsp70-18	11	AT3G09440.1	3	54,0738	0,2916	0,00539263	415,9523077
ZjuHsp70-18	11	AT1G16030.1	1	55,3441	0,2923	0,005281502	425,7238462
ZjuHsp70-18	11	AT5G02490.1	5	54,8219	0,3002	0,005475914	421,7069231
ZjuHsp70-18	11	AT1G56410.1	1	55,0259	0,2968	0,005393824	423,2761538
ZjuHsp70-18	11	AT5G09590.1	5	52,2587	0,4708	0,009009026	401,99
ZjuHsp70-18	11	AT5G02500.2	5	55,7341	0,3200	0,005741548	428,7238462
ZjuHsp70-18	11	AT4G37910.1	4	53,7676	0,4776	0,008882673	413,5969231
ZjuHsp70-18	11	AT4G24280.1	4	41,9324	0,5210	0,01242476	322,5569231
ZjuHsp70-18	11	AT5G49910.1	5	53,7803	0,5477	0,010184026	413,6946154
ZjuHsp70-19	11	AT5G02500.1	5	4,2480	0,0317	0,007462335	32,67692308
ZjuHsp70-19	11	AT3G12580.1	3	6,2817	0,0394	0,006272187	48,32076923
ZjuHsp70-19	11	AT5G02490.1	5	4,6129	0,0450	0,009755252	35,48384615
ZjuHsp70-19	11	AT3G09440.2	3	3,0976	0,0409	0,013203771	23,82769231
ZjuHsp70-19	11	AT3G09440.1	3	3,0976	0,0409	0,013203771	23,82769231
ZjuHsp70-19	11	AT1G56410.1	1	4,2151	0,0566	0,013427914	32,42384615
ZjuHsp70-19	11	AT1G16030.1	1	7,4029	0,1008	0,013616286	56,94538462
ZjuHsp70-19	11	AT5G28540.1	5	38,6141	0,2919	0,007559415	297,0315385
ZjuHsp70-19	11	AT5G42020.1	5	36,3742	0,2991	0,008222861	279,8015385
ZjuHsp70-19	11	AT5G02500.2	5	4,3637	0,0353	0,008089465	33,56692308
ZjuHsp70-19	11	AT1G09080.1	1	5,5243	0,2971	0,053780569	42,49461538
ZjuHsp70-19	11	AT1G09080.2	1	52,9882	0,2973	0,005610683	407,6015385
ZjuHsp70-19	11	AT5G42020.2	5	15,9701	0,3012	0,018860245	122,8469231
ZjuHsp70-19	11	AT5G09590.1	5	50,7274	0,4513	0,008896573	390,2107692
ZjuHsp70-19	11	AT4G37910.1	4	51,4540	0,4573	0,00888755	395,8
ZjuHsp70-19	11	AT4G24280.1	4	15,9310	0,4996	0,031360241	122,5461538
ZjuHsp70-19	11	AT5G49910.1	5	28,3659	0,5008	0,017655001	218,1992308
ZjuHsp70-20	NW	AT5G28540.1	5	5,4338	0,1336	0,024586845	41,79846154
ZjuHsp70-20	NW	AT5G42020.1	5	5,0128	0,1379	0,027509575	38,56
ZjuHsp70-20	NW	AT1G09080.1	1	9,3300	0,1347	0,014437299	71,76923077

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-20	NW	AT1G09080.2	1	9,3269	0,1347	0,014442098	71,74538462
ZjuHsp70-20	NW	AT3G12580.1	3	14,5590	0,3221	0,022123772	111,9923077
ZjuHsp70-20	NW	AT5G02500.1	5	20,3721	0,3291	0,016154447	156,7084615
ZjuHsp70-20	NW	AT3G09440.2	3	22,3478	0,3161	0,014144569	171,9061538
ZjuHsp70-20	NW	AT3G09440.1	3	22,2217	0,3160	0,014220334	170,9361538
ZjuHsp70-20	NW	AT5G42020.2	5	4,4994	0,1388	0,030848558	34,61076923
ZjuHsp70-20	NW	AT1G16030.1	1	27,1957	0,3190	0,011729796	209,1976923
ZjuHsp70-20	NW	AT5G02490.1	5	13,8400	0,3284	0,023728324	106,4615385
ZjuHsp70-20	NW	AT1G56410.1	1	15,3660	0,3362	0,021879474	118,2
ZjuHsp70-20	NW	AT4G24280.1	4	51,5023	0,4839	0,009395697	396,1715385
ZjuHsp70-20	NW	AT5G49910.1	5	52,5532	0,4843	0,009215424	404,2553846
ZjuHsp70-20	NW	AT5G09590.1	5	43,4970	0,4688	0,010777755	334,5923077
ZjuHsp70-20	NW	AT4G37910.1	4	7,1548	0,4739	0,066235255	55,03692308
ZjuHsp70-20	NW	AT5G02500.2	5	26,9096	0,34050	0,012653477	206,9969231
ZjuHsp70-21	NW	AT5G28540.1	5	7,1830	0,1093	0,015216483	55,25384615
ZjuHsp70-21	NW	AT5G42020.1	5	6,1792	0,1150	0,018610823	47,53230769
ZjuHsp70-21	NW	AT1G09080.2	1	4,9270	0,1232	0,025005074	37,9
ZjuHsp70-21	NW	AT1G09080.1	1	5,1533	0,1252	0,024295112	39,64076923
ZjuHsp70-21	NW	AT5G42020.2	5	7,0800	0,1789	0,025268362	54,46153846
ZjuHsp70-21	NW	AT1G16030.1	1	14,7946	0,2948	0,019926189	113,8046154
ZjuHsp70-21	NW	AT3G12580.1	3	12,0849	0,3056	0,025287756	92,96076923
ZjuHsp70-21	NW	AT5G02500.1	5	28,7397	0,3088	0,010744719	221,0746154
ZjuHsp70-21	NW	AT3G09440.2	3	18,2934	0,3019	0,01650322	140,7184615
ZjuHsp70-21	NW	AT3G09440.1	3	18,3156	0,3019	0,016483216	140,8892308
ZjuHsp70-21	NW	AT5G02490.1	5	19,0537	0,3075	0,016138598	146,5669231
ZjuHsp70-21	NW	AT1G56410.1	1	17,9452	0,3149	0,017547868	138,04
ZjuHsp70-21	NW	AT5G09590.1	5	17,9783	0,4481	0,024924492	138,2946154
ZjuHsp70-21	NW	AT4G37910.1	4	7,6175	0,4380	0,05749918	58,59615385
ZjuHsp70-21	NW	AT5G02500.2	5	51,9666	0,3958	0,007616431	399,7430769
ZjuHsp70-21	NW	AT4G24280.1	4	41,8455	0,4847	0,011583085	321,8884615
ZjuHsp70-21	NW	AT5G49910.1	5	53,5962	0,5026	0,00937753	412,2784615
		Mean		29,473	0,476781	0,016176631	226,7186149

Z. jujuba – C. sinensis

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-01	1	orange1.1g043296m	scaffold	4,3248	0,0631	0,01459027	33,26769231
ZjuHsp70-01	1	orange1.1g006381m	scaffold	15,2267	0,0698	0,004584053	117,1284615
ZjuHsp70-01	1	orange1.1g038511m	scaffold	5,3038	0,0516	0,009728874	40,79846154
ZjuHsp70-01	1	orange1.1g009246m	scaffold	314,96	0,0986	0,000313055	242,776923
ZjuHsp70-01	1	orange1.1g009882m	scaffold	15,3577	0,098	0,006381164	118,1361538
ZjuHsp70-01	1	orange1.1g005955m	scaffold	52,7662	0,2918	0,005530055	405,8938462
ZjuHsp70-01	1	orange1.1g006194m	scaffold	9,9652	0,296	0,029703368	76,65538462
ZjuHsp70-01	1	orange1.1g043979m	scaffold	5,8649	0,0791	0,013487016	45,11461538
ZjuHsp70-01	1	orange1.1g041815m	scaffold	54,7363	0,2233	0,00407956	421,0484615
ZjuHsp70-01	1	orange1.1g005824m	scaffold	55,1996	0,223	0,004039884	424,6123077
ZjuHsp70-01	1	orange1.1g007552m	scaffold	53,6409	0,3456	0,006442845	412,6223077
ZjuHsp70-01	1	orange1.1g010543m	scaffold	9,5846	0,2747	0,02866056	73,72769231
ZjuHsp70-01	1	orange1.1g014219m	scaffold	24,3601	0,2078	0,008530343	187,3853846
ZjuHsp70-01	1	orange1.1g010228m	scaffold	52,5313	0,3188	0,006068763	404,0869231
ZjuHsp70-01	1	orange1.1g041209m	scaffold	5,9391	0,0643	0,010826556	45,68538462
ZjuHsp70-01	1	orange1.1g011367m	scaffold	51,5362	0,2971	0,00576488	396,4323077
ZjuHsp70-01	1	orange1.1g036208m	scaffold	5,9234	0,0578	0,009757909	45,56461538
ZjuHsp70-01	1	orange1.1g014165m	scaffold	9,8867	0,2936	0,029696461	76,05153846
ZjuHsp70-01	1	orange1.1g005807m	scaffold	10,4937	0,4743	0,045198548	80,72076923
ZjuHsp70-02	1	orange1.1g004282m	scaffold	10	0,1871	0,01838098	78,3
ZjuHsp70-02	1	orange1.1g004296m	scaffold	1,0179	0,1871	0,183809804	7,83
ZjuHsp70-02	1	orange1.1g004211m	scaffold	1,8699	0,2141	0,114498102	14,38384615
ZjuHsp70-02	1	orange1.1g004210m	scaffold	1,8699	0,2141	0,114498102	14,38384615
ZjuHsp70-02	1	orange1.1g005222m	scaffold	1,0919	0,1778	0,162835424	8,399230769
ZjuHsp70-02	1	orange1.1g005530m	scaffold	1,8917	0,2009	0,106200772	14,55153846
ZjuHsp70-02	1	orange1.1g005521m	scaffold	1,8917	0,2009	0,106200772	14,55153846
ZjuHsp70-02	1	orange1.1g003056m	scaffold	1,8522	5,4130	2,922470576	18,24769231
ZjuHsp70-02	1	orange1.1g003290m	scaffold	2,0674	5,4441	2,633307536	15,90307692
ZjuHsp70-02	1	orange1.1g004867m	scaffold	0,6057	7,9008	13,04408123	4,659230769
ZjuHsp70-02	1	orange1.1g043296m	scaffold	48,6195	4,5573	0,093733996	373,9961538
ZjuHsp70-02	1	orange1.1g006194m	scaffold	2,341	17,2196	7,355659974	18,00769231
ZjuHsp70-02	1	orange1.1g005955m	scaffold	7,2243	0,8668	0,119983943	55,57153846

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-02	1	orange1.1g002363m	scaffold	55,9054	0,9124	0,016320427	430,0415385
ZjuHsp70-02	1	orange1.1g002367m	scaffold	55,9058	0,9123	0,016318522	430,0446154
ZjuHsp70-02	1	orange1.1g006381m	scaffold	27,7792	0,8990	0,032362343	213,6861538
ZjuHsp70-02	1	orange1.1g003782m	scaffold	56,0525	0,8848	0,015785201	431,1730769
ZjuHsp70-02	1	orange1.1g003784m	scaffold	56,1677	0,8846	0,015749265	432,0592308
ZjuHsp70-02	1	orange1.1g004058m	scaffold	51,9011	0,8889	0,017126805	399,2392308
ZjuHsp70-02	1	orange1.1g010543m	scaffold	6,1946	0,8277	0,133616376	47,65076923
ZjuHsp70-02	1	orange1.1g010228m	scaffold	9,5397	0,8158	0,085516316	73,38230769
ZjuHsp70-02	1	orange1.1g014165m	scaffold	7,3794	0,7674	0,103992194	56,76461538
ZjuHsp70-02	1	orange1.1g038511m	scaffold	55,437	0,8342	0,015047712	426,4384615
ZjuHsp70-02	1	orange1.1g009882m	scaffold	9,9862	0,8155	0,081662695	76,81692308
ZjuHsp70-02	1	orange1.1g009246m	scaffold	12,0082	0,8306	0,069169401	92,37076923
ZjuHsp70-02	1	orange1.1g005807m	scaffold	5,1861	0,8253	0,159136924	39,89307692
ZjuHsp70-02	1	orange1.1g041815m	scaffold	10,7115	0,8675	0,080987723	82,39615385
ZjuHsp70-03	1	orange1.1g003056m	scaffold	1,3716	0,0831	0,060586177	10,35016923
ZjuHsp70-03	1	orange1.1g003290m	scaffold	1,4188	0,0851	0,059980265	10,91384615
ZjuHsp70-03	1	orange1.1g004867m	scaffold	1,3996	0,0712	0,050871678	10,76615385
ZjuHsp70-03	1	orange1.1g004282m	scaffold	57,0353	0,3755	0,006583642	438,7330769
ZjuHsp70-03	1	orange1.1g004296m	scaffold	57,0316	0,3754	0,006582316	438,7046154
ZjuHsp70-03	1	orange1.1g004211m	scaffold	9,0297	0,3872	0,042880716	69,45923077
ZjuHsp70-03	1	orange1.1g004210m	scaffold	9,0382	0,3872	0,042840389	69,52461538
ZjuHsp70-03	1	orange1.1g005222m	scaffold	58,1873	0,3677	0,006319248	447,5946154
ZjuHsp70-03	1	orange1.1g005530m	scaffold	9,5112	0,3651	0,038386323	73,16307692
ZjuHsp70-03	1	orange1.1g005521m	scaffold	9,5012	0,3651	0,038426725	73,08615385
ZjuHsp70-03	1	orange1.1g043296m	scaffold	53,6472	0,8081	0,015063228	412,6707692
ZjuHsp70-03	1	orange1.1g006381m	scaffold	52,6564	0,8035	0,015259304	405,0492308
ZjuHsp70-03	1	orange1.1g006194m	scaffold	56,4571	0,7574	0,013415496	434,2853846
ZjuHsp70-03	1	orange1.1g038511m	scaffold	53,5818	0,7934	0,014807267	412,1676923
ZjuHsp70-03	1	orange1.1g009882m	scaffold	53,5698	0,7798	0,014556709	412,0753846
ZjuHsp70-03	1	orange1.1g009246m	scaffold	52,4787	0,7987	0,015219508	403,6823077
ZjuHsp70-03	1	orange1.1g005824m	scaffold	51,9531	0,9405	0,018102866	399,6392308
ZjuHsp70-03	1	orange1.1g014165m	scaffold	1,7052	17,2449	10,11312456	131,1292308
ZjuHsp70-03	1	orange1.1g041815m	scaffold	13,6017	12,8179	0,94237485	104,6284615
ZjuHsp70-03	1	orange1.1g010228m	scaffold	1,1659	17,6871	15,17034051	8,968461538
ZjuHsp70-03	1	orange1.1g005955m	scaffold	54,5635	0,8255	0,015129161	419,7192308
ZjuHsp70-03	1	orange1.1g014219m	scaffold	54,4626	0,7478	0,013730523	418,9430769
ZjuHsp70-03	1	orange1.1g002363m	scaffold	56,3937	0,9037	0,01602484	433,7976923
ZjuHsp70-03	1	orange1.1g002367m	scaffold	56,3933	0,9036	0,01602318	433,7946154
ZjuHsp70-03	1	orange1.1g010543m	scaffold	55,6718	0,7762	0,013942427	428,2446154
ZjuHsp70-03	1	orange1.1g003782m	scaffold	15,1281	8,8968	0,588097646	116,37
ZjuHsp70-03	1	orange1.1g003784m	scaffold	53,3538	0,8381	0,015708347	410,4138462
ZjuHsp70-03	1	orange1.1g004058m	scaffold	56,0447	0,8456	0,015087957	431,1130769
ZjuHsp70-04	1	orange1.1g043296m	scaffold	1,9454	0,0494	0,025393235	14,96461538
ZjuHsp70-04	1	orange1.1g006381m	scaffold	8,7697	0,0848	0,009669658	67,45923077
ZjuHsp70-04	1	orange1.1g038511m	scaffold	2,8243	0,0522	0,018482456	21,52538462
ZjuHsp70-04	1	orange1.1g009246m	scaffold	8,268	0,1287	0,015566038	63,6
ZjuHsp70-04	1	orange1.1g009882m	scaffold	8,8398	0,1063	0,012025159	67,99846154
ZjuHsp70-04	1	orange1.1g006194m	scaffold	12,2278	0,2854	0,023340257	94,06
ZjuHsp70-04	1	orange1.1g005955m	scaffold	53,9131	0,2940	0,00545322	414,7161538
ZjuHsp70-04	1	orange1.1g007552m	scaffold	55,1719	0,3435	0,006225995	424,3992308
ZjuHsp70-04	1	orange1.1g043979m	scaffold	3,6805	0,0757	0,020567858	28,31153846
ZjuHsp70-04	1	orange1.1g005824m	scaffold	12,7077	0,3735	0,029391629	97,75153846
ZjuHsp70-04	1	orange1.1g041815m	scaffold	10,6376	0,2188	0,020568549	81,82769231
ZjuHsp70-04	1	orange1.1g010543m	scaffold	53,0079	0,2717	0,005125651	407,7530769
ZjuHsp70-04	1	orange1.1g041209m	scaffold	4,1073	0,0530	0,012903854	31,59461538
ZjuHsp70-04	1	orange1.1g011367m	scaffold	53,3309	0,2960	0,005550253	410,2376923
ZjuHsp70-04	1	orange1.1g010228m	scaffold	52,379	0,3135	0,005985223	402,9153846
ZjuHsp70-04	1	orange1.1g014219m	scaffold	18,2408	0,2128	0,011666155	140,3138462
ZjuHsp70-04	1	orange1.1g036208m	scaffold	21,9166	0,0601	0,002742214	168,5892308
ZjuHsp70-04	1	orange1.1g014165m	scaffold	53,1810	0,2951	0,005548974	409,0846154
ZjuHsp70-04	1	orange1.1g005807m	scaffold	39,2291	0,4773	0,012166988	301,7623077
ZjuHsp70-04	1	orange1.1g020168m	scaffold	12,5325	0,1089	0,008689408	96,40384615
ZjuHsp70-04	1	orange1.1g005099m	scaffold	50,6222	0,5332	0,010532928	389,4015385
ZjuHsp70-05	1	orange1.1g043296m	scaffold	1,6052	0,0500	0,031148767	12,34769231
ZjuHsp70-05	1	orange1.1g038511m	scaffold	2,1348	0,0384	0,017987634	16,42153846
ZjuHsp70-05	1	orange1.1g006381m	scaffold	8,2565	0,0758	0,009180646	63,51153846
ZjuHsp70-05	1	orange1.1g009246m	scaffold	7,1192	0,1168	0,016406338	54,76307692
ZjuHsp70-05	1	orange1.1g009882m	scaffold	6,7773	0,0961	0,014179688	52,13307692
ZjuHsp70-05	1	orange1.1g006194m	scaffold	9,3528	0,2866	0,03064323	71,94461538

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-05	1	orange1.1g005955m	scaffold	53,7146	0,2936	0,005465925	413,1892308
ZjuHsp70-05	1	orange1.1g043979m	scaffold	2,2982	0,0672	0,029240275	17,67846154
ZjuHsp70-05	1	orange1.1g007552m	scaffold	54,7915	0,3459	0,006313023	421,4730769
ZjuHsp70-05	1	orange1.1g005824m	scaffold	53,7289	0,3755	0,00698879	413,2992308
ZjuHsp70-05	1	orange1.1g041815m	scaffold	12,2962	0,2247	0,018273938	94,58615385
ZjuHsp70-05	1	orange1.1g010543m	scaffold	11,6176	0,2713	0,0233525	89,36615385
ZjuHsp70-05	1	orange1.1g041209m	scaffold	2,3666	0,0484	0,02045128	18,20461538
ZjuHsp70-05	1	orange1.1g014219m	scaffold	10,7086	0,2126	0,019853202	82,37384615
ZjuHsp70-05	1	orange1.1g010228m	scaffold	53,0393	0,3172	0,005980471	407,9946154
ZjuHsp70-05	1	orange1.1g011367m	scaffold	52,5861	0,3001	0,005706831	404,5084615
ZjuHsp70-05	1	orange1.1g036208m	scaffold	9,9189	0,0561	0,005655869	76,29923077
ZjuHsp70-05	1	orange1.1g014165m	scaffold	53,8985	0,2900	0,005380484	414,6038462
ZjuHsp70-05	1	orange1.1g005807m	scaffold	26,6752	0,4749	0,017803053	205,1938462
ZjuHsp70-05	1	orange1.1g020168m	scaffold	6,012	0,0955	0,015884897	46,24615385
ZjuHsp70-06	2	orange1.1g006381m	scaffold	3,3099	0,0321	0,009698178	25,46076923
ZjuHsp70-06	2	orange1.1g043296m	scaffold	9,9482	0,0846	0,008504051	76,52461538
ZjuHsp70-06	2	orange1.1g038511m	scaffold	11,1550	0,0748	0,006705513	85,80769231
ZjuHsp70-06	2	orange1.1g009246m	scaffold	3,2912	0,0839	0,025492222	25,31692308
ZjuHsp70-06	2	orange1.1g009882m	scaffold	3,2206	0,0638	0,019809973	24,77384615
ZjuHsp70-06	2	orange1.1g005955m	scaffold	54,6974	0,2941	0,005376855	420,7492308
ZjuHsp70-06	2	orange1.1g006194m	scaffold	7,3674	0,2918	0,039606917	56,67230769
ZjuHsp70-06	2	orange1.1g007552m	scaffold	55,0143	0,3465	0,006298362	423,1869231
ZjuHsp70-06	2	orange1.1g005824m	scaffold	54,2307	0,3443	0,006348802	417,1592308
ZjuHsp70-06	2	orange1.1g041815m	scaffold	10,8818	0,1988	0,018269036	83,70615385
ZjuHsp70-06	2	orange1.1g043979m	scaffold	9,6713	0,1128	0,011663375	74,39461538
ZjuHsp70-06	2	orange1.1g010543m	scaffold	55,4969	0,2662	0,004796664	426,8992308
ZjuHsp70-06	2	orange1.1g041209m	scaffold	9,8454	0,0952	0,00966949	75,73384615
ZjuHsp70-06	2	orange1.1g014219m	scaffold	10,8640	0,1939	0,017847938	83,56923077
ZjuHsp70-06	2	orange1.1g010228m	scaffold	54,9293	0,3119	0,005678208	422,5330769
ZjuHsp70-06	2	orange1.1g036208m	scaffold	1,4050	0,0175	0,012455516	10,80769231
ZjuHsp70-06	2	orange1.1g020168m	scaffold	1,4318	0,0349	0,024374913	11,01384615
ZjuHsp70-06	2	orange1.1g014165m	scaffold	56,2934	0,2892	0,00513737	433,32769231
ZjuHsp70-06	2	orange1.1g005807m	scaffold	16,2130	0,4447	0,027428607	124,7153846
ZjuHsp70-06	2	orange1.1g005099m	scaffold	27,0026	0,4995	0,018498219	207,7123077
ZjuHsp70-06	2	orange1.1g006194m	scaffold	1,4438	0,0527	0,0365009	11,10615385
ZjuHsp70-08	2	orange1.1g005955m	scaffold	32,0425	0,0922	0,002877428	246,4807692
ZjuHsp70-08	2	orange1.1g007552m	scaffold	28,1739	0,1232	0,004372842	216,7223077
ZjuHsp70-08	2	orange1.1g010543m	scaffold	18,4073	0,0821	0,004460187	141,5946154
ZjuHsp70-08	2	orange1.1g010228m	scaffold	24,6114	0,1153	0,004684821	189,3184615
ZjuHsp70-08	2	orange1.1g043296m	scaffold	16,2990	0,2791	0,01712375	123,32769231
ZjuHsp70-08	2	orange1.1g006381m	scaffold	23,0406	0,2963	0,012859908	177,2353846
ZjuHsp70-08	2	orange1.1g011367m	scaffold	24,6744	0,0876	0,003550238	189,8030769
ZjuHsp70-08	2	orange1.1g038511m	scaffold	53,3002	0,2904	0,005448385	410,0015385
ZjuHsp70-08	2	orange1.1g014165m	scaffold	27,7337	0,0928	0,00334611	213,3361538
ZjuHsp70-08	2	orange1.1g009246m	scaffold	22,5276	0,3240	0,014382358	173,2892308
ZjuHsp70-08	2	orange1.1g009882m	scaffold	23,6604	0,3052	0,01289919	182,0030769
ZjuHsp70-08	2	orange1.1g005807m	scaffold	12,6471	0,4930	0,038981268	97,28538462
ZjuHsp70-08	2	orange1.1g041815m	scaffold	49,8829	0,4369	0,008758512	383,7146154
ZjuHsp70-08	2	orange1.1g005824m	scaffold	52,3598	0,5779	0,011037093	402,7676923
ZjuHsp70-08	2	orange1.1g005099m	scaffold	53,6081	0,5353	0,009985431	412,37
ZjuHsp70-08	2	orange1.1g047849m	scaffold	48,4563	0,5063	0,01044859	372,7407692
ZjuHsp70-08	2	orange1.1g047555m	scaffold	52,8019	0,4676	0,008855742	406,1684615
ZjuHsp70-08	2	orange1.1g014219m	scaffold	52,8657	0,3814	0,007214508	406,6592308
ZjuHsp70-09	2	orange1.1g006194m	scaffold	1,8184	0,0903	0,049659041	13,98769231
ZjuHsp70-09	2	orange1.1g005955m	scaffold	34,4768	0,1248	0,003619826	265,2061538
ZjuHsp70-09	2	orange1.1g007552m	scaffold	27,0165	0,1683	0,006229526	207,8192308
ZjuHsp70-09	2	orange1.1g010543m	scaffold	45,3735	0,1070	0,002358205	349,0269231
ZjuHsp70-09	2	orange1.1g043296m	scaffold	11,4724	0,2994	0,026097416	88,24923077
ZjuHsp70-09	2	orange1.1g006381m	scaffold	22,7368	0,3252	0,014302804	174,8984615
ZjuHsp70-09	2	orange1.1g010228m	scaffold	40,6987	0,1381	0,003393229	313,0669231
ZjuHsp70-09	2	orange1.1g011367m	scaffold	11,4760	0,1351	0,011772395	88,2692308
ZjuHsp70-09	2	orange1.1g038511m	scaffold	12,0850	0,3153	0,026090194	92,96153846
ZjuHsp70-09	2	orange1.1g014165m	scaffold	35,5629	0,1113	0,003129666	273,5607692
ZjuHsp70-09	2	orange1.1g009246m	scaffold	18,3962	0,3554	0,019319207	141,5092308
ZjuHsp70-09	2	orange1.1g009882m	scaffold	19,7478	0,3404	0,017237363	151,9061538
ZjuHsp70-09	2	orange1.1g005807m	scaffold	8,5404	0,5031	0,058908248	65,69538462
ZjuHsp70-09	2	orange1.1g005099m	scaffold	52,9818	0,5483	0,010348837	407,5523077
ZjuHsp70-09	2	orange1.1g047849m	scaffold	11,8075	0,5129	0,043438492	90,82692308
ZjuHsp70-09	2	orange1.1g041815m	scaffold	50,0627	0,4546	0,009080613	385,0976923

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-09	2	orange1.1g005824m	scaffold	52,3805	0,5684	0,010851366	402,9269231
ZjuHsp70-09	2	orange1.1g047555m	scaffold	15,2618	0,4816	0,031555911	117,3984615
ZjuHsp70-09	2	orange1.1g014219m	scaffold	28,6214	0,3840	0,013416534	220,1646154
ZjuHsp70-10	2	orange1.1g005099m	scaffold	1,5703	0,0817	0,052028275	12,07923077
ZjuHsp70-10	2	orange1.1g047555m	scaffold	1,9169	0,0868	0,045281444	14,74538462
ZjuHsp70-10	2	orange1.1g005807m	scaffold	49,2446	0,4358	0,008849701	378,8046154
ZjuHsp70-10	2	orange1.1g047849m	scaffold	49,2275	0,4132	0,008393682	378,6730769
ZjuHsp70-10	2	orange1.1g005955m	scaffold	51,5720	0,5222	0,01012565	396,7076923
ZjuHsp70-10	2	orange1.1g006194m	scaffold	51,7228	0,5526	0,010683876	397,8676923
ZjuHsp70-10	2	orange1.1g006381m	scaffold	52,4473	0,4939	0,009417072	403,4407692
ZjuHsp70-10	2	orange1.1g043296m	scaffold	51,9021	0,5127	0,009878213	399,2469231
ZjuHsp70-10	2	orange1.1g007552m	scaffold	52,4443	0,5326	0,010155536	403,4176923
ZjuHsp70-10	2	orange1.1g009246m	scaffold	51,5188	0,4805	0,009326692	396,2984615
ZjuHsp70-10	2	orange1.1g009882m	scaffold	50,5848	0,4944	0,009773687	389,1138462
ZjuHsp70-10	2	orange1.1g038511m	scaffold	51,8216	0,5290	0,010208099	398,6276923
ZjuHsp70-10	2	orange1.1g010228m	scaffold	50,2457	0,5326	0,010599912	386,5053846
ZjuHsp70-10	2	orange1.1g011367m	scaffold	52,8172	0,4879	0,009237521	406,2861538
ZjuHsp70-10	2	orange1.1g014165m	scaffold	50,8334	0,5364	0,010552117	391,0261538
ZjuHsp70-10	2	orange1.1g005824m	scaffold	49,4391	0,6392	0,012929038	380,3007692
ZjuHsp70-10	2	orange1.1g041815m	scaffold	49,8880	0,5761	0,011547867	383,7538462
ZjuHsp70-11	3	orange1.1g006381m	scaffold	1,6208	0,0776	0,047877591	12,46769231
ZjuHsp70-11	3	orange1.1g043296m	scaffold	50,2378	0,1506	0,002997743	386,4446154
ZjuHsp70-11	3	orange1.1g038511m	scaffold	13,0294	0,1398	0,010729581	100,2261538
ZjuHsp70-11	3	orange1.1g009246m	scaffold	1,2533	0,0956	0,076278624	9,640769231
ZjuHsp70-11	3	orange1.1g009882m	scaffold	1,1635	0,7776	0,66832832	8,95
ZjuHsp70-11	3	orange1.1g005955m	scaffold	53,0286	0,3608	0,006803876	407,9123077
ZjuHsp70-11	3	orange1.1g006194m	scaffold	35,9769	0,3443	0,00957003	276,7453846
ZjuHsp70-11	3	orange1.1g041815m	scaffold	2,5751	0,1813	0,070405033	19,80846154
ZjuHsp70-11	3	orange1.1g005824m	scaffold	2,3408	0,2806	0,119873548	18,00615385
ZjuHsp70-11	3	orange1.1g007552m	scaffold	54,3492	0,4188	0,007705725	418,0707692
ZjuHsp70-11	3	orange1.1g010543m	scaffold	52,3763	0,2978	0,005685778	402,8946154
ZjuHsp70-11	3	orange1.1g043979m	scaffold	52,4660	0,1799	0,003428887	403,5846154
ZjuHsp70-11	3	orange1.1g014219m	scaffold	2,8038	0,2109	0,075219345	21,56769231
ZjuHsp70-11	3	orange1.1g010228m	scaffold	4,3075	16,4061	3,808728961	33,13461538
ZjuHsp70-11	3	orange1.1g036208m	scaffold	3,1836	0,0410	0,012878502	24,48923077
ZjuHsp70-11	3	orange1.1g011367m	scaffold	52,9985	0,3771	0,007115296	407,6807692
ZjuHsp70-11	3	orange1.1g041209m	scaffold	23,2326	0,1709	0,007356043	178,7123077
ZjuHsp70-11	3	orange1.1g005807m	scaffold	46,1923	0,5013	0,010852458	355,3253846
ZjuHsp70-11	3	orange1.1g014165m	scaffold	52,6313	0,3186	0,006053432	404,8561538
ZjuHsp70-11	3	orange1.1g005099m	scaffold	29,4096	0,5237	0,017807111	226,2276923
ZjuHsp70-12	3	orange1.1g006381m	scaffold	1,5541	0,0190	0,012225726	11,95461538
ZjuHsp70-12	3	orange1.1g043296m	scaffold	10,6570	0,0968	0,009083232	81,97692308
ZjuHsp70-12	3	orange1.1g038511m	scaffold	11,6890	0,0806	0,006895372	89,91538462
ZjuHsp70-12	3	orange1.1g009246m	scaffold	1,3296	0,0797	0,05994284	10,22769231
ZjuHsp70-12	3	orange1.1g009882m	scaffold	34,4787	8,05114	0,233510544	265,2207692
ZjuHsp70-12	3	orange1.1g005955m	scaffold	55,4569	0,3003	0,005415016	426,5915385
ZjuHsp70-12	3	orange1.1g006194m	scaffold	19,0263	0,2938	0,015441783	146,3561538
ZjuHsp70-12	3	orange1.1g007552m	scaffold	56,5977	0,3527	0,006231702	435,3669231
ZjuHsp70-12	3	orange1.1g041815m	scaffold	3,5424	0,1962	0,055386179	27,24923077
ZjuHsp70-12	3	orange1.1g005824m	scaffold	4,7304	0,3463	0,07320734	36,38769231
ZjuHsp70-12	3	orange1.1g043979m	scaffold	12,0224	0,1181	0,00982333	92,48
ZjuHsp70-12	3	orange1.1g010543m	scaffold	54,0711	0,2711	0,005013769	415,9315385
ZjuHsp70-12	3	orange1.1g014219m	scaffold	2,8146	0,1978	0,070276416	21,65076923
ZjuHsp70-12	3	orange1.1g011367m	scaffold	56,0435	0,3055	0,005451123	431,1038462
ZjuHsp70-12	3	orange1.1g010228m	scaffold	53,3749	0,3118	0,005841697	410,5761538
ZjuHsp70-12	3	orange1.1g041209m	scaffold	12,7481	0,0967	0,007585444	98,06230769
ZjuHsp70-12	3	orange1.1g036208m	scaffold	6,7936	0,0268	0,003944889	52,25846154
ZjuHsp70-12	3	orange1.1g020168m	scaffold	4,3304	0,0370	0,008544245	33,31076923
ZjuHsp70-12	3	orange1.1g014165m	scaffold	54,3312	0,2914	0,005363401	417,9323077
ZjuHsp70-12	3	orange1.1g005807m	scaffold	51,8629	0,4479	0,008636231	398,9453846
ZjuHsp70-13	3	orange1.1g006381m	scaffold	1,4678	0,0196	0,013353318	11,29076923
ZjuHsp70-13	3	orange1.1g043296m	scaffold	17,2505	0,0895	0,005188255	132,6961538
ZjuHsp70-13	3	orange1.1g038511m	scaffold	10,9751	0,0752	0,006851874	84,42384615
ZjuHsp70-13	3	orange1.1g009246m	scaffold	1,2047	0,0867	0,071968125	9,266923077
ZjuHsp70-13	3	orange1.1g009882m	scaffold	1,1466	0,0648	0,056514914	8,82
ZjuHsp70-13	3	orange1.1g005955m	scaffold	54,5270	0,3008	0,005516533	419,4384615
ZjuHsp70-13	3	orange1.1g006194m	scaffold	22,3227	0,2939	0,01316597	171,7130769
ZjuHsp70-13	3	orange1.1g007552m	scaffold	55,8256	0,3525	0,006314307	429,4276923
ZjuHsp70-13	3	orange1.1g041815m	scaffold	2,4945	0,2103	0,084305472	19,18846154

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-13	3	orange1.1g005824m	scaffold	3,9893	0,3495	0,087609355	30,68692308
ZjuHsp70-13	3	orange1.1g043979m	scaffold	14,6896	0,1149	0,00782186	112,9969231
ZjuHsp70-13	3	orange1.1g010543m	scaffold	54,0307	0,2781	0,005147074	415,6207692
ZjuHsp70-13	3	orange1.1g011367m	scaffold	54,7297	0,3059	0,005589287	420,9976923
ZjuHsp70-13	3	orange1.1g041209m	scaffold	11,6254	0,0946	0,008137354	89,42615385
ZjuHsp70-13	3	orange1.1g010228m	scaffold	53,3453	0,3196	0,005991156	410,3484615
ZjuHsp70-13	3	orange1.1g014219m	scaffold	2,6878	0,2036	0,075749684	20,67538462
ZjuHsp70-13	3	orange1.1g036208m	scaffold	4,4112	0,0300	0,006800871	33,93230769
ZjuHsp70-13	3	orange1.1g020168m	scaffold	4,6153	0,0287	0,006218447	35,50230769
ZjuHsp70-13	3	orange1.1g005807m	scaffold	47,9195	0,4566	0,00952848	368,6115385
ZjuHsp70-13	3	orange1.1g014165m	scaffold	54,3827	0,2970	0,005461296	418,3284615
ZjuHsp70-13	3	orange1.1g005099m	scaffold	39,9633	0,4962	0,012416392	307,41
ZjuHsp70-14	4	orange1.1g002363m	scaffold	1,5375	0,1852	0,120455285	11,82692308
ZjuHsp70-14	4	orange1.1g002367m	scaffold	1,5375	0,1852	#BAŞV!	11,82692308
ZjuHsp70-14	4	orange1.1g003782m	scaffold	1,4949	0,1648	0,110241488	11,49923077
ZjuHsp70-14	4	orange1.1g003784m	scaffold	1,4949	0,1648	0,109530772	11,49923077
ZjuHsp70-14	4	orange1.1g004058m	scaffold	1,5046	0,1648	0,024844837	11,57384615
ZjuHsp70-14	4	orange1.1g004282m	scaffold	37,4766	0,9311	0,024844837	288,2815385
ZjuHsp70-14	4	orange1.1g004296m	scaffold	0,1587	15,7134	99,01323251	1,220769231
ZjuHsp70-14	4	orange1.1g005222m	scaffold	54,5935	0,9134	0,01673093	419,95
ZjuHsp70-14	4	orange1.1g004211m	scaffold	54,1320	0,8938	0,01651149	416,4
ZjuHsp70-14	4	orange1.1g004210m	scaffold	54,1358	0,8938	0,016510331	416,4292308
ZjuHsp70-14	4	orange1.1g005530m	scaffold	54,6782	0,8705	0,015920422	420,6015385
ZjuHsp70-14	4	orange1.1g005521m	scaffold	54,6813	0,8704	0,01591769	420,6253846
ZjuHsp70-14	4	orange1.1g043296m	scaffold	27,4452	0,8423	0,030690248	211,1169231
ZjuHsp70-14	4	orange1.1g014165m	scaffold	38,4473	0,7337	0,019083265	295,7484615
ZjuHsp70-14	4	orange1.1g010543m	scaffold	53,9203	0,7739	0,014352665	414,7715385
ZjuHsp70-14	4	orange1.1g005955m	scaffold	52,6153	0,8757	0,016643448	404,7330769
ZjuHsp70-14	4	orange1.1g006194m	scaffold	52,4125	0,8494	0,016206058	403,1730769
ZjuHsp70-14	4	orange1.1g010228m	scaffold	38,2404	0,7760	0,020292675	294,1569231
ZjuHsp70-14	4	orange1.1g006381m	scaffold	13,3885	0,8540	0,063786085	102,9884615
ZjuHsp70-14	4	orange1.1g038511m	scaffold	27,4320	0,8724	0,031802275	211,0153846
ZjuHsp70-14	4	orange1.1g009882m	scaffold	15,4243	0,7877	0,051068768	118,6484615
ZjuHsp70-14	4	orange1.1g009246m	scaffold	15,1793	0,7941	0,052314665	116,7638462
ZjuHsp70-14	4	orange1.1g041815m	scaffold	10,8746	0,8311	0,0764258	83,65076923
ZjuHsp70-14	4	orange1.1g005824m	scaffold	13,9949	0,9047	0,064644978	107,6530769
ZjuHsp70-14	4	orange1.1g004867m	scaffold	54,9353	0,8739	0,015907804	422,5792308
ZjuHsp70-14	4	orange1.1g003056m	scaffold	55,0367	0,8890	0,016152858	423,3592308
ZjuHsp70-14	4	orange1.1g003290m	scaffold	54,8251	0,8842	0,01612765	421,7315385
ZjuHsp70-15	7	orange1.1g008233m	scaffold	0,9826	0,0971	0,098819459	7,558461538
ZjuHsp70-15	7	orange1.1g008241m	scaffold	0,9826	0,0971	0,098819459	7,558461538
ZjuHsp70-15	7	orange1.1g043296m	scaffold	11,5727	0,6965	0,060184745	89,02076923
ZjuHsp70-15	7	orange1.1g043296m	scaffold	11,5785	0,6965	0,060154597	89,06538462
ZjuHsp70-15	7	orange1.1g006381m	scaffold	34,0072	0,7389	0,021272752	261,5938462
ZjuHsp70-15	7	orange1.1g009882m	scaffold	47,8041	0,7099	0,014850191	367,7238462
ZjuHsp70-15	7	orange1.1g009246m	scaffold	47,9417	0,7302	0,015230999	368,7823077
ZjuHsp70-15	7	orange1.1g006194m	scaffold	45,7394	0,7754	0,016952562	351,8415385
ZjuHsp70-15	7	orange1.1g038511m	scaffold	12,1625	0,7391	0,060768756	93,55769231
ZjuHsp70-15	7	orange1.1g005955m	scaffold	49,5603	0,8231	0,016608051	381,2330769
ZjuHsp70-15	7	orange1.1g010543m	scaffold	49,6132	0,7860	0,015842558	381,64
ZjuHsp70-15	7	orange1.1g005807m	scaffold	8,3115	0,8413	0,1012212	63,93461538
ZjuHsp70-15	7	orange1.1g007552m	scaffold	50,2360	0,8322	0,016565809	386,4307692
ZjuHsp70-15	7	orange1.1g010228m	scaffold	49,1387	0,8513	0,017324431	377,99
ZjuHsp70-15	7	orange1.1g047849m	scaffold	9,4812	0,8605	0,090758554	72,93230769
ZjuHsp70-15	7	orange1.1g047555m	scaffold	47,4175	0,8864	0,01869352	364,75
ZjuHsp70-15	7	orange1.1g005099m	scaffold	47,8871	0,8878	0,01853944	368,3623077
ZjuHsp70-15	7	orange1.1g043979m	scaffold	7,4747	0,7116	0,095201145	57,49769231
ZjuHsp70-16	9	orange1.1g006194m	scaffold	1,8072	0,3232	0,178840195	13,90153846
ZjuHsp70-16	9	orange1.1g014165m	scaffold	56,2512	0,3810	0,006773189	432,7015385
ZjuHsp70-16	9	orange1.1g010543m	scaffold	55,8621	0,3771	0,006750552	429,7084615
ZjuHsp70-16	9	orange1.1g010228m	scaffold	55,7190	0,3787	0,006796604	428,6076923
ZjuHsp70-16	9	orange1.1g005955m	scaffold	55,8521	0,3769	0,00674818	429,6315385
ZjuHsp70-16	9	orange1.1g007552m	scaffold	58,8998	0,3796	0,006444844	453,0753846
ZjuHsp70-16	9	orange1.1g043296m	scaffold	9,5545	0,4940	0,051703386	73,49615385
ZjuHsp70-16	9	orange1.1g009882m	scaffold	5,8724	0,4909	0,083594442	45,17230769
ZjuHsp70-16	9	orange1.1g009246m	scaffold	5,8732	0,4909	0,083583055	45,17846154
ZjuHsp70-16	9	orange1.1g006381m	scaffold	15,9708	0,5128	0,032108598	122,8523077
ZjuHsp70-16	9	orange1.1g038511m	scaffold	9,7163	0,5168	0,053188971	74,74076923
ZjuHsp70-16	9	orange1.1g041815m	scaffold	37,7272	0,5813	0,015407982	290,2092308

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-16	9	orange1.1g005824m	scaffold	20,4694	0,5921	0,028926104	157,4569231
ZjuHsp70-16	9	orange1.1g014219m	scaffold	24,1261	0,6137	0,025437182	185,5853846
ZjuHsp70-16	9	orange1.1g036208m	scaffold	10,5989	0,4573	0,043145987	81,53
ZjuHsp70-16	9	orange1.1g005807m	scaffold	4,7111	0,6989	0,148351765	36,23923077
ZjuHsp70-16	9	orange1.1g011367m	scaffold	58,2628	0,3547	0,006087933	448,1753846
ZjuHsp70-16	9	orange1.1g047555m	scaffold	52,7064	0,7545	0,01431515	405,4338462
ZjuHsp70-16	9	orange1.1g047849m	scaffold	37,7147	0,6936	0,018390707	290,1130769
ZjuHsp70-16	9	orange1.1g005099m	scaffold	52,8676	0,7509	0,014203406	406,6738462
ZjuHsp70-16	9	orange1.1g048693m	scaffold	32,5932	0,5698	0,017482174	250,7169231
ZjuHsp70-17	9	orange1.1g005807m	scaffold	1,0219	0,0640	0,062628437	7,860769231
ZjuHsp70-17	9	orange1.1g047849m	scaffold	1,2487	0,0569	0,04556739	9,605384615
ZjuHsp70-17	9	orange1.1g005099m	scaffold	51,6070	0,4114	0,007971787	396,9769231
ZjuHsp70-17	9	orange1.1g005955m	scaffold	55,0170	0,4803	0,008730029	423,2076923
ZjuHsp70-17	9	orange1.1g047555m	scaffold	28,3659	0,3686	0,012994476	218,1992308
ZjuHsp70-17	9	orange1.1g006194m	scaffold	7,2100	0,5076	0,070402219	55,46153846
ZjuHsp70-17	9	orange1.1g043296m	scaffold	53,6130	0,4461	0,008320743	412,4076923
ZjuHsp70-17	9	orange1.1g006381m	scaffold	53,9145	0,4485	0,008318727	414,7269231
ZjuHsp70-17	9	orange1.1g007552m	scaffold	56,8457	0,4923	0,008660286	437,2746154
ZjuHsp70-17	9	orange1.1g009882m	scaffold	29,4916	0,3998	0,013556403	7,860769231
ZjuHsp70-17	9	orange1.1g009246m	scaffold	48,4162	0,4175	0,008623147	372,4323077
ZjuHsp70-17	9	orange1.1g010543m	scaffold	43,9054	0,4348	0,00990311	337,7338462
ZjuHsp70-17	9	orange1.1g038511m	scaffold	54,2387	0,4598	0,008819025	413,3546154
ZjuHsp70-17	9	orange1.1g010228m	scaffold	53,7361	0,4739	0,008381543	438,7846154
ZjuHsp70-17	9	orange1.1g011367m	scaffold	57,0420	0,4781	0,008381543	438,7846154
ZjuHsp70-17	9	orange1.1g014165m	scaffold	13,1691	0,4706	0,035735168	101,3007692
ZjuHsp70-18	11	orange1.1g005955m	scaffold	0,9953	0,0256	0,025720888	7,656153846
ZjuHsp70-18	11	orange1.1g006194m	scaffold	34,2930	0,1091	0,003181407	263,7923077
ZjuHsp70-18	11	orange1.1g007552m	scaffold	1,2899	0,0683	0,052949841	9,922307692
ZjuHsp70-18	11	orange1.1g010543m	scaffold	0,8839	0,0338	0,03823962	6,799230769
ZjuHsp70-18	11	orange1.1g010228m	scaffold	1,0507	0,0665	0,063291139	8,082307692
ZjuHsp70-18	11	orange1.1g011367m	scaffold	1,2589	0,0320	0,025419017	9,683846154
ZjuHsp70-18	11	orange1.1g006381m	scaffold	53,2489	0,2978	0,00592604	409,6069231
ZjuHsp70-18	11	orange1.1g043296m	scaffold	55,4929	0,2851	0,005137594	426,8684615
ZjuHsp70-18	11	orange1.1g014165m	scaffold	0,8672	0,0371	0,042781365	6,670769231
ZjuHsp70-18	11	orange1.1g038511m	scaffold	54,0609	0,2955	0,005466058	415,8530769
ZjuHsp70-18	11	orange1.1g009246m	scaffold	54,2037	0,3333	0,006149027	416,9515385
ZjuHsp70-18	11	orange1.1g009882m	scaffold	53,7679	0,3123	0,005808298	413,5992308
ZjuHsp70-18	11	orange1.1g005807m	scaffold	53,6978	0,4861	0,009052512	413,06
ZjuHsp70-18	11	orange1.1g005099m	scaffold	53,7919	0,5271	0,009798873	413,7838462
ZjuHsp70-18	11	orange1.1g047849m	scaffold	54,3703	0,4957	0,00911711	418,2330769
ZjuHsp70-18	11	orange1.1g041815m	scaffold	50,7193	0,4479	0,008830958	390,1484615
ZjuHsp70-18	11	orange1.1g005824m	scaffold	51,3151	0,5440	0,010601168	394,7315385
ZjuHsp70-18	11	orange1.1g047555m	scaffold	52,9106	0,4758	0,008992527	407,0046154
ZjuHsp70-18	11	orange1.1g043979m	scaffold	54,0101	0,3319	0,006145147	415,4623077
ZjuHsp70-19	11	orange1.1g006381m	scaffold	1,0313	0,0120	0,011635799	7,933076923
ZjuHsp70-19	11	orange1.1g043296m	scaffold	9,2138	0,0895	0,00971369	70,87538462
ZjuHsp70-19	11	orange1.1g038511m	scaffold	8,6260	0,0704	0,008161373	66,35384615
ZjuHsp70-19	11	orange1.1g009246m	scaffold	1,7939	0,0761	0,04242154	13,79923077
ZjuHsp70-19	11	orange1.1g009882m	scaffold	1,7853	0,0557	0,031199238	13,73307692
ZjuHsp70-19	11	orange1.1g005955m	scaffold	53,7542	0,2999	0,005579099	413,4938462
ZjuHsp70-19	11	orange1.1g006194m	scaffold	12,6527	0,2938	0,02322034	97,32846154
ZjuHsp70-19	11	orange1.1g007552m	scaffold	54,9924	0,3515	0,006391792	423,0184615
ZjuHsp70-19	11	orange1.1g041815m	scaffold	2,2655	0,1971	0,087000662	17,42692308
ZjuHsp70-19	11	orange1.1g005824m	scaffold	3,0265	0,3410	0,112671403	23,28076923
ZjuHsp70-19	11	orange1.1g043979m	scaffold	12,6102	0,1081	0,008572425	97,00153846
ZjuHsp70-19	11	orange1.1g010543m	scaffold	12,2572	0,2706	0,02207682	94,28615385
ZjuHsp70-19	11	orange1.1g014219m	scaffold	2,2681	0,1924	0,084828711	17,44692308
ZjuHsp70-19	11	orange1.1g041209m	scaffold	9,0424	0,0910	0,0100637	69,55692308
ZjuHsp70-19	11	orange1.1g011367m	scaffold	53,9618	0,3052	0,005655853	415,0907692
ZjuHsp70-19	11	orange1.1g010228m	scaffold	52,8243	0,3151	0,005965058	406,3407692
ZjuHsp70-19	11	orange1.1g036208m	scaffold	5,7917	0,0250	0,004316522	44,55153846
ZjuHsp70-19	11	orange1.1g020168m	scaffold	2,4275	0,0345	0,014212152	18,67307692
ZjuHsp70-19	11	orange1.1g014165m	scaffold	29,2212	0,2925	0,010009856	224,7784615
ZjuHsp70-19	11	orange1.1g005807m	scaffold	51,6842	0,4531	0,008766702	397,5707692
ZjuHsp70-20	NW	orange1.1g006194m	scaffold	1,4197	0,0993	0,069944354	10,92076923
ZjuHsp70-20	NW	orange1.1g005955m	scaffold	26,4715	0,1296	0,004895831	203,6269231
ZjuHsp70-20	NW	orange1.1g007552m	scaffold	25,9681	0,1297	0,00499459	199,7546154
ZjuHsp70-20	NW	orange1.1g011367m	scaffold	25,0043	0,1406	0,005623033	192,3407692
ZjuHsp70-20	NW	orange1.1g043296m	scaffold	55,4746	0,3015	0,00543492	426,7276923

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-20	NW	orange1.1g006381m	scaffold	20,1035	0,3330	0,01656428	154,6423077
ZjuHsp70-20	NW	orange1.1g010543m	scaffold	14,3342	0,0981	0,006843772	110,2630769
ZjuHsp70-20	NW	orange1.1g038511m	scaffold	54,4138	3,168	0,058220525	418,5676923
ZjuHsp70-20	NW	orange1.1g010228m	scaffold	33,5676	0,1452	0,0043256	258,2123077
ZjuHsp70-20	NW	orange1.1g009882m	scaffold	13,9765	0,3394	0,024283619	107,5115385
ZjuHsp70-20	NW	orange1.1g009246m	scaffold	16,1010	0,0983	0,006105211	123,8538462
ZjuHsp70-20	NW	orange1.1g014165m	scaffold	15,9796	0,0982	0,006145335	122,92
ZjuHsp70-20	NW	orange1.1g043979m	scaffold	53,3794	0,3694	0,006920273	410,6107692
ZjuHsp70-20	NW	orange1.1g005807m	scaffold	5,9705	0,4778	0,080026798	45,92692308
ZjuHsp70-20	NW	orange1.1g005099m	scaffold	52,4297	0,4965	0,009469823	403,3053846
ZjuHsp70-20	NW	orange1.1g041209m	scaffold	52,5121	0,3436	0,006543254	403,9392308
ZjuHsp70-20	NW	orange1.1g047555m	scaffold	51,4030	0,3967	0,007717448	395,4076923
ZjuHsp70-20	NW	orange1.1g047849m	scaffold	20,7306	0,4899	0,023631733	159,4661538
ZjuHsp70-20	NW	orange1.1g020168m	scaffold	4,2571	0,3840	0,09020225	32,74692308
ZjuHsp70-20	NW	orange1.1g041815m	scaffold	22,5722	0,5074	0,022478979	173,6323077
ZjuHsp70-20	NW	orange1.1g048693m	scaffold	53,1498	0,6516	0,012259689	408,8446154
ZjuHsp70-21	NW	orange1.1g006194m	scaffold	1,4736	0,0980	0,0665038	11,33538462
ZjuHsp70-21	NW	orange1.1g005955m	scaffold	51,7966	0,1155	0,002229876	398,4353846
ZjuHsp70-21	NW	orange1.1g010543m	scaffold	53,9274	0,119	0,00220667	414,8261538
ZjuHsp70-21	NW	orange1.1g007552m	scaffold	53,1840	0,1627	0,003059191	409,1076923
ZjuHsp70-21	NW	orange1.1g010228m	scaffold	43,8742	0,1434	0,003268436	337,4938462
ZjuHsp70-21	NW	orange1.1g043296m	scaffold	12,4373	0,2799	0,022504885	95,67153846
ZjuHsp70-21	NW	orange1.1g006381m	scaffold	21,0994	0,3022	0,014322682	162,3030769
ZjuHsp70-21	NW	orange1.1g014165m	scaffold	37,4109	0,1145	0,003060605	287,7761538
ZjuHsp70-21	NW	orange1.1g038511m	scaffold	13,1225	0,3096	0,023593065	100,9423077
ZjuHsp70-21	NW	orange1.1g011367m	scaffold	51,3596	0,1221	0,002377355	395,0738462
ZjuHsp70-21	NW	orange1.1g009246m	scaffold	16,5350	0,3439	0,020798307	127,1923077
ZjuHsp70-21	NW	orange1.1g009882m	scaffold	18,4321	0,3294	0,017870997	141,7853846
ZjuHsp70-21	NW	orange1.1g005807m	scaffold	8,4107	0,4510	0,053622172	64,69769231
ZjuHsp70-21	NW	orange1.1g005099m	scaffold	52,2851	0,5118	0,00978864	402,1930769
ZjuHsp70-21	NW	orange1.1g041815m	scaffold	49,8462	0,4527	0,009081936	383,4323077
ZjuHsp70-21	NW	orange1.1g047849m	scaffold	14,2255	0,4614	0,032434712	109,4269231
ZjuHsp70-21	NW	orange1.1g005824m	scaffold	51,2739	0,5257	0,01025278	394,4146154
ZjuHsp70-21	NW	orange1.1g047555m	scaffold	52,0503	0,4771	0,009166134	400,3869231
ZjuHsp70-21	NW	orange1.1g014219m	scaffold	41,7672	0,3856	0,009232125	321,2861538
Mean				29,40896675	0,700119757	0,023806336	226,2228211

Z. jujuba – *M. accuminata*

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-01	1	GSMUA_Achr8T20830_001	8	61,404	0,0759	0,001236076	472,3384615
ZjuHsp70-01	1	GSMUA_Achr10T00900_001	10	8,0082	0,0791	0,009877376	61,60153846
ZjuHsp70-01	1	GSMUA_Achr4T11940_001	4	54,9118	0,2847	0,005184678	422,3984615
ZjuHsp70-01	1	GSMUA_Achr5T04580_001	5	49,9705	0,0906	0,00181307	384,3884615
ZjuHsp70-01	1	GSMUA_Achr9T23710_001	9	25	0,2736	0,011131907	189,0615385
ZjuHsp70-01	1	GSMUA_Achr3T27250_001	3	32,3174	0,2794	0,008645497	248,5953846
ZjuHsp70-01	1	GSMUA_Achr9T03960_001	9	7,5093	0,0821	0,01093311	57,76384615
ZjuHsp70-01	1	GSMUA_Achr8T34360_001	8	13,6414	0,2214	0,016230006	104,9338462
ZjuHsp70-01	1	GSMUA_Achr7T15160_001	7	7,1485	0,0836	0,011694761	54,98846154
ZjuHsp70-01	1	GSMUA_Achr6T15270_001	6	18,453	0,1031	0,005587167	141,9461538
ZjuHsp70-01	1	GSMUA_Achr5T10770_001	5	6,8036	0,3173	0,046637074	52,33538462
ZjuHsp70-01	1	GSMUA_Achr4T19830_001	4	15,3889	0,4597	0,029872181	118,3761538
ZjuHsp70-02	1	GSMUA_Achr10T09990_001	10	7,0876	0,2612	0,036853096	54,52
ZjuHsp70-02	1	GSMUA_Achr7T09800_001	7	54,3096	0,3846	0,007081621	417,7661538
ZjuHsp70-02	1	GSMUA_Achr2T15830_001	2	13,2002	12,9473	0,980841199	101,54
ZjuHsp70-02	1	GSMUA_Achr2T19660_001	2	0,1721	17,0379	99	1,323846154
ZjuHsp70-02	1	GSMUA_Achr5T06230_001	5	15,3332	12,3899	0,808043983	117,9476923
ZjuHsp70-02	1	GSMUA_Achr10T20220_001	10	13,0361	12,9898	0,996448324	100,2776923
ZjuHsp70-02	1	GSMUA_Achr6T09420_001	6	52,9428	0,9338	0,017637904	407,2523077
ZjuHsp70-02	1	GSMUA_Achr8T20830_001	8	13,3358	0,8954	0,067142579	102,5830769
ZjuHsp70-02	1	GSMUA_Achr4T11940_001	4	52,4237	0,8734	0,016660404	403,2592308
ZjuHsp70-02	1	GSMUA_Achr4T19830_001	4	2,9141	0,9335	0,320339041	22,41615385
ZjuHsp70-03	1	GSMUA_Achr7T09800_001	7	4,4764	0,1239	0,027678492	34,43384615
ZjuHsp70-03	1	GSMUA_Achr2T15830_001	2	3,5359	0,1307	0,036963715	27,19923077
ZjuHsp70-03	1	GSMUA_Achr5T06230_001	5	3,7716	0,1372	0,036377134	29,01230769
ZjuHsp70-03	1	GSMUA_Achr2T19660_001	2	3,4903	0,1445	0,041400453	26,84846154
ZjuHsp70-03	1	GSMUA_Achr10T09990_001	10	17,1588	0,3896	0,022705551	131,9907692
ZjuHsp70-03	1	GSMUA_Achr8T20830_001	8	52,4643	0,7956	0,015164598	403,5715385

Table S3.4 Continued

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-03	1	GSMUA_Achr4T11940_001	4	51,0326	0,8502	0,016659939	392,5584615
ZjuHsp70-03	1	GSMUA_Achr10T20220_001	10	54,0016	0,9443	0,017486519	415,3969231
ZjuHsp70-03	1	GSMUA_Achr8T20830_001	8	7,8981	0,0871	0,011027969	60,75461538
ZjuHsp70-03	1	GSMUA_Achr10T00900_001	10	6,4939	0,0981	0,015106485	49,95307692
ZjuHsp70-03	1	GSMUA_Achr4T11940_001	4	52,5768	0,2917	0,005548074	404,4369231
ZjuHsp70-03	1	GSMUA_Achr5T04580_001	5	65,6402	0,1093	0,001665138	504,9246154
ZjuHsp70-03	1	GSMUA_Achr9T23710_001	9	51,2154	0,2789	0,005445628	393,9646154
ZjuHsp70-04	1	GSMUA_Achr9T03960_001	9	7,4054	0,0987	0,013328112	56,96461538
ZjuHsp70-04	1	GSMUA_Achr3T27250_001	3	52,41452	0,2904	0,005540449	403,1886154
ZjuHsp70-04	1	GSMUA_Achr7T15160_001	7	10,6819	0,0904	0,008462914	82,16846154
ZjuHsp70-04	1	GSMUA_Achr6T15270_001	6	9,2316	0,1072	0,011612288	71,01230769
ZjuHsp70-04	1	GSMUA_Achr8T34360_001	8	5,8240	0,2399	0,041191621	44,8
ZjuHsp70-04	1	GSMUA_Achr5T10770_001	5	7,1376	0,3183	0,044594822	54,90461538
ZjuHsp70-04	1	GSMUA_Achr4T19830_001	4	50,3547	0,4662	0,009258321	387,3438462
ZjuHsp70-04	1	GSMUA_Achr8T20830_001	8	4,6979	0,0818	0,017412035	36,13769231
ZjuHsp70-04	1	GSMUA_Achr10T00900_001	10	4,2734	0,0920	0,021528525	32,87230769
ZjuHsp70-04	1	GSMUA_Achr4T11940_001	4	43,2066	0,2864	0,006628617	332,3584615
ZjuHsp70-04	1	GSMUA_Achr5T04580_001	5	65,0941	0,0993	0,001525484	500,7238462
ZjuHsp70-05	1	GSMUA_Achr9T23710_001	9	23,3768	0,2713	0,011605523	179,8215385
ZjuHsp70-05	1	GSMUA_Achr9T03960_001	9	5,3491	0,0895	0,016731787	41,14692308
ZjuHsp70-05	1	GSMUA_Achr3T27250_001	3	7,7359	0,2888	0,037332437	59,50692308
ZjuHsp70-05	1	GSMUA_Achr7T15160_001	7	7,2818	0,0899	0,012345849	56,01384615
ZjuHsp70-05	1	GSMUA_Achr8T34360_001	8	5,5666	0,2260	0,040599289	42,82
ZjuHsp70-05	1	GSMUA_Achr6T15270_001	6	7,9053	0,1056	0,013358127	60,81
ZjuHsp70-05	1	GSMUA_Achr5T10770_001	5	4,3115	0,3082	0,071483242	33,16538462
ZjuHsp70-05	1	GSMUA_Achr4T19830_001	4	28,6742	0,4930	0,017193156	220,5707692
ZjuHsp70-06	2	GSMUA_Achr8T20830_001	8	2,3666	0,0410	0,017324432	18,20461538
ZjuHsp70-06	2	GSMUA_Achr10T00900_001	10	6,8494	0,0456	0,006657517	52,68769231
ZjuHsp70-06	2	GSMUA_Achr4T11940_001	4	52,5319	0,2930	0,005577563	404,0915385
ZjuHsp70-06	2	GSMUA_Achr9T03960_001	9	5,5248	0,0470	0,008507095	42,49846154
ZjuHsp70-06	2	GSMUA_Achr5T04580_001	5	44,5241	0,1166	0,002618806	342,4930769
ZjuHsp70-06	2	GSMUA_Achr7T15160_001	7	2,5553	0,0498	0,019488905	19,65615385
ZjuHsp70-06	2	GSMUA_Achr9T23710_001	9	43,9376	0,2736	0,006227013	337,9815385
ZjuHsp70-06	2	GSMUA_Achr6T15270_001	6	5,7387	0,0844	0,014707164	44,14384615
ZjuHsp70-06	2	GSMUA_Achr3T27250_001	3	32,3141	0,2829	0,008754692	248,57
ZjuHsp70-06	2	GSMUA_Achr8T34360_001	8	8,3328	0,1889	0,022669451	64,09846154
ZjuHsp70-06	2	GSMUA_Achr5T10770_001	5	11,8567	0,3162	0,026668466	91,20538462
ZjuHsp70-06	2	GSMUA_Achr4T19830_001	4	16,0310	0,4454	0,027783669	123,3153846
ZjuHsp70-06	2	GSMUA_Achr4T19830_001	4	16,0366	0,4454	0,027773967	123,3584615
ZjuHsp70-08	2	GSMUA_Achr4T11940_001	4	33,3950	0,0999	0,002991466	256,8846154
ZjuHsp70-08	2	GSMUA_Achr9T23710_001	9	28,6571	0,0958	0,003342976	220,4392308
ZjuHsp70-08	2	GSMUA_Achr3T27250_001	3	24,7622	0,1013	0,004090913	190,4784615
ZjuHsp70-08	2	GSMUA_Achr8T20830_001	8	22,5407	0,2937	0,013029764	173,39
ZjuHsp70-08	2	GSMUA_Achr5T10770_001	5	13,7814	0,1387	0,01006429	106,0107692
ZjuHsp70-08	2	GSMUA_Achr10T00900_001	10	18,6671	0,3143	0,016837109	143,5930769
ZjuHsp70-08	2	GSMUA_Achr8T34360_001	8	46,7460	0,3846	0,008227442	359,5846154
ZjuHsp70-08	2	GSMUA_Achr9T03960_001	9	50,0501	0,2819	0,005632356	385,0007692
ZjuHsp70-08	2	GSMUA_Achr5T04580_001	5	54,1222	0,3325	0,006143505	416,3246154
ZjuHsp70-08	2	GSMUA_Achr6T28370_001	6	51,1484	0,4846	0,009474392	393,4492308
ZjuHsp70-08	2	GSMUA_Achr3T12480_001	3	52,2913	0,4906	0,009382058	402,2407692
ZjuHsp70-08	2	GSMUA_Achr9T07750_001	9	51,6347	0,4941	0,009569146	397,19
ZjuHsp70-08	2	GSMUA_Achr6T15270_001	6	22,8590	0,30388	0,01329367	175,8384615
ZjuHsp70-08	2	GSMUA_Achr4T11940_001	4	42,2222	0,1321	0,003128686	324,7861538
ZjuHsp70-09	2	GSMUA_Achr9T23710_001	9	38,8474	0,1274	0,003279499	298,8261538
ZjuHsp70-09	2	GSMUA_Achr3T27250_001	3	25,2510	0,1324	0,005243357	194,2384615
ZjuHsp70-09	2	GSMUA_Achr8T20830_001	8	12,8871	0,3181	0,024683598	99,13153846
ZjuHsp70-09	2	GSMUA_Achr5T10770_001	5	53,0036	0,1642	0,003097903	407,72
ZjuHsp70-09	2	GSMUA_Achr4T19830_001	4	10,3157	0,5100	0,049439204	79,35153846
ZjuHsp70-09	2	GSMUA_Achr10T00900_001	10	5,8302	0,3378	0,057939693	44,84769231
ZjuHsp70-09	2	GSMUA_Achr6T28370_001	6	50,4002	0,5261	0,010438451	387,6938462
ZjuHsp70-09	2	GSMUA_Achr5T04580_001	5	55,9383	0,3407	0,006090639	430,2946154
ZjuHsp70-09	2	GSMUA_Achr3T12480_001	3	46,6573	0,4839	0,010371367	358,9023077
ZjuHsp70-09	2	GSMUA_Achr9T03960_001	9	12,4324	0,3059	0,024605064	95,63384615
ZjuHsp70-09	2	GSMUA_Achr9T07750_001	9	51,2211	0,5323	0,010392202	394,0084615
ZjuHsp70-09	2	GSMUA_Achr6T15270_001	6	52,3438	0,3216	0,006143994	402,6446154
ZjuHsp70-09	2	GSMUA_Achr6T12370_001	6	50,3031	0,5639	0,011210045	386,9469231
ZjuHsp70-09	2	GSMUA_Achr8T34360_001	8	49,8752	0,4276	0,008573399	383,6553846
ZjuHsp70-10	2	GSMUA_Achr6T28370_001	6	3,2040	0,0769	0,024001248	24,64615385
ZjuHsp70-10	2	GSMUA_Achr9T07750_001	9	2,7146	0,0886	0,032638326	20,88153846

Table S3.4 Continued

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-10	2	GSMUA_Achr6T12370_001	6	3,6928	0,1137	0,030789645	28,40615385
ZjuHsp70-10	2	GSMUA_Achr4T19830_001	4	48,7327	0,4329	0,008883152	374,8669231
ZjuHsp70-10	2	GSMUA_Achr3T12480_001	3	48,7323	0,4328	0,008881173	374,8638462
ZjuHsp70-10	2	GSMUA_Achr4T11940_001	4	50,2378	0,5561	0,011069354	386,4446154
ZjuHsp70-10	2	GSMUA_Achr8T20830_001	8	52,8453	0,4996	0,00945401	406,5023077
ZjuHsp70-10	2	GSMUA_Achr9T23710_001	9	50,2639	0,4919	0,009786348	386,6453846
ZjuHsp70-10	2	GSMUA_Achr3T27250_001	3	49,7559	0,4986	0,010020922	382,7376923
ZjuHsp70-10	2	GSMUA_Achr6T36350_001	6	24,9457	0,4460	0,017878833	191,89
ZjuHsp70-10	2	GSMUA_Achr5T10770_001	5	50,7037	0,5718	0,011277284	390,0284615
ZjuHsp70-10	2	GSMUA_Achr8T34360_001	8	49,6015	0,5713	0,011517797	381,55
ZjuHsp70-10	2	GSMUA_Achr5T04580_001	5	56,4677	0,5644	0,009995095	434,3669231
ZjuHsp70-11	3	GSMUA_Achr8T20830_001	8	7,6810	0,0961	0,012511392	59,08461538
ZjuHsp70-11	3	GSMUA_Achr10T00900_001	10	18,6168	0,1230	0,006606936	143,2061538
ZjuHsp70-11	3	GSMUA_Achr4T11940_001	4	52,9352	0,3406	0,006434282	407,1938462
ZjuHsp70-11	3	GSMUA_Achr9T23710_001	9	50,6277	0,3399	0,006713716	389,4438462
ZjuHsp70-11	3	GSMUA_Achr5T04580_001	5	42,5553	0,1714	0,0040277	327,3484615
ZjuHsp70-11	3	GSMUA_Achr9T03960_001	9	54,9264	0,1505	0,00274003	422,5107692
ZjuHsp70-11	3	GSMUA_Achr3T27250_001	3	47,5435	0,3564	0,007496293	365,7192308
ZjuHsp70-11	3	GSMUA_Achr8T34360_001	8	7,3778	0,2389	0,032380927	56,75230769
ZjuHsp70-11	3	GSMUA_Achr7T15160_001	7	56,7214	0,1241	0,002187887	436,3184615
ZjuHsp70-11	3	GSMUA_Achr6T15270_001	6	11,2371	0,1507	0,013410933	86,43923077
ZjuHsp70-11	3	GSMUA_Achr4T19830_001	4	50,7819	0,4752	0,009357665	390,63
ZjuHsp70-11	3	GSMUA_Achr5T10770_001	5	25,6904	0,3550	0,013818391	197,6184615
ZjuHsp70-12	3	GSMUA_Achr8T20830_001	8	5,3807	0,0277	0,005148029	41,39
ZjuHsp70-12	3	GSMUA_Achr10T00900_001	10	16,7824	0,0321	0,001912718	129,0953846
ZjuHsp70-12	3	GSMUA_Achr4T11940_001	4	54,2744	0,2845	0,005241882	147,4953846
ZjuHsp70-12	3	GSMUA_Achr9T03960_001	9	18,8151	0,0368	0,001955876	444,7315385
ZjuHsp70-12	3	GSMUA_Achr9T23710_001	9	48,4050	0,2678	0,005532486	372,3461538
ZjuHsp70-12	3	GSMUA_Achr5T04580_001	5	37,8429	0,1157	0,003057377	291,0992308
ZjuHsp70-12	3	GSMUA_Achr7T15160_001	7	16,1150	0,0276	0,00171269	123,9615385
ZjuHsp70-12	3	GSMUA_Achr3T27250_001	3	30,9602	0,2763	0,008924361	238,1553846
ZjuHsp70-12	3	GSMUA_Achr6T15270_001	6	4,8023	0,0847	0,017637382	36,94076923
ZjuHsp70-12	3	GSMUA_Achr8T34360_001	8	6,0835	0,1963	0,032267609	46,79615385
ZjuHsp70-12	3	GSMUA_Achr5T10770_001	5	15,1065	0,3100	0,020520968	116,2038462
ZjuHsp70-12	3	GSMUA_Achr4T19830_001	4	51,5400	0,4589	0,008903764	396,4615385
ZjuHsp70-13	3	GSMUA_Achr8T20830_001	4	4,1357	0,0272	0,006576879	31,81307692
ZjuHsp70-13	3	GSMUA_Achr10T00900_001	8	12,9861	0,0310	0,002387168	99,89307692
ZjuHsp70-13	3	GSMUA_Achr4T11940_001	10	53,4053	0,2914	0,005456387	410,81
ZjuHsp70-13	3	GSMUA_Achr9T03960_001	4	10,9613	0,0335	0,003056207	84,31769231
ZjuHsp70-13	3	GSMUA_Achr9T23710_001	9	51,7312	0,2773	0,005360401	397,9323077
ZjuHsp70-13	3	GSMUA_Achr3T27250_001	3	43,2980	0,2827	0,00652917	333,0615385
ZjuHsp70-13	3	GSMUA_Achr5T04580_001	5	33,7535	0,1180	0,003495934	259,6423077
ZjuHsp70-13	3	GSMUA_Achr7T15160_001	7	10,9032	0,0249	0,002283733	83,87076923
ZjuHsp70-13	3	GSMUA_Achr6T15270_001	6	5,0261	0,0828	0,016474006	38,66230769
ZjuHsp70-13	3	GSMUA_Achr8T34360_001	8	7,1220	0,2001	0,02809604	54,78461538
ZjuHsp70-13	3	GSMUA_Achr5T10770_001	5	24,4585	0,3107	0,01270315	188,1423077
ZjuHsp70-13	3	GSMUA_Achr4T19830_001	4	51,5719	0,4620	0,008958367	396,7069231
ZjuHsp70-14	4	GSMUA_Achr6T09420_001	6	2,8034	0,2298	0,081971891	21,56461538
ZjuHsp70-14	4	GSMUA_Achr10T20220_001	10	2,5422	0,2249	0,088466682	19,55538462
ZjuHsp70-14	4	GSMUA_Achr10T09990_001	10	21,1440	0,8860	0,04190314	162,6461538
ZjuHsp70-14	4	GSMUA_Achr7T09800_001	7	53,6889	0,9358	0,017430046	412,9915385
ZjuHsp70-14	4	GSMUA_Achr2T19660_001	2	52,3009	0,9240	0,017667	402,3146154
ZjuHsp70-14	4	GSMUA_Achr5T06230_001	5	54,5940	0,9218	0,016884639	419,9538462
ZjuHsp70-14	4	GSMUA_Achr4T11940_001	4	49,7488	0,8664	0,017415495	382,6830769
ZjuHsp70-14	4	GSMUA_Achr8T20830_001	8	7,1515	0,8597	0,120212543	55,01153846
ZjuHsp70-14	4	GSMUA_Achr9T23710_001	9	50,5508	0,8080	0,015983921	388,8523077
ZjuHsp70-14	4	GSMUA_Achr3T27250_001	3	44,2822	0,8143	0,018388879	340,6323077
ZjuHsp70-15	7	GSMUA_Achr9T19260_001	9	2,6273	0,2053	0,078141057	20,21
ZjuHsp70-15	7	GSMUA_Achr8T20830_001	8	7,0624	0,7390	0,10463865	54,32615385
ZjuHsp70-15	7	GSMUA_Achr8T20830_001	8	7,0622	0,7390	0,104641613	54,32461538
ZjuHsp70-15	7	GSMUA_Achr4T11940_001	4	47,2664	0,8043	0,017016316	363,5876923
ZjuHsp70-15	7	GSMUA_Achr8T34360_001	8	46,3939	0,7543	0,016258603	356,8761538
ZjuHsp70-15	7	GSMUA_Achr9T23710_001	9	48,2984	0,8146	0,016865983	371,5261538
ZjuHsp70-15	7	GSMUA_Achr4T19830_001	4	49,1225	0,8470	0,017242608	377,8653846
ZjuHsp70-15	7	GSMUA_Achr3T27250_001	3	47,8701	0,8150	0,017025241	368,2315385
ZjuHsp70-15	7	GSMUA_Achr9T07750_001	9	46,2027	0,8922	0,01931056	355,4053846
ZjuHsp70-15	7	GSMUA_Achr6T28370_001	6	46,3671	0,9343	0,020150063	356,67
ZjuHsp70-15	7	GSMUA_Achr3T12480_001	3	30,5195	0,8095	0,026524026	234,7653846
ZjuHsp70-16	9	GSMUA_Achr4T11940_001	4	54,3951	0,3811	0,007006146	418,4238462

Table S3.4 Continued

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-16	9	GSMUA_Achr9T23710_001	9	53,3856	0,3665	0,006865147	410,6584615
ZjuHsp70-16	9	GSMUA_Achr9T23710_001	9	53,3678	0,3666	0,006869311	410,5215385
ZjuHsp70-16	9	GSMUA_Achr3T27250_001	3	53,6821	0,3872	0,007212833	412,9392308
ZjuHsp70-16	9	GSMUA_Achr8T20830_001	8	20,8380	0,5182	0,02486803	160,2923077
ZjuHsp70-16	9	GSMUA_Achr5T10770_001	5	14,5428	0,4108	0,028247655	111,8676923
ZjuHsp70-16	9	GSMUA_Achr10T00900_001	10	6,8300	0,5539	0,081098097	52,53846154
ZjuHsp70-16	9	GSMUA_Achr4T19830_001	4	34,3350	0,6681	0,019458279	264,1153846
ZjuHsp70-16	9	GSMUA_Achr8T34360_001	8	52,8184	0,5784	0,010950729	406,2953846
ZjuHsp70-16	9	GSMUA_Achr5T04580_001	5	58,8113	0,5582	0,009491373	452,3946154
ZjuHsp70-16	9	GSMUA_Achr6T28370_001	6	50,1549	0,7650	0,015252747	385,8069231
ZjuHsp70-17	9	GSMUA_Achr4T19830_001	4	3,3067	0,0984	0,029757765	25,43615385
ZjuHsp70-17	9	GSMUA_Achr3T12480_001	3	3,4243	0,0750	0,021902287	26,34076923
ZjuHsp70-17	9	GSMUA_Achr6T36350_001	6	15,7376	0,1309	0,00831766	121,0584615
ZjuHsp70-17	9	GSMUA_Achr6T28370_001	6	48,0331	0,4230	0,008806427	369,4853846
ZjuHsp70-17	9	GSMUA_Achr9T07750_001	9	48,2791	0,3967	0,008216806	371,3776923
ZjuHsp70-17	9	GSMUA_Achr6T12370_001	6	48,2832	0,4211	0,00872146	371,4092308
ZjuHsp70-17	9	GSMUA_Achr4T11940_001	4	53,4934	0,5065	0,009468458	411,4876923
ZjuHsp70-17	9	GSMUA_Achr8T20830_001	8	52,9697	0,4424	0,008351945	407,4592308
ZjuHsp70-17	9	GSMUA_Achr9T23710_001	9	52,4370	0,4729	0,009018441	403,3615385
ZjuHsp70-17	9	GSMUA_Achr3T27250_001	3	29,9115	0,4851	0,016217843	230,0884615
ZjuHsp70-17	9	GSMUA_Achr7T05820_001	7	6,1229	0,2148	0,035081416	47,09923077
ZjuHsp70-17	9	GSMUA_Achr5T10770_001	5	53,0153	0,5173	0,009757561	407,81
ZjuHsp70-17	9	GSMUA_AchrUn_randomT12910_001		7,5447	0,1335	0,017694541	58,03615385
ZjuHsp70-17	9	GSMUA_Achr8T34360_001	8	49,2280	0,5295	0,010756074	378,6769231
ZjuHsp70-18	11	GSMUA_Achr4T11940_001	4	2,4374	0,0485	0,019898252	18,74923077
ZjuHsp70-18	11	GSMUA_Achr9T23710_001	9	1,6157	0,0411	0,025437891	12,42846154
ZjuHsp70-18	11	GSMUA_Achr3T27250_001	3	1,7054	0,0453	0,026562683	13,11846154
ZjuHsp70-18	11	GSMUA_Achr5T10770_001	5	1,7967	0,0963	0,053598263	13,82076923
ZjuHsp70-18	11	GSMUA_Achr8T20830_001	8	54,6184	0,2960	0,005419419	420,1415385
ZjuHsp70-18	11	GSMUA_Achr4T19830_001	4	52,3477	0,4825	0,009217215	402,6746154
ZjuHsp70-18	11	GSMUA_Achr10T00900_001	10	57,6772	0,3175	0,005504775	443,6707692
ZjuHsp70-18	11	GSMUA_Achr9T03960_001	9	51,9866	0,2742	0,005274436	399,8969231
ZjuHsp70-18	11	GSMUA_Achr5T04580_001	5	56,3617	0,3280	0,005819555	433,5515385
ZjuHsp70-18	11	GSMUA_Achr6T28370_001	6	50,2533	0,5036	0,010021232	386,5638462
ZjuHsp70-18	11	GSMUA_Achr8T34360_001	8	51,4193	0,3856	0,00749913	395,5330769
ZjuHsp70-18	11	GSMUA_Achr9T07750_001	9	51,3159	0,5210	0,010152799	394,7376923
ZjuHsp70-18	11	GSMUA_Achr3T12480_001	3	50,8862	0,4768	0,009369927	391,4323077
ZjuHsp70-18	11	GSMUA_Achr6T12370_001	6	50,4024	0,5290	0,010495532	387,7107692
ZjuHsp70-19	11	GSMUA_Achr8T20830_001	8	3,3859	0,0291	0,008594465	26,04538462
ZjuHsp70-19	11	GSMUA_Achr10T00900_001	10	9,4205	0,0297	0,003152699	72,46538462
ZjuHsp70-19	11	GSMUA_Achr4T11940_001	4	13,0860	0,2867	0,02190891	100,6615385
ZjuHsp70-19	11	GSMUA_Achr9T03960_001	9	4,1447	0,0302	0,007286414	31,88230769
ZjuHsp70-19	11	GSMUA_Achr7T15160_001	7	3,7814	0,0244	0,006452637	29,08769231
ZjuHsp70-19	11	GSMUA_Achr5T04580_001	5	52,3865	0,1259	0,002403291	402,9730769
ZjuHsp70-19	11	GSMUA_Achr9T23710_001	9	15,7997	0,2686	0,017000323	121,5361538
ZjuHsp70-19	11	GSMUA_Achr3T27250_001	3	7,9016	0,2843	0,035980055	60,78153846
ZjuHsp70-19	11	GSMUA_Achr6T15270_001	6	4,4411	0,0806	0,018148657	34,16230769
ZjuHsp70-19	11	GSMUA_Achr8T34360_001	8	4,6616	0,1982	0,042517591	35,85846154
ZjuHsp70-19	11	GSMUA_Achr5T10770_001	5	4,7207	0,3140	0,066515559	36,31307692
ZjuHsp70-19	11	GSMUA_Achr4T19830_001	4	50,8597	0,4620	0,009083813	391,2284615
ZjuHsp70-20	NW	GSMUA_Achr4T11940_001	4	52,0132	0,1406	0,00270316	400,1015385
ZjuHsp70-20	NW	GSMUA_Achr9T23710_001	9	44,7342	0,1313	0,002935115	344,1092308
ZjuHsp70-20	NW	GSMUA_Achr3T27250_001	3	44,2792	0,1392	0,003143688	340,6092308
ZjuHsp70-20	NW	GSMUA_Achr8T20830_001	8	16,5939	0,3251	0,019591537	127,6453846
ZjuHsp70-20	NW	GSMUA_Achr5T10770_001	5	9,6074	0,1636	0,017028541	73,90307692
ZjuHsp70-20	NW	GSMUA_Achr10T00900_001	10	8,5310	0,3338	0,039127887	65,62307692
ZjuHsp70-20	NW	GSMUA_Achr6T28370_001	6	51,2469	0,4702	0,009175189	394,2069231
ZjuHsp70-20	NW	GSMUA_Achr9T07750_001	9	52,3603	0,4730	0,009033562	402,7715385
ZjuHsp70-20	NW	GSMUA_Achr4T19830_001	4	6,1895	0,5140	0,083043865	47,61153846
ZjuHsp70-20	NW	GSMUA_Achr6T12370_001	6	50,7218	0,5085	0,010025275	390,1676923
ZjuHsp70-20	NW	GSMUA_Achr3T12480_001	3	14,9802	0,4781	0,031915462	115,232077
ZjuHsp70-20	NW	GSMUA_Achr7T15160_001	7	22,5315	0,3257	0,014455318	173,3192308
ZjuHsp70-20	NW	GSMUA_Achr5T04580_001	5	56,7614	0,3382	0,005958274	436,6261538
ZjuHsp70-20	NW	GSMUA_Achr9T03960_001	9	36,3099	0,3016	0,008306275	279,3069231
ZjuHsp70-21	NW	GSMUA_Achr4T11940_001	4	49,5832	0,1252	0,002525049	381,4092308
ZjuHsp70-21	NW	GSMUA_Achr9T23710_001	9	49,9513	0,1395	0,00279272	384,2407692
ZjuHsp70-21	NW	GSMUA_Achr3T27250_001	3	48,1995	0,1528	0,003170157	370,7653846
ZjuHsp70-21	NW	GSMUA_Achr8T20830_001	8	14,1157	0,2963	0,020990812	108,5823077
ZjuHsp70-21	NW	GSMUA_Achr5T10770_001	5	52,3002	0,1928	0,00368641	402,3092308

Table S3.4 Continued

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-21	NW	GSMUA_Achr4T19830_001	4	45,0486	0,4547	0,010093543	346,5276923
ZjuHsp70-21	NW	GSMUA_Achr3T12480_001	3	17,7978	0,4042	0,022710672	136,9061538
ZjuHsp70-21	NW	GSMUA_Achr10T00900_001	10	7,1274	0,3161	0,044349973	54,82615385
ZjuHsp70-21	NW	GSMUA_Achr6T28370_001	6	50,1277	0,4930	0,009834882	385,5976923
ZjuHsp70-21	NW	GSMUA_Achr5T04580_001	5	57,1883	0,3200	0,005595555	439,91
ZjuHsp70-21	NW	GSMUA_Achr9T07750_001	9	50,5914	0,5015	0,009912752	389,1646154
ZjuHsp70-21	NW	GSMUA_Achr6T12370_001	6	50,3792	0,5004	0,009932671	387,5323077
ZjuHsp70-21	NW	GSMUA_Achr8T34360_001	8	49,4615	0,4414	0,008924113	380,4730769
ZjuHsp70-21	NW	GSMUA_Achr6T15270_001	6	52,3860	0,3621	0,006912152	402,9692308
ZjuHsp70-21	NW	GSMUA_Achr9T03960_001	9	51,7147	0,2825	0,005462663	397,8053846
		Mean		30,713	0,558972163	0,018199582	236,257397

Z. jujuba – P. persica

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-01	1	Prupe.7G265200.1	7	1,4212	0,0394	0,027723051	10,93230769
ZjuHsp70-01	1	Prupe.3G102300.1	3	2,8798	0,0494	0,017153969	22,15230769
ZjuHsp70-01	1	Prupe.3G102200.1	3	2,8318	0,0489	0,017268169	21,78307692
ZjuHsp70-01	1	Prupe.2G233500.1	2	19,2417	0,0742	0,003856208	148,0130769
ZjuHsp70-01	1	Prupe.6G252500.1	6	14,8976	0,0779	0,00522903	114,5969231
ZjuHsp70-01	1	Prupe.6G079800.1	6	14,9765	0,0836	0,005582079	115,2038462
ZjuHsp70-01	1	Prupe.5G125900.1	5	14,3111	0,2987	0,020871911	110,0853846
ZjuHsp70-01	1	Prupe.6G321700.1	6	12,4192	0,981	0,078990595	95,53230769
ZjuHsp70-01	1	Prupe.2G234200.1	2	15,1205	0,2179	0,014410899	116,3115385
ZjuHsp70-01	1	Prupe.2G234200.	2	11,7052	0,2155	0,018410621	90,04
ZjuHsp70-01	1	Prupe.6G079700.1	6	10,5799	0,1976	0,018676925	81,38384615
ZjuHsp70-01	1	Prupe.2G234300.1	2	13,0033	0,2401	0,018464544	100,0253846
ZjuHsp70-01	1	Prupe.7G106700.1	7	11,678	0,2545	0,021793115	89,83076923
ZjuHsp70-01	1	Prupe.7G108500.1	7	16,1894	0,2509	0,015497795	124,5338462
ZjuHsp70-01	1	Prupe.7G107700.1	7	17,4063	0,256	0,014707319	133,8946154
ZjuHsp70-01	1	Prupe.7G107700.2	7	17,1046	0,253	0,014791343	131,5738462
ZjuHsp70-01	1	Prupe.7G106500.1	7	11,9447	0,252	0,021097223	91,88230769
ZjuHsp70-01	1	Prupe.7G107800.1	7	14,5629	0,2484	0,017057042	112,0223077
ZjuHsp70-01	1	Prupe.7G107400.3	7	15,1441	0,2541	0,016778812	116,4930769
ZjuHsp70-01	1	Prupe.7G107400.1	7	15,1443	0,2541	0,01677859	116,4946154
ZjuHsp70-01	1	Prupe.7G107400.2	7	15,1864	0,2541	0,016732076	116,8184615
ZjuHsp70-01	1	Prupe.7G108100.1	7	18,4775	0,2594	0,014038696	142,1346154
ZjuHsp70-01	1	Prupe.5G125900.2	5	7,3406	0,2896	0,039451816	56,46615385
ZjuHsp70-01	1	Prupe.7G107600.3	7	6,6745	0,2982	0,044677504	51,34230769
ZjuHsp70-01	1	Prupe.7G107600.4	7	6,6737	0,2982	0,04468286	51,33615385
ZjuHsp70-01	1	Prupe.7G107600.1	7	6,674	0,2982	0,044680851	51,33846154
ZjuHsp70-01	1	Prupe.7G107600.2	7	6,6737	0,2982	0,04468286	51,33615385
ZjuHsp70-01	1	Prupe.7G107900.1	7	7,7754	0,2964	0,038120225	59,81076923
ZjuHsp70-01	1	Prupe.7G108200.1	7	9,831	0,2901	0,029508697	75,62307692
ZjuHsp70-01	1	Prupe.7G108000.1	7	11,2103	0,2935	0,02618128	86,23307692
ZjuHsp70-01	1	Prupe.7G106600.1	7	12,8857	0,3228	0,025051026	99,12076923
ZjuHsp70-01	1	Prupe.2G234400.1	2	29,1681	0,2468	0,008461298	224,37
ZjuHsp70-01	1	Prupe.5G125900.3	5	11,0957	0,3133	0,028236164	85,35153846
ZjuHsp70-01	1	Prupe.8G075000.1	8	21,1689	0,457	0,021588273	162,8376923
ZjuHsp70-01	1	Prupe.8G075000.2	8	14,7744	0,4544	0,030755902	113,6492308
ZjuHsp70-01	1	Prupe.3G077000.1	3	12,4682	0,4841	0,038826775	95,90923077
ZjuHsp70-01	1	Prupe.1G078200.1	1	50,7154	0,4992	0,009843164	390,1184615
ZjuHsp70-01	1	Prupe.1G078200.2	1	50,662	0,4979	0,009827879	389,7076923
ZjuHsp70-02	1	Prupe.4G212200.1	4	0,6615	0,1255	0,189720333	5,088461538
ZjuHsp70-02	1	Prupe.3G071300.3	3	12,783	0,3833	0,029985137	98,33076923
ZjuHsp70-02	1	Prupe.3G071300.2	3	17,3163	0,3832	0,022129439	133,2023077
ZjuHsp70-02	1	Prupe.3G071300.1	3	17,2888	0,3832	0,022164638	132,9907692
ZjuHsp70-02	1	Prupe.3G187600.1	3	3,6006	16,5448	4,595011942	27,69692308
ZjuHsp70-02	1	Prupe.3G187600.2	3	3,6006	16,5448	4,595011942	27,69692308
ZjuHsp70-02	1	Prupe.7G265200.1	7	10,1235	0,8502	0,083982812	77,87307692
ZjuHsp70-02	1	Prupe.2G233500.1	2	31,7913	0,8716	0,027416306	244,5484615
ZjuHsp70-02	1	Prupe.6G321700.1	6	6,5325	0,8286	0,12684271	50,25
ZjuHsp70-02	1	Prupe.3G102200.1	3	10,3934	0,8867	0,085313757	79,94923077
ZjuHsp70-02	1	Prupe.5G125900.1	5	9,1757	0,8869	0,096657476	70,58230769
ZjuHsp70-02	1	Prupe.3G102300.1	3	10,0691	0,8888	0,088270054	77,45461538
ZjuHsp70-02	1	Prupe.6G079800.1	6	13,9759	0,8615	0,061641826	107,5069231
ZjuHsp70-02	1	Prupe.6G252500.1	6	18,8631	0,9049	0,047971966	145,1107692
ZjuHsp70-02	1	Prupe.5G125900.2	5	7,5923	0,8264	0,108847121	58,40230769

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-02	1	Prupe.5G125900.3	5	7,3448	0,7976	0,108593835	56,49846154
ZjuHsp70-02	1	Prupe.8G075000.1	8	53,1185	0,9070	0,01707503	408,6038462
ZjuHsp70-02	1	Prupe.3G077000.1	3	10,6581	0,8872	0,083241854	81,98538462
ZjuHsp70-02	1	Prupe.7G106500.1	7	9,1718	0,8557	0,093296845	70,55230769
ZjuHsp70-02	1	Prupe.7G106700.1	7	7,3989	0,8408	0,113638514	56,91461538
ZjuHsp70-02	1	Prupe.7G107700.2	7	0,3660	15,8335	43,26092896	2,815384615
ZjuHsp70-02	1	Prupe.7G107700.1	7	0,2979	15,8488	53,20174555	2,291538462
ZjuHsp70-02	1	Prupe.7G107800.1	7	8,3303	0,8410	0,100956748	64,07923077
ZjuHsp70-03	1	Prupe.3G071300.3	3	0,9597	0,0783	0,081587996	7,382307692
ZjuHsp70-03	1	Prupe.3G071300.2	3	0,9597	0,0783	0,081587996	7,382307692
ZjuHsp70-03	1	Prupe.3G071300.1	3	0,9597	0,0783	0,081587996	7,382307692
ZjuHsp70-03	1	Prupe.4G212200.1	4	21,3656	0,3769	0,017640506	164,3507692
ZjuHsp70-03	1	Prupe.7G265200.1	7	50,3742	0,7815	0,015513894	387,4938462
ZjuHsp70-03	1	Prupe.2G233500.1	2	52,1249	0,7902	0,015159741	400,9607692
ZjuHsp70-03	1	Prupe.6G252500.1	6	49,7648	0,8122	0,016320773	382,8061538
ZjuHsp70-03	1	Prupe.3G102300.1	3	51,9913	0,8057	0,015496824	399,9330769
ZjuHsp70-03	1	Prupe.3G102200.1	3	51,8741	0,8119	0,015651356	399,0315385
ZjuHsp70-03	1	Prupe.6G079800.1	6	53,0067	0,7770	0,014658524	407,7438462
ZjuHsp70-03	1	Prupe.6G321700.1	6	54,4394	0,7811	0,014348064	418,7646154
ZjuHsp70-03	1	Prupe.3G187600.1	3	55,037	0,8907	0,016183658	423,3615385
ZjuHsp70-03	1	Prupe.3G187600.2	3	55,706	0,8906	0,015987506	428,5076923
ZjuHsp70-03	1	Prupe.7G106500.1	7	52,3120	0,7907	0,015115079	402,4
ZjuHsp70-03	1	Prupe.7G106700.1	7	52,7293	0,7902	0,014985976	405,61
ZjuHsp70-03	1	Prupe.5G125900.1	5	51,1301	0,8298	0,016229188	393,3084615
ZjuHsp70-03	1	Prupe.5G125900.3	5	53,092	0,7712	0,014525729	408,4
ZjuHsp70-03	1	Prupe.5G125900.2	5	52,0856	0,7890	0,015148141	400,6584615
ZjuHsp70-03	1	Prupe.2G234200.1	2	53,605	0,8145	0,015194478	412,3461538
ZjuHsp70-03	1	Prupe.2G234300.1	2	53,3299	0,8253	0,015475371	410,23
ZjuHsp70-03	1	Prupe.2G234200.2	2	54,3821	0,7588	0,013953121	418,3238462
ZjuHsp70-03	1	Prupe.7G107700.2	7	54,0764	0,8447	0,015620492	415,9723077
ZjuHsp70-03	1	Prupe.7G107700.1	7	43,9618	3,8346	0,087225728	338,1676923
ZjuHsp70-03	1	Prupe.7G107800.1	7	52,5115	0,8415	0,016025061	403,9346154
ZjuHsp70-04	1	Prupe.7G265200.1	7	3,4630	0,0522	0,015073636	26,63846154
ZjuHsp70-04	1	Prupe.3G102300.1	3	1,3521	0,0518	0,038310776	10,40076923
ZjuHsp70-04	1	Prupe.3G102200.1	3	1,3330	0,0511	0,038334584	10,25384615
ZjuHsp70-04	1	Prupe.2G233500.1	2	12,4029	0,0864	0,006966113	95,40692308
ZjuHsp70-04	1	Prupe.6G079800.1	6	9,7023	0,0960	0,009894561	74,63307692
ZjuHsp70-04	1	Prupe.6G252500.1	6	9,4487	0,0887	0,009387535	72,68230769
ZjuHsp70-04	1	Prupe.6G321700.1	6	52,4351	0,2928	0,005584046	403,3469231
ZjuHsp70-04	1	Prupe.5G125900.1	5	52,8447	0,2944	0,005571041	406,4976923
ZjuHsp70-04	1	Prupe.2G234200.1	2	8,8389	0,2145	0,024267726	67,99153846
ZjuHsp70-04	1	Prupe.2G234200.2	2	8,9581	0,2238	0,024982976	68,90846154
ZjuHsp70-04	1	Prupe.6G079700.1	6	7,2846	0,2115	0,029033852	56,03538462
ZjuHsp70-04	1	Prupe.2G234300.1	2	9,0071	0,2409	0,026745567	69,28538462
ZjuHsp70-04	1	Prupe.7G107700.2	7	13,3122	0,2526	0,018975075	102,4015385
ZjuHsp70-04	1	Prupe.7G106700.1	7	10,6112	0,2559	0,024116028	81,62461538
ZjuHsp70-04	1	Prupe.7G107800.1	7	13,0956	0,2452	0,018723846	100,7353846
ZjuHsp70-04	1	Prupe.7G107700.1	7	12,3443	0,2586	0,02094894	94,95615385
ZjuHsp70-04	1	Prupe.7G108500.1	7	21,5448	0,2453	0,011385578	165,7292308
ZjuHsp70-04	1	Prupe.7G106500.1	7	14,4677	0,2576	0,01780518	111,29
ZjuHsp70-04	1	Prupe.7G107400.3	7	10,2204	0,2561	0,025057728	78,61846154
ZjuHsp70-04	1	Prupe.7G107400.1	7	10,2265	0,2561	0,025042781	78,66538462
ZjuHsp70-04	1	Prupe.7G107400.2	7	10,2188	0,2561	0,025061651	78,60615385
ZjuHsp70-04	1	Prupe.7G108100.1	7	13,1811	0,2567	0,019474854	101,3930769
ZjuHsp70-04	1	Prupe.5G125900.2	5	52,0152	0,2895	0,005565681	400,1169231
ZjuHsp70-04	1	Prupe.7G108200.1	7	9,2310	0,3020	0,032715849	71,00769231
ZjuHsp70-04	1	Prupe.7G107900.1	7	9,2161	0,3051	0,03310511	70,89307692
ZjuHsp70-04	1	Prupe.7G107600.3	7	8,7888	0,3039	0,034578099	67,60615385
ZjuHsp70-04	1	Prupe.7G107600.4	7	8,7901	0,3039	0,034572986	67,61615385
ZjuHsp70-04	1	Prupe.7G107600.1	7	8,7899	0,3039	0,034573772	67,61461538
ZjuHsp70-04	1	Prupe.7G108000.1	7	9,7729	0,3035	0,031055265	75,17615385
ZjuHsp70-04	1	Prupe.7G107600.2	7	8,7877	0,3039	0,034582428	67,59769231
ZjuHsp70-04	1	Prupe.7G106600.1	7	7,1301	0,3277	0,045960085	54,84692308
ZjuHsp70-04	1	Prupe.2G234400.1	2	13,3131	0,2557	0,019206646	102,4084615
ZjuHsp70-04	1	Prupe.8G075000.1	8	50,4694	0,4524	0,008963847	388,2261538
ZjuHsp70-04	1	Prupe.5G125900.3	5	52,1735	0,3182	0,006098882	401,3346154
ZjuHsp70-04	1	Prupe.8G075000.2	8	50,7192	0,4475	0,008823089	390,1476923
ZjuHsp70-04	1	Prupe.3G077000.1	3	48,9125	0,4738	0,009686685	376,25
ZjuHsp70-04	1	Prupe.1G078200.1	1	50,3464	0,4983	0,009897431	387,28

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-04	1	Prupe.1G078200.2	1	50,2585	0,4997	0,009942597	386,6038462
ZjuHsp70-05	1	Prupe.3G102300.1	3	1,2883	0,0394	0,030582939	9,91
ZjuHsp70-05	1	Prupe.3G102200.1	3	1,2728	0,0402	0,031583909	9,790769231
ZjuHsp70-05	1	Prupe.7G265200.1	7	3,4614	0,0486	0,014040562	26,62615385
ZjuHsp70-05	1	Prupe.2G233500.1	2	6,7449	0,0725	0,010748862	51,88384615
ZjuHsp70-05	1	Prupe.6G252500.1	6	7,9058	0,0782	0,009891472	60,81384615
ZjuHsp70-05	1	Prupe.6G079800.1	6	6,7050	0,0838	0,012498136	51,57692308
ZjuHsp70-05	1	Prupe.5G125900.1	5	52,4897	0,2941	0,005603004	403,7669231
ZjuHsp70-05	1	Prupe.6G321700.1	6	8,2162	0,2869	0,034918819	63,20153846
ZjuHsp70-05	1	Prupe.2G234200.2	2	7,5227	0,2188	0,029085302	57,86692308
ZjuHsp70-05	1	Prupe.2G234200.1	2	5,8705	0,2197	0,03742441	45,15769231
ZjuHsp70-05	1	Prupe.6G079700.1	6	7,2232	0,2014	0,027882379	55,56307692
ZjuHsp70-05	1	Prupe.2G234300.1	2	7,7558	0,2370	0,030557776	59,66
ZjuHsp70-05	1	Prupe.7G106700.1	7	9,7566	0,2572	0,026361642	75,05076923
ZjuHsp70-05	1	Prupe.7G107700.2	7	11,1827	0,2463	0,022025092	86,02076923
ZjuHsp70-05	1	Prupe.7G107700.1	7	11,4129	0,2494	0,021852465	87,79153846
ZjuHsp70-05	1	Prupe.7G107800.1	7	12,1243	0,2408	0,01986094	93,26384615
ZjuHsp70-05	1	Prupe.7G108500.1	7	15,0551	0,2461	0,01634662	115,8084615
ZjuHsp70-05	1	Prupe.7G106500.1	7	13,8043	0,2561	0,01855219	106,1869231
ZjuHsp70-05	1	Prupe.7G107400.3	7	10,5757	0,2475	0,023402706	81,35153846
ZjuHsp70-05	1	Prupe.7G107400.1	7	10,5656	0,2475	0,023425078	81,27384615
ZjuHsp70-05	1	Prupe.7G107400.2	7	10,5671	0,2475	0,02342173	81,28546154
ZjuHsp70-05	1	Prupe.7G108100.1	7	14,3874	0,2521	0,017522276	110,6723077
ZjuHsp70-05	1	Prupe.5G125900.2	5	9,8329	0,2871	0,029197897	75,63769231
ZjuHsp70-05	1	Prupe.7G107600.3	7	7,3751	0,2995	0,040609619	56,73153846
ZjuHsp70-05	1	Prupe.7G107600.4	7	7,3257	0,2995	0,040883465	56,35153846
ZjuHsp70-05	1	Prupe.7G107600.1	7	7,3731	0,2595	0,035195508	56,71615385
ZjuHsp70-05	1	Prupe.7G107900.1	7	7,6998	0,3019	0,039208811	59,22923077
ZjuHsp70-05	1	Prupe.7G108200.1	7	7,4254	0,2926	0,039405285	57,11846154
ZjuHsp70-05	1	Prupe.7G108000.1	7	7,2947	0,2969	0,040700783	56,11307692
ZjuHsp70-05	1	Prupe.7G106600.1	7	6,7583	0,3200	0,047349185	51,98692308
ZjuHsp70-05	1	Prupe.2G234400.1	2	11,3133	0,2560	0,022628234	87,02538462
ZjuHsp70-05	1	Prupe.5G125900.3	5	4,3114	0,3082	0,0714849	33,16461538
ZjuHsp70-05	1	Prupe.8G075000.1	8	39,7379	0,4667	0,011744456	305,6761538
ZjuHsp70-05	1	Prupe.8G075000.2	8	36,2093	0,4623	0,012767438	278,5330769
ZjuHsp70-05	1	Prupe.3G077000.1	3	37,5676	0,4648	0,012372363	288,9815385
ZjuHsp70-05	1	Prupe.1G078200.1	1	51,3731	0,5060	0,009849513	395,1776923
ZjuHsp70-05	1	Prupe.1G078200.2	1	51,3224	0,5048	0,009835861	394,7876923
ZjuHsp70-06	2	Prupe.2G233500.1	2	2,7753	0,0377	0,013584117	21,34846154
ZjuHsp70-06	2	Prupe.6G252500.1	6	3,6239	0,0373	0,010292778	27,87615385
ZjuHsp70-06	2	Prupe.6G079800.1	6	4,5771	0,0459	0,010028184	35,20846154
ZjuHsp70-06	2	Prupe.7G265200.1	7	5,6765	0,0724	0,012754338	43,66538462
ZjuHsp70-06	2	Prupe.3G102200.1	3	7,9307	0,0744	0,009381265	61,00538462
ZjuHsp70-06	2	Prupe.3G102300.1	3	7,6164	0,0748	0,009820913	58,58769231
ZjuHsp70-06	2	Prupe.5G125900.1	5	53,5803	0,3003	0,005604672	412,1561538
ZjuHsp70-06	2	Prupe.6G321700.1	6	8,7096	0,3030	0,034789198	66,99692308
ZjuHsp70-06	2	Prupe.2G234200.1	2	3,3531	0,1901	0,056693806	25,79307692
ZjuHsp70-06	2	Prupe.2G234200.2	2	3,0980	0,1888	0,060942544	23,83076923
ZjuHsp70-06	2	Prupe.6G079700.1	6	2,4642	0,1749	0,070976382	18,95538462
ZjuHsp70-06	2	Prupe.2G234300.1	2	4,1963	0,2090	0,049805781	32,27923077
ZjuHsp70-06	2	Prupe.7G108500.1	7	6,9958	0,2237	0,031976329	53,81384615
ZjuHsp70-06	2	Prupe.7G106700.1	7	6,6897	0,2319	0,034665232	51,45923077
ZjuHsp70-06	2	Prupe.7G107800.1	7	6,3673	0,2254	0,03539962	48,97923077
ZjuHsp70-06	2	Prupe.7G107800.1	7	6,3669	0,2254	0,035401844	48,97615385
ZjuHsp70-06	2	Prupe.7G107700.2	7	6,2823	0,2312	0,036801808	48,32538462
ZjuHsp70-06	2	Prupe.7G107700.1	7	6,4268	0,2342	0,036441153	49,43692308
ZjuHsp70-06	2	Prupe.7G106500.1	7	7,9254	0,2336	0,029474853	60,96461538
ZjuHsp70-06	2	Prupe.7G107400.3	7	5,3323	0,2337	0,043827242	41,01769231
ZjuHsp70-06	2	Prupe.7G107400.1	7	5,3330	0,2337	0,043821489	41,02307692
ZjuHsp70-06	2	Prupe.7G107400.2	7	5,3332	0,2337	0,043819845	41,02461538
ZjuHsp70-06	2	Prupe.7G108100.1	7	9,0321	0,2363	0,026162244	69,47769231
ZjuHsp70-06	2	Prupe.7G107900.1	7	4,3882	0,2700	0,061528645	33,75538462
ZjuHsp70-06	2	Prupe.5G125900.2	5	53,3468	0,2845	0,005333028	410,36
ZjuHsp70-06	2	Prupe.7G108200.1	7	4,9446	0,2717	0,054948833	38,03538462
ZjuHsp70-06	2	Prupe.7G108000.1	7	5,6995	0,2729	0,047881393	43,84230769
ZjuHsp70-06	2	Prupe.7G106600.1	7	5,8819	0,3037	0,051632976	45,24538462
ZjuHsp70-06	2	Prupe.7G107600.3	7	4,7607	0,2720	0,057134455	36,62076923
ZjuHsp70-06	2	Prupe.7G107600.4	7	4,7604	0,2720	0,057138056	36,61846154
ZjuHsp70-06	2	Prupe.7G107600.1	7	4,7608	0,2720	0,057133255	36,62153846

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-06	2	Prupe.7G107600.2	7	4,7605	0,2720	0,057136855	36,61923077
ZjuHsp70-06	2	Prupe.8G075000.1	8	12,1528	0,4378	0,03602462	93,48307692
ZjuHsp70-06	2	Prupe.5G125900.3	5	53,5856	0,3113	0,005809397	412,1969231
ZjuHsp70-06	2	Prupe.8G075000.2	8	15,8586	0,4362	0,027505581	121,9892308
ZjuHsp70-06	2	Prupe.3G077000.1	3	16,1712	0,4608	0,028495102	124,3938462
ZjuHsp70-06	2	Prupe.1G078200.1	1	52,6267	0,4931	0,009369769	404,8207692
ZjuHsp70-06	2	Prupe.1G078200.2	1	52,5781	0,4917	0,009351802	404,4469231
ZjuHsp70-08	2	Prupe.6G321700.1	6	0,9094	0,0464	0,051022652	6,995384615
ZjuHsp70-08	2	Prupe.5G125900.1	5	19,8262	0,0949	0,004786596	152,5092308
ZjuHsp70-08	2	Prupe.5G125900.2	5	14,4023	0,0929	0,006450359	110,7869231
ZjuHsp70-08	2	Prupe.7G265200.1	7	15,8832	0,2770	0,017439811	122,1784615
ZjuHsp70-08	2	Prupe.3G102200.1	3	9,5295	0,2786	0,029235532	73,30384615
ZjuHsp70-08	2	Prupe.3G102300.1	3	9,9382	0,2794	0,028113743	76,44769231
ZjuHsp70-08	2	Prupe.2G233500.1	2	18,1824	0,2945	0,016196982	139,8646154
ZjuHsp70-08	2	Prupe.6G252500.1	6	14,1287	0,2974	0,021049353	108,6823077
ZjuHsp70-08	2	Prupe.6G079800.1	6	17,6841	0,2956	0,016715581	136,0315385
ZjuHsp70-08	2	Prupe.5G125900.3	5	41,8094	0,1045	0,002499438	321,6107692
ZjuHsp70-08	2	Prupe.2G234200.1	2	20,2432	0,3680	0,018178944	155,7169231
ZjuHsp70-08	2	Prupe.7G107700.2	7	52,7241	0,3863	0,00732682	405,57
ZjuHsp70-08	2	Prupe.7G107700.1	7	52,8024	0,4028	0,007628441	406,1723077
ZjuHsp70-08	2	Prupe.7G107800.1	7	53,1182	0,3898	0,007338351	408,6015385
ZjuHsp70-08	2	Prupe.2G234300.1	2	21,1648	0,3886	0,018360674	162,8061538
ZjuHsp70-08	2	Prupe.7G106500.1	7	25,2892	0,4022	0,015904022	194,5323077
ZjuHsp70-08	2	Prupe.7G106700.1	7	30,6561	0,4239	0,013827591	235,8161538
ZjuHsp70-08	2	Prupe.8G075000.2	8	53,6946	0,4680	0,00871596	413,0353846
ZjuHsp70-08	2	Prupe.3G077000.1	3	52,0965	0,5085	0,009760732	400,7423077
ZjuHsp70-08	2	Prupe.7G108100.1	7	52,7125	0,3873	0,007347403	405,4807692
ZjuHsp70-08	2	Prupe.7G107400.3	7	52,9876	0,3911	0,007380972	407,5969231
ZjuHsp70-08	2	Prupe.7G107400.1	7	52,9892	0,3911	0,007380749	407,6092308
ZjuHsp70-08	2	Prupe.7G107400.2	7	52,9803	0,3913	0,007385764	407,5407692
ZjuHsp70-08	2	Prupe.1G078200.1	1	52,9380	0,5335	0,010077827	407,2153846
ZjuHsp70-08	2	Prupe.7G107900.1	7	19,3149	0,4576	0,023691554	148,5761538
ZjuHsp70-08	2	Prupe.7G108200.1	7	15,6948	0,4440	0,028289625	120,7292308
ZjuHsp70-08	2	Prupe.1G078200.2	1	52,9380	0,5336	0,010079716	407,2153846
ZjuHsp70-08	2	Prupe.7G108000.1	7	16,0049	0,4384	0,027391611	123,1146154
ZjuHsp70-08	2	Prupe.7G106600.1	7	34,7024	0,4668	0,013451519	266,9415385
ZjuHsp70-08	2	Prupe.7G107600.3	7	11,0682	0,4553	0,041135867	85,14
ZjuHsp70-08	2	Prupe.7G107600.4	7	11,0616	0,4553	0,041160411	85,08923077
ZjuHsp70-08	2	Prupe.7G107600.1	7	11,0629	0,4553	0,041155574	85,09923077
ZjuHsp70-08	2	Prupe.7G107600.2	7	11,0666	0,4553	0,041141814	85,12769231
ZjuHsp70-09	2	Prupe.6G321700.1	6	1,2565	0,0940	0,074810983	9,665384615
ZjuHsp70-09	2	Prupe.5G125900.1	5	31,8647	0,1240	0,003891454	245,1130769
ZjuHsp70-09	2	Prupe.5G125900.2	5	49,8603	0,1201	0,00240873	383,5407692
ZjuHsp70-09	2	Prupe.3G102200.1	3	8,9903	0,2977	0,033113467	69,15615385
ZjuHsp70-09	2	Prupe.3G102300.1	3	8,8174	0,2983	0,033830834	67,82615385
ZjuHsp70-09	2	Prupe.7G265200.1	7	9,3599	0,3025	0,032318721	71,99923077
ZjuHsp70-09	2	Prupe.2G233500.1	2	16,6352	0,3173	0,019074012	127,9630769
ZjuHsp70-09	2	Prupe.6G252500.1	6	15,8944	0,3311	0,020831236	122,2646154
ZjuHsp70-09	2	Prupe.6G079800.1	6	13,4616	0,3133	0,023273608	103,5507692
ZjuHsp70-09	2	Prupe.5G125900.3	5	52,0359	0,1252	0,002406031	400,2761538
ZjuHsp70-09	2	Prupe.8G075000.1	8	53,6426	0,4956	0,009238926	412,6353846
ZjuHsp70-09	2	Prupe.2G234200.1	2	26,8617	0,3790	0,014109308	206,6284615
ZjuHsp70-09	2	Prupe.2G234200.2	2	17,0459	0,3903	0,022897002	131,1223077
ZjuHsp70-09	2	Prupe.8G075000.2	8	54,0590	0,4937	0,009132614	415,8384615
ZjuHsp70-09	2	Prupe.7G108500.1	7	19,0525	0,3995	0,020968377	146,5576923
ZjuHsp70-09	2	Prupe.3G077000.1	3	4,6623	0,5245	0,112498123	35,86384615
ZjuHsp70-09	2	Prupe.1G078200.1	1	52,3160	0,5315	0,010159416	402,4307692
ZjuHsp70-09	2	Prupe.6G079700.1	6	17,3059	0,3994	0,023078834	133,1223077
ZjuHsp70-09	2	Prupe.7G107700.2	7	52,1947	0,4013	0,00768852	401,4976923
ZjuHsp70-09	2	Prupe.1G078200.2	1	52,3262	0,5310	0,01014788	402,5092308
ZjuHsp70-09	2	Prupe.7G107700.1	7	52,4885	0,4130	0,00786839	403,7576923
ZjuHsp70-09	2	Prupe.7G107800.1	7	52,4818	0,4079	0,007772218	403,7061538
ZjuHsp70-09	2	Prupe.7G106500.1	7	25,6077	0,4155	0,016225588	196,9823077
ZjuHsp70-09	2	Prupe.7G106700.1	7	18,7187	0,4466	0,023858494	143,99
ZjuHsp70-09	2	Prupe.2G234300.1	2	51,6293	0,4171	0,008078746	397,1484615
ZjuHsp70-09	2	Prupe.7G108100.1	7	45,1063	0,4076	0,009036432	346,9715385
ZjuHsp70-09	2	Prupe.7G107400.3	7	33,6953	0,4027	0,011951222	259,1946154
ZjuHsp70-09	2	Prupe.7G107400.1	7	33,5343	0,4027	0,0120086	257,9561538
ZjuHsp70-09	2	Prupe.7G107400.2	7	34,0655	0,4027	0,011821344	262,0423077

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-09	2	Prupe.7G108200.1	7	15,0518	0,4587	0,03047476	115,7830769
ZjuHsp70-09	2	Prupe.7G107900.1	7	15,2702	0,4816	0,031538552	117,4630769
ZjuHsp70-09	2	Prupe.7G108000.1	7	15,1317	0,4595	0,030366714	116,3976923
ZjuHsp70-09	2	Prupe.7G106600.1	7	14,0326	0,4914	0,035018457	107,9430769
ZjuHsp70-09	2	Prupe.7G107600.3	7	12,0635	0,4671	0,038720106	92,79615385
ZjuHsp70-09	2	Prupe.7G107600.4	7	12,0635	0,4671	0,038720106	92,79615385
ZjuHsp70-09	2	Prupe.7G107600.1	7	12,0698	0,4671	0,038699896	92,84461538
ZjuHsp70-10	2	Prupe.1G078200.1	1	0,9509	0,0648	0,068145967	7,314615385
ZjuHsp70-10	2	Prupe.1G078200.2	1	0,9268	0,0604	0,065170479	7,129230769
ZjuHsp70-10	2	Prupe.8G075000.1	8	49,4581	0,4104	0,008297933	380,4469231
ZjuHsp70-10	2	Prupe.8G075000.2	8	50,2332	0,3810	0,007584625	386,4092308
ZjuHsp70-10	2	Prupe.3G077000.1	3	49,2582	0,4475	0,009084782	378,9092308
ZjuHsp70-10	2	Prupe.5G125900.1	5	50,5869	0,5354	0,010583768	389,13
ZjuHsp70-10	2	Prupe.6G321700.1	6	51,5328	0,5312	0,010307998	396,4061538
ZjuHsp70-10	2	Prupe.3G102300.1	3	51,7974	0,4977	0,00960859	398,4415385
ZjuHsp70-10	2	Prupe.3G102200.1	3	51,6114	0,5025	0,009736221	397,0107692
ZjuHsp70-10	2	Prupe.2G233500.1	2	52,1957	0,4897	0,009381999	401,5053846
ZjuHsp70-10	2	Prupe.6G079800.1	6	53,0844	0,4893	0,009217397	408,3415385
ZjuHsp70-10	2	Prupe.6G252500.1	6	50,8239	0,4950	0,009739512	390,9530769
ZjuHsp70-10	2	Prupe.7G265200.1	7	52,4121	0,5070	0,009673339	403,17
ZjuHsp70-10	2	Prupe.5G125900.2	5	49,5470	0,5249	0,010593981	381,1307692
ZjuHsp70-10	2	Prupe.2G234200.1	2	20,6534	0,4980	0,024112253	158,8723077
ZjuHsp70-10	2	Prupe.2G234200.2	2	26,3947	0,5056	0,019155361	203,0361538
ZjuHsp70-10	2	Prupe.7G106500.1	7	50,8295	0,5033	0,00990173	390,9961538
ZjuHsp70-10	2	Prupe.7G108500.1	7	50,7418	0,4763	0,009386738	390,3215385
ZjuHsp70-10	2	Prupe.7G107700.2	7	50,8995	0,4957	0,009738799	391,5346154
ZjuHsp70-10	2	Prupe.7G107800.1	7	50,8477	0,5076	0,009982752	391,1361538
ZjuHsp70-10	2	Prupe.7G107700.1	7	50,9521	0,5291	0,010384263	391,9392308
ZjuHsp70-10	2	Prupe.7G106700.1	7	51,7072	0,4922	0,009518984	397,7476923
ZjuHsp70-10	2	Prupe.7G108100.1	7	51,1185	0,5055	0,009888788	393,2192308
ZjuHsp70-10	2	Prupe.2G234300.1	2	50,5497	0,5330	0,010544078	388,8438462
ZjuHsp70-10	2	Prupe.7G107400.3	7	51,0323	0,5023	0,009842786	392,5561538
ZjuHsp70-10	2	Prupe.7G107400.1	7	51,0350	0,5022	0,009840306	392,5769231
ZjuHsp70-10	2	Prupe.7G107400.2	7	51,0396	0,5023	0,009841378	392,6123077
ZjuHsp70-10	2	Prupe.6G079700.1	6	50,0278	0,5956	0,011905381	384,8292308
ZjuHsp70-10	2	Prupe.5G125900.3	5	49,9557	0,5742	0,011494184	384,2746154
ZjuHsp70-10	2	Prupe.7G107900.1	7	50,1217	0,6184	0,012337969	385,5515385
ZjuHsp70-10	2	Prupe.7G107600.3	7	50,4711	0,6162	0,012208967	388,2392308
ZjuHsp70-10	2	Prupe.7G107600.4	7	50,4704	0,6162	0,012209136	388,2338462
ZjuHsp70-10	2	Prupe.7G107600.1	7	50,4719	0,6162	0,012208774	388,2453846
ZjuHsp70-10	2	Prupe.7G107600.2	7	50,4727	0,6162	0,01220858	388,2515385
ZjuHsp70-10	2	Prupe.7G108000.1	7	50,5338	0,6459	0,012781544	388,7215385
ZjuHsp70-10	2	Prupe.7G108200.1	7	50,2961	0,6487	0,01289762	386,8930769
ZjuHsp70-10	2	Prupe.7G106600.1	7	49,5505	0,6513	0,013144166	381,1576923
ZjuHsp70-10	2	Prupe.2G234400.1	2	7,8316	5,1707	0,660235456	60,24307692
ZjuHsp70-11	3	Prupe.2G233500.1	2	1,5998	0,0806	0,050381298	12,30615385
ZjuHsp70-11	3	Prupe.6G252500.1	6	2,8224	0,0896	0,031746032	21,71076923
ZjuHsp70-11	3	Prupe.6G079800.1	6	3,9571	0,1088	0,027494883	30,43923077
ZjuHsp70-11	3	Prupe.7G265200.1	7	15,3868	0,1276	0,008292822	118,36
ZjuHsp70-11	3	Prupe.3G102200.1	3	51,0839	0,1380	0,002701438	392,9530769
ZjuHsp70-11	3	Prupe.3G102300.1	3	10,0594	0,1253	0,012456011	77,38
ZjuHsp70-11	3	Prupe.6G321700.1	6	53,2780	0,3482	0,006535531	409,8307692
ZjuHsp70-11	3	Prupe.5G125900.1	5	52,7222	0,3577	0,006784618	405,5553846
ZjuHsp70-11	3	Prupe.2G234200.1	2	1,6769	0,2003	0,119446598	12,89923077
ZjuHsp70-11	3	Prupe.6G079700.1	6	2,0284	0,1981	0,097663183	15,60307692
ZjuHsp70-11	3	Prupe.2G234200.2	2	2,1220	0,2027	0,095523091	16,32307692
ZjuHsp70-11	3	Prupe.7G107800.1	7	2,3480	0,2338	0,099574106	18,06153846
ZjuHsp70-11	3	Prupe.2G234300.1	2	2,0128	0,2216	0,11009539	15,48307692
ZjuHsp70-11	3	Prupe.7G108500.1	7	2,4470	0,2292	0,093665713	18,82307692
ZjuHsp70-11	3	Prupe.7G107700.2	7	2,5927	0,2418	0,093261851	19,94384615
ZjuHsp70-11	3	Prupe.7G107700.1	7	2,6819	0,2450	0,091353145	20,63
ZjuHsp70-11	3	Prupe.2G234200.1	2	1,6769	0,2003	0,119446598	12,89923077
ZjuHsp70-11	3	Prupe.6G079700.1	6	2,0284	0,1981	0,097663183	15,60307692
ZjuHsp70-11	3	Prupe.2G234200.2	2	2,1220	0,2027	0,095523091	16,32307692
ZjuHsp70-11	3	Prupe.7G107800.1	7	2,34780	0,2338	0,099582588	18,06
ZjuHsp70-11	3	Prupe.2G234300.1	2	2,0128	0,2216	0,11009539	15,48307692
ZjuHsp70-11	3	Prupe.7G108500.1	7	2,4470	0,2292	0,093665713	18,82307692
ZjuHsp70-11	3	Prupe.7G107700.2	7	2,5927	0,2418	0,093261851	19,94384615
ZjuHsp70-11	3	Prupe.7G107700.1	7	2,6819	0,2450	0,091353145	20,63

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-11	3	Prupe.7G107400.3	7	2,5002	0,2407	0,096272298	19,23230769
ZjuHsp70-11	3	Prupe.7G107400.1	7	2,5001	0,2407	0,096276149	19,23153846
ZjuHsp70-11	3	Prupe.7G107400.2	7	2,5002	0,2407	0,096272298	19,23230769
ZjuHsp70-11	3	Prupe.7G106700.1	7	2,3052	0,2461	0,106758633	17,73230769
ZjuHsp70-11	3	Prupe.7G108100.1	7	2,9379	0,2403	0,081793118	22,59923077
ZjuHsp70-11	3	Prupe.7G106500.1	7	2,2960	0,2378	0,103571429	17,66153846
ZjuHsp70-11	3	Prupe.7G107900.1	7	1,8857	0,2824	0,14975871	14,50538462
ZjuHsp70-11	3	Prupe.7G107600.3	7	1,8266	0,2900	0,158764918	14,05076923
ZjuHsp70-11	3	Prupe.7G107600.4	7	1,8266	0,2900	0,158764918	14,05076923
ZjuHsp70-11	3	Prupe.7G107600.1	7	1,8266	0,2900	0,158764918	14,05076923
ZjuHsp70-11	3	Prupe.7G107600.2	7	1,8266	0,2900	0,158764918	14,05076923
ZjuHsp70-11	3	Prupe.5G125900.2	5	51,5805	0,3092	0,005994513	396,7730769
ZjuHsp70-11	3	Prupe.7G108200.1	7	1,7394	0,2918	0,167758997	13,38
ZjuHsp70-11	3	Prupe.7G108000.1	7	1,5528	0,2921	0,188111798	11,94461538
ZjuHsp70-11	3	Prupe.7G106600.1	7	2,2680	0,3252	0,143386243	17,44615385
ZjuHsp70-11	3	Prupe.2G234400.1	2	1,7223	0,2385	0,138477617	13,24846154
ZjuHsp70-11	3	Prupe.8G075000.1	8	51,2791	0,4737	0,009237682	394,4546154
ZjuHsp70-11	3	Prupe.3G077000.1	3	51,2827	0,5103	0,009950724	394,4823077
ZjuHsp70-11	3	Prupe.8G075000.2	8	51,6901	0,4719	0,009129408	397,6161538
ZjuHsp70-11	3	Prupe.5G125900.3	5	51,4683	0,3329	0,006468059	395,91
ZjuHsp70-11	3	Prupe.1G078200.1	1	51,4967	0,5113	0,009928792	396,1284615
ZjuHsp70-11	3	Prupe.1G078200.2	1	51,4357	0,5101	0,009917236	395,6592308
ZjuHsp70-12	3	Prupe.2G233500.1	2	1,3568	0,2200	0,162146226	10,43692308
ZjuHsp70-12	3	Prupe.6G252500.1	6	2,5073	0,0309	0,012324014	19,28692308
ZjuHsp70-12	3	Prupe.6G079800.1	6	2,9336	0,0312	0,010635397	22,56615385
ZjuHsp70-12	3	Prupe.7G265200.1	7	9,4763	0,0815	0,008600403	72,89461538
ZjuHsp70-12	3	Prupe.3G102300.1	3	8,4965	0,0700	0,008238687	65,35769231
ZjuHsp70-12	3	Prupe.3G102200.1	3	8,4216	0,0695	0,008252589	64,78153846
ZjuHsp70-12	3	Prupe.5G125900.1	5	54,7587	0,2991	0,005462146	421,2207692
ZjuHsp70-12	3	Prupe.6G321700.1	6	20,4847	0,3028	0,014781764	157,5746154
ZjuHsp70-12	3	Prupe.6G079700.1	6	2,6215	0,1800	0,068662979	20,16538462
ZjuHsp70-12	3	Prupe.2G234200.1	2	2,1673	0,1928	0,088958612	16,67153846
ZjuHsp70-12	3	Prupe.2G234200.2	2	2,6042	0,1937	0,074379848	20,03230769
ZjuHsp70-12	3	Prupe.2G234200.1	2	2,1673	0,1928	0,088958612	16,67153846
ZjuHsp70-12	3	Prupe.2G234200.2	2	2,6042	0,1937	0,074379848	20,03230769
ZjuHsp70-12	3	Prupe.2G234300.1	2	1,9714	0,2150	0,109059552	15,16461538
ZjuHsp70-12	3	Prupe.7G108500.1	7	3,9740	0,2197	0,055284348	30,56923077
ZjuHsp70-12	3	Prupe.7G106700.1	7	3,6837	0,2353	0,063875994	28,33615385
ZjuHsp70-12	3	Prupe.7G107700.1	7	3,6220	0,2340	0,064605191	27,86153846
ZjuHsp70-12	3	Prupe.7G107700.2	7	3,4847	0,2308	0,066232387	26,80538462
ZjuHsp70-12	3	Prupe.7G107800.1	7	3,7125	0,2258	0,060821549	28,55769231
ZjuHsp70-12	3	Prupe.7G107400.3	7	2,8835	0,2336	0,081012658	22,18076923
ZjuHsp70-12	3	Prupe.7G107400.1	7	2,8836	0,2336	0,081009849	22,18153846
ZjuHsp70-12	3	Prupe.7G107400.2	7	2,8825	0,2336	0,081040763	22,17307692
ZjuHsp70-12	3	Prupe.7G106500.1	7	3,6314	0,2335	0,06430027	27,93384615
ZjuHsp70-12	3	Prupe.7G108100.1	7	4,1742	0,2360	0,05653778	32,10923077
ZjuHsp70-12	3	Prupe.5G125900.2	5	53,2542	0,2835	0,005323524	409,6476923
ZjuHsp70-12	3	Prupe.7G107900.1	7	1,8633	0,2794	0,149949015	14,33307692
ZjuHsp70-12	3	Prupe.7G107600.3	7	1,9451	0,2852	0,146624852	14,96230769
ZjuHsp70-12	3	Prupe.7G107600.4	7	1,9451	0,2852	0,146624852	14,96230769
ZjuHsp70-12	3	Prupe.7G107600.1	7	1,9451	0,2852	0,146624852	14,96230769
ZjuHsp70-12	3	Prupe.7G107600.2	7	1,9451	0,2852	0,146624852	14,96230769
ZjuHsp70-12	3	Prupe.7G108200.1	7	1,7104	0,2843	0,166218428	13,15692308
ZjuHsp70-12	3	Prupe.7G108000.1	7	1,4630	0,2851	0,194873548	11,25384615
ZjuHsp70-12	3	Prupe.7G106600.1	7	2,1773	0,3169	0,145547237	16,74846154
ZjuHsp70-12	3	Prupe.2G234400.1	2	2,6617	0,2288	0,085960101	20,47461538
ZjuHsp70-12	3	Prupe.5G125900.3	5	53,2985	0,3065	0,005750631	409,9884615
ZjuHsp70-12	3	Prupe.8G075000.1	8	52,1999	0,4565	0,008745227	401,5376923
ZjuHsp70-12	3	Prupe.3G077000.1	3	50,9796	0,4724	0,009266452	392,1507692
ZjuHsp70-12	3	Prupe.8G075000.2	8	52,4792	0,4562	0,008692968	403,6861538
ZjuHsp70-12	3	Prupe.1G078200.1	1	52,3522	0,4867	0,009296648	402,7092308
ZjuHsp70-12	3	Prupe.1G078200.2	1	52,2998	0,4851	0,00927537	402,3061538
ZjuHsp70-13	3	Prupe.2G233500.1	2	1,2996	0,0216	0,016620499	9,996923077
ZjuHsp70-13	3	Prupe.6G252500.1	6	3,0968	0,0320	0,010333247	23,82153846
ZjuHsp70-13	3	Prupe.6G079800.1	6	3,5667	0,0328	0,009196176	27,43615385
ZjuHsp70-13	3	Prupe.7G265200.1	7	10,4067	0,0706	0,006784091	80,05153846
ZjuHsp70-13	3	Prupe.3G102200.1	3	7,6783	0,0698	0,009090554	59,06384615
ZjuHsp70-13	3	Prupe.3G102300.1	3	8,1454	0,0703	0,008630638	62,65692308
ZjuHsp70-13	3	Prupe.5G125900.1	5	53,6139	0,3012	0,005617946	412,4146154

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-13	3	Prupe.6G321700.1	6	51,5491	0,3025	0,005868192	396,5315385
ZjuHsp70-13	3	Prupe.6G079700.1	6	2,8291	0,1858	0,065674596	21,76230769
ZjuHsp70-13	3	Prupe.2G234200.2	2	2,0248	0,2002	0,098873963	15,57538462
ZjuHsp70-13	3	Prupe.2G234200.1	2	1,6647	0,1996	0,119901484	12,80538462
ZjuHsp70-13	3	Prupe.2G234300.1	2	1,9102	0,2240	0,117265208	14,69384615
ZjuHsp70-13	3	Prupe.7G108500.1	7	3,5818	0,2261	0,063124686	27,55230769
ZjuHsp70-13	3	Prupe.7G107800.1	7	2,8870	0,2339	0,081018358	22,20769231
ZjuHsp70-13	3	Prupe.7G107700.1	7	3,5271	0,2408	0,068271384	27,13153846
ZjuHsp70-13	3	Prupe.7G107700.2	7	3,3993	0,2376	0,069896743	26,14846154
ZjuHsp70-13	3	Prupe.7G106700.1	7	3,0471	0,2422	0,079485412	23,43923077
ZjuHsp70-13	3	Prupe.7G107400.3	7	2,9837	0,2421	0,081140865	22,95153846
ZjuHsp70-13	3	Prupe.7G107400.1	7	2,9838	0,2421	0,081138146	22,95230769
ZjuHsp70-13	3	Prupe.7G107400.2	7	2,9837	0,2421	0,081140865	22,95153846
ZjuHsp70-13	3	Prupe.7G106500.1	7	2,9050	0,2426	0,083511188	22,34615385
ZjuHsp70-13	3	Prupe.7G108100.1	7	3,8368	0,2441	0,063620726	29,51384615
ZjuHsp70-13	3	Prupe.5G125900.2	5	52,9991	0,2911	0,005492546	407,6853846
ZjuHsp70-13	3	Prupe.7G107900.1	7	1,8008	0,2877	0,159762328	13,85230769
ZjuHsp70-13	3	Prupe.7G107600.3	7	1,8636	0,2929	0,15716892	14,33538462
ZjuHsp70-13	3	Prupe.7G107600.4	7	1,8636	0,2929	0,15716892	14,33538462
ZjuHsp70-13	3	Prupe.7G107600.1	7	1,8636	0,2929	0,15716892	14,33538462
ZjuHsp70-13	3	Prupe.7G107600.2	7	1,8636	0,2929	0,15716892	14,33538462
ZjuHsp70-13	3	Prupe.7G108200.1	7	1,7993	0,2898	0,161062635	13,84076923
ZjuHsp70-13	3	Prupe.7G108000.1	7	1,5611	0,2908	0,186278906	12,00846154
ZjuHsp70-13	3	Prupe.7G106600.1	7	2,3052	0,3277	0,142156863	17,73230769
ZjuHsp70-13	3	Prupe.2G234400.1	2	1,9207	0,2396	0,124746186	14,77461538
ZjuHsp70-13	3	Prupe.8G075000.1	8	52,2364	0,4619	0,008842493	401,8184615
ZjuHsp70-13	3	Prupe.5G125900.3	5	52,8689	0,3132	0,005924088	406,6838462
ZjuHsp70-13	3	Prupe.3G077000.1	3	51,1940	0,4760	0,009297965	393,8
ZjuHsp70-13	3	Prupe.8G075000.2	8	52,4953	0,4581	0,008726496	403,81
ZjuHsp70-13	3	Prupe.1G078200.1	1	53,0046	0,4931	0,009302966	407,7276923
ZjuHsp70-13	3	Prupe.1G078200.2	1	52,9476	0,4919	0,009290317	407,2892308
ZjuHsp70-14	4	Prupe.3G187600.1	3	0,8297	0,1239	0,149331084	6,382307692
ZjuHsp70-14	4	Prupe.3G187600.2	3	0,8297	0,1239	0,149331084	6,382307692
ZjuHsp70-14	4	Prupe.3G071300.3	3	55,2121	0,9543	0,017284255	424,7084615
ZjuHsp70-14	4	Prupe.3G071300.2	3	55,2111	0,9543	0,017284568	424,7007692
ZjuHsp70-14	4	Prupe.3G071300.1	3	55,2101	0,9545	0,017288503	424,6930769
ZjuHsp70-14	4	Prupe.6G321700.1	6	36,0865	0,8645	0,023956327	277,5884615
ZjuHsp70-14	4	Prupe.5G125900.1	5	50,0729	0,8822	0,017618313	385,1761538
ZjuHsp70-14	4	Prupe.5G125900.2	5	33,6267	0,7751	0,023050136	258,6669231
ZjuHsp70-14	4	Prupe.5G125900.3	5	21,1835	0,7717	0,036429296	162,95
ZjuHsp70-14	4	Prupe.7G265200.1	7	5,2344	0,8719	0,166571145	40,26461538
ZjuHsp70-14	4	Prupe.3G102200.1	3	10,0214	0,8625	0,086065819	77,08769231
ZjuHsp70-14	4	Prupe.6G252500.1	6	13,9541	0,8613	0,061723794	107,3392308
ZjuHsp70-14	4	Prupe.3G102300.1	3	10,1696	0,8634	0,084900094	78,22769231
ZjuHsp70-14	4	Prupe.6G079800.1	6	5,5176	0,8697	0,15762288	42,44307692
ZjuHsp70-14	4	Prupe.2G233500.1	2	11,1789	0,8466	0,075731959	85,99153846
ZjuHsp70-14	4	Prupe.7G107700.2	7	37,8413	0,7996	0,021130352	291,0869231
ZjuHsp70-14	4	Prupe.7G107800.1	7	19,2812	0,8305	0,043073045	148,3169231
ZjuHsp70-14	4	Prupe.7G107700.1	7	34,2551	0,8024	0,023424249	263,5007692
ZjuHsp70-14	4	Prupe.7G108500.1	7	19,0044	0,7871	0,041416725	146,1876923
ZjuHsp70-14	4	Prupe.7G106500.1	7	13,0891	0,8272	0,063197622	100,6853846
ZjuHsp70-14	4	Prupe.4G212200.1	4	56,5922	0,9480	0,016751425	435,3246154
ZjuHsp70-14	4	Prupe.7G106700.1	7	0,1800	15,8814	88,23	1,384615385
ZjuHsp70-14	4	Prupe.2G234200.2	2	15,5689	0,8600	0,055238328	119,7607692
ZjuHsp70-14	4	Prupe.7G108100.1	7	11,8074	0,8092	0,068533293	90,82615385
ZjuHsp70-14	4	Prupe.2G234200.1	2	23,0435	0,8156	0,035393929	177,2576923
ZjuHsp70-14	4	Prupe.7G106600.1	7	12,9051	0,7921	0,061378835	99,27
ZjuHsp70-14	4	Prupe.7G107400.3	7	27,8049	0,7922	0,028491381	213,8838462
ZjuHsp70-14	4	Prupe.7G107400.1	7	27,6964	0,7922	0,028602995	213,0492308
ZjuHsp70-15	7	Prupe.1G012200.2	1	0,6642	0,1070	0,161096055	5,109230769
ZjuHsp70-15	7	Prupe.1G012200.1	1	0,6642	0,1070	0,161096055	5,109230769
ZjuHsp70-15	7	Prupe.7G265200.1	7	46,5731	0,7124	0,015296384	358,2546154
ZjuHsp70-15	7	Prupe.3G102200.1	3	46,6839	0,7268	0,015568536	359,1069231
ZjuHsp70-15	7	Prupe.3G102300.1	3	46,7418	0,7257	0,015525718	359,5523077
ZjuHsp70-15	7	Prupe.2G233500.1	2	45,0245	0,7280	0,016168975	346,3423077
ZjuHsp70-15	7	Prupe.7G265200.1	7	46,5747	0,7123	0,015293711	358,2669231
ZjuHsp70-15	7	Prupe.3G102300.1	3	46,7431	0,7256	0,015523147	359,5623077
ZjuHsp70-15	7	Prupe.2G233500.1	2	44,2154	0,7280	0,016464852	340,1184615
ZjuHsp70-15	7	Prupe.6G252500.1	6	46,4393	0,7351	0,015829265	357,2253846

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-15	7	Prupe.6G079800.1	6	9,5595	0,7368	0,077075161	73,53461538
ZjuHsp70-15	7	Prupe.7G106500.1	7	47,7418	0,6993	0,014647542	367,2446154
ZjuHsp70-15	7	Prupe.7G108500.1	7	17,8937	0,7184	0,040148209	137,6438462
ZjuHsp70-15	7	Prupe.6G321700.1	6	8,9254	0,7766	0,087010106	68,65692308
ZjuHsp70-15	7	Prupe.7G107700.2	7	48,0926	0,6957	0,014465843	369,9430769
ZjuHsp70-15	7	Prupe.7G106700.1	7	47,7603	0,7596	0,015904423	367,3869231
ZjuHsp70-15	7	Prupe.7G107800.1	7	47,9162	0,7115	0,01484884	368,5861538
ZjuHsp70-15	7	Prupe.7G107700.1	7	48,1561	0,2440	0,005066855	370,4315385
ZjuHsp70-15	7	Prupe.2G234200.1	2	25,0557	0,7205	0,028755932	192,7361538
ZjuHsp70-15	7	Prupe.7G108100.1	7	47,9191	0,7175	0,014973153	368,6084615
ZjuHsp70-15	7	Prupe.5G125900.1	5	48,1386	0,8317	0,017277195	370,2969231
ZjuHsp70-15	7	Prupe.7G107400.3	7	48,1262	0,7170	0,01489833	370,2015385
ZjuHsp70-15	7	Prupe.7G107400.1	7	48,1249	0,7172	0,014902888	370,1915385
ZjuHsp70-15	7	Prupe.7G107400.2	7	48,1284	0,7170	0,014897649	370,2184615
ZjuHsp70-15	7	Prupe.2G234200.2	2	18,8048	0,7364	0,039160214	144,6523077
ZjuHsp70-15	7	Prupe.2G234300.1	2	21,6501	0,7530	0,03478044	166,5392308
ZjuHsp70-15	7	Prupe.7G106600.1	7	19,2849	0,7996	0,041462491	148,3453846
ZjuHsp70-15	7	Prupe.6G079700.1	6	10,6864	0,8018	0,075029945	82,20307692
ZjuHsp70-15	7	Prupe.5G125900.2	5	48,5616	0,8089	0,016657194	373,5507692
ZjuHsp70-15	7	Prupe.7G108200.1	7	49,6428	0,8415	0,016951099	381,8676923
ZjuHsp70-15	7	Prupe.7G108000.1	7	50,7141	0,8124	0,016019214	390,1084615
ZjuHsp70-15	7	Prupe.8G075000.1	8	48,2154	0,8400	0,01742182	370,8876923
ZjuHsp70-15	7	Prupe.7G107900.1	7	49,0017	0,8171	0,016674932	376,9361538
ZjuHsp70-15	7	Prupe.8G075000.2	8	47,9871	0,8244	0,017179617	369,1315385
ZjuHsp70-15	7	Prupe.2G234400.1	2	48,8337	0,7604	0,015571214	375,6438462
ZjuHsp70-15	7	Prupe.7G107600.3	7	48,9377	0,8171	0,016696739	376,4438462
ZjuHsp70-15	7	Prupe.7G107600.4	7	48,9361	0,8172	0,016699328	376,4315385
ZjuHsp70-15	7	Prupe.7G107600.1	7	48,9371	0,8172	0,016698987	376,4392308
ZjuHsp70-15	7	Prupe.7G107600.2	7	48,9374	0,8171	0,016696841	376,4415385
ZjuHsp70-15	7	Prupe.3G077000.1	3	47,7341	0,8495	0,017796502	367,1853846
ZjuHsp70-15	7	Prupe.1G078200.2	1	47,6055	0,9217	0,019361208	366,1961538
ZjuHsp70-15	7	Prupe.1G078200.1	1	46,9303	0,9370	0,019965779	361,0023077
ZjuHsp70-16	9	Prupe.6G321700.1	6	1,3672	0,3467	0,253583967	10,51692308
ZjuHsp70-16	9	Prupe.5G125900.3	5	4,6785	0,3896	0,083274554	35,98846154
ZjuHsp70-16	9	Prupe.5G125900.2	5	4,4471	0,3875	0,087135437	34,20846154
ZjuHsp70-16	9	Prupe.5G125900.1	5	4,4470	0,3875	0,087137396	34,20769231
ZjuHsp70-16	9	Prupe.7G265200.1	7	3,8032	0,5127	0,134807531	29,25538462
ZjuHsp70-16	9	Prupe.3G102300.1	3	15,3319	0,5150	0,033590096	117,9376923
ZjuHsp70-16	9	Prupe.3G102200.1	3	13,6501	0,5187	0,037999722	105,0007692
ZjuHsp70-16	9	Prupe.2G233500.1	2	1,4740	0,5202	0,352917232	11,33846154
ZjuHsp70-16	9	Prupe.6G079800.1	6	15,9311	0,5190	0,032577788	122,5469231
ZjuHsp70-16	9	Prupe.6G252500.1	6	8,0737	0,5241	0,064914475	62,10538462
ZjuHsp70-16	9	Prupe.2G234200.1	2	8,0407	0,5500	0,068402005	61,85153846
ZjuHsp70-16	9	Prupe.2G234200.2	2	7,5084	0,5355	0,071320121	57,75692308
ZjuHsp70-16	9	Prupe.2G234300.1	2	6,4244	0,5728	0,089160077	49,41846154
ZjuHsp70-16	9	Prupe.7G106700.1	7	8,2966	0,5953	0,071752284	63,82
ZjuHsp70-16	9	Prupe.6G079700.1	6	13,8327	0,5489	0,039681335	106,4053846
ZjuHsp70-16	9	Prupe.7G108500.1	7	7,1735	0,6007	0,083738761	55,18076923
ZjuHsp70-16	9	Prupe.7G107700.2	7	8,8890	0,6156	0,069254134	68,37692308
ZjuHsp70-16	9	Prupe.7G107700.1	7	8,2984	0,6425	0,077424564	63,83384615
ZjuHsp70-16	9	Prupe.7G107800.1	7	8,9197	0,6135	0,06878034	68,61307692
ZjuHsp70-16	9	Prupe.7G106500.1	7	8,9295	0,6455	0,072288482	68,68846154
ZjuHsp70-16	9	Prupe.7G108200.1	7	6,2184	0,6583	0,105863245	47,83384615
ZjuHsp70-16	9	Prupe.7G107900.1	7	8,0608	0,6164	0,076468837	62,00615385
ZjuHsp70-16	9	Prupe.7G106600.1	7	4,5087	0,6176	0,136979617	34,68230769
ZjuHsp70-16	9	Prupe.8G075000.1	8	43,3108	0,6754	0,015594263	333,16
ZjuHsp70-16	9	Prupe.7G108100.1	7	9,8493	0,6131	0,062248079	75,76384615
ZjuHsp70-16	9	Prupe.7G107600.3	7	6,4030	0,5938	0,092737779	49,25384615
ZjuHsp70-16	9	Prupe.7G107600.4	7	6,4030	0,5938	0,092737779	49,25384615
ZjuHsp70-16	9	Prupe.7G107600.1	7	6,4034	0,5938	0,092731986	49,25692308
ZjuHsp70-16	9	Prupe.7G107600.2	7	6,4028	0,5938	0,092740676	49,25230769
ZjuHsp70-16	9	Prupe.7G107400.3	7	8,1433	0,6201	0,07614849	62,64076923
ZjuHsp70-16	9	Prupe.7G107400.1	7	8,1445	0,6201	0,076137271	62,65
ZjuHsp70-16	9	Prupe.7G107400.2	7	8,1435	0,6201	0,07614662	62,64230769
ZjuHsp70-16	9	Prupe.3G077000.1	3	4,4011	0,7006	0,159187476	33,85461538
ZjuHsp70-16	9	Prupe.8G075000.2	8	39,3244	0,6104	0,015522169	302,4953846
ZjuHsp70-16	9	Prupe.7G108000.1	7	6,1508	0,6339	0,103059765	47,31384615
ZjuHsp70-16	9	Prupe.2G234400.1	2	5,5590	0,6446	0,115956107	42,76153846
ZjuHsp70-16	9	Prupe.1G078200.1	1	52,4213	0,7230	0,013792104	403,2407692

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-16	9	Prupe.1G078200.2	1	52,3558	0,7252	0,013851378	402,7369231
ZjuHsp70-17	9	Prupe.8G075000.1	8	0,9243	0,0524	0,05669155	7,11
ZjuHsp70-17	9	Prupe.3G077000.1	3	0,8523	0,0786	0,092221049	6,556153846
ZjuHsp70-17	9	Prupe.8G075000.2	8	0,9599	0,0398	0,041462652	7,383846154
ZjuHsp70-17	9	Prupe.1G078200.1	1	50,2456	0,4149	0,008257439	386,5046154
ZjuHsp70-17	9	Prupe.1G078200.2	1	50,3501	0,4264	0,008468702	387,3084615
ZjuHsp70-17	9	Prupe.6G321700.1	6	53,0437	0,5048	0,009516682	408,0284615
ZjuHsp70-17	9	Prupe.5G125900.1	5	53,0883	0,4901	0,009231789	408,3715385
ZjuHsp70-17	9	Prupe.7G265200.1	7	11,2367	0,4562	0,040599108	86,43615385
ZjuHsp70-17	9	Prupe.3G102200.1	3	53,9991	0,4404	0,008155691	415,3776923
ZjuHsp70-17	9	Prupe.6G079800.1	6	54,3457	0,4452	0,008192	418,0438462
ZjuHsp70-17	9	Prupe.6G252500.1	6	51,8474	0,4582	0,008837473	398,8261538
ZjuHsp70-17	9	Prupe.5G125900.2	5	52,0229	0,4603	0,008848027	400,1761538
ZjuHsp70-17	9	Prupe.2G234200.1	2	54,1723	0,4420	0,008159151	416,71
ZjuHsp70-17	9	Prupe.2G234200.2	2	53,8025	0,4424	0,008222666	413,8653846
ZjuHsp70-17	9	Prupe.2G234300.1	2	53,6742	0,4450	0,008290762	412,8784615
ZjuHsp70-17	9	Prupe.7G106500.1	7	23,5408	0,4890	0,020772446	181,0830769
ZjuHsp70-17	9	Prupe.7G107700.2	7	36,8499	0,4766	0,012933549	283,4607692
ZjuHsp70-17	9	Prupe.7G108500.1	7	42,6379	0,4716	0,011060582	327,9838462
ZjuHsp70-17	9	Prupe.7G107800.1	7	46,0395	0,4841	0,010514884	354,15
ZjuHsp70-17	9	Prupe.7G107700.1	7	41,9076	0,5067	0,012090886	322,3661538
ZjuHsp70-17	9	Prupe.7G106700.1	7	51,9063	0,4963	0,009561646	399,2792308
ZjuHsp70-17	9	Prupe.7G107900.1	7	23,1665	0,5420	0,023395852	178,2038462
ZjuHsp70-17	9	Prupe.7G108100.1	7	49,0646	0,4838	0,00986047	377,42
ZjuHsp70-17	9	Prupe.7G107400.3	7	27,8162	0,4857	0,017461048	213,9707692
ZjuHsp70-17	9	Prupe.7G107400.1	7	27,6662	0,4857	0,017555718	212,8169231
ZjuHsp70-17	9	Prupe.7G107400.2	7	27,5718	0,4857	0,017615825	212,0907692
ZjuHsp70-17	9	Prupe.6G079700.1	6	51,7154	0,5372	0,010387621	397,8107692
ZjuHsp70-17	9	Prupe.7G108200.1	7	15,7195	12,2455	0,779000604	120,9192308
ZjuHsp70-17	9	Prupe.7G106600.1	7	36,8032	5,1843	0,140865468	283,1015385
ZjuHsp70-17	9	Prupe.5G125900.3	5	37,4602	0,4996	0,013336821	288,1553846
ZjuHsp70-17	9	Prupe.7G108000.1	7	50,6809	0,5620	0,01108899	389,8530769
ZjuHsp70-17	9	Prupe.7G107600.3	7	31,7176	0,5543	0,017476102	243,9815385
ZjuHsp70-17	9	Prupe.7G107600.4	7	31,7664	0,5543	0,017449255	244,3569231
ZjuHsp70-17	9	Prupe.7G107600.1	7	31,6726	0,5544	0,017504089	243,6353846
ZjuHsp70-17	9	Prupe.7G107600.2	7	31,8813	0,5543	0,017386368	245,2407692
ZjuHsp70-17	9	Prupe.2G234400.1	2	53,3261	0,4786	0,008974967	410,2007692
ZjuHsp70-18	11	Prupe.5G125900.1	5	0,7214	0,0213	0,029525922	5,549230769
ZjuHsp70-18	11	Prupe.6G321700.1	6	33,3567	0,1133	0,003396619	256,59
ZjuHsp70-18	11	Prupe.5G125900.2	5	0,6709	0,0340	0,050678193	5,160769231
ZjuHsp70-18	11	Prupe.3G102200.1	3	25,5656	0,2824	0,011046093	196,6584615
ZjuHsp70-18	11	Prupe.3G102300.1	3	21,9234	0,2846	0,012981563	168,6415385
ZjuHsp70-18	11	Prupe.7G265200.1	7	46,9218	0,2745	0,005850159	360,9369231
ZjuHsp70-18	11	Prupe.2G233500.1	2	54,2266	0,2848	0,005252035	417,1276923
ZjuHsp70-18	11	Prupe.5G125900.3	5	0,6792	0,0412	0,0606596	5,224615385
ZjuHsp70-18	11	Prupe.6G252500.1	6	46,7404	0,3013	0,006446244	359,5415385
ZjuHsp70-18	11	Prupe.6G079800.1	6	54,3129	0,2939	0,005411237	417,7915385
ZjuHsp70-18	11	Prupe.8G075000.1	8	53,5660	0,4793	0,00894784	412,0461538
ZjuHsp70-18	11	Prupe.2G234200.1	2	40,8583	0,3814	0,009334701	314,2946154
ZjuHsp70-18	11	Prupe.6G079700.1	6	53,8075	0,3750	0,006969289	413,9038462
ZjuHsp70-18	11	Prupe.2G234200.2	2	55,1742	0,3858	0,006992399	424,4169231
ZjuHsp70-18	11	Prupe.7G108500.1	7	26,8886	0,4093	0,015222064	206,8353846
ZjuHsp70-18	11	Prupe.8G075000.2	8	53,8758	0,4527	0,008402659	414,4292308
ZjuHsp70-18	11	Prupe.3G077000.1	3	52,1655	0,5039	0,009659641	401,2730769
ZjuHsp70-18	11	Prupe.7G107800.1	7	52,2833	0,4274	0,008174694	402,1792308
ZjuHsp70-18	11	Prupe.7G107700.2	7	49,4566	0,4215	0,008522624	380,4353846
ZjuHsp70-18	11	Prupe.1G078200.1	1	52,4639	0,5173	0,009860113	403,5684615
ZjuHsp70-18	11	Prupe.7G106500.1	7	52,7878	0,4259	0,008068152	406,06
ZjuHsp70-18	11	Prupe.2G234300.1	2	51,8890	0,4050	0,007805122	399,1461538
ZjuHsp70-18	11	Prupe.7G107700.1	7	34,8995	0,4567	0,013086147	268,4576923
ZjuHsp70-18	11	Prupe.7G106700.1	7	53,0357	0,4429	0,008350979	407,9669231
ZjuHsp70-18	11	Prupe.1G078200.2	1	52,8453	0,5178	0,009798412	406,5023077
ZjuHsp70-18	11	Prupe.7G108100.1	7	24,7150	0,4204	0,017009913	190,1153846
ZjuHsp70-18	11	Prupe.7G107400.3	7	37,4164	0,4227	0,011297185	287,8184615
ZjuHsp70-18	11	Prupe.7G107400.1	7	36,9560	0,4226	0,01143522	284,2769231
ZjuHsp70-18	11	Prupe.7G107400.2	7	36,6544	0,4227	0,01153204	281,9569231
ZjuHsp70-18	11	Prupe.7G107900.1	7	20,0697	0,4928	0,024554428	154,3823077
ZjuHsp70-18	11	Prupe.7G108200.1	7	52,3793	0,4880	0,009316658	402,9176923
ZjuHsp70-18	11	Prupe.7G108000.1	7	24,9061	0,4841	0,019437005	191,5853846

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-18	11	Prupe.7G106600.1	7	20,9407	0,4787	0,02285979	161,0823077
ZjuHsp70-18	11	Prupe.7G107600.3	7	18,3761	0,4880	0,026556233	141,3546154
ZjuHsp70-18	11	Prupe.7G107600.4	7	18,3079	0,4880	0,02665516	140,83
ZjuHsp70-18	11	Prupe.7G107600.1	7	18,3650	0,4881	0,026577729	141,2692308
ZjuHsp70-18	11	Prupe.7G107600.2	7	18,3060	0,4880	0,026657926	140,8153846
ZjuHsp70-19	11	Prupe.6G252500.1	6	1,6999	0,0280	0,016471557	13,07615385
ZjuHsp70-19	11	Prupe.2G233500.1	2	1,8247	0,0229	0,012550008	14,03615385
ZjuHsp70-19	11	Prupe.6G079800.1	6	3,8211	0,0292	0,007641779	29,39307692
ZjuHsp70-19	11	Prupe.7G265200.1	7	7,0342	0,0681	0,009681272	54,10923077
ZjuHsp70-19	11	Prupe.3G102200.1	3	7,1210	0,0654	0,009184103	54,77692308
ZjuHsp70-19	11	Prupe.3G102300.1	3	7,3349	0,0668	0,009107145	56,42230769
ZjuHsp70-19	11	Prupe.5G125900.1	5	52,8076	0,3009	0,005698043	406,2123077
ZjuHsp70-19	11	Prupe.6G321700.1	6	52,3112	0,3049	0,00582858	402,3938462
ZjuHsp70-19	11	Prupe.6G079700.1	6	2,8833	0,1765	0,061214581	22,17923077
ZjuHsp70-19	11	Prupe.2G234200.1	2	1,8525	0,1938	0,104615385	14,25
ZjuHsp70-19	11	Prupe.2G234200.2	2	1,8907	0,1924	0,101761252	14,54384615
ZjuHsp70-19	11	Prupe.2G234300.1	2	1,8665	0,2075	0,111117064	14,35769231
ZjuHsp70-19	11	Prupe.7G108500.1	7	2,7693	0,2260	0,081609071	21,30230769
ZjuHsp70-19	11	Prupe.7G106700.1	7	2,2150	0,2329	0,105146727	17,03846154
ZjuHsp70-19	11	Prupe.7G107700.1	7	2,3242	0,2339	0,100636778	17,87846154
ZjuHsp70-19	11	Prupe.7G107700.2	7	2,2851	0,2307	0,100958383	17,57769231
ZjuHsp70-19	11	Prupe.7G107800.1	7	2,7507	0,2271	0,082560803	21,15923077
ZjuHsp70-19	11	Prupe.7G107400.3	7	2,3593	0,2326	0,098588564	18,14846154
ZjuHsp70-19	11	Prupe.7G107400.1	7	2,3593	0,2326	0,098588564	18,14846154
ZjuHsp70-19	11	Prupe.7G107400.2	7	2,3593	0,2326	0,098588564	18,14846154
ZjuHsp70-19	11	Prupe.7G106500.1	7	2,8789	0,2325	0,080760013	22,14538462
ZjuHsp70-19	11	Prupe.7G108100.1	7	2,7479	0,2376	0,086466029	17,63079231
ZjuHsp70-19	11	Prupe.7G107900.1	7	1,9750	0,2742	0,138835443	15,19230769
ZjuHsp70-19	11	Prupe.7G107600.3	7	1,7772	0,2794	0,157213594	13,67076923
ZjuHsp70-19	11	Prupe.7G107600.4	7	1,7772	0,2794	0,157213594	13,67076923
ZjuHsp70-19	11	Prupe.7G107600.1	7	1,7772	0,2794	0,157213594	13,67076923
ZjuHsp70-19	11	Prupe.7G107600.2	7	1,7772	0,2794	0,157213594	13,67076923
ZjuHsp70-19	11	Prupe.5G125900.2	5	14,5677	0,2870	0,01970112	112,0592308
ZjuHsp70-19	11	Prupe.7G108200.1	7	1,7923	0,2770	0,15455002	13,78692308
ZjuHsp70-19	11	Prupe.7G106600.1	7	1,8547	0,3069	0,165471505	14,26692308
ZjuHsp70-19	11	Prupe.7G108000.1	7	1,6664	0,2792	0,167546807	12,81846154
ZjuHsp70-19	11	Prupe.2G234400.1	2	1,8967	0,2270	0,119681552	14,59
ZjuHsp70-19	11	Prupe.5G125900.3	5	9,2591	0,3106	0,033545377	71,22384615
ZjuHsp70-19	11	Prupe.8G075000.1	8	51,6155	0,4570	0,00885393	397,0423077
ZjuHsp70-19	11	Prupe.3G077000.1	3	51,1549	0,4647	0,009084174	393,4992308
ZjuHsp70-19	11	Prupe.8G075000.2	8	51,9644	0,4562	0,008779087	399,7261538
ZjuHsp70-19	11	Prupe.1G078200.1	1	51,6821	0,4931	0,009541021	397,5546154
ZjuHsp70-19	11	Prupe.1G078200.2	1	51,6284	0,4919	0,009527702	397,1415385
ZjuHsp70-20	NW	Prupe.6G321700.1	6	0,9931	0,0988	0,099486457	7,639230769
ZjuHsp70-20	NW	Prupe.5G125900.1	5	16,5181	0,1340	0,008112313	127,0623077
ZjuHsp70-20	NW	Prupe.3G102300.1	3	10,5238	0,3044	0,028924913	80,95230769
ZjuHsp70-20	NW	Prupe.3G102200.1	3	13,5352	0,3071	0,022688989	104,1169231
ZjuHsp70-20	NW	Prupe.2G233500.1	2	14,2323	0,3243	0,022786198	109,4792308
ZjuHsp70-20	NW	Prupe.6G252500.1	6	12,4433	0,3381	0,027171249	95,71769231
ZjuHsp70-20	NW	Prupe.6G079800.1	6	18,0776	0,3246	0,017955923	139,0584615
ZjuHsp70-20	NW	Prupe.7G265200.1	7	13,1700	0,3098	0,023523159	101,3076923
ZjuHsp70-20	NW	Prupe.5G125900.2	5	7,8259	0,1218	0,015563705	60,19923077
ZjuHsp70-20	NW	Prupe.5G125900.3	5	52,0196	0,1278	0,002456766	400,1507692
ZjuHsp70-20	NW	Prupe.8G075000.2	8	38,0622	0,4923	0,012934092	292,7861538
ZjuHsp70-20	NW	Prupe.8G075000.1	8	37,8862	0,4924	0,012996817	291,4323077
ZjuHsp70-20	NW	Prupe.1G078200.1	1	51,1917	0,4863	0,009499587	393,7823077
ZjuHsp70-20	NW	Prupe.1G078200.2	1	51,1953	0,4883	0,009537985	393,81
ZjuHsp70-20	NW	Prupe.3G077000.1	3	5,8300	0,5126	0,087924528	44,84615385
ZjuHsp70-20	NW	Prupe.7G108500.1	7	51,0690	0,3971	0,007775754	392,8384615
ZjuHsp70-20	NW	Prupe.7G106500.1	7	52,8594	0,4213	0,0079702	406,6107692
ZjuHsp70-20	NW	Prupe.7G107700.2	7	52,1915	0,4125	0,007903586	401,4730769
ZjuHsp70-20	NW	Prupe.2G234200.1	2	54,8978	0,3908	0,007118682	422,2907692
ZjuHsp70-20	NW	Prupe.6G079700.1	6	53,3108	0,4347	0,00815407	410,0830769
ZjuHsp70-20	NW	Prupe.7G107700.1	7	52,1915	0,4125	0,007903586	401,4730769
ZjuHsp70-20	NW	Prupe.7G107800.1	7	52,3340	0,4206	0,00803684	402,5692308
ZjuHsp70-20	NW	Prupe.2G234200.2	2	17,8873	0,3957	0,022121841	137,5946154
ZjuHsp70-20	NW	Prupe.7G106700.1	7	52,3486	0,4689	0,00895726	402,6815385
ZjuHsp70-20	NW	Prupe.7G108100.1	7	51,7686	0,4119	0,007956561	398,22
ZjuHsp70-20	NW	Prupe.7G107400.3	7	52,6341	0,4184	0,007949219	404,8776923

Table S3.4 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp70-20	NW	Prupe.7G107400.1	7	52,6274	0,4186	0,007954032	404,8261538
ZjuHsp70-20	NW	Prupe.7G107400.2	7	52,6325	0,4184	0,007949461	404,8653846
ZjuHsp70-20	NW	Prupe.2G234300.1	2	38,3340	0,4427	0,011548495	294,8769231
ZjuHsp70-20	NW	Prupe.7G107900.1	7	13,2013	0,4868	0,036875156	101,5484615
ZjuHsp70-20	NW	Prupe.7G108200.1	7	12,4787	0,4650	0,037263497	95,99
ZjuHsp70-20	NW	Prupe.7G108400.1	7	13,2080	0,4739	0,03587977	101,6
ZjuHsp70-20	NW	Prupe.7G108000.1	7	12,7206	0,4679	0,036782856	97,85076923
ZjuHsp70-21	NW	Prupe.6G321700.1	6	1,1778	0,0942	0,079979623	9,06
ZjuHsp70-21	NW	Prupe.5G125900.1	5	50,6111	0,1191	0,002353239	389,3161538
ZjuHsp70-21	NW	Prupe.5G125900.2	5	49,1348	0,1269	0,002582691	377,96
ZjuHsp70-21	NW	Prupe.3G102300.1	3	10,0430	0,2847	0,028348103	77,25384615
ZjuHsp70-21	NW	Prupe.3G102200.1	3	11,2289	0,2870	0,025559049	86,37615385
ZjuHsp70-21	NW	Prupe.7G265200.1	7	10,7115	0,2913	0,027195071	82,39615385
ZjuHsp70-21	NW	Prupe.2G233500.1	2	16,8275	0,3032	0,018018125	129,4423077
ZjuHsp70-21	NW	Prupe.6G079800.1	6	14,9128	0,3017	0,020230943	114,7138462
ZjuHsp70-21	NW	Prupe.6G252500.1	6	13,7002	0,3060	0,02233544	105,3861538
ZjuHsp70-21	NW	Prupe.5G125900.3	5	52,9504	0,1302	0,002458905	407,3107692
ZjuHsp70-21	NW	Prupe.8G075000.1	8	53,0246	0,4393	0,008284834	407,8815385
ZjuHsp70-21	NW	Prupe.2G234200.1	2	25,6073	0,3826	0,014941052	196,9792308
ZjuHsp70-21	NW	Prupe.8G075000.2	8	43,0946	0,4272	0,009913075	331,4969231
ZjuHsp70-21	NW	Prupe.3G077000.1	3	4,7774	0,4593	0,09614016	36,74923077
ZjuHsp70-21	NW	Prupe.7G108500.1	7	27,4706	0,3977	0,014477296	211,3123077
ZjuHsp70-21	NW	Prupe.2G234200.2	2	15,0152	0,3860	0,025707283	115,5015385
ZjuHsp70-21	NW	Prupe.6G079700.1	6	17,5314	0,3839	0,021897852	134,8569231
ZjuHsp70-21	NW	Prupe.7G107700.2	7	51,8763	0,4071	0,007847514	399,0484615
ZjuHsp70-21	NW	Prupe.7G107800.1	7	52,3026	0,4055	0,007752961	402,3276923
ZjuHsp70-21	NW	Prupe.7G107700.1	7	52,0189	0,4179	0,008033619	400,1453846
ZjuHsp70-21	NW	Prupe.7G106500.1	7	30,5472	0,4205	0,013765582	234,9784615
ZjuHsp70-21	NW	Prupe.7G106700.1	7	49,5088	0,4455	0,0089984	380,8369231
ZjuHsp70-21	NW	Prupe.1G078200.1	1	51,7461	0,4960	0,009585263	398,0469231
ZjuHsp70-21	NW	Prupe.1G078200.2	1	51,7266	0,4979	0,009625608	397,8969231
ZjuHsp70-21	NW	Prupe.2G234300.1	2	20,1391	0,4241	0,021058538	154,9161538
ZjuHsp70-21	NW	Prupe.7G108100.1	7	51,9844	0,4083	0,007854279	399,88
ZjuHsp70-21	NW	Prupe.7G107400.3	7	47,9074	0,4112	0,008583225	368,5184615
ZjuHsp70-21	NW	Prupe.7G107400.1	7	48,1537	0,4112	0,008539323	370,4130769
ZjuHsp70-21	NW	Prupe.7G107400.2	7	48,3510	0,4113	0,008506546	371,9307692
ZjuHsp70-21	NW	Prupe.7G108200.1	7	12,4101	0,4600	0,037066583	95,46230769
ZjuHsp70-21	NW	Prupe.7G107900.1	7	12,1827	0,4777	0,039211341	93,71307692
ZjuHsp70-21	NW	Prupe.7G108000.1	7	11,3667	0,4621	0,04065384	87,43615385
ZjuHsp70-21	NW	Prupe.7G106600.1	7	16,3703	0,4934	0,030139949	125,9253846
ZjuHsp70-21	NW	Prupe.7G107600.3	7	11,4659	0,4711	0,041087049	88,19923077
ZjuHsp70-21	NW	Prupe.7G107600.4	7	11,4697	0,4711	0,041073437	88,22846154
ZjuHsp70-21	NW	Prupe.7G107600.1	7	11,4705	0,4711	0,041070572	88,23461538
ZjuHsp70-21	NW	Prupe.7G107600.2	7	11,4697	0,4711	0,041073437	88,22846154
		Mean		25,0777	0,47097188	0,018780535	192,9050777

Table S3.5 Calculation of divergence time rates and Ka/Ks ratios of orthologous *ZjuHsp90* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Z. jujuba – *A. thaliana*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-01	1	AT5G56000.1	5	2,9399	0,0424	0,014422259	22,61461538
ZjuHsp90-01	1	AT5G56030.1	5	3,3854	0,0363	0,010722514	26,04153846
ZjuHsp90-01	1	AT5G56010.1	5	2,7015	0,0378	0,013992227	20,78076923
ZjuHsp90-01	1	AT5G56030.2	5	3,384	0,0363	0,01072695	26,03076923
ZjuHsp90-01	1	AT5G52640.1	5	6,885	0,0676	0,009818446	52,96153846
ZjuHsp90-01	1	AT4G24190.2	4	55,6443	0,4239	0,007618031	428,0330769
ZjuHsp90-01	1	AT4G24190.1	4	55,6424	0,4239	0,007618291	428,0184615
ZjuHsp90-01	1	AT2G04030.1	2	53,0052	0,4801	0,009057602	407,7323077
ZjuHsp90-01	1	AT3G07770.1	3	49,4322	0,5088	0,010292886	380,2476923
ZjuHsp90-01	1	AT2G04030.2	2	52,6604	0,4878	0,009263128	405,08
ZjuHsp90-02	4	AT3G07770.1	3	1,5279	0,1310	0,085738595	11,75307692
ZjuHsp90-02	4	AT2G04030.1	2	11,7165	0,2454	0,020944821	90,12692308
ZjuHsp90-02	4	AT2G04030.2	2	11,7993	0,246	0,020848694	90,76384615
ZjuHsp90-02	4	AT4G24190.1	4	50,0843	0,5305	0,010592142	385,2638462
ZjuHsp90-02	4	AT4G24190.2	4	54,1827	0,5329	0,009835243	416,79
ZjuHsp90-02	4	AT5G52640.1	5	53,683	0,5278	0,00983179	412,9461538

Table S3.5 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-02	4	AT5G56000.1	5	54,9226	0,5273	0,009600784	422,4815385
ZjuHsp90-02	4	AT5G56010.1	5	54,5615	0,5299	0,009711976	419,7038462
ZjuHsp90-02	4	AT5G56030.1	5	54,5827	0,5284	0,009680723	419,8669231
ZjuHsp90-02	4	AT5G56030.2	5	54,4270	0,5307	0,009750675	418,6692308
ZjuHsp90-03	6	AT4G24190.2	4	1,6603	0,1115	0,067156538	12,77153846
ZjuHsp90-03	6	AT4G24190.1	4	1,6727	0,1105	0,06606086	12,86692308
ZjuHsp90-03	6	AT5G52640.1	5	53,3676	0,4313	0,008081683	410,52
ZjuHsp90-03	6	AT5G56000.1	5	55,1731	0,4146	0,007514532	424,4084615
ZjuHsp90-03	6	AT5G56030.1	5	54,7239	0,4133	0,007552459	420,9530769
ZjuHsp90-03	6	AT5G56010.1	5	54,2328	0,4167	0,007683542	417,1753846
ZjuHsp90-03	6	AT5G56030.2	5	54,7548	0,4143	0,00756646	421,1907692
ZjuHsp90-03	6	AT2G04030.1	2	56,2943	0,5349	0,00950185	433,0330769
ZjuHsp90-03	6	AT2G04030.2	2	56,4557	0,5346	0,009469372	434,2746154
ZjuHsp90-03	6	AT3G07770.1	3	56,0345	0,5535	0,009877843	431,0346154
ZjuHsp90-04	10	AT2G04030.1	2	2,4862	0,0867	0,034872496	19,12461538
ZjuHsp90-04	10	AT2G04030.2	2	2,4885	0,0878	0,035282299	19,14230769
ZjuHsp90-04	10	AT3G07770.1	3	13,6269	0,2659	0,019512875	104,8223077
ZjuHsp90-04	10	AT4G24190.1	4	13,1329	0,5291	0,040288131	101,0223077
ZjuHsp90-04	10	AT4G24190.2	4	11,0483	0,5319	0,048143153	84,98692308
ZjuHsp90-04	10	AT5G52640.1	5	5,3266	0,5076	0,09529531	40,97384615
ZjuHsp90-04	10	AT5G56030.1	5	28,5301	0,4915	0,017227419	219,4623077
ZjuHsp90-04	10	AT5G56010.1	5	25,7428	0,4956	0,019251985	198,0215385
ZjuHsp90-04	10	AT5G56000.1	5	25,4713	0,4946	0,019417933	195,9330769
ZjuHsp90-04	10	AT5G56030.2	5	28,1984	0,4915	0,017430067	216,9107692
ZjuHsp90-05	11	AT5G52640.1	5	4,8011	0,0785	0,01635042	36,93153846
ZjuHsp90-05	11	AT5G56000.1	5	19,9838	0,1286	0,006435213	153,7215385
ZjuHsp90-05	11	AT5G56030.2	5	28,0212	0,1226	0,004375259	215,5476923
ZjuHsp90-05	11	AT5G56030.1	5	27,615	0,1227	0,004443237	212,4230769
ZjuHsp90-05	11	AT5G56010.1	5	24,5779	0,1218	0,004955672	189,0607692
ZjuHsp90-05	11	AT4G24190.2	4	56,8961	0,525	0,009227346	437,6623077
ZjuHsp90-05	11	AT4G24190.1	4	56,8814	0,525	0,009229731	437,5492308
ZjuHsp90-05	11	AT2G04030.1	2	16,5646	0,5997	0,036203712	127,42
ZjuHsp90-05	11	AT3G07770.1	3	55,5723	0,5467	0,009837635	427,4792308
ZjuHsp90-05	11	AT2G04030.2	2	16,2825	0,6085	0,037371411	125,25
ZjuHsp90-06	11	AT5G52640.1	5	3,1214	0,062	0,019862882	24,01076923
ZjuHsp90-06	11	AT5G56000.1	5	4,798	0,1054	0,021967486	36,90769231
ZjuHsp90-06	11	AT5G56030.1	5	5,9230	0,1036	0,017491136	45,56153846
ZjuHsp90-06	11	AT5G56010.1	5	6,6419	0,1038	0,015628058	51,09153846
ZjuHsp90-06	11	AT5G56030.2	5	5,9237	0,1036	0,017489069	45,56692308
ZjuHsp90-06	11	AT4G24190.1	4	53,7347	0,4252	0,00791295	413,3438462
ZjuHsp90-06	11	AT4G24190.2	4	53,7366	0,4253	0,007914531	413,3584615
ZjuHsp90-06	11	AT2G04030.1	2	20,236	0,4908	0,024253805	155,6615385
ZjuHsp90-06	11	AT2G04030.2	2	20,1974	0,4952	0,024518007	155,3646154
ZjuHsp90-06	11	AT3G07770.1	3	57,5753	0,5189	0,009012545	442,8869231
ZjuHsp90-06	11	AT3G07770.1	3	57,5753	0,5189	0,009012545	442,8869231
		Mean		30,444557	0,350085	0,019195578	234,1888974

Z. jujuba – *C. sinensis*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-01	1	orange1.1g045760m	scaffold	1,4252	0,0167	0,011717654	10,96307692
ZjuHsp90-01	1	orange1.1g005370m	scaffold	38,4875	0,0697	0,001810978	296,0576923
ZjuHsp90-01	1	orange1.1g005321m	scaffold	9,3256	0,079	0,008471305	71,73538462
ZjuHsp90-01	1	orange1.1g007669m	scaffold	31,8932	0,0767	0,002404901	245,3323077
ZjuHsp90-01	1	orange1.1g003827m	scaffold	32,3155	0,4727	0,014627655	248,5807692
ZjuHsp90-01	1	orange1.1g005150m	scaffold	52,5597	0,4406	0,008382848	404,3053846
ZjuHsp90-01	1	orange1.1g003713m	scaffold	56,383	0,5194	0,009211997	433,7153846
ZjuHsp90-01	1	orange1.1g004236m	scaffold	28,2661	0,4757	0,016829347	217,4315385
ZjuHsp90-01	1	orange1.1g004444m	scaffold	57,7017	0,4949	0,00857687	443,8592308
ZjuHsp90-01	1	orange1.1g007698m	scaffold	47,6841	0,43	0,009017681	366,8007692
ZjuHsp90-01	1	orange1.1g005751m	scaffold	57,3564	0,4312	0,007517906	441,2030769
ZjuHsp90-01	1	orange1.1g004309m	scaffold	57,1416	0,4188	0,007329161	439,5507692
ZjuHsp90-01	1	orange1.1g010583m	scaffold	56,0473	0,4049	0,007224255	431,1330769
ZjuHsp90-01	1	orange1.1g007926m	scaffold	57,8942	0,4292	0,007413523	445,34
ZjuHsp90-02	4	orange1.1g003713m	scaffold	0,9831	0,0982	0,099888109	7,562307692
ZjuHsp90-02	4	orange1.1g004444m	scaffold	0,9914	0,0995	0,100363123	7,626153846
ZjuHsp90-02	4	orange1.1g003827m	scaffold	25,7635	0,2266	0,008795389	198,1807692
ZjuHsp90-02	4	orange1.1g004236m	scaffold	20,386	0,2312	0,011341116	156,8153846
ZjuHsp90-02	4	orange1.1g005150m	scaffold	52,6976	0,2177	0,004131118	405,3661538

Table S3.5 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-02	4	orange1.1g007698m	scaffold	43,5095	0,2417	0,005555109	334,6884615
ZjuHsp90-02	4	orange1.1g003458m	scaffold	55,2894	0,5334	0,009647419	425,3030769
ZjuHsp90-02	4	orange1.1g005370m	scaffold	55,2662	0,5265	0,009526618	425,1246154
ZjuHsp90-02	4	orange1.1g005321m	scaffold	54,0484	0,5330	0,009861532	415,7569231
ZjuHsp90-02	4	orange1.1g004309m	scaffold	55,6082	0,5340	0,0096029	427,7553846
ZjuHsp90-02	4	orange1.1g045760m	scaffold	54,4548	0,5427	0,009966064	418,8830769
ZjuHsp90-02	4	orange1.1g005751m	scaffold	55,2412	0,5142	0,00930827	424,9323077
ZjuHsp90-02	4	orange1.1g007669m	scaffold	56,2071	0,5616	0,00999162	432,3623077
ZjuHsp90-02	4	orange1.1g007926m	scaffold	56,4323	0,5383	0,009538863	434,0946154
ZjuHsp90-02	4	orange1.1g010583m	scaffold	30,7592	0,5251	0,017071315	236,6092308
ZjuHsp90-03	6	orange1.1g003458m	scaffold	1,1630	0,0728	0,062596733	8,946153846
ZjuHsp90-03	6	orange1.1g004309m	scaffold	1,1735	0,0803	0,06842778	9,026923077
ZjuHsp90-03	6	orange1.1g005751m	scaffold	1,0749	0,0736	0,068471486	8,268461538
ZjuHsp90-03	6	orange1.1g007926m	scaffold	1,1660	0,1055	0,090480274	8,969230769
ZjuHsp90-03	6	orange1.1g010583m	scaffold	1,0684	0,0795	0,074410333	8,218461538
ZjuHsp90-03	6	orange1.1g005321m	scaffold	54,2883	0,4088	0,007530168	417,6023077
ZjuHsp90-03	6	orange1.1g007669m	scaffold	55,3433	0,4363	0,00788352	425,7176923
ZjuHsp90-03	6	orange1.1g005370m	scaffold	55,2682	0,4106	0,007429227	425,14
ZjuHsp90-03	6	orange1.1g045760m	scaffold	55,1298	0,4232	0,007676429	424,0753846
ZjuHsp90-03	6	orange1.1g004236m	scaffold	19,7981	0,587	0,02964931	152,2930769
ZjuHsp90-03	6	orange1.1g003827m	scaffold	22,3681	0,5779	0,0258359	172,0623077
ZjuHsp90-03	6	orange1.1g003713m	scaffold	56,5413	0,547	0,009674344	434,9330769
ZjuHsp90-03	6	orange1.1g004444m	scaffold	57,0400	0,5219	0,009149719	438,7692308
ZjuHsp90-03	6	orange1.1g005150m	scaffold	21,508	0,5404	0,025125535	165,4461538
ZjuHsp90-03	6	orange1.1g007698m	scaffold	29,2696	0,5605	0,019149561	225,1507692
ZjuHsp90-04	10	orange1.1g003827m	scaffold	0,9100	0,0676	0,074285714	7
ZjuHsp90-04	10	orange1.1g004236m	scaffold	0,9034	0,0681	0,075381891	6,949230769
ZjuHsp90-04	10	orange1.1g005150m	scaffold	0,8870	0,0729	0,082187148	6,823076923
ZjuHsp90-04	10	orange1.1g003713m	scaffold	13,3602	0,2467	0,018465292	102,7707692
ZjuHsp90-04	10	orange1.1g007698m	scaffold	0,9643	0,0898	0,093124546	7,417692308
ZjuHsp90-04	10	orange1.1g004444m	scaffold	12,0945	0,2391	0,019769317	93,03461538
ZjuHsp90-04	10	orange1.1g005370m	scaffold	12,696	0,4955	0,03902804	97,66153846
ZjuHsp90-04	10	orange1.1g045760m	scaffold	23,6056	0,4914	0,020817094	181,5815385
ZjuHsp90-04	10	orange1.1g005321m	scaffold	22,773	0,4977	0,021854828	175,1769231
ZjuHsp90-04	10	orange1.1g007669m	scaffold	19,4701	0,5261	0,027020919	149,77
ZjuHsp90-04	10	orange1.1g005751m	scaffold	19,5849	0,5166	0,026377464	150,6530769
ZjuHsp90-04	10	orange1.1g003458m	scaffold	16,2856	0,5213	0,032009874	125,2738462
ZjuHsp90-04	10	orange1.1g004309m	scaffold	18,0954	0,5071	0,028023697	139,1953846
ZjuHsp90-04	10	orange1.1g010583m	scaffold	8,3228	0,4829	0,058021339	64,02153846
ZjuHsp90-04	10	orange1.1g007926m	scaffold	15,3083	0,4930	0,032204752	117,7561538
ZjuHsp90-05	11	orange1.1g005321m	scaffold	3,0022	0,0681	0,022683366	23,09384615
ZjuHsp90-05	11	orange1.1g005370m	scaffold	3,9759	0,0743	0,018687593	30,58384615
ZjuHsp90-05	11	orange1.1g007669m	scaffold	3,9758	0,0743	0,018688063	30,58307692
ZjuHsp90-05	11	orange1.1g045760m	scaffold	32,0402	0,1198	0,003739053	246,4630769
ZjuHsp90-05	11	orange1.1g005751m	scaffold	56,416	0,4888	0,008664209	433,9692308
ZjuHsp90-05	11	orange1.1g003458m	scaffold	56,5053	0,487	0,008618661	434,6561538
ZjuHsp90-05	11	orange1.1g004309m	scaffold	56,807	0,4942	0,008699632	436,9769231
ZjuHsp90-05	11	orange1.1g004236m	scaffold	21,2071	0,5815	0,027420062	163,1315385
ZjuHsp90-05	11	orange1.1g003827m	scaffold	21,1388	0,5815	0,027508657	162,6061538
ZjuHsp90-05	11	orange1.1g003713m	scaffold	56,0163	0,5566	0,009936394	430,8946154
ZjuHsp90-05	11	orange1.1g005150m	scaffold	27,5233	0,5277	0,019172846	211,7176923
ZjuHsp90-05	11	orange1.1g004444m	scaffold	56,5861	0,5220	0,00922488	435,2776923
ZjuHsp90-05	11	orange1.1g007698m	scaffold	27,9996	0,5527	0,019739568	215,3815385
ZjuHsp90-05	11	orange1.1g007926m	scaffold	57,3166	0,5808	0,01013319	440,8969231
ZjuHsp90-06	11	orange1.1g005321m	scaffold	2,0927	0,0478	0,022841305	16,09769231
ZjuHsp90-06	11	orange1.1g005370m	scaffold	2,6591	0,0570	0,021435824	20,45461538
ZjuHsp90-06	11	orange1.1g045760m	scaffold	13,2315	0,0932	0,007043797	101,7807692
ZjuHsp90-06	11	orange1.1g007669m	scaffold	2,783	0,0572	0,02055336	21,40769231
ZjuHsp90-06	11	orange1.1g003827m	scaffold	16,0814	0,4798	0,029835711	123,7030769
ZjuHsp90-06	11	orange1.1g005150m	scaffold	19,1004	0,4486	0,023486419	146,9261538
ZjuHsp90-06	11	orange1.1g003713m	scaffold	56,592	0,5243	0,00926456	435,3230769
ZjuHsp90-06	11	orange1.1g004236m	scaffold	16,3008	0,4804	0,029470946	125,3907692
ZjuHsp90-06	11	orange1.1g004444m	scaffold	57,3577	0,5002	0,008720712	441,2130769
ZjuHsp90-06	11	orange1.1g007698m	scaffold	16,7811	0,4395	0,026190178	129,0853846
ZjuHsp90-06	11	orange1.1g005751m	scaffold	55,8857	0,4143	0,007413345	429,89
ZjuHsp90-06	11	orange1.1g003458m	scaffold	55,4837	0,4143	0,007467058	426,7976923
ZjuHsp90-06	11	orange1.1g004309m	scaffold	55,6121	0,4134	0,007433634	427,7853846
ZjuHsp90-06	11	orange1.1g010583m	scaffold	7,768	14,3416	1,846240989	59,75384615
ZjuHsp90-06	11	orange1.1g007926m	scaffold	55,935	0,4264	0,007623134	430,2692308
Mean				26,0399	0,60189	0,057784512	200,3070769

Table S3.5 Continued

(*Z. jujuba* – *M. Accuminata*)

ID	Chrom.	Gene IDs	Chrom.	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-01	1	GSMUA_Achr3T10970_001	3	3,0883	0,0397	0,012854969	23,75615385
ZjuHsp90-01	1	GSMUA_Achr11T10020_001	11	7,5905	0,047	0,00619195	58,38846154
ZjuHsp90-01	1	GSMUA_Achr8T19130_001	8	9,594	0,0714	0,007442151	73,8
ZjuHsp90-01	1	GSMUA_Achr10T03520_001	10	4,8235	0,0433	0,008976884	37,10384615
ZjuHsp90-01	1	GSMUA_Achr1T07620_001	1	58,3905	0,4326	0,007408739	449,1576923
ZjuHsp90-01	1	GSMUA_Achr7T17770_001	7	56,9221	0,4529	0,007956488	437,8623077
ZjuHsp90-01	1	GSMUA_Achr1T07620_001	1	58,3946	0,4328	0,007411644	449,1892308
ZjuHsp90-01	1	GSMUA_Achr7T17770_001	7	56,9187	0,4527	0,007953449	437,8361538
ZjuHsp90-01	1	GSMUA_Achr3T28100_001	3	53,1546	0,4862	0,009146904	408,8815385
ZjuHsp90-01	1	GSMUA_Achr9T22700_001	9	53,4751	0,4894	0,009151923	411,3469231
ZjuHsp90-01	1	GSMUA_Achr10T26930_001	10	46,5612	0,5132	0,011022053	358,1630769
ZjuHsp90-01	1	GSMUA_Achr9T12680_001	9	4,3820	0,0355	0,008101324	33,70769231
ZjuHsp90-01	1	GSMUA_Achr3T04010_001	3	5,4590	0,0385	0,007052574	41,99230769
ZjuHsp90-02	4	GSMUA_Achr10T26930_001	10	2,6281	0,1320	0,050226399	20,21615385
ZjuHsp90-02	4	GSMUA_Achr3T28100_001	3	23,4326	0,2250	0,009602007	180,2507692
ZjuHsp90-02	4	GSMUA_Achr9T22700_001	9	22,0459	0,2179	0,009883924	169,5838462
ZjuHsp90-02	4	GSMUA_Achr1T07620_001	1	56,7073	0,5555	0,009795917	436,21
ZjuHsp90-02	4	GSMUA_Achr7T17770_001	7	30,514	0,5392	0,017670577	234,7230769
ZjuHsp90-02	4	GSMUA_Achr3T10970_001	3	54,7274	0,5360	0,009793997	420,98
ZjuHsp90-02	4	GSMUA_Achr8T19130_001	8	56,3632	0,5057	0,008972166	433,5630769
ZjuHsp90-02	4	GSMUA_Achr11T10020_001	11	52,2574	0,5670	0,010850138	401,98
ZjuHsp90-02	4	GSMUA_Achr10T03520_001	10	52,7357	0,5583	0,010586756	405,6592308
ZjuHsp90-02	4	GSMUA_Achr9T12680_001	9	52,0403	0,5505	0,01057834	400,31
ZjuHsp90-02	4	GSMUA_Achr3T04010_001	3	52,2858	0,5662	0,010828944	402,1984615
ZjuHsp90-03	6	GSMUA_Achr7T17770_001	7	1,9703	0,0908	0,046084353	15,15615385
ZjuHsp90-03	6	GSMUA_Achr1T07620_001	1	2,3598	0,0889	0,037672684	18,15230769
ZjuHsp90-03	6	GSMUA_Achr3T28100_001	3	0,1798	17,8017	99,0083426	1,383076923
ZjuHsp90-03	6	GSMUA_Achr9T22700_001	9	55,7978	0,5343	0,009575646	429,2138462
ZjuHsp90-03	6	GSMUA_Achr10T26930_001	10	45,7272	0,5398	0,01180479	351,7476923
ZjuHsp90-03	6	GSMUA_Achr10T03520_001	10	54,3182	0,4396	0,008093052	417,8323077
ZjuHsp90-03	6	GSMUA_Achr11T10020_001	11	55,6446	0,4530	0,008140952	428,0353846
ZjuHsp90-03	6	GSMUA_Achr3T04010_001	3	52,4705	0,4190	0,007985439	403,6192308
ZjuHsp90-03	6	GSMUA_Achr8T19130_001	8	54,8244	0,4535	0,008271864	421,7261538
ZjuHsp90-03	6	GSMUA_Achr9T12680_001	9	52,9188	0,4147	0,007836534	407,0676923
ZjuHsp90-03	6	GSMUA_Achr3T10970_001	3	55,9561	0,4344	0,007763229	430,4315385
ZjuHsp90-04	10	GSMUA_Achr3T28100_001	3	2,1615	0,1003	0,046402961	16,62692308
ZjuHsp90-04	10	GSMUA_Achr9T22700_001	9	2,1159	0,1071	0,050616759	16,27615385
ZjuHsp90-04	10	GSMUA_Achr10T26930_001	10	6,4711	0,2332	0,03603715	49,77769231
ZjuHsp90-04	10	GSMUA_Achr1T07620_001	1	25,3689	0,5488	0,021632787	195,1453846
ZjuHsp90-04	10	GSMUA_Achr7T17770_001	7	24,3608	0,546	0,022413057	187,3907692
ZjuHsp90-04	10	GSMUA_Achr3T10970_001	3	37,1716	0,5194	0,013973033	285,9353846
ZjuHsp90-04	10	GSMUA_Achr11T10020_001	11	51,127	0,5409	0,010579537	393,2846154
ZjuHsp90-04	10	GSMUA_Achr8T19130_001	8	35,9546	0,5086	0,014145617	276,5738462
ZjuHsp90-04	10	GSMUA_Achr10T03520_001	10	51,6987	0,5225	0,010106637	397,6823077
ZjuHsp90-04	10	GSMUA_Achr9T12680_001	9	23,1031	0,5180	0,022421234	177,7161538
ZjuHsp90-04	10	GSMUA_Achr3T04010_001	3	25,7005	0,5146	0,020022957	197,6961538
ZjuHsp90-05	11	GSMUA_Achr10T03520_001	10	25,8485	0,1503	0,005814651	198,8346154
ZjuHsp90-05	11	GSMUA_Achr3T10970_001	3	18,6726	0,1425	0,007631503	143,6353846
ZjuHsp90-05	11	GSMUA_Achr8T19130_001	8	57,9865	0,0945	0,00162969	446,05
ZjuHsp90-05	11	GSMUA_Achr11T10020_001	11	66,6792	0,1506	0,002258575	512,9169231
ZjuHsp90-05	11	GSMUA_Achr1T07620_001	1	57,9455	0,4981	0,008596008	445,7346154
ZjuHsp90-05	11	GSMUA_Achr7T17770_001	7	57,1971	0,5053	0,008834364	439,9776923
ZjuHsp90-05	11	GSMUA_Achr3T28100_001	3	17,6405	0,5654	0,032051246	135,6961538
ZjuHsp90-05	11	GSMUA_Achr10T26930_001	10	53,4513	0,5445	0,010186843	411,1638462
ZjuHsp90-05	11	GSMUA_Achr9T22700_001	9	32,4023	0,5913	0,018248705	249,2484615
ZjuHsp90-05	11	GSMUA_Achr3T04010_001	3	61,3835	0,1485	0,002419217	472,1807692
ZjuHsp90-05	11	GSMUA_Achr9T12680_001	9	46,6722	0,1494	0,003201049	359,0169231
ZjuHsp90-06	11	GSMUA_Achr3T10970_001	3	7,2224	0,1092	0,015119628	55,55692308
ZjuHsp90-06	11	GSMUA_Achr8T19130_001	8	12,9300	0,0659	0,005096674	99,46153846
ZjuHsp90-06	11	GSMUA_Achr11T10020_001	11	14,9395	0,1116	0,00747013	114,9192308
ZjuHsp90-06	11	GSMUA_Achr1T07620_001	1	48,9521	0,4202	0,008583901	376,5546154
ZjuHsp90-06	11	GSMUA_Achr7T17770_001	7	53,6423	0,4259	0,00793963	412,6330769
ZjuHsp90-06	11	GSMUA_Achr10T03520_001	10	17,3083	0,1012	0,005846906	133,1407692
ZjuHsp90-06	11	GSMUA_Achr3T28100_001	3	25,0238	0,4874	0,019477457	192,4907692
ZjuHsp90-06	11	GSMUA_Achr9T22700_001	9	36,0468	0,5120	0,014203757	277,2830769
ZjuHsp90-06	11	GSMUA_Achr10T26930_001	10	51,7329	0,5053	0,009767479	397,9453846
ZjuHsp90-06	11	GSMUA_Achr9T12680_001	9	22,9785	0,0914	0,003977631	176,7576923
ZjuHsp90-06	11	GSMUA_Achr3T04010_001	3	29,9494	0,0917	0,003061831	230,38
		Mean		35,8796	0,655123333	1,663910062	275,9969231

Table S3.5 Continued

Z. jujuba – P. persica

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp90-01	1	Prupe.6G028600.1	6	1,3855	0,0244	0,017610971	10,65769231
ZjuHsp90-01	1	Prupe.2G301300.1	2	5,5827	0,066	0,011822237	42,94384615
ZjuHsp90-01	1	Prupe.5G105600.1	5	9,7548	0,1254	0,01285521	75,03692308
ZjuHsp90-01	1	Prupe.1G295600.1	1	31,359	0,4841	0,015437355	241,2230769
ZjuHsp90-01	1	Prupe.3G201400.1	3	57,3198	0,5148	0,00898119	440,9215385
ZjuHsp90-01	1	Prupe.1G363900.2	1	56,8867	0,4356	0,007657326	437,59
ZjuHsp90-01	1	Prupe.1G363900.1	1	56,596	0,4384	0,00774613	435,3538462
ZjuHsp90-02	4	Prupe.3G201400.1	3	0,6753	0,0959	0,142010958	5,194615385
ZjuHsp90-02	4	Prupe.1G295600.1	1	9,1502	0,2286	0,02498306	70,38615385
ZjuHsp90-02	4	Prupe.2G301300.1	2	54,9522	0,5207	0,009475508	422,7092308
ZjuHsp90-02	4	Prupe.1G363900.1	1	55,9735	0,5399	0,009645636	430,5653846
ZjuHsp90-02	4	Prupe.6G028600.1	6	54,0295	0,5245	0,00970766	415,6115385
ZjuHsp90-02	4	Prupe.1G363900.2	1	56,6225	0,5025	0,008874564	435,5576923
ZjuHsp90-02	4	Prupe.5G105600.1	5	55,806	0,5506	0,009866323	429,2769231
ZjuHsp90-03	6	Prupe.1G363900.1	1	0,8364	0,0621	0,074246772	6,433846154
ZjuHsp90-03	6	Prupe.1G363900.2	1	0,8287	0,0641	0,077350066	6,374615385
ZjuHsp90-03	6	Prupe.2G301300.1	2	53,8486	0,4170	0,007743934	414,22
ZjuHsp90-03	6	Prupe.6G028600.1	6	54,7926	0,4258	0,007771122	421,4815385
ZjuHsp90-03	6	Prupe.1G295600.1	1	16,5767	0,5611	0,033848715	127,5130769
ZjuHsp90-03	6	Prupe.3G201400.1	3	56,5322	0,5426	0,00959807	434,8630769
ZjuHsp90-03	6	Prupe.5G105600.1	5	55,401	0,4434	0,008003466	426,1615385
ZjuHsp90-04	10	Prupe.1G295600.1	1	0,6262	0,0634	0,101245608	4,816923077
ZjuHsp90-04	10	Prupe.3G201400.1	3	13,7165	0,2364	0,017234717	105,5115385
ZjuHsp90-04	10	Prupe.2G301300.1	2	8,1959	0,496	0,060518064	63,04538462
ZjuHsp90-04	10	Prupe.6G028600.1	6	43,256	0,4892	0,011309414	332,7384615
ZjuHsp90-04	10	Prupe.1G363900.2	1	14,9696	0,5084	0,033962163	4,816923077
ZjuHsp90-04	10	Prupe.1G363900.1	1	15,0021	0,5500	0,036661534	115,4007692
ZjuHsp90-04	10	Prupe.5G105600.1	5	11,8601	0,5579	0,047040076	91,23153846
ZjuHsp90-05	11	Prupe.2G301300.1	2	3,3296	0,0613	0,01841062	25,61230769
ZjuHsp90-05	11	Prupe.6G028600.1	6	22,4864	0,1173	0,005216486	172,9723077
ZjuHsp90-05	11	Prupe.5G105600.1	5	1,4655	0,1071	0,07308086	11,27307692
ZjuHsp90-05	11	Prupe.1G363900.2	1	56,8823	0,4911	0,008633617	437,5561538
ZjuHsp90-05	11	Prupe.1G363900.1	1	56,8839	0,4912	0,008635132	437,5684615
ZjuHsp90-05	11	Prupe.1G295600.1	1	36,9080	0,6058	0,016413786	283,9076923
ZjuHsp90-05	11	Prupe.3G201400.1	3	55,9958	0,553	0,009875741	430,7369231
ZjuHsp90-06	11	Prupe.2G301300.1	2	2,3427	0,0461	0,019678149	18,02076923
ZjuHsp90-06	11	Prupe.6G028600.1	6	7,8294	0,0894	0,0114185	60,22615385
ZjuHsp90-06	11	Prupe.5G105600.1	5	1,4015	0,0921	0,065715305	10,78076923
ZjuHsp90-06	11	Prupe.1G295600.1	1	24,8732	0,5094	0,020479874	191,3323077
ZjuHsp90-06	11	Prupe.3G201400.1	3	57,2593	0,5134	0,008966229	440,4561538
ZjuHsp90-06	11	Prupe.1G363900.2	1	54,3800	0,4046	0,007440235	418,3076923
ZjuHsp90-06	11	Prupe.1G363900.1	1	54,1374	0,4125	0,007619501	416,4415385
Mean				30,68360238	14,9631	0,026304569	236,0277106

Table S3.6 Calculation of divergence time rates and Ka/Ks ratios of orthologous *ZjuHsp100* gene pairs between jujube and peach, banana, orange, Arabidopsis.

Z. jujuba – A. thaliana

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	AT5G57480.1	5	10,4168	0,1413	0,013564626	80,12923077
ZjuHsp100-01	1	AT4G25835.1	4	2,4256	0,1615	0,066581464	18,65846154
ZjuHsp100-01	1	AT4G30250.1	4	3,4605	0,2129	0,061522901	26,61923077
ZjuHsp100-01	1	AT3G28580.1	3	54,9894	0,5801	0,010549306	422,9953846
ZjuHsp100-01	1	AT5G40010.1	5	53,1358	0,6113	0,011504485	408,7369231
ZjuHsp100-01	1	AT3G28510.1	3	56,2151	0,6022	0,010712424	432,4238462
ZjuHsp100-01	1	AT3G50930.1	3	0,1556	15,4021	98,98521851	1,196923077
ZjuHsp100-01	1	AT3G50940.1	3	52,1282	0,5788	0,011103395	400,9861538
ZjuHsp100-01	1	AT3G28600.1	3	53,2445	0,6033	0,011330748	409,5730769
ZjuHsp100-01	1	AT5G40000.1	5	52,8088	0,5656	0,010710336	406,2215385
ZjuHsp100-01	1	AT3G28610.1	3	52,7059	0,6194	0,011752005	405,43
ZjuHsp100-01	1	AT3G28540.2	3	56,3999	0,6155	0,01091314	433,8453846
ZjuHsp100-01	1	AT3G28540.1	3	56,4998	0,6187	0,010950481	434,6138462
ZjuHsp100-01	1	AT2G18193.1	2	53,4491	0,6516	0,012191038	411,1469231
ZjuHsp100-01	1	AT5G17760.1	5	52,5096	0,6463	0,012308226	403,92
ZjuHsp100-01	1	AT2G18190.1	2	52,9454	0,646	0,012201249	407,2723077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	AT3G28570.1	3	53,8873	0,5938	0,011019294	414,5176923
ZjuHsp100-01	1	AT5G17740.1	5	5,8654	0,7114	0,121287551	45,11846154
ZjuHsp100-01	1	AT3G28520.1	3	54,7476	0,6356	0,011609641	421,1353846
ZjuHsp100-01	1	AT5G17730.1	5	4,7151	0,7017	0,148819749	36,27
ZjuHsp100-01	1	AT5G17750.1	5	57,0659	0,5952	0,010430047	438,9684615
ZjuHsp100-01	1	AT1G43910.1	1	52,9021	0,6817	0,012886067	406,9392308
ZjuHsp100-01	1	AT2G46620.1	2	52,8748	0,7182	0,013583303	406,7292308
ZjuHsp100-02	1	AT5G57480.1	5	9,3943	0,1301	0,013848823	72,26384615
ZjuHsp100-02	1	AT4G25835.1	4	2,4684	0,1454	0,058904554	18,98769231
ZjuHsp100-02	1	AT4G30250.1	4	25,1526	0,2016	0,008015076	193,4815385
ZjuHsp100-02	1	AT3G28580.1	3	54,4989	0,5856	0,010745171	419,2223077
ZjuHsp100-02	1	AT5G40010.1	5	52,9127	0,6071	0,011473616	407,0207692
ZjuHsp100-02	1	AT3G28510.1	3	44,4492	0,5824	0,013102598	341,9169231
ZjuHsp100-02	1	AT3G50930.1	3	51,0672	0,6402	0,012536423	392,8246154
ZjuHsp100-02	1	AT3G50940.1	3	52,3817	0,5733	0,010944662	402,2661538
ZjuHsp100-02	1	AT5G40000.1	5	52,5311	0,5665	0,010784088	404,0853846
ZjuHsp100-02	1	AT3G28540.2	3	57,4149	0,6073	0,010577394	441,6530769
ZjuHsp100-02	1	AT3G28540.1	3	57,394	0,6074	0,010582988	441,4923077
ZjuHsp100-02	1	AT3G28600.1	3	52,4246	0,5980	0,011406859	403,2661538
ZjuHsp100-02	1	AT3G28610.1	3	52,3838	0,6269	0,01196744	402,9523077
ZjuHsp100-02	1	AT2G18193.1	2	53,7538	0,6366	0,011842884	413,4907692
ZjuHsp100-02	1	AT2G18190.1	2	51,9662	0,6400	0,012315698	399,74
ZjuHsp100-02	1	AT5G17760.1	5	52,1843	0,6524	0,012501844	401,4176923
ZjuHsp100-02	1	AT3G28570.1	3	42,5482	0,587	0,013796118	327,2938462
ZjuHsp100-02	1	AT5G17740.1	5	11,1565	0,6791	0,060870345	85,81923077
ZjuHsp100-02	1	AT3G28520.1	3	54,3272	0,6312	0,011618489	417,9015385
ZjuHsp100-02	1	AT5G17730.1	5	3,9187	0,6934	0,176946436	30,14384615
ZjuHsp100-02	1	AT5G17750.1	5	52,2344	0,6671	0,012771277	401,8030769
ZjuHsp100-02	1	AT1G43910.1	1	53,2122	0,6956	0,01307219	409,3246154
ZjuHsp100-02	1	AT2G46620.1	2	52,7658	0,6992	0,013251007	405,8907692
ZjuHsp100-03	1	AT4G29920.1	4	2,2756	0,4369	0,19199332	17,50461538
ZjuHsp100-03	1	AT5G57130.1	5	3,3531	0,4449	0,132683189	25,79307692
ZjuHsp100-03	1	AT4G30350.1	4	52,4368	0,7813	0,014899841	403,36
ZjuHsp100-04	1	AT4G25835.1	4	54,9832	0,5322	0,00967932	422,9476923
ZjuHsp100-04	1	AT5G57480.1	5	52,9992	0,5516	0,010407704	407,6861538
ZjuHsp100-04	1	AT4G30250.1	4	44,1023	0,5335	0,012096875	339,2484615
ZjuHsp100-04	1	AT3G28510.1	3	56,5237	0,6683	0,011823359	434,7976923
ZjuHsp100-04	1	AT3G50930.1	3	52,1895	0,6255	0,011985169	401,4576923
ZjuHsp100-04	1	AT3G28600.1	3	51,562	0,6528	0,012660486	396,6307692
ZjuHsp100-04	1	AT3G28580.1	3	56,1001	0,6515	0,01161317	431,5392308
ZjuHsp100-04	1	AT5G40000.1	5	53,7989	0,6568	0,012208428	413,8376923
ZjuHsp100-04	1	AT3G28540.2	3	55,3245	0,6434	0,011629567	425,5730769
ZjuHsp100-04	1	AT3G28540.1	3	55,4298	0,6469	0,011670618	426,3830769
ZjuHsp100-04	1	AT3G50940.1	3	50,9969	0,5889	0,011547761	392,2838462
ZjuHsp100-04	1	AT2G18193.1	2	54,2867	0,6186	0,011395056	417,59
ZjuHsp100-04	1	AT2G18190.1	2	53,2345	0,6243	0,011727357	409,4961538
ZjuHsp100-04	1	AT5G17760.1	5	21,7968	0,6324	0,029013433	167,6676923
ZjuHsp100-04	1	AT1G43910.1	1	50,4768	0,6896	0,013661722	388,2830769
ZjuHsp100-04	1	AT2G46620.1	2	54,1222	0,6194	0,011444472	416,3246154
ZjuHsp100-04	1	AT5G17740.1	5	16,4555	0,7021	0,042666586	126,5807692
ZjuHsp100-04	1	AT3G28520.1	3	55,9226	0,6565	0,01173944	430,1738462
ZjuHsp100-04	1	AT3G28570.1	3	53,3296	0,6274	0,011764574	410,2276923
ZjuHsp100-04	1	AT5G17730.1	5	54,0647	0,6333	0,011713743	415,8823077
ZjuHsp100-04	1	AT5G17750.1	5	54,4717	0,613	0,01125355	419,0130769
ZjuHsp100-04	1	AT5G40010.1	5	56,3623	0,6341	0,011250428	433,5561538
ZjuHsp100-05	1	AT4G04180.1	4	2,3381	0,3125	0,133655532	17,98538462
ZjuHsp100-06	1	AT4G04180.1	4	2,2687	0,241	0,106228236	17,45153846
ZjuHsp100-07	1	AT2G25140.1	2	2,3789	0,0936	0,039345916	18,29923077
ZjuHsp100-07	1	AT5G15450.1	5	11,7288	0,1828	0,015585567	90,22153846
ZjuHsp100-07	1	AT1G74310.1	1	32,0572	0,4646	0,014492844	246,5938462
ZjuHsp100-07	1	AT5G50920.1	5	51,829	0,4961	0,009571861	398,6846154
ZjuHsp100-07	1	AT3G48870.2	3	47,8141	0,4891	0,0102292	367,8007692
ZjuHsp100-07	1	AT3G48870.1	3	49,0064	0,489	0,009978289	376,9723077
ZjuHsp100-07	1	AT5G51070.1	5	52,2682	0,587	0,011230538	402,0630769
ZjuHsp100-07	1	AT4G14670.1	4	56,9689	0,4749	0,008336127	438,2223077
ZjuHsp100-08	1	AT4G04910.1	4	2,041	0,1026	0,050269476	15,7
ZjuHsp100-09	1	AT1G53750.1	1	1,7601	0,0215	0,012215215	13,53923077
ZjuHsp100-09	1	AT1G53780.2	1	1,9755	0,1115	0,056441407	15,19615385
ZjuHsp100-09	1	AT1G53780.1	1	1,8265	0,1063	0,058198741	14,05

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-09	1	AT1G53780.3	1	1,9755	0,1115	0,056441407	15,19615385
ZjuHsp100-09	1	AT5G19990.1	5	55,0571	0,5015	0,009108725	423,5161538
ZjuHsp100-09	1	AT5G20000.1	5	54,8359	0,5121	0,009338773	421,8146154
ZjuHsp100-09	1	AT1G45000.1	1	53,5597	0,5484	0,010239042	411,9976923
ZjuHsp100-09	1	AT5G43010.1	5	52,8677	0,5682	0,010747583	406,6746154
ZjuHsp100-09	1	AT4G29040.1	4	56,3871	0,5603	0,00993667	433,7469231
ZjuHsp100-09	1	AT2G20140.1	2	49,6932	0,5602	0,011273172	382,2553846
ZjuHsp100-09	1	AT3G05530.1	3	49,5054	0,5511	0,011132119	380,8107692
ZjuHsp100-09	1	AT1G09100.1	1	53,0283	0,5738	0,010820637	407,91
ZjuHsp100-09	1	AT5G58290.1	5	51,6284	0,6148	0,011908175	397,1415385
ZjuHsp100-09	1	AT1G45000.2	1	55,4333	0,5801	0,010464829	426,41
ZjuHsp100-09	1	AT5G42270.1	5	43,3943	0,6925	0,015958317	333,8023077
ZjuHsp100-09	1	AT5G15250.1	5	50,2886	0,7519	0,014951699	386,8353846
ZjuHsp100-09	1	AT1G50250.1	1	26,8962	0,7614	0,028308832	206,8938462
ZjuHsp100-09	1	AT2G30950.1	2	12,8553	0,732	0,056941495	98,88692308
ZjuHsp100-09	1	AT3G53230.1	3	41,4171	0,8237	0,019887921	318,5930769
ZjuHsp100-12	1	AT1G67120.1	1	2,5105	0,4128	0,164429397	19,31153846
ZjuHsp100-13	1	AT1G67120.1	1	2,5245	0,4113	0,162923351	19,41923077
ZjuHsp100-14	1	AT1G80350.1	1	3,017	0,0897	0,029731521	23,20769231
ZjuHsp100-14	1	AT1G80360.1	1	1,8551	0,1804	0,097245432	14,27
ZjuHsp100-14	1	AT2G34560.1	2	53,5386	0,5935	0,01108546	411,8353846
ZjuHsp100-14	1	AT2G34560.2	2	13,348	0,6051	0,045332634	102,6769231
ZjuHsp100-14	1	AT2G27600.1	2	53,0733	0,6514	0,012273591	408,2561538
ZjuHsp100-14	1	AT3G27120.1	3	55,6411	0,7063	0,012693854	428,0084615
ZjuHsp100-14	1	AT2G45500.2	2	54,4183	0,7875	0,014471235	418,6023077
ZjuHsp100-14	1	AT2G45500.1	2	54,535	0,8023	0,014711653	419,5
ZjuHsp100-14	1	AT3G19740.1	3	0,2365	16,0324	67,79027484	1,819230769
ZjuHsp100-15	2	AT2G27600.1	2	1,7951	0,0571	0,031808813	13,80846154
ZjuHsp100-15	2	AT1G80350.1	1	37,1197	0,6212	0,016735049	285,5361538
ZjuHsp100-15	2	AT2G45500.1	2	54,2582	0,598	0,011021376	417,3707692
ZjuHsp100-15	2	AT2G45500.2	2	54,5257	0,5972	0,010952633	419,4284615
ZjuHsp100-15	2	AT3G27120.1	3	52,8589	0,6541	0,012374453	406,6069231
ZjuHsp100-15	2	AT2G34560.1	2	52,5323	0,562	0,01069818	404,0946154
ZjuHsp100-15	2	AT2G34560.2	2	53,3151	0,6014	0,011280106	410,1161538
ZjuHsp100-16	2	AT2G27600.1	2	1,7951	0,0571	0,031808813	13,80846154
ZjuHsp100-16	2	AT1G80350.1	1	36,9798	0,6212	0,01679836	284,46
ZjuHsp100-16	2	AT2G34560.1	2	52,5173	0,5631	0,010722181	403,9792308
ZjuHsp100-16	2	AT2G34560.2	2	53,2965	0,6026	0,011306559	409,9730769
ZjuHsp100-16	2	AT2G45500.1	2	54,256	0,598	0,011021822	417,3538462
ZjuHsp100-16	2	AT2G45500.2	2	54,5228	0,5971	0,010951382	419,4061538
ZjuHsp100-16	2	AT3G27120.1	3	52,8609	0,6541	0,012373985	406,6223077
ZjuHsp100-17	2	AT5G22010.1	5	2,0299	0,2189	0,107837825	15,61461538
ZjuHsp100-18	2	AT5G22010.1	5	2,0299	0,2189	0,107837825	15,61461538
ZjuHsp100-19	2	AT2G29970.1	2	2,9684	0,4588	0,15456138	22,83384615
ZjuHsp100-19	2	AT1G07200.1	1	2,9326	0,5391	0,183830048	22,55846154
ZjuHsp100-19	2	AT1G07200.2	1	2,2716	0,4615	0,203160768	17,47384615
ZjuHsp100-20	2	AT5G58870.1	5	1,6057	0,1693	0,105436881	12,35153846
ZjuHsp100-20	2	AT3G47060.1	3	1,4466	0,1717	0,118692106	11,12769231
ZjuHsp100-20	2	AT1G50250.1	1	49,985	0,6421	0,012845854	384,5
ZjuHsp100-20	2	AT1G06430.1	1	50,8034	0,6419	0,012634981	390,7953846
ZjuHsp100-20	2	AT2G30950.1	2	52,2409	0,6463	0,012371533	401,8530769
ZjuHsp100-20	2	AT5G42270.1	5	53,6051	0,6337	0,011821636	412,3469231
ZjuHsp100-20	2	AT5G15250.1	5	49,4544	0,645	0,013042318	380,4184615
ZjuHsp100-20	2	AT5G15250.2	5	49,4434	0,6426	0,012996679	380,3338462
ZjuHsp100-20	2	AT2G29080.1	2	55,5946	0,7546	0,013573261	427,6507692
ZjuHsp100-20	2	AT1G07510.1	1	53,3797	0,7696	0,014417466	410,6130769
ZjuHsp100-20	2	AT2G26140.1	2	52,1828	0,7105	0,013615597	401,4061538
ZjuHsp100-20	2	AT5G53170.1	5	52,9381	0,7741	0,014622739	407,2161538
ZjuHsp100-20	2	AT4G23940.1	4	51,7123	0,8576	0,016584062	397,7869231
ZjuHsp100-20	2	AT3G02450.1	3	8,3108	0,7084	0,085238485	63,92923077
ZjuHsp100-21	2	AT5G58870.1	5	1,6056	0,1693	0,105443448	12,35076923
ZjuHsp100-21	2	AT3G47060.1	3	1,4466	0,1717	0,118692106	11,12769231
ZjuHsp100-21	2	AT1G50250.1	1	49,8391	0,6428	0,012897504	383,3776923
ZjuHsp100-21	2	AT1G06430.1	1	50,5806	0,6447	0,012745994	389,0815385
ZjuHsp100-21	2	AT2G30950.1	2	52,142	0,6433	0,012337463	401,0923077
ZjuHsp100-21	2	AT5G42270.1	5	53,4122	0,632	0,011832503	410,8630769
ZjuHsp100-21	2	AT5G15250.1	5	49,4538	0,645	0,013042476	380,4138462
ZjuHsp100-21	2	AT5G15250.2	5	49,443	0,6428	0,013000829	380,3307692
ZjuHsp100-21	2	AT1G07510.1	1	53,4334	0,7696	0,014402976	411,0261538

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-21	2	AT2G29080.1	2	55,6216	0,7538	0,013552289	427,8584615
ZjuHsp100-21	2	AT5G53170.1	5	52,9377	0,7741	0,014622849	407,2130769
ZjuHsp100-21	2	AT2G26140.1	2	52,0813	0,7176	0,013778458	400,6253846
ZjuHsp100-21	2	AT4G23940.1	4	51,8553	0,8612	0,016607753	398,8869231
ZjuHsp100-21	2	AT3G02450.1	3	7,5464	0,7078	0,093793067	58,04923077
ZjuHsp100-22	2	AT2G39730.1	2	2,3538	0,1308	0,055569717	18,10615385
ZjuHsp100-22	2	AT2G39730.2	2	2,5686	0,139	0,054115082	19,75846154
ZjuHsp100-22	2	AT2G39730.3	2	2,5153	0,1308	0,052001749	19,34846154
ZjuHsp100-22	2	AT1G73110.1	1	8,9062	0,5302	0,059531562	68,50923077
ZjuHsp100-23	2	AT1G07510.1	1	2,2138	0,1466	0,066220978	17,02923077
ZjuHsp100-23	2	AT2G29080.1	2	3,4499	0,1478	0,042841822	26,53769231
ZjuHsp100-23	2	AT1G50250.1	1	44,0054	0,5893	0,013391538	338,5030769
ZjuHsp100-23	2	AT5G42270.1	5	12,8792	0,5724	0,044443754	99,07076923
ZjuHsp100-23	2	AT5G15250.1	5	50,954	0,6205	0,01217765	391,9538462
ZjuHsp100-23	2	AT2G30950.1	2	54,0111	0,6354	0,011764248	415,47
ZjuHsp100-23	2	AT1G06430.1	1	52,0099	0,6424	0,012351495	400,0761538
ZjuHsp100-23	2	AT5G15250.2	5	50,9181	0,6188	0,012152849	391,6776923
ZjuHsp100-23	2	AT2G26140.1	2	53,3284	0,7146	0,013399989	410,2184615
ZjuHsp100-23	2	AT5G53170.1	5	54,2375	0,7364	0,013577322	417,2115385
ZjuHsp100-23	2	AT5G58870.1	5	56,7883	0,7112	0,012523706	436,8330769
ZjuHsp100-23	2	AT3G47060.1	3	55,4102	0,7236	0,013058967	426,2323077
ZjuHsp100-23	2	AT3G02450.1	3	54,5801	0,7321	0,013413314	419,8469231
ZjuHsp100-23	2	AT4G23940.1	4	51,4009	0,901	0,017528876	395,3915385
ZjuHsp100-23	2	AT3G16290.1	3	17,0346	0,8448	0,049593181	131,0353846
ZjuHsp100-26	2	AT5G03340.1	5	3,9871	0,078	0,019563091	30,67
ZjuHsp100-26	2	AT3G53230.1	3	3,6619	0,0854	0,023321227	28,16846154
ZjuHsp100-26	2	AT3G09840.1	3	4,5237	0,0838	0,018524659	34,79769231
ZjuHsp100-26	2	AT3G01610.1	3	54,9769	0,7011	0,012752629	422,8992308
ZjuHsp100-26	2	AT2G03670.1	2	51,802	0,6142	0,011856685	398,4769231
ZjuHsp100-26	2	AT1G03000.1	1	54,7105	0,7779	0,014218477	420,85
ZjuHsp100-26	2	AT3G56690.1	3	52,9107	0,7012	0,013252518	407,0053846
ZjuHsp100-26	2	AT5G08470.1	5	53,5421	0,8724	0,01629372	411,8623077
ZjuHsp100-26	2	AT1G05910.1	1	28,5082	0,9082	0,031857501	219,2938462
ZjuHsp100-27	2	AT5G58290.1	5	5,1524	0,038	0,007375204	39,63384615
ZjuHsp100-27	2	AT4G29040.1	4	54,3202	0,4796	0,008829128	417,8476923
ZjuHsp100-27	2	AT2G20140.1	2	53,0011	0,4863	0,009175281	407,7007692
ZjuHsp100-27	2	AT5G20000.1	5	51,8024	0,553	0,010675181	398,48
ZjuHsp100-27	2	AT5G19990.1	5	51,8595	0,5898	0,011373037	398,9192308
ZjuHsp100-27	2	AT1G53750.1	1	25,1794	0,6403	0,025429518	193,6876923
ZjuHsp100-27	2	AT3G05530.1	3	50,2791	0,6155	0,012241667	386,7623077
ZjuHsp100-27	2	AT1G09100.1	1	50,6784	0,582	0,011484183	389,8338462
ZjuHsp100-27	2	AT1G45000.1	1	51,3324	0,5985	0,011659303	394,8646154
ZjuHsp100-27	2	AT5G43010.1	5	50,4639	0,6085	0,012058125	388,1838462
ZjuHsp100-27	2	AT1G53780.3	1	35,0872	0,5761	0,016419093	269,9015385
ZjuHsp100-27	2	AT1G53780.1	1	35,9585	0,5782	0,016079647	276,6038462
ZjuHsp100-27	2	AT1G53780.2	1	34,8511	0,5718	0,016406943	268,0853846
ZjuHsp100-27	2	AT1G45000.2	1	53,2163	0,6218	0,01168439	409,3561538
ZjuHsp100-27	2	AT3G53230.1	3	55,1739	0,7697	0,013950437	424,4146154
ZjuHsp100-28	2	AT5G58290.1	5	53,9614	0,3195	0,005920899	415,0876923
ZjuHsp100-28	2	AT2G30520.3	2	5,4403	0,5888	0,108229326	41,84846154
ZjuHsp100-28	2	AT2G30520.2	2	5,4403	0,5888	0,108229326	41,84846154
ZjuHsp100-28	2	AT2G30520.1	2	5,4405	0,5888	0,108225347	41,85
ZjuHsp100-29	2	AT5G26860.1	5	1,9573	0,2255	0,115209728	15,05615385
ZjuHsp100-29	2	AT3G05790.1	3	1,6942	0,2601	0,153523787	13,03230769
ZjuHsp100-29	2	AT3G05780.1	3	1,6623	0,2915	0,175359442	12,78692308
ZjuHsp100-30	2	AT3G05530.1	3	1,1846	0,0255	0,021526254	9,112307692
ZjuHsp100-30	2	AT1G09100.1	1	2,2901	0,0234	0,010217894	17,61615385
ZjuHsp100-30	2	AT4G29040.1	4	53,3541	0,5166	0,00968248	410,4161538
ZjuHsp100-30	2	AT2G20140.1	2	52,2051	0,5175	0,009912825	401,5776923
ZjuHsp100-30	2	AT5G20000.1	5	52,6782	0,5221	0,009911121	405,2169231
ZjuHsp100-30	2	AT5G19990.1	5	53,3769	0,5451	0,010212283	410,5915385
ZjuHsp100-30	2	AT1G53750.1	1	53,3344	0,5774	0,010826033	410,2646154
ZjuHsp100-30	2	AT5G58290.1	5	50,5844	0,5746	0,011359233	389,1107692
ZjuHsp100-30	2	AT1G53780.3	1	30,8943	0,5719	0,018511505	237,6484615
ZjuHsp100-30	2	AT1G53780.1	1	18,8138	0,5616	0,029850429	144,7215385
ZjuHsp100-30	2	AT1G53780.2	1	30,755	0,5719	0,01859535	236,5769231
ZjuHsp100-30	2	AT5G43010.1	5	51,3438	0,5357	0,010433587	394,9523077
ZjuHsp100-30	2	AT1G45000.1	1	50,6219	0,5879	0,011613551	389,3992308
ZjuHsp100-31	2	AT3G04340.1	3	2,1315	0,2018	0,094675111	16,39615385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-32	2	AT4G14700.1	4	2,8489	0,2053	0,072062901	21,91461538
ZjuHsp100-32	2	AT4G12620.1	4	3,2506	0,212	0,065218729	25,00461538
ZjuHsp100-33	2	AT5G50920.1	5	2,997	0,1537	0,051284618	23,05384615
ZjuHsp100-33	2	AT3G48870.2	3	2,021	0,1433	0,070905492	15,54615385
ZjuHsp100-33	2	AT3G48870.1	3	2,1074	0,164	0,077821012	16,21076923
ZjuHsp100-35	3	AT2G27600.1	2	3,2907	0,1033	0,031391497	25,31307692
ZjuHsp100-35	3	AT1G80350.1	1	44,3344	0,5896	0,013298928	341,0338462
ZjuHsp100-35	3	AT2G34560.1	2	53,6372	0,5914	0,01102593	412,5938462
ZjuHsp100-35	3	AT2G34560.2	2	53,9411	0,6188	0,011471772	414,9315385
ZjuHsp100-35	3	AT2G45500.1	2	57,5254	0,6031	0,010484064	442,5030769
ZjuHsp100-35	3	AT2G45500.2	2	57,6486	0,6005	0,010416558	443,4507692
ZjuHsp100-35	3	AT3G27120.1	3	56,5147	0,607	0,010740568	434,7284615
ZjuHsp100-35	3	AT1G50140.2	1	53,0099	0,7383	0,013927587	407,7684615
ZjuHsp100-35	3	AT1G50140.1	1	53,0128	0,7381	0,013923053	407,7907692
ZjuHsp100-36	3	AT3G52490.1	3	2,685	0,4302	0,160223464	20,65384615
ZjuHsp100-36	3	AT5G57710.1	5	53,8082	0,7356	0,013670779	413,9092308
ZjuHsp100-36	3	AT4G29920.1	4	7,3973	0,7379	0,099752612	56,90230769
ZjuHsp100-36	3	AT5G57130.1	5	9,125	0,7146	0,078312329	70,19230769
ZjuHsp100-36	3	AT4G30350.1	4	55,4747	0,6929	0,012490378	426,7284615
ZjuHsp100-37	3	AT2G27600.1	2	3,3149	0,1032	0,031132161	25,49923077
ZjuHsp100-37	3	AT1G80350.1	1	46,8535	0,5892	0,012575368	360,4115385
ZjuHsp100-37	3	AT2G34560.1	2	53,6807	0,5911	0,011011406	412,9284615
ZjuHsp100-37	3	AT2G34560.2	2	53,9833	0,6186	0,011459099	415,2561538
ZjuHsp100-37	3	AT2G45500.1	2	57,5827	0,6028	0,010468422	442,9438462
ZjuHsp100-37	3	AT2G45500.2	2	57,705	0,600	0,010397713	443,8846154
ZjuHsp100-37	3	AT3G27120.1	3	56,5675	0,6065	0,010721704	435,1346154
ZjuHsp100-37	3	AT1G50140.2	1	53,0604	0,738	0,013908678	408,1569231
ZjuHsp100-37	3	AT1G50140.1	1	53,0631	0,7379	0,013906085	408,1776923
ZjuHsp100-38	3	AT2G39730.1	2	1,3452	0,127	0,094409753	10,34769231
ZjuHsp100-38	3	AT2G39730.2	2	1,4805	0,1376	0,092941574	11,38846154
ZjuHsp100-38	3	AT2G39730.3	2	1,4273	0,1322	0,092622434	10,97923077
ZjuHsp100-38	3	AT1G73110.1	1	28,0274	0,5867	0,020933087	215,5953846
ZjuHsp100-39	3	AT2G39730.3	2	1,3941	0,1321	0,094756474	10,72384615
ZjuHsp100-39	3	AT2G39730.2	2	1,3941	0,1321	0,094756474	10,72384615
ZjuHsp100-39	3	AT2G39730.1	2	1,419	0,132	0,093023256	10,91538462
ZjuHsp100-39	3	AT1G73110.1	1	24,5477	0,5941	0,02420186	188,8284615
ZjuHsp100-40	3	AT2G40130.1	2	7,7796	0,4181	0,053743123	59,84307692
ZjuHsp100-40	3	AT2G40130.2	2	3,8295	0,4589	0,119832876	29,45769231
ZjuHsp100-40	3	AT2G29970.1	2	8,0748	0,4817	0,059654728	62,11384615
ZjuHsp100-40	3	AT1G07200.2	1	8,0426	0,482	0,059930868	61,86615385
ZjuHsp100-41	3	AT4G25370.1	4	1,4992	0,2983	0,198972785	11,53230769
ZjuHsp100-41	3	AT4G12060.1	4	50,9258	0,3436	0,006747071	391,7369231
ZjuHsp100-42	3	AT4G28000.1	4	2,2075	0,1522	0,068946772	16,98076923
ZjuHsp100-42	3	AT5G52882.1	5	1,9802	0,1573	0,079436421	15,23230769
ZjuHsp100-42	3	AT1G64110.3	1	10,1176	0,1827	0,018057642	77,82769231
ZjuHsp100-42	3	AT1G64110.1	1	9,1364	0,1841	0,020150169	70,28
ZjuHsp100-42	3	AT1G64110.2	1	9,7093	0,1855	0,019105394	74,68692308
ZjuHsp100-42	3	AT1G02890.1	1	54,4253	0,5339	0,009809776	418,6561538
ZjuHsp100-42	3	AT4G02480.1	4	54,9471	0,5441	0,009902251	422,67
ZjuHsp100-42	3	AT1G02890.2	1	54,4336	0,5513	0,010127936	418,72
ZjuHsp100-42	3	AT4G24860.1	4	54,9651	0,5853	0,010648575	422,8084615
ZjuHsp100-42	3	AT3G19740.1	3	53,415	0,646	0,012093981	410,8846154
ZjuHsp100-42	3	AT1G50140.2	1	54,2042	0,6724	0,012404943	416,9553846
ZjuHsp100-42	3	AT1G50140.1	1	54,9945	0,6632	0,012059388	423,0346154
ZjuHsp100-42	3	AT1G62130.1	1	55,3035	0,6241	0,011285	425,4115385
ZjuHsp100-42	3	AT4G27680.1	4	57,6755	0,5545	0,009614134	443,6576923
ZjuHsp100-42	3	AT5G53540.1	5	56,1651	0,6444	0,011473317	432,0392308
ZjuHsp100-42	3	AT2G45500.2	2	11,7767	0,7887	0,066971223	90,59
ZjuHsp100-42	3	AT2G45500.1	2	20,7822	0,7994	0,03846561	159,8630769
ZjuHsp100-42	3	AT3G27120.1	3	59,4887	0,7526	0,012651142	457,6053846
ZjuHsp100-43	3	AT5G53350.1	5	2,4739	0,1744	0,070495978	19,03
ZjuHsp100-43	3	AT1G33360.1	1	53,5963	0,3275	0,006110496	412,2792308
ZjuHsp100-43	3	AT5G49840.1	5	55,2209	0,3519	0,006372587	424,7761538
ZjuHsp100-44	3	AT3G03060.1	3	2,0773	0,1185	0,057045203	15,97923077
ZjuHsp100-44	3	AT5G16930.1	5	2,0452	0,1400	0,068452963	15,73230769
ZjuHsp100-44	3	AT2G18330.1	2	18,5918	0,2563	0,013785647	143,0138462
ZjuHsp100-44	3	AT4G36580.1	4	10,5899	0,2587	0,024428937	81,46076923
ZjuHsp100-45	3	AT2G46620.1	2	3,024	0,2838	0,093849206	23,26153846
ZjuHsp100-45	3	AT3G28580.1	3	54,152	0,7215	0,013323608	416,5538462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-45	3	AT4G25835.1	4	53,6536	0,7138	0,01330386	412,72
ZjuHsp100-45	3	AT5G57480.1	5	41,4317	0,6981	0,016849417	318,7053846
ZjuHsp100-45	3	AT5G40010.1	5	55,2443	0,6956	0,012591344	424,9561538
ZjuHsp100-45	3	AT4G30250.1	4	50,4895	0,7033	0,013929629	388,3807692
ZjuHsp100-45	3	AT5G40000.1	5	57,182	0,7012	0,0122626	439,8615385
ZjuHsp100-45	3	AT3G28570.1	3	55,6522	0,7046	0,012660775	428,0938462
ZjuHsp100-45	3	AT3G28600.1	3	55,0427	0,7075	0,012853657	423,4053846
ZjuHsp100-45	3	AT3G28610.1	3	15,0216	0,699	0,046532992	115,5507692
ZjuHsp100-45	3	AT3G50930.1	3	51,5247	0,807	0,015662391	396,3438462
ZjuHsp100-45	3	AT2G18193.1	2	55,5184	0,7573	0,013640523	427,0646154
ZjuHsp100-45	3	AT3G28540.2	3	55,6647	0,7494	0,013462751	428,19
ZjuHsp100-45	3	AT3G28540.1	3	55,731	0,7489	0,013437764	428,7
ZjuHsp100-45	3	AT3G50940.1	3	51,3258	0,7711	0,015023633	394,8138462
ZjuHsp100-45	3	AT5G17730.1	5	53,3121	0,715	0,013411589	410,0930769
ZjuHsp100-45	3	AT2G18190.1	2	52,9305	0,7437	0,0140505	407,1576923
ZjuHsp100-45	3	AT5G17740.1	5	51,0379	0,8036	0,015745162	392,5992308
ZjuHsp100-46	3	AT4G27680.1	4	1,6899	0,1398	0,082726789	12,99923077
ZjuHsp100-46	3	AT5G53540.1	5	2,3488	0,1766	0,07518733	18,06769231
ZjuHsp100-46	3	AT1G64110.1	1	43,5802	0,5808	0,013327153	335,2323077
ZjuHsp100-46	3	AT1G64110.3	1	40,1116	0,5809	0,014482095	308,5507692
ZjuHsp100-46	3	AT1G64110.2	1	38,4102	0,581	0,01512619	295,4630769
ZjuHsp100-46	3	AT1G02890.1	1	52,0076	0,5847	0,011242588	400,0584615
ZjuHsp100-46	3	AT4G24860.1	4	53,4414	0,5849	0,010944698	411,0876923
ZjuHsp100-46	3	AT1G50140.2	1	51,6381	0,5775	0,5775	7,692307692
ZjuHsp100-46	3	AT1G50140.1	1	51,6347	0,5777	0,011188213	397,19
ZjuHsp100-46	3	AT4G02480.1	4	52,4405	0,5825	0,011107827	403,3884615
ZjuHsp100-46	3	AT3G19740.1	3	52,4712	0,5864	0,011175654	403,6246154
ZjuHsp100-46	3	AT5G52882.1	5	56,8368	0,5844	0,010282071	437,2061538
ZjuHsp100-46	3	AT4G28000.1	4	52,9517	0,6309	0,011914632	407,3207692
ZjuHsp100-46	3	AT1G62130.1	1	30,9286	0,6573	0,021252174	237,9123077
ZjuHsp100-46	3	AT2G45500.1	2	2,5462	17,0961	6,714358652	19,58615385
ZjuHsp100-46	3	AT2G45500.2	2	53,1491	0,7238	0,013618293	408,8392308
ZjuHsp100-47	3	AT4G27680.1	4	1,6391	0,0946	0,057714599	12,60846154
ZjuHsp100-47	3	AT5G53540.1	5	2,2559	0,1399	0,06201516	17,35307692
ZjuHsp100-47	3	AT1G02890.1	1	52,1363	0,5212	0,009996874	401,0484615
ZjuHsp100-47	3	AT1G64110.3	1	39,8458	0,5673	0,014237385	306,5061538
ZjuHsp100-47	3	AT1G64110.1	1	40,0924	0,5672	0,01414732	308,4030769
ZjuHsp100-47	3	AT4G02480.1	4	52,4557	0,5662	0,01079387	403,5053846
ZjuHsp100-47	3	AT1G64110.2	1	39,5491	0,5673	0,014344195	304,2238462
ZjuHsp100-47	3	AT4G24860.1	4	52,8707	0,5641	0,010669426	406,6976923
ZjuHsp100-47	3	AT1G50140.2	1	49,3971	0,6189	0,012529076	379,9776923
ZjuHsp100-47	3	AT1G50140.1	1	49,3991	0,6189	0,012528568	379,9930769
ZjuHsp100-47	3	AT3G19740.1	3	50,757	0,5764	0,011356069	390,4384615
ZjuHsp100-47	3	AT5G52882.1	5	56,1268	0,5842	0,010408575	431,7446154
ZjuHsp100-47	3	AT4G28000.1	4	52,9219	0,6269	0,011845758	407,0915385
ZjuHsp100-47	3	AT1G62130.1	1	24,309	0,6103	0,025105928	186,9923077
ZjuHsp100-47	3	AT2G45500.2	2	51,354	0,7164	0,013950228	395,0307692
ZjuHsp100-47	3	AT2G45500.1	2	50,9988	0,7486	0,014678777	392,2984615
ZjuHsp100-48	3	AT4G27680.1	4	1,6391	0,0946	0,057714599	12,60846154
ZjuHsp100-48	3	AT5G53540.1	5	2,256	0,1399	0,062012411	17,35384615
ZjuHsp100-48	3	AT1G02890.1	1	52,1383	0,5214	0,010000326	401,0638462
ZjuHsp100-48	3	AT1G64110.3	1	39,0456	0,5673	0,014529166	300,3507692
ZjuHsp100-48	3	AT1G64110.1	1	41,7656	0,5672	0,013580554	321,2738462
ZjuHsp100-48	3	AT4G02480.1	4	52,4559	0,5662	0,010793829	403,5069231
ZjuHsp100-48	3	AT1G64110.2	1	39,349	0,5672	0,014414598	302,6846154
ZjuHsp100-48	3	AT4G24860.1	4	52,8716	0,5642	0,010671135	406,7046154
ZjuHsp100-48	3	AT1G50140.2	1	49,4003	0,6188	0,01252624	380,0023077
ZjuHsp100-48	3	AT1G50140.1	1	49,4002	0,6188	0,012526265	380,0015385
ZjuHsp100-48	3	AT3G19740.1	3	49,4602	0,4868	0,009842257	380,4630769
ZjuHsp100-48	3	AT5G52882.1	5	56,13	0,584	0,010404418	431,7692308
ZjuHsp100-48	3	AT4G28000.1	4	52,924	0,627	0,011847177	407,1076923
ZjuHsp100-48	3	AT1G62130.1	1	24,4119	0,6103	0,025000102	187,7838462
ZjuHsp100-48	3	AT2G45500.2	2	51,3567	0,7163	0,013947547	395,0515385
ZjuHsp100-48	3	AT2G45500.1	2	50,9991	0,7486	0,01467869	392,3007692
ZjuHsp100-49	4	AT5G40010.1	5	54,5784	0,2718	0,004979992	419,8338462
ZjuHsp100-49	4	AT3G28580.1	3	31,068	0,2634	0,008478177	238,9846154
ZjuHsp100-49	4	AT3G28510.1	3	6,7917	0,3316	0,0488243	52,24384615
ZjuHsp100-49	4	AT3G28540.2	3	42,1661	0,336	0,007968487	324,3546154
ZjuHsp100-49	4	AT3G28540.1	3	47,9895	0,3417	0,007120308	369,15

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-49	4	AT3G28600.1	3	57,5924	0,3723	0,006464395	443,0184615
ZjuHsp100-49	4	AT3G28610.1	3	4,6616	0,3622	0,077698644	35,85846154
ZjuHsp100-49	4	AT5G40000.1	5	7,4002	0,3787	0,051174293	56,92461538
ZjuHsp100-49	4	AT3G28520.1	3	15,8611	0,3507	0,022110699	122,0084615
ZjuHsp100-49	4	AT3G28570.1	3	38,7722	0,3732	0,009625453	298,2476923
ZjuHsp100-49	4	AT5G57480.1	5	55,8895	0,6332	0,011329498	429,9192308
ZjuHsp100-49	4	AT4G25835.1	4	9,195	0,654	0,071125612	70,73076923
ZjuHsp100-49	4	AT3G50940.1	3	51,6598	0,5701	0,01103566	397,3830769
ZjuHsp100-49	4	AT3G50930.1	3	49,0591	0,6114	0,01246252	377,3776923
ZjuHsp100-49	4	AT2G18193.1	2	57,7153	0,5491	0,009513942	443,9638462
ZjuHsp100-49	4	AT4G30250.1	4	5,6262	0,6171	0,109683268	43,27846154
ZjuHsp100-49	4	AT2G18190.1	2	54,5002	0,6093	0,011179775	419,2323077
ZjuHsp100-49	4	AT5G17740.1	5	37,7055	0,6505	0,017252125	290,0423077
ZjuHsp100-49	4	AT5G17730.1	5	21,6954	0,6516	0,030034016	166,8876923
ZjuHsp100-49	4	AT5G17760.1	5	17,9092	0,6487	0,036221607	137,7630769
ZjuHsp100-49	4	AT1G43910.1	1	53,2026	0,6429	0,012083996	409,2507692
ZjuHsp100-49	4	AT5G17750.1	5	53,5285	0,5827	0,01088579	411,7576923
ZjuHsp100-49	4	AT2G46620.1	2	53,721	0,7553	0,014059679	413,2384615
ZjuHsp100-49	4	AT4G05380.1	4	57,4468	0,4628	0,008056149	441,8984615
ZjuHsp100-50	4	AT5G40010.1	5	53,2337	0,2752	0,005169658	409,49
ZjuHsp100-50	4	AT3G28510.1	3	11,6696	0,314	0,02690752	89,76615385
ZjuHsp100-50	4	AT3G28580.1	3	12,261	0,2986	0,024353642	94,31538462
ZjuHsp100-50	4	AT3G28540.2	3	24,3658	0,3264	0,013395825	187,4292308
ZjuHsp100-50	4	AT3G28540.1	3	24,8421	0,3279	0,013199367	191,0930769
ZjuHsp100-50	4	AT3G28610.1	3	4,2656	0,4081	0,095672356	32,81230769
ZjuHsp100-50	4	AT3G28600.1	3	9,0315	0,4046	0,04479876	69,47307692
ZjuHsp100-50	4	AT3G28520.1	3	34,523	0,363	0,010514729	265,5615385
ZjuHsp100-50	4	AT5G40000.1	5	5,7697	0,4142	0,071788828	44,38230769
ZjuHsp100-50	4	AT3G28570.1	3	29,1975	0,396	0,013562805	224,5961538
ZjuHsp100-50	4	AT5G57480.1	5	54,7287	0,6191	0,011312163	420,99
ZjuHsp100-50	4	AT3G50930.1	3	50,4854	0,5814	0,011516201	388,3492308
ZjuHsp100-50	4	AT4G25835.1	4	53,3396	0,6475	0,012139199	410,3046154
ZjuHsp100-50	4	AT3G50940.1	3	49,8378	0,5824	0,011685909	383,3676923
ZjuHsp100-50	4	AT4G30250.1	4	53,013	0,6328	0,011936695	407,7923077
ZjuHsp100-50	4	AT2G18193.1	2	41,7302	0,5856	0,014033002	321,0015385
ZjuHsp100-50	4	AT5G17740.1	5	54,0708	0,6388	0,01181414	415,9292308
ZjuHsp100-50	4	AT2G18190.1	2	54,1165	0,6478	0,011970471	416,2807692
ZjuHsp100-50	4	AT5G17760.1	5	50,3047	0,6409	0,01274036	386,9592308
ZjuHsp100-50	4	AT5G17730.1	5	19,392	0,6807	0,035102104	149,1692308
ZjuHsp100-50	4	AT1G43910.1	1	52,1622	0,646	0,012384447	401,2476923
ZjuHsp100-50	4	AT5G17750.1	5	52,0751	0,6184	0,011875157	400,5776923
ZjuHsp100-50	4	AT2G46620.1	2	54,0754	0,7538	0,013939795	415,9646154
ZjuHsp100-50	4	AT4G05380.1	4	54,5615	0,4955	0,009081495	419,7038462
ZjuHsp100-51	4	AT5G15250.1	5	3,6471	0,1482	0,040635025	28,05461538
ZjuHsp100-51	4	AT5G15250.2	5	3,6473	0,1482	0,040632797	28,05615385
ZjuHsp100-51	4	AT2G30950.1	2	49,2202	0,2375	0,004825255	378,6169231
ZjuHsp100-51	4	AT1G06430.1	1	48,8151	0,2369	0,004853007	375,5007692
ZjuHsp100-51	4	AT5G42270.1	5	45,2084	0,4808	0,010635192	347,7569231
ZjuHsp100-51	4	AT1G50250.1	1	48,2752	0,499	0,01033657	371,3476923
ZjuHsp100-51	4	AT5G53170.1	5	26,4448	0,6239	0,02359254	203,4215385
ZjuHsp100-51	4	AT2G26140.1	2	49,867	0,6371	0,012775984	383,5923077
ZjuHsp100-51	4	AT2G29080.1	2	51,2788	0,5969	0,011640288	394,4523077
ZjuHsp100-51	4	AT5G58870.1	5	50,7087	0,6628	0,013070735	390,0669231
ZjuHsp100-51	4	AT3G47060.1	3	50,4298	0,6372	0,012635386	387,9215385
ZjuHsp100-51	4	AT1G07510.1	1	50,7436	0,6179	0,012176905	390,3353846
ZjuHsp100-51	4	AT4G23940.1	4	48,8757	0,7567	0,015482131	375,9669231
ZjuHsp100-51	4	AT3G02450.1	3	49,2563	0,5919	0,012016737	378,8946154
ZjuHsp100-52	4	AT3G28580.1	3	19,5444	0,3268	0,016720902	150,3415385
ZjuHsp100-52	4	AT5G40010.1	5	4,9528	0,323	0,065215636	38,09846154
ZjuHsp100-52	4	AT3G28510.1	3	8,8043	0,3385	0,038447122	67,72538462
ZjuHsp100-52	4	AT3G28540.2	3	15,1682	0,357	0,023536082	116,6784615
ZjuHsp100-52	4	AT3G28540.1	3	15,2166	0,357	0,02346122	117,0507692
ZjuHsp100-52	4	AT3G28610.1	3	18,5176	0,3763	0,020321208	142,4430769
ZjuHsp100-52	4	AT3G28600.1	3	29,0029	0,395	0,013619328	223,0992308
ZjuHsp100-52	4	AT3G28520.1	3	13,3848	0,3932	0,029376606	102,96
ZjuHsp100-52	4	AT5G40000.1	5	12,9101	0,3706	0,028706207	99,30846154
ZjuHsp100-52	4	AT3G28570.1	3	10,6986	0,3932	0,036752472	82,29692308
ZjuHsp100-52	4	AT4G25835.1	4	16,0556	0,6085	0,037899549	123,5046154
ZjuHsp100-52	4	AT5G57480.1	5	21,2713	0,5863	0,02756296	163,6253846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-52	4	AT3G50930.1	3	35,5353	0,5681	0,01598692	273,3484615
ZjuHsp100-52	4	AT3G50940.1	3	21,9675	0,5874	0,026739502	168,9807692
ZjuHsp100-52	4	AT4G30250.1	4	7,9303	0,5837	0,073603773	61,00230769
ZjuHsp100-52	4	AT5G17740.1	5	54,5884	0,6087	0,011150721	419,9107692
ZjuHsp100-52	4	AT2G18193.1	2	55,2756	0,5833	0,010552577	425,1969231
ZjuHsp100-52	4	AT2G18190.1	2	53,7977	0,6188	0,01150235	413,8284615
ZjuHsp100-52	4	AT5G17760.1	5	50,3359	0,6123	0,01216428	387,1992308
ZjuHsp100-52	4	AT5G17730.1	5	41,6278	0,674	0,016191103	320,2138462
ZjuHsp100-52	4	AT5G17750.1	5	52,9815	0,5934	0,011200136	407,55
ZjuHsp100-52	4	AT1G43910.1	1	42,5878	0,6521	0,015311897	327,5984615
ZjuHsp100-52	4	AT2G46620.1	2	54,7576	0,6757	0,01233984	421,2123077
ZjuHsp100-53	4	AT5G40010.1	5	8,747	0,3373	0,038561793	67,28461538
ZjuHsp100-53	4	AT3G28580.1	3	23,452	0,3415	0,014561658	180,4
ZjuHsp100-53	4	AT3G28510.1	3	11,5553	0,365	0,031587237	88,88692308
ZjuHsp100-53	4	AT3G28540.2	3	12,7007	0,3768	0,029667656	97,69769231
ZjuHsp100-53	4	AT3G28540.1	3	12,979	0,3785	0,029162493	99,83846154
ZjuHsp100-53	4	AT3G28600.1	3	52,9669	0,3929	0,00741784	407,4376923
ZjuHsp100-53	4	AT3G28610.1	3	52,7097	0,4005	0,007598222	405,4592308
ZjuHsp100-53	4	AT5G40000.1	5	17,2738	0,3886	0,022496498	132,8753846
ZjuHsp100-53	4	AT3G28520.1	3	12,2525	0,4046	0,033021832	94,25
ZjuHsp100-53	4	AT3G28570.1	3	12,013	0,3904	0,032498127	92,40769231
ZjuHsp100-53	4	AT4G25835.1	4	13,5172	0,5707	0,042220282	103,9784615
ZjuHsp100-53	4	AT5G57480.1	5	55,0554	0,5729	0,010405882	423,5030769
ZjuHsp100-53	4	AT3G50940.1	3	49,5059	0,5827	0,011770314	380,8146154
ZjuHsp100-53	4	AT3G50930.1	3	49,9417	0,588	0,011773728	384,1669231
ZjuHsp100-53	4	AT5G17740.1	5	55,5995	0,5882	0,010579232	427,6884615
ZjuHsp100-53	4	AT2G18193.1	2	53,5624	0,5914	0,011041327	412,0184615
ZjuHsp100-53	4	AT4G30250.1	4	49,8986	0,556	0,011142597	383,8353846
ZjuHsp100-53	4	AT5G17760.1	5	50,3452	0,5991	0,011899843	387,2707692
ZjuHsp100-53	4	AT2G18190.1	2	52,5252	0,6173	0,011752454	404,04
ZjuHsp100-53	4	AT5G17730.1	5	50,9122	0,6376	0,012523521	391,6323077
ZjuHsp100-53	4	AT5G17750.1	5	52,0754	0,5522	0,010603855	400,58
ZjuHsp100-53	4	AT1G43910.1	1	51,441	0,6463	0,012563908	395,7
ZjuHsp100-53	4	AT4G05380.1	4	52,5393	0,5271	0,01003249	404,1484615
ZjuHsp100-54	4	AT5G40010.1	5	12,1716	0,4332	0,035591048	93,62769231
ZjuHsp100-54	4	AT3G28600.1	3	11,6104	0,4115	0,035442362	89,31076923
ZjuHsp100-54	4	AT3G28510.1	3	7,5203	0,4186	0,055662673	57,84846154
ZjuHsp100-54	4	AT3G28610.1	3	52,0592	0,4389	0,008430786	400,4553846
ZjuHsp100-54	4	AT3G28580.1	3	16,9606	0,4302	0,025364669	130,4661538
ZjuHsp100-54	4	AT5G40000.1	5	43,8499	0,4597	0,01048349	337,3069231
ZjuHsp100-54	4	AT3G28540.2	3	26,8492	0,4335	0,016145732	206,5323077
ZjuHsp100-54	4	AT3G28540.1	3	26,9395	0,4335	0,016091613	207,2269231
ZjuHsp100-54	4	AT3G28570.1	3	13,4424	0,4294	0,031943701	103,4030769
ZjuHsp100-54	4	AT3G28520.1	3	53,8248	0,4641	0,008622419	414,0369231
ZjuHsp100-54	4	AT4G25835.1	4	6,2949	0,6175	0,098095283	48,42230769
ZjuHsp100-54	4	AT3G50940.1	3	51,0929	0,6024	0,011790288	393,0223077
ZjuHsp100-54	4	AT5G57480.1	5	25,5928	0,6298	0,024608484	196,8676923
ZjuHsp100-54	4	AT3G50930.1	3	48,6395	0,6445	0,013250547	374,15
ZjuHsp100-54	4	AT4G30250.1	4	54,4213	0,5956	0,010944244	418,6253846
ZjuHsp100-54	4	AT2G18193.1	2	13,4674	0,6505	0,048301825	103,5953846
ZjuHsp100-54	4	AT2G18190.1	2	52,9423	0,6695	0,012645843	407,2484615
ZjuHsp100-54	4	AT5G17730.1	5	52,8103	0,6791	0,012859234	406,2330769
ZjuHsp100-54	4	AT1G43910.1	1	55,6949	0,6631	0,011905938	428,4223077
ZjuHsp100-54	4	AT5G17740.1	5	53,2211	0,738	0,013866681	409,3930769
ZjuHsp100-54	4	AT5G17760.1	5	53,0859	0,697	0,013129663	408,3530769
ZjuHsp100-54	4	AT4G05380.1	4	57,8103	0,4912	0,008496756	444,6946154
ZjuHsp100-54	4	AT5G17750.1	5	14,9306	0,6659	0,044599681	114,8507692
ZjuHsp100-55	4	AT5G40010.1	5	10,0412	0,3003	0,029907	77,24
ZjuHsp100-55	4	AT3G28580.1	3	16,9123	0,2939	0,017378	130,0946
ZjuHsp100-55	4	AT3G28510.1	3	6,4475	0,3471	0,053835	49,59615
ZjuHsp100-55	4	AT3G28540.1	3	24,8124	0,3734	0,015049	190,8646
ZjuHsp100-55	4	AT3G28540.2	3	24,3352	0,3689	0,015159	187,1938
ZjuHsp100-55	4	AT3G28610.1	3	53,7102	0,3927	0,007311	413,1554
ZjuHsp100-55	4	AT3G28600.1	3	9,8492	0,407	0,041323	75,76308
ZjuHsp100-55	4	AT5G40000.1	5	0,4093	0,0633	0,154654	3,148462
ZjuHsp100-55	4	AT3G28520.1	3	12,3095	0,4181	0,033966	94,68846
ZjuHsp100-55	4	AT3G28570.1	3	41,7306	0,3993	0,009569	321,0046
ZjuHsp100-55	4	AT3G50940.1	3	50,6221	0,555	0,010964	389,4008
ZjuHsp100-55	4	AT3G50930.1	3	41,6435	0,6129	0,014718	320,3346

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-55	4	AT5G57480.1	5	55,0923	0,6524	0,011842	423,7869
ZjuHsp100-55	4	AT4G25835.1	4	14,4602	0,6579	0,045497	111,2323
ZjuHsp100-55	4	AT5G17740.1	5	53,7674	0,6074	0,011297	413,5954
ZjuHsp100-55	4	AT2G18190.1	2	52,323	0,6504	0,01243	402,4846
ZjuHsp100-55	4	AT5G17760.1	5	50,6086	0,6569	0,01298	389,2969
ZjuHsp100-55	4	AT5G17730.1	5	18,2513	0,6386	0,034989	140,3946
ZjuHsp100-55	4	AT4G30250.1	4	56,011	0,6228	0,011119	430,8538
ZjuHsp100-55	4	AT2G18193.1	2	55,5729	0,617	0,011103	427,4838
ZjuHsp100-55	4	AT5G17750.1	5	51,6434	0,5862	0,011351	397,2569
ZjuHsp100-55	4	AT1G43910.1	1	34,4422	0,665	0,019308	264,94
ZjuHsp100-55	4	AT4G05380.1	4	9,9751	0,4837	0,048491	76,73154
ZjuHsp100-56	4	AT5G40010.1	5	10,1388	0,3143	0,031	77,99077
ZjuHsp100-56	4	AT3G28580.1	3	20,3896	0,3062	0,015017	156,8431
ZjuHsp100-56	4	AT3G28510.1	3	8,2008	0,3624	0,044191	63,08308
ZjuHsp100-56	4	AT3G28540.2	3	23,7155	0,3845	0,016213	182,4269
ZjuHsp100-56	4	AT3G28540.1	3	24,7288	0,3888	0,015723	190,2215
ZjuHsp100-56	4	AT3G28610.1	3	55,161	0,4122	0,007473	424,3154
ZjuHsp100-56	4	AT3G28600.1	3	54,7371	0,4103	0,007496	421,0546
ZjuHsp100-56	4	AT3G28520.1	3	10,9461	0,4199	0,038361	84,20077
ZjuHsp100-56	4	AT3G28570.1	3	53,715	0,4345	0,008089	413,1923
ZjuHsp100-56	4	AT5G40000.1	5	6,3233	0,4262	0,067402	48,64077
ZjuHsp100-56	4	AT3G50940.1	3	50,9227	0,5757	0,011305	391,7131
ZjuHsp100-56	4	AT3G50930.1	3	47,7537	0,6556	0,013729	367,3362
ZjuHsp100-56	4	AT5G57480.1	5	56,9987	0,6275	0,011009	438,4515
ZjuHsp100-56	4	AT4G25835.1	4	10,1065	0,6672	0,066017	77,74231
ZjuHsp100-56	4	AT5G17740.1	5	56,0894	0,6019	0,010731	431,4569
ZjuHsp100-56	4	AT4G30250.1	4	55,4558	0,6545	0,011802	426,5831
ZjuHsp100-56	4	AT5G17760.1	5	51,097	0,7034	0,013766	393,0538
ZjuHsp100-56	4	AT5G17730.1	5	11,2715	0,6585	0,058422	86,70385
ZjuHsp100-56	4	AT2G18193.1	2	55,2804	0,6356	0,011498	425,2338
ZjuHsp100-56	4	AT2G18190.1	2	53,8201	0,6447	0,011979	414,0008
ZjuHsp100-56	4	AT2G18190.1	2	53,8219	0,6448	0,01198	414,0146
ZjuHsp100-56	4	AT5G17750.1	5	53,2717	0,5917	0,011107	409,7823
ZjuHsp100-56	4	AT1G43910.1	1	51,815	0,6259	0,01208	398,5769
ZjuHsp100-56	4	AT4G05380.1	4	51,8144	0,6259	0,01208	398,5723
ZjuHsp100-57	4	AT5G15450.1	5	3,1968	0,0898	0,028090591	24,59076923
ZjuHsp100-57	4	AT2G25140.1	2	42,8349	0,2314	0,005402137	329,4992308
ZjuHsp100-57	4	AT1G74310.1	1	13,7128	0,4224	0,030803337	105,4830769
ZjuHsp100-57	4	AT5G50920.1	5	51,3949	0,5464	0,010631405	395,3453846
ZjuHsp100-57	4	AT3G48870.2	3	50,3116	0,5392	0,01071721	387,0123077
ZjuHsp100-57	4	AT3G48870.1	3	45,6127	0,5399	0,011836616	350,8669231
ZjuHsp100-57	4	AT4G14670.1	4	11,2946	0,4607	0,040789404	86,88153846
ZjuHsp100-57	4	AT5G51070.1	5	52,039	0,5895	0,011328042	400,3
ZjuHsp100-58	4	AT1G24290.1	1	2,5661	0,2216	0,086356728	19,73923077
ZjuHsp100-59	4	AT3G02450.1	3	2,1519	0,2501	0,116222873	16,55307692
ZjuHsp100-59	4	AT5G15250.1	5	49,6664	0,5902	0,011883285	382,0492308
ZjuHsp100-59	4	AT1G50250.1	1	13,588	0,665	0,048940241	104,5230769
ZjuHsp100-59	4	AT2G30950.1	2	53,9992	0,6217	0,011513134	415,3784615
ZjuHsp100-59	4	AT5G42270.1	5	15,358	0,6717	0,043736164	118,1384615
ZjuHsp100-59	4	AT5G58870.1	5	14,9858	0,6388	0,04262702	115,2753846
ZjuHsp100-59	4	AT1G06430.1	1	51,2425	0,6208	0,012114944	394,1730769
ZjuHsp100-59	4	AT3G47060.1	3	49,0012	0,6677	0,013626197	376,9323077
ZjuHsp100-59	4	AT5G15250.2	5	49,562	0,5861	0,011825592	381,2461538
ZjuHsp100-59	4	AT1G07510.1	1	53,6014	0,7299	0,013617182	412,3184615
ZjuHsp100-59	4	AT2G29080.1	2	19,0997	0,749	0,039215276	146,9207692
ZjuHsp100-59	4	AT2G26140.1	2	52,787	0,6642	0,012582643	406,0538462
ZjuHsp100-59	4	AT5G53170.1	5	47,7264	0,8091	0,016952881	367,1261538
ZjuHsp100-59	4	AT3G16290.1	3	33,2566	0,8138	0,024470331	255,82
ZjuHsp100-59	4	AT5G64580.1	5	57,3172	0,7725	0,01347763	440,9015385
ZjuHsp100-60	4	AT2G30950.1	2	1,9715	0,0815	0,041339082	15,16538462
ZjuHsp100-60	4	AT1G06430.1	1	1,7419	0,0748	0,042941615	13,39923077
ZjuHsp100-60	4	AT5G15250.1	5	27,5503	0,2256	0,008188659	211,9253846
ZjuHsp100-60	4	AT5G15250.2	5	28,5362	0,2256	0,007905748	219,5092308
ZjuHsp100-60	4	AT5G42270.1	5	53,7107	0,4639	0,008637013	413,1592308
ZjuHsp100-60	4	AT1G50250.1	1	11,0056	0,4884	0,044377408	84,65846154
ZjuHsp100-60	4	AT5G53170.1	5	51,1145	0,6284	0,012293967	393,1884615
ZjuHsp100-60	4	AT2G26140.1	2	50,4538	0,631	0,012506491	388,1061538
ZjuHsp100-60	4	AT2G29080.1	2	51,801	0,6246	0,012057682	398,4692308
ZjuHsp100-60	4	AT1G07510.1	1	50,0628	0,614	0,012264596	385,0984615

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-60	4	AT5G58870.1	5	49,0335	0,6182	0,012607707	377,1807692
ZjuHsp100-60	4	AT3G47060.1	3	49,692	0,6181	0,012438622	382,2461538
ZjuHsp100-60	4	AT4G23940.1	4	50,2325	0,7421	0,014773304	386,4038462
ZjuHsp100-60	4	AT3G02450.1	3	16,8803	0,5995	0,035514772	129,8484615
ZjuHsp100-60	4	AT3G16290.1	3	54,1501	0,7886	0,014563223	416,5392308
ZjuHsp100-61	5	AT4G02480.1	4	10,9596	0,2001	0,018257966	84,30461538
ZjuHsp100-61	5	AT1G02890.2	1	9,2546	0,2013	0,021751345	71,18923077
ZjuHsp100-61	5	AT1G02890.1	1	8,9761	0,2095	0,023339758	69,04692308
ZjuHsp100-61	5	AT4G24860.1	4	1,361	0,2219	0,163041881	10,46923077
ZjuHsp100-61	5	AT1G62130.1	1	1,8858	0,1989	0,105472479	14,50615385
ZjuHsp100-62	5	AT1G79560.1	1	1,714	0,1461	0,085239207	13,18461538
ZjuHsp100-62	5	AT5G42270.1	5	7,8543	0,8027	0,102198796	60,41769231
ZjuHsp100-62	5	AT1G50250.1	1	9,3957	0,8241	0,087710336	72,27461538
ZjuHsp100-62	5	AT5G15250.1	5	17,0581	0,8317	0,048756896	131,2161538
ZjuHsp100-62	5	AT2G30950.1	2	30,4402	0,8426	0,027680501	234,1553846
ZjuHsp100-62	5	AT1G06430.1	1	9,4662	0,8857	0,093564471	72,81692308
ZjuHsp100-62	5	AT5G15250.2	5	18,9872	0,8348	0,043966462	146,0553846
ZjuHsp100-63	5	AT4G24710.1	4	1,5102	0,1322	0,087538074	11,61692308
ZjuHsp100-64	5	AT5G40010.1	5	9,7443	0,2935	0,030120173	74,95615385
ZjuHsp100-64	5	AT3G28580.1	3	10,3512	0,2884	0,027861504	79,62461538
ZjuHsp100-64	5	AT3G28540.2	3	16,2303	0,3442	0,021207248	124,8484615
ZjuHsp100-64	5	AT3G28540.1	3	16,224	0,3443	0,021221647	124,8
ZjuHsp100-64	5	AT3G28510.1	3	10,6706	0,3514	0,032931606	82,08153846
ZjuHsp100-64	5	AT3G28600.1	3	12,0567	0,3598	0,029842328	92,74384615
ZjuHsp100-64	5	AT3G28610.1	3	7,7463	0,3714	0,047945471	59,58692308
ZjuHsp100-64	5	AT5G40000.1	5	5,5104	0,3608	0,06547619	42,38769231
ZjuHsp100-64	5	AT3G28520.1	3	14,3455	0,3894	0,027144401	110,35
ZjuHsp100-64	5	AT3G28570.1	3	9,5821	0,344	0,035900272	73,70846154
ZjuHsp100-64	5	AT4G25835.1	4	57,5452	0,5689	0,009886142	442,6553846
ZjuHsp100-64	5	AT3G50940.1	3	56,182	0,4803	0,008549001	432,1692308
ZjuHsp100-64	5	AT3G50930.1	3	51,7103	0,5285	0,010220401	397,7715385
ZjuHsp100-64	5	AT5G57480.1	5	59,7824	0,5532	0,00925356	459,8646154
ZjuHsp100-64	5	AT2G18193.1	2	59,2427	0,5561	0,009386811	455,7130769
ZjuHsp100-64	5	AT5G17760.1	5	57,3149	0,5519	0,009629259	440,8838462
ZjuHsp100-64	5	AT4G30250.1	4	43,1464	0,5447	0,01262446	331,8953846
ZjuHsp100-64	5	AT2G18190.1	2	59,0524	0,5421	0,009179983	454,2492308
ZjuHsp100-64	5	AT1G43910.1	1	59,5859	0,5402	0,009065903	458,3530769
ZjuHsp100-64	5	AT5G17740.1	5	57,4438	0,5884	0,010243055	441,8753846
ZjuHsp100-64	5	AT5G17730.1	5	57,1786	0,5619	0,009827103	439,8353846
ZjuHsp100-64	5	AT5G17750.1	5	55,306	0,5158	0,009326294	425,4307692
ZjuHsp100-64	5	AT4G05380.1	4	56,8133	0,4612	0,008117817	437,0253846
ZjuHsp100-65	5	AT5G40010.1	5	13,3783	0,3544	0,02649066	102,91
ZjuHsp100-65	5	AT3G28580.1	3	7,5851	0,3753	0,049478583	58,34692308
ZjuHsp100-65	5	AT3G28540.2	3	57,8987	0,3957	0,00683435	445,3746154
ZjuHsp100-65	5	AT3G28540.1	3	58,4392	0,4056	0,006940547	449,5323077
ZjuHsp100-65	5	AT3G28510.1	3	7,0883	0,4045	0,057065869	54,52538462
ZjuHsp100-65	5	AT3G28610.1	3	31,8329	0,4438	0,013941551	244,8684615
ZjuHsp100-65	5	AT3G28600.1	3	55,241	0,4155	0,007521587	424,9307692
ZjuHsp100-65	5	AT5G40000.1	5	4,9341	0,4518	0,091566851	37,95461538
ZjuHsp100-65	5	AT3G28520.1	3	12,2117	0,455	0,03725935	93,93615385
ZjuHsp100-65	5	AT3G28570.1	3	5,7388	0,4541	0,079128041	44,14461538
ZjuHsp100-65	5	AT4G25835.1	4	54,128	0,6228	0,01150606	416,3692308
ZjuHsp100-65	5	AT5G57480.1	5	54,3288	0,6068	0,01116903	417,9138462
ZjuHsp100-65	5	AT3G50940.1	3	52,2213	0,6004	0,011497224	401,7023077
ZjuHsp100-65	5	AT3G50930.1	3	32,4976	0,6573	0,020226109	249,9815385
ZjuHsp100-65	5	AT4G30250.1	4	54,6447	0,5856	0,010716501	420,3438462
ZjuHsp100-65	5	AT2G18193.1	2	55,8704	0,6633	0,011872118	429,7723077
ZjuHsp100-65	5	AT5G17760.1	5	53,153	0,593	0,011156473	408,8692308
ZjuHsp100-65	5	AT5G17740.1	5	55,8338	0,5877	0,010525882	429,4907692
ZjuHsp100-65	5	AT2G18190.1	2	55,7226	0,642	0,011521358	428,6353846
ZjuHsp100-65	5	AT5G17730.1	5	53,5177	0,6391	0,011941844	411,6746154
ZjuHsp100-65	5	AT1G43910.1	1	56,5565	0,6506	0,011503541	435,05
ZjuHsp100-65	5	AT5G17750.1	5	53,637	0,5516	0,010283946	412,5923077
ZjuHsp100-65	5	AT4G05380.1	4	57,0266	0,4398	0,00771219	438,6661538
ZjuHsp100-65	5	AT2G46620.1	2	54,5365	0,6804	0,012476048	419,5115385
ZjuHsp100-66	5	AT5G40010.1	5	14,2009	0,3585	0,025244879	109,2376923
ZjuHsp100-66	5	AT3G28580.1	3	7,4581	0,3811	0,051098805	57,37
ZjuHsp100-66	5	AT3G28540.2	3	58,189	0,3928	0,006750417	447,6076923
ZjuHsp100-66	5	AT3G28540.1	3	57,9024	0,397	0,006856365	445,4030769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-66	5	AT3G28510.1	3	6,7603	0,402	0,059464817	52,00230769
ZjuHsp100-66	5	AT3G28600.1	3	55,649	0,4226	0,007594027	428,0692308
ZjuHsp100-66	5	AT3G28610.1	3	5,2289	0,4355	0,083287116	40,22230769
ZjuHsp100-66	5	AT5G40000.1	5	5,0424	0,4471	0,088668095	38,78769231
ZjuHsp100-66	5	AT3G28520.1	3	12,2028	0,455	0,037286524	93,86769231
ZjuHsp100-66	5	AT3G28570.1	3	5,7384	0,4541	0,079133556	44,14153846
ZjuHsp100-66	5	AT4G25835.1	4	54,2467	0,6304	0,011620983	417,2823077
ZjuHsp100-66	5	AT5G57480.1	5	54,5272	0,616	0,011297114	419,44
ZjuHsp100-66	5	AT3G50940.1	3	52,2213	0,6004	0,011497224	401,7023077
ZjuHsp100-66	5	AT3G50930.1	3	28,9615	0,658	0,022719818	222,7807692
ZjuHsp100-66	5	AT4G30250.1	4	54,7703	0,5789	0,010569597	421,31
ZjuHsp100-66	5	AT2G18193.1	2	55,7986	0,6695	0,011998509	429,22
ZjuHsp100-66	5	AT5G17760.1	5	53,0285	0,5961	0,011241125	407,9115385
ZjuHsp100-66	5	AT5G17740.1	5	55,9753	0,5838	0,0104296	430,5792308
ZjuHsp100-66	5	AT2G18190.1	2	55,8097	0,6400	0,011467541	429,3053846
ZjuHsp100-66	5	AT5G17730.1	5	53,5086	0,6393	0,011947612	411,6046154
ZjuHsp100-66	5	AT1G43910.1	1	56,5494	0,6506	0,011504985	434,9953846
ZjuHsp100-66	5	AT5G17750.1	5	53,6376	0,5516	0,010283831	412,5969231
ZjuHsp100-66	5	AT4G05380.1	4	57,0305	0,4398	0,007711663	438,6801538
ZjuHsp100-66	5	AT2G46620.1	2	54,3764	0,6855	0,012606572	418,28
ZjuHsp100-67	5	AT3G28600.1	3	7,8006	0,3257	0,041753198	60,00461538
ZjuHsp100-67	5	AT3G28510.1	3	47,8821	0,3239	0,006764532	368,3238462
ZjuHsp100-67	5	AT3G28610.1	3	5,1462	0,344	0,066845439	39,58615385
ZjuHsp100-67	5	AT5G40010.1	5	7,0199	0,3173	0,045200074	53,99923077
ZjuHsp100-67	5	AT3G28540.2	3	12,691	0,3394	0,026743361	97,62307692
ZjuHsp100-67	5	AT3G28540.1	3	11,8052	0,3393	0,028741572	90,80923077
ZjuHsp100-67	5	AT5G40000.1	5	4,5965	0,3295	0,071684978	35,35769231
ZjuHsp100-67	5	AT3G28580.1	3	15,8593	0,3142	0,019811719	121,9946154
ZjuHsp100-67	5	AT3G28520.1	3	14,3345	0,3673	0,025623496	110,2653846
ZjuHsp100-67	5	AT3G28570.1	3	7,1831	0,3456	0,048112932	55,25461538
ZjuHsp100-67	5	AT3G50940.1	3	56,2078	0,4429	0,007879689	432,3676923
ZjuHsp100-67	5	AT5G57480.1	5	66,3135	0,4823	0,007273029	510,1038462
ZjuHsp100-67	5	AT4G25835.1	4	62,6076	0,4972	0,007941528	481,5969231
ZjuHsp100-67	5	AT3G50930.1	3	51,908	0,5291	0,010193034	399,2923077
ZjuHsp100-67	5	AT5G17760.1	5	7,2894	0,525	0,072022389	56,07230769
ZjuHsp100-67	5	AT2G18193.1	2	16,5579	0,5051	0,030505076	127,3684615
ZjuHsp100-67	5	AT5G17740.1	5	55,55	0,5414	0,009746175	427,3076923
ZjuHsp100-67	5	AT4G30250.1	4	8,551	0,4648	0,054356216	65,77692308
ZjuHsp100-67	5	AT2G18190.1	2	61,5396	0,5273	0,008568466	473,3815385
ZjuHsp100-67	5	AT5G17730.1	5	5,8293	0,5623	0,096460982	44,84076923
ZjuHsp100-67	5	AT1G43910.1	1	59,6477	0,5432	0,009106805	458,8284615
ZjuHsp100-67	5	AT4G05380.1	4	4,3491	0,5116	0,117633533	33,45461538
ZjuHsp100-67	5	AT5G17750.1	5	54,0338	0,4647	0,008600172	415,6446154
ZjuHsp100-67	5	AT2G46620.1	2	57,5707	0,6539	0,011358208	442,8515385
ZjuHsp100-68	5	AT3G28580.1	3	18,1112	0,3934	0,021721366	139,3169231
ZjuHsp100-68	5	AT5G40010.1	5	57,3836	0,4042	0,007043824	441,4123077
ZjuHsp100-68	5	AT3G28510.1	3	57,9765	0,414	0,007140824	445,9730769
ZjuHsp100-68	5	AT3G28600.1	3	6,4263	0,4112	0,063987053	49,43307692
ZjuHsp100-68	5	AT3G28610.1	3	5,2076	0,429	0,082379599	40,05846154
ZjuHsp100-68	5	AT3G28540.2	3	63,4143	0,4187	0,006602612	487,8023077
ZjuHsp100-68	5	AT3G28540.1	3	63,6629	0,4254	0,006682071	489,7146154
ZjuHsp100-68	5	AT5G40000.1	5	8,5906	0,4478	0,052126743	66,08153846
ZjuHsp100-68	5	AT3G28570.1	3	3,7616	0,4239	0,112691408	28,93538462
ZjuHsp100-68	5	AT3G28520.1	3	31,8342	0,4222	0,013262466	244,8784615
ZjuHsp100-68	5	AT3G50940.1	3	53,3411	0,5488	0,010288502	410,3161538
ZjuHsp100-68	5	AT3G50930.1	3	50,4417	0,611	0,012112994	388,0130769
ZjuHsp100-68	5	AT5G57480.1	5	55,5293	0,5923	0,010666441	427,1484615
ZjuHsp100-68	5	AT4G25835.1	4	56,3814	0,6012	0,010663091	433,7030769
ZjuHsp100-68	5	AT5G17760.1	5	54,1201	0,6082	0,011237969	416,3084615
ZjuHsp100-68	5	AT2G18193.1	2	55,8954	0,6164	0,011027741	429,9646154
ZjuHsp100-68	5	AT5G17740.1	5	54,9659	0,659	0,011989252	422,8146154
ZjuHsp100-68	5	AT4G30250.1	4	54,9391	0,5618	0,010225868	422,6084615
ZjuHsp100-68	5	AT2G18190.1	2	53,0522	0,6233	0,011748806	408,0938462
ZjuHsp100-68	5	AT5G17730.1	5	53,7626	0,6175	0,01148568	413,5584615
ZjuHsp100-68	5	AT5G17750.1	5	53,5317	0,5736	0,010715146	411,7823077
ZjuHsp100-68	5	AT1G43910.1	1	54,7807	0,7053	0,012874972	421,39
ZjuHsp100-68	5	AT2G46620.1	2	55,5572	0,6936	0,01248443	427,3630769
ZjuHsp100-68	5	AT4G05380.1	4	57,0868	0,4854	0,008502841	439,1292308
ZjuHsp100-70	5	AT1G74310.1	1	2,6054	0,0645	0,024756275	20,04153846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-70	5	AT4G14670.1	4	2,1075	0,1847	0,087639383	16,21153846
ZjuHsp100-70	5	AT5G15450.1	5	34,2417	0,4568	0,013340459	263,3976923
ZjuHsp100-70	5	AT2G25140.1	2	10,8019	0,4898	0,045343875	83,09153846
ZjuHsp100-70	5	AT5G50920.1	5	37,1191	0,528	0,014224483	285,5315385
ZjuHsp100-70	5	AT3G48870.1	3	48,6329	0,5383	0,011068639	374,0992308
ZjuHsp100-70	5	AT3G48870.2	3	48,6316	0,5383	0,011068935	374,0892308
ZjuHsp100-70	5	AT5G51070.1	5	49,187	0,598	0,012157684	378,3615385
ZjuHsp100-71	5	AT4G14670.1	4	2,1075	0,1847	0,087639383	16,21153846
ZjuHsp100-71	5	AT5G15450.1	5	34,4885	0,4568	0,013244995	265,2961538
ZjuHsp100-71	5	AT2G25140.1	2	10,8022	0,4898	0,045342615	83,09384615
ZjuHsp100-71	5	AT5G50920.1	5	36,5272	0,5281	0,014457719	280,9784615
ZjuHsp100-71	5	AT3G48870.1	3	48,6336	0,5382	0,011066423	374,1046154
ZjuHsp100-71	5	AT3G48870.2	3	48,63	0,5382	0,011067242	374,0769231
ZjuHsp100-71	5	AT5G51070.1	5	49,1845	0,598	0,012158302	378,3423077
ZjuHsp100-71	5	AT1G74310.1	1	2,6052	0,0645	0,024758176	20,2004
ZjuHsp100-72	6	AT5G42270.1	5	2,8939	0,0846	0,029233906	22,26076923
ZjuHsp100-72	6	AT1G50250.1	1	2,887	0,0969	0,033564254	22,20769231
ZjuHsp100-72	6	AT2G30950.1	2	8,9963	0,4804	0,053399731	69,20230769
ZjuHsp100-72	6	AT1G06430.1	1	48,4663	0,4888	0,010085358	372,8176923
ZjuHsp100-72	6	AT5G15250.1	5	47,506	0,5050	0,010630236	365,4307692
ZjuHsp100-72	6	AT5G15250.2	5	47,4189	0,5030	0,010607585	364,7607692
ZjuHsp100-72	6	AT2G26140.1	2	48,2226	0,6643	0,013775699	370,9430769
ZjuHsp100-72	6	AT5G53170.1	5	49,4259	0,6326	0,012798958	380,1992308
ZjuHsp100-72	6	AT2G29080.1	2	49,2472	0,6260	0,012711383	378,8246154
ZjuHsp100-72	6	AT1G07510.1	1	48,4692	0,6080	0,012544049	372,84
ZjuHsp100-72	6	AT5G58870.1	5	48,3356	0,6035	0,012485621	371,8123077
ZjuHsp100-72	6	AT3G47060.1	3	47,2934	0,5891	0,012456284	363,7953846
ZjuHsp100-72	6	AT4G23940.1	4	21,0309	0,7618	0,036222891	161,7761538
ZjuHsp100-72	6	AT3G16290.1	3	49,9004	0,7448	0,014925732	383,8492308
ZjuHsp100-72	6	AT3G02450.1	3	49,2184	0,6658	0,013527461	378,6030769
ZjuHsp100-73	6	AT1G50250.1	1	3,294	0,2573	0,078111718	25,33846154
ZjuHsp100-73	6	AT5G42270.1	5	3,5068	0,2857	0,081470286	26,97338462
ZjuHsp100-73	6	AT4G35190.1	4	1,9895	0,1816	0,091279216	15,30384615
ZjuHsp100-73	6	AT2G28305.1	2	3,1163	0,2271	0,072874884	23,97153846
ZjuHsp100-73	6	AT2G37210.1	2	2,4857	0,2338	0,094058012	19,12076923
ZjuHsp100-73	6	AT5G06300.1	5	5,658	0,2379	0,04204666	43,5207692
ZjuHsp100-73	6	AT2G30950.1	2	6,3972	0,6592	0,103045082	49,20923077
ZjuHsp100-73	6	AT5G15250.1	5	47,6998	0,6475	0,013574448	366,9215385
ZjuHsp100-73	6	AT1G06430.1	1	20,3755	0,6379	0,031307207	156,7346154
ZjuHsp100-73	6	AT2G37210.2	2	2,5094	0,2370	0,094444887	19,30307692
ZjuHsp100-73	6	AT5G15250.2	5	47,7002	0,6475	0,013574367	366,9246154
ZjuHsp100-73	6	AT2G35990.1	2	4,7175	0,2886	0,061176471	36,28846154
ZjuHsp100-73	6	AT5G11950.2	5	7,9109	0,3163	0,039982809	60,85307692
ZjuHsp100-73	6	AT5G11950.1	5	7,9074	0,3163	0,040000506	60,82615385
ZjuHsp100-73	6	AT2G26140.1	2	9,5051	0,7860	0,082692449	73,11615385
ZjuHsp100-73	6	AT5G53170.1	5	49,6257	0,6784	0,013670336	381,7361538
ZjuHsp100-74	6	AT2G26140.1	2	2,9176	0,1111	0,038079243	22,44307692
ZjuHsp100-74	6	AT5G53170.1	5	51,4551	0,4528	0,008799905	395,8084615
ZjuHsp100-74	6	AT5G15250.1	5	50,5869	0,6849	0,013539078	389,13
ZjuHsp100-74	6	AT1G50250.1	1	50,9194	0,6650	0,013059855	391,6876923
ZjuHsp100-74	6	AT5G42270.1	5	48,1873	0,6615	0,013727683	370,6715385
ZjuHsp100-74	6	AT5G15250.2	5	50,6407	0,6785	0,013398314	389,5438462
ZjuHsp100-74	6	AT2G30950.1	2	53,503	0,6400	0,011961946	411,5615385
ZjuHsp100-74	6	AT1G06430.1	1	51,5509	0,6463	0,012537124	396,5453846
ZjuHsp100-74	6	AT2G29080.1	2	53,127	0,7020	0,01321362	408,6692308
ZjuHsp100-74	6	AT1G07510.1	1	52,3736	0,7182	0,013713016	402,8738462
ZjuHsp100-74	6	AT5G58870.1	5	52,7154	0,7074	0,013419229	405,5030769
ZjuHsp100-74	6	AT3G47060.1	3	31,0818	0,7135	0,022955556	239,0907692
ZjuHsp100-74	6	AT4G23940.1	4	15,4722	0,8504	0,054963095	119,0169231
ZjuHsp100-74	6	AT3G16290.1	3	53,0582	0,7942	0,014968469	408,14
ZjuHsp100-75	6	AT2G26140.1	2	2,9176	0,1111	0,038079243	22,44307692
ZjuHsp100-75	6	AT5G53170.1	5	51,4558	0,4528	0,008799785	395,8138462
ZjuHsp100-75	6	AT5G15250.1	5	50,5835	0,6848	0,013538011	389,1038462
ZjuHsp100-75	6	AT1G50250.1	1	50,9201	0,6649	0,013057712	391,6930769
ZjuHsp100-75	6	AT5G42270.1	5	47,6436	0,6614	0,013882242	366,4892308
ZjuHsp100-75	6	AT5G15250.2	5	50,6411	0,6786	0,013400183	389,5469231
ZjuHsp100-75	6	AT2G30950.1	2	53,5024	0,6402	0,011965818	411,5569231
ZjuHsp100-75	6	AT1G06430.1	1	51,5513	0,6462	0,012535086	396,5484615
ZjuHsp100-75	6	AT2G29080.1	2	53,1279	0,7022	0,013217161	408,6761538

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-75	6	AT1G07510.1	1	52,3732	0,7182	0,01371312	402,8707692
ZjuHsp100-75	6	AT5G58870.1	5	52,7153	0,7075	0,013421151	405,5023077
ZjuHsp100-75	6	AT3G47060.1	3	31,3552	0,7135	0,022755396	241,1938462
ZjuHsp100-75	6	AT4G23940.1	4	15,4458	0,8505	0,055063512	118,8138462
ZjuHsp100-75	6	AT3G16290.1	3	53,071	0,7928	0,014938479	408,2384615
ZjuHsp100-76	6	AT2G25140.1	2	2,4357	0,1214	0,049841935	18,73615385
ZjuHsp100-76	6	AT5G15450.1	5	10,7306	0,1876	0,017482713	82,54307692
ZjuHsp100-76	6	AT1G74310.1	1	7,9217	0,4130	0,052135274	60,93615385
ZjuHsp100-76	6	AT5G50920.1	5	53,1015	0,5009	0,009432879	408,4730769
ZjuHsp100-76	6	AT3G48870.2	3	47,9973	0,4856	0,010117236	369,21
ZjuHsp100-76	6	AT3G48870.1	3	48,0665	0,4856	0,01010267	369,7423077
ZjuHsp100-76	6	AT4G14670.1	4	56,9587	0,4765	0,008365711	438,1438462
ZjuHsp100-76	6	AT5G51070.1	5	52,5232	0,5879	0,011193149	404,0246154
ZjuHsp100-77	6	AT5G43010.1	5	2,4417	0,0350	0,014334275	18,78230769
ZjuHsp100-77	6	AT1G45000.1	1	2,3801	0,0355	0,01491534	18,30846154
ZjuHsp100-77	6	AT1G45000.2	1	2,4483	0,0395	0,016133644	18,83307692
ZjuHsp100-77	6	AT5G20000.1	5	55,0965	0,5067	0,009196591	423,8192308
ZjuHsp100-77	6	AT5G19990.1	5	55,2964	0,5400	0,009765554	425,3569231
ZjuHsp100-77	6	AT1G53750.1	1	55,7245	0,5542	0,009945356	428,65
ZjuHsp100-77	6	AT4G29040.1	4	7,4464	0,5549	0,074519231	57,28
ZjuHsp100-77	6	AT2G20140.1	2	7,4798	0,5548	0,074173106	57,53692308
ZjuHsp100-77	6	AT1G53780.3	1	55,8532	0,5669	0,010149821	429,64
ZjuHsp100-77	6	AT1G53780.1	1	55,6926	0,5727	0,010283233	428,4046154
ZjuHsp100-77	6	AT1G53780.2	1	55,8568	0,5668	0,010147377	429,6676923
ZjuHsp100-77	6	AT5G58290.1	5	48,7208	0,5827	0,011959984	374,7753846
ZjuHsp100-77	6	AT3G05530.1	3	50,9644	0,5588	0,010964516	392,0338462
ZjuHsp100-77	6	AT1G09100.1	1	53,6015	0,5701	0,010635896	412,3192308
ZjuHsp100-78	6	AT1G21690.1	1	1,0988	0,0952	0,086639971	8,452307692
ZjuHsp100-78	6	AT1G21690.3	1	1,0988	0,0952	0,086639971	8,452307692
ZjuHsp100-78	6	AT1G21690.4	1	1,1464	0,0976	0,085136078	8,818461538
ZjuHsp100-78	6	AT1G21690.2	1	1,1747	0,0970	0,082574274	9,036153846
ZjuHsp100-78	6	AT1G77470.1	1	52,6031	0,6277	0,011932757	404,6392308
ZjuHsp100-78	6	AT1G63160.1	1	53,9972	0,6739	0,012480277	415,3630769
ZjuHsp100-79	6	AT1G21690.1	1	1,135	0,1024	0,090220264	8,730769231
ZjuHsp100-79	6	AT1G21690.4	1	1,1814	0,1048	0,088708312	9,087692308
ZjuHsp100-79	6	AT1G21690.2	1	1,2064	0,1043	0,08645557	9,28
ZjuHsp100-79	6	AT1G21690.3	1	1,2703	0,1433	0,112807998	9,771538462
ZjuHsp100-79	6	AT1G63160.1	1	53,4637	0,6742	0,012610425	411,2592308
ZjuHsp100-79	6	AT1G77470.1	1	52,2629	0,6623	0,012672469	402,0223077
ZjuHsp100-80	7	AT3G56690.1	3	2,0663	0,3229	0,156269661	15,89461538
ZjuHsp100-80	7	AT5G03340.1	5	52,8335	0,6561	0,012418257	406,4115385
ZjuHsp100-80	7	AT3G09840.1	3	51,3839	0,6579	0,012803621	395,2607692
ZjuHsp100-80	7	AT3G01610.1	3	58,058	0,7370	0,012694202	446,6
ZjuHsp100-80	7	AT3G53230.1	3	15,4917	0,6842	0,044165585	119,1669231
ZjuHsp100-80	7	AT1G03000.1	1	54,3128	0,8767	0,016141683	417,7907692
ZjuHsp100-80	7	AT2G03670.1	2	12,3146	0,6496	0,052750394	94,72769231
ZjuHsp100-81	7	AT1G05910.1	1	1,6272	0,1816	0,111603	12,51692
ZjuHsp100-81	7	AT3G15120.1	3	33,7171	0,8794	0,026082	259,3623
ZjuHsp100-81	7	AT5G03340.1	5	10,9919	0,8747	0,079577	84,55308
ZjuHsp100-81	7	AT3G09840.1	3	11,3731	0,8809	0,077455	87,48538
ZjuHsp100-81	7	AT3G53230.1	3	14,69	0,863	0,058747	113
ZjuHsp100-82	7	AT1G05910.1	1	1,645	0,1808	0,109909	12,65385
ZjuHsp100-82	7	AT3G15120.1	3	27,9588	0,874	0,03126	215,0677
ZjuHsp100-82	7	AT5G03340.1	5	11,3113	0,8745	0,077312	87,01
ZjuHsp100-82	7	AT3G09840.1	3	0,1572	15,4239	98,11641	1,209231
ZjuHsp100-82	7	AT3G53230.1	3	15,237	0,8614	0,056533	117,2077
ZjuHsp100-83	7	AT1G04730.1	1	2,1657	0,285	0,131597	16,65923
ZjuHsp100-84	7	AT1G04730.1	1	50,7725	1,2306	0,024238	390,5577
ZjuHsp100-85	7	AT5G51070.1	5	2,2489	0,2314	0,102895	17,29923
ZjuHsp100-85	7	AT5G50920.1	5	52,0084	0,4921	0,009462	400,0646
ZjuHsp100-85	7	AT3G48870.2	3	51,0957	0,4996	0,009778	393,0438
ZjuHsp100-85	7	AT3G48870.1	3	48,307	0,4937	0,01022	371,5923
ZjuHsp100-85	7	AT5G15450.1	5	53,6494	0,5911	0,011018	412,6877
ZjuHsp100-85	7	AT2G25140.1	2	40,5717	0,618	0,015232	312,09
ZjuHsp100-85	7	AT1G74310.1	1	39,2993	0,5753	0,014639	302,3023
ZjuHsp100-85	7	AT4G14670.1	4	54,0523	0,5801	0,010732	415,7869
ZjuHsp100-86	8	AT2G45500.1	2	1,8062	0,2072	0,114716	13,89385
ZjuHsp100-86	8	AT2G45500.2	2	53,229	0,2087	0,003921	409,4538
ZjuHsp100-86	8	AT3G27120.1	3	54,6491	0,6407	0,011724	420,3777

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-86	8	AT2G34560.2	2	53,6346	0,6783	0,012647	412,5738
ZjuHsp100-86	8	AT2G34560.1	2	54,725	0,6652	0,012155	420,9615
ZjuHsp100-86	8	AT1G80350.1	1	54,8456	0,6475	0,011806	4,980769
ZjuHsp100-86	8	AT2G27600.1	2	33,7168	0,6225	0,018463	259,36
ZjuHsp100-86	8	AT3G19740.1	3	51,75	0,7214	0,01394	398,0769
ZjuHsp100-86	8	AT1G50140.2	1	53,0603	0,7149	0,013473	408,1562
ZjuHsp100-86	8	AT1G50140.1	1	53,0581	0,7149	0,013474	408,1392
ZjuHsp100-86	8	AT1G64110.2	1	52,6595	0,7449	0,014146	405,0731
ZjuHsp100-86	8	AT1G64110.1	1	52,6587	0,7448	0,014144	405,0669
ZjuHsp100-86	8	AT1G64110.3	1	0,1329	13,1581	99,00752	1,022308
ZjuHsp100-86	8	AT4G28000.1	4	52,7294	0,7839	0,014866	405,6108
ZjuHsp100-86	8	AT4G02480.1	4	42,9216	0,7938	0,018494	330,1662
ZjuHsp100-86	8	AT4G24860.1	4	54,6354	0,7914	0,014485	420,2723
ZjuHsp100-86	8	AT5G53540.1	5	57,6272	0,7378	0,012803	443,2862
ZjuHsp100-86	8	AT1G02890.1	1	55,1815	0,7858	0,01424	424,4731
ZjuHsp100-86	8	AT5G52882.1	5	8,6495	0,7515	0,086884	66,53462
ZjuHsp100-87	8	AT1G33360.1	1	3,3093	0,234	0,07071	25,45615
ZjuHsp100-87	8	AT5G53350.1	5	4,5768	0,3172	0,069306	35,20615
ZjuHsp100-87	8	AT5G49840.1	5	4,7118	0,3387	0,071883	36,24462
ZjuHsp100-88	8	AT1G33290.1	1	2,0309	0,2158	0,106258	15,62231
ZjuHsp100-88	8	AT3G10420.1	3	52,4964	0,4973	0,009473	403,8185
ZjuHsp100-88	8	AT3G10420.2	3	52,4934	0,4973	0,009474	403,7954
ZjuHsp100-88	8	AT1G73170.1	1	11,7379	0,5283	0,045008	90,29154
ZjuHsp100-88	8	AT1G73170.2	1	8,8844	0,4296	0,048354	68,34154
ZjuHsp100-88	8	AT1G33290.2	1	2,4311	0,2594	0,106701	18,70077
ZjuHsp100-89	8	AT2G18330.1	2	2,1786	0,1294	0,059396	16,75846
ZjuHsp100-89	8	AT4G36580.1	4	2,6874	0,1463	0,054439	20,67231
ZjuHsp100-89	8	AT5G16930.1	5	11,7985	0,2723	0,023079	90,75769
ZjuHsp100-89	8	AT3G03060.1	3	11,3339	0,2637	0,023266	87,18385
ZjuHsp100-90	8	AT3G50930.1	3	28,2508	0,3005	0,010637	217,3138
ZjuHsp100-90	8	AT3G50940.1	3	27,3247	0,307	0,011235	210,19
ZjuHsp100-90	8	AT2G18193.1	2	16,5317	0,4804	0,029059	127,1669
ZjuHsp100-90	8	AT2G18190.1	2	13,9102	0,5396	0,038792	107,0015
ZjuHsp100-90	8	AT5G17760.1	5	18,0097	0,5323	0,029556	138,5362
ZjuHsp100-90	8	AT5G17740.1	5	8,6112	0,538	0,062477	66,24
ZjuHsp100-90	8	AT5G17730.1	5	15,1661	0,5301	0,034953	116,6623
ZjuHsp100-90	8	AT3G28600.1	3	52,6047	0,5692	0,01082	404,6515
ZjuHsp100-90	8	AT3G28610.1	3	52,0166	0,5613	0,010791	400,1277
ZjuHsp100-90	8	AT5G57480.1	5	25,7189	0,6098	0,02371	197,8377
ZjuHsp100-90	8	AT4G25835.1	4	13,6408	0,6452	0,047299	104,9292
ZjuHsp100-90	8	AT3G28540.2	3	52,1921	0,6026	0,011546	401,4777
ZjuHsp100-90	8	AT3G28540.1	3	52,4255	0,6006	0,011456	403,2731
ZjuHsp100-90	8	AT3G28510.1	3	51,8681	0,6023	0,011612	398,9854
ZjuHsp100-90	8	AT5G40000.1	5	50,5123	0,6078	0,2026	23,07692
ZjuHsp100-90	8	AT3G28570.1	3	51,7813	0,5625	0,010863	398,3177
ZjuHsp100-90	8	AT3G28580.1	3	19,1958	0,5909	0,030783	147,66
ZjuHsp100-90	8	AT5G17750.1	5	20,9364	0,5166	0,024675	161,0492
ZjuHsp100-90	8	AT5G40010.1	5	41,2097	0,5856	0,01421	316,9977
ZjuHsp100-90	8	AT1G43910.1	1	50,8529	0,6097	0,011989	391,1762
ZjuHsp100-90	8	AT4G30250.1	4	47,6765	21,8104	0,457466	366,7423
ZjuHsp100-90	8	AT3G28520.1	3	47,6765	0,6304	0,013222	366,7423
ZjuHsp100-91	8	AT2G18193.1	2	20,6505	0,3842	0,018605	158,85
ZjuHsp100-91	8	AT5G17760.1	5	8,8237	0,336	0,038079	67,87462
ZjuHsp100-91	8	AT2G18190.1	2	17,0303	0,427	0,025073	131,0023
ZjuHsp100-91	8	AT3G50940.1	3	19,7473	0,3952	0,020013	151,9023
ZjuHsp100-91	8	AT3G50930.1	3	29,7828	0,4387	0,01473	229,0985
ZjuHsp100-91	8	AT5G17740.1	5	52,2779	0,4434	0,008482	402,1377
ZjuHsp100-91	8	AT5G17730.1	5	6,1731	0,3946	0,063923	47,48538
ZjuHsp100-91	8	AT5G17750.1	5	22,4885	0,3802	0,016906	172,9885
ZjuHsp100-91	8	AT1G43910.1	1	52,8316	0,5197	0,009837	406,3969
ZjuHsp100-91	8	AT3G28540.1	3	57,13	0,5874	0,010282	439,4615
ZjuHsp100-91	8	AT3G28540.2	3	57,2385	0,5835	0,010194	440,2962
ZjuHsp100-91	8	AT5G40000.1	5	53,4857	0,6073	0,011354	411,4285
ZjuHsp100-91	8	AT3G28610.1	3	55,3249	0,5503	0,009947	425,5762
ZjuHsp100-91	8	AT4G25835.1	4	57,732	0,6384	0,011058	444,0923
ZjuHsp100-91	8	AT5G57480.1	5	56,314	0,6384	0,011336	433,1846
ZjuHsp100-91	8	AT3G28510.1	3	8,2671	0,6039	0,073049	63,59308
ZjuHsp100-91	8	AT3G28600.1	3	51,6122	0,5549	0,010751	397,0169
ZjuHsp100-91	8	AT3G28570.1	3	23,5859	0,5725	0,024273	181,43

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-91	8	AT5G40010.1	5	8,3964	0,6501	0,077426	64,58769
ZjuHsp100-91	8	AT3G28580.1	3	19,9574	0,6353	0,031833	153,5185
ZjuHsp100-91	8	AT5G17760.2	5	12,0751	0,3615	0,029938	92,88538
ZjuHsp100-91	8	AT3G28520.1	3	16,635	0,6124	0,036814	127,9615
ZjuHsp100-91	8	AT4G30250.1	4	24,5365	0,6361	0,025925	188,7423
ZjuHsp100-91	8	AT4G05380.1	4	13,6392	0,3505	0,025698	104,9169
ZjuHsp100-92	8	AT2G18193.1	2	5,3429	0,3185	0,059612	41,09923
ZjuHsp100-92	8	AT2G18190.1	2	4,4156	0,3263	0,073897	33,96615
ZjuHsp100-92	8	AT3G50930.1	3	26,8745	0,4358	0,016216	206,7269
ZjuHsp100-92	8	AT3G50940.1	3	17,9722	0,3877	0,021572	138,2477
ZjuHsp100-92	8	AT5G17760.1	5	20,5796	0,372	0,018076	158,3046
ZjuHsp100-92	8	AT5G17730.1	5	41,9151	0,4601	0,010977	322,4238
ZjuHsp100-92	8	AT5G17740.1	5	52,5483	0,4785	0,009106	404,2177
ZjuHsp100-92	8	AT4G25835.1	4	56,985	0,5944	0,010431	438,3462
ZjuHsp100-92	8	AT1G43910.1	1	50,1478	0,5545	0,011057	385,7523
ZjuHsp100-92	8	AT5G17750.1	1	19,4127	0,453	0,023335	149,3285
ZjuHsp100-92	8	AT3G28510.1	3	52,8906	0,589	0,011136	406,8508
ZjuHsp100-92	8	AT5G57480.1	5	55,0758	0,6259	0,011364	423,66
ZjuHsp100-92	8	AT3G28610.1	3	51,5757	0,5683	0,011019	396,7362
ZjuHsp100-92	8	AT3G28540.2	3	54,2252	0,5818	0,010729	417,1169
ZjuHsp100-92	8	AT3G28540.1	3	54,267	0,5818	0,010721	417,4385
ZjuHsp100-92	8	AT5G40010.1	5	51,0386	0,6022	0,011799	392,6046
ZjuHsp100-92	8	AT3G28600.1	3	50,8584	0,5871	0,011544	391,2185
ZjuHsp100-92	8	AT3G28570.1	3	47,576	0,5766	0,01212	365,9692
ZjuHsp100-92	8	AT3G28580.1	3	52,8736	0,5857	0,011077	406,72
ZjuHsp100-92	8	AT5G40000.1	5	52,2423	0,6124	0,011722	401,8638
ZjuHsp100-92	8	AT3G28520.1	3	52,8294	0,6046	0,011444	4,650769
ZjuHsp100-92	8	AT5G17760.2	3	13,6777	0,4083	0,029852	105,2131
ZjuHsp100-92	8	AT4G30250.1	4	12,6757	0,6385	0,050372	97,50538
ZjuHsp100-93	8	AT2G18190.1	2	4,6779	0,3837	0,082024	35,98385
ZjuHsp100-93	8	AT2G18193.1	2	5,8231	0,3481	0,059779	44,79308
ZjuHsp100-93	8	AT3G50940.1	3	0,1807	15,5714	86,17266	1,39
ZjuHsp100-93	8	AT3G50930.1	3	54,0027	0,4494	0,008322	415,4054
ZjuHsp100-93	8	AT5G17760.2	5	53,0959	0,4123	0,007765	408,43
ZjuHsp100-93	8	AT5G17730.1	5	53,0089	0,488	0,009206	407,7608
ZjuHsp100-93	8	AT5G17760.1	5	54,5188	0,4195	0,007695	419,3754
ZjuHsp100-93	8	AT5G17740.1	5	52,9918	0,4927	0,009298	407,6292
ZjuHsp100-93	8	AT5G57480.1	5	55,9769	0,5898	0,010536	430,5915
ZjuHsp100-93	8	AT5G17750.1	5	17,5131	0,4983	0,028453	134,7162
ZjuHsp100-93	8	AT4G25835.1	4	60,2894	0,5971	0,009904	463,7646
ZjuHsp100-93	8	AT3G28510.1	3	57,0063	0,6294	0,011041	438,51
ZjuHsp100-93	8	AT3G28540.1	3	43,4288	0,6364	0,014654	334,0677
ZjuHsp100-93	8	AT3G28540.2	3	42,7255	0,6365	0,014897	328,6577
ZjuHsp100-93	8	AT1G43910.1	1	50,9645	0,6115	0,011999	392,0346
ZjuHsp100-93	8	AT4G30250.1	4	53,3578	0,6238	0,011691	410,4446
ZjuHsp100-93	8	AT3G28580.1	3	8,6552	0,6659	0,076936	66,57846
ZjuHsp100-93	8	AT5G40010.1	5	53,8288	0,6417	0,011921	414,0677
ZjuHsp100-93	8	AT3G28610.1	3	52,4822	0,6582	0,012541	403,7092
ZjuHsp100-93	8	AT3G28600.1	3	51,9597	0,6432	0,012379	399,69
ZjuHsp100-93	8	AT3G28520.1	3	25,5848	0,6647	0,02598	196,8062
ZjuHsp100-94	8	AT5G08470.1	5	2,0972	0,2724	0,129887	16,13231
ZjuHsp100-94	8	AT3G53230.1	3	56,152	0,8713	0,015517	431,9385
ZjuHsp100-94	8	AT3G09840.1	3	52,7636	0,8801	0,01668	405,8738
ZjuHsp100-94	8	AT5G03340.1	5	54,0495	0,8853	0,016379	415,7654
ZjuHsp100-95	8	AT5G03340.1	5	54,2781	0,8819	0,016248	417,5238
ZjuHsp100-95	8	AT5G08470.1	5	1,7875	0,2864	0,160224	13,75
ZjuHsp100-95	8	AT3G09840.1	3	52,7031	0,8834	0,016762	405,4085
ZjuHsp100-95	8	AT3G53230.1	3	56,2687	0,8739	0,015531	432,8362
ZjuHsp100-97	8	AT5G64580.1	5	2,9847	0,0922	0,030891	22,95923
ZjuHsp100-98	8	AT1G33360.1	1	43,6205	0,3455	0,007921	335,5423
ZjuHsp100-98	8	AT5G49840.1	5	3,0315	0,3569	0,11773	23,31923
ZjuHsp100-98	8	AT5G53350.1	5	11,4994	0,3927	0,03415	88,45692
ZjuHsp100-99	9	AT1G02890.1	1	2,3081	0,2423	0,104978	17,75462
ZjuHsp100-99	9	AT4G02480.1	4	2,1038	0,2416	0,11484	16,18308
ZjuHsp100-99	9	AT4G24860.1	4	7,6285	0,4547	0,059605	58,68077
ZjuHsp100-99	9	AT1G02890.2	1	2,2739	0,2495	0,109723	17,49154
ZjuHsp100-99	9	AT3G19740.1	3	43,0202	0,6554	0,015235	330,9246
ZjuHsp100-99	9	AT1G62130.1	1	5,0955	0,4497	0,088254	39,19615
ZjuHsp100-99	9	AT1G64110.1	1	52,762	0,5356	0,010151	405,8615

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-99	9	AT1G50140.2	1	57,9314	0,7035	0,012144	445,6262
ZjuHsp100-99	9	AT1G64110.3	1	52,4139	0,5371	0,010247	403,1838
ZjuHsp100-99	9	AT1G64110.2	1	52,6533	0,5427	0,010307	405,0254
ZjuHsp100-99	9	AT4G28000.1	4	53,6729	0,5687	0,010596	412,8685
ZjuHsp100-99	9	AT1G50140.1	1	57,4645	0,7004	0,012188	442,0346
ZjuHsp100-99	9	AT4G27680.1	4	54,7779	0,6077	0,011094	421,3685
ZjuHsp100-99	9	AT5G52882.1	5	56,566	0,5683	0,010047	435,1231
ZjuHsp100-99	9	AT3G27120.1	3	59,4495	0,7586	0,01276	457,3038
ZjuHsp100-99	9	AT5G53540.1	5	55,842	0,5767	0,010327	429,5538
ZjuHsp100-100	9	AT4G02480.1	4	2,2839	0,2459	0,107667	17,56846
ZjuHsp100-100	9	AT1G02890.1	1	2,3081	0,2326	0,100776	17,75462
ZjuHsp100-100	9	AT4G24860.1	4	8,4795	0,4753	0,056053	65,22692
ZjuHsp100-100	9	AT1G02890.2	1	2,2713	0,24	0,105666	17,47154
ZjuHsp100-100	9	AT3G19740.1	3	58,6209	0,6674	0,011385	450,93
ZjuHsp100-100	9	AT1G62130.1	1	6,626	0,4771	0,072004	50,96923
ZjuHsp100-100	9	AT1G64110.1	1	52,7641	0,5356	0,010151	405,8777
ZjuHsp100-100	9	AT1G50140.2	1	58,0955	0,7063	0,012158	446,8885
ZjuHsp100-100	9	AT1G64110.2	1	52,6514	0,5427	0,010307	405,0108
ZjuHsp100-100	9	AT1G64110.3	1	52,4094	0,5373	0,010252	403,1492
ZjuHsp100-100	9	AT4G28000.1	4	53,6537	0,5689	0,010603	412,7208
ZjuHsp100-100	9	AT1G50140.1	1	57,7337	0,7062	0,012232	444,1054
ZjuHsp100-100	9	AT4G27680.1	4	54,7764	0,6077	0,011094	421,3569
ZjuHsp100-100	9	AT5G52882.1	5	56,6749	0,5674	0,010011	435,9608
ZjuHsp100-100	9	AT3G27120.1	3	59,8238	0,7539	0,012602	460,1831
ZjuHsp100-100	9	AT5G53540.1	5	55,8403	0,5768	0,010329	429,5408
ZjuHsp100-101	9	AT1G03000.1	1	1,6023	0,2323	0,144979	12,32538
ZjuHsp100-101	9	AT5G03340.1	5	53,4479	0,8313	0,015553	411,1377
ZjuHsp100-101	9	AT3G09840.1	3	52,13	0,849	0,016286	401
ZjuHsp100-101	9	AT3G53230.1	3	55,425	0,8172	0,014744	426,3462
ZjuHsp100-101	9	AT3G56690.1	3	50,7203	0,9241	0,01822	390,1562
ZjuHsp100-101	9	AT2G20140.1	2	2,8418	0,0129	0,004539	21,86
ZjuHsp100-101	9	AT4G29040.1	4	2,7809	0,012	0,004315	21,39154
ZjuHsp100-102	9	AT2G20140.1	2	2,8438	0,0129	0,004536	21,87538
ZjuHsp100-102	9	AT4G29040.1	4	2,7809	0,012	0,004315	21,39154
ZjuHsp100-102	9	AT1G09100.1	1	50,4673	0,507	0,010046	388,21
ZjuHsp100-102	9	AT5G58290.1	5	50,9949	0,5105	0,010011	392,2685
ZjuHsp100-102	9	AT3G05530.1	3	48,9132	0,5422	0,011085	376,2554
ZjuHsp100-102	9	AT5G20000.1	5	48,6979	0,5228	0,010736	374,5992
ZjuHsp100-102	9	AT1G45000.1	1	3,9644	0,5675	0,143149	30,49538
ZjuHsp100-102	9	AT5G19990.1	5	36,9003	0,5279	0,014306	283,8485
ZjuHsp100-102	9	AT1G53750.1	1	53,2238	0,5778	0,010856	409,4138
ZjuHsp100-102	9	AT5G43010.1	5	50,2136	0,5798	0,011547	386,2585
ZjuHsp100-102	9	AT1G53780.3	1	16,6802	0,6751	0,040473	128,3092
ZjuHsp100-102	9	AT1G53780.1	1	16,6881	0,6751	0,040454	128,37
ZjuHsp100-102	9	AT1G53780.2	1	16,7089	0,6751	0,040404	128,53
ZjuHsp100-102	9	AT1G45000.2	1	3,5597	0,615	0,172767	27,38231
ZjuHsp100-103	9	AT3G27120.1	3	1,7237	0,145	0,084121	13,25923
ZjuHsp100-103	9	AT3G27130.1	3	1,5724	0,4124	0,262274	12,09538
ZjuHsp100-103	9	AT2G45500.1	2	57,563	0,7001	0,012162	442,7923
ZjuHsp100-103	9	AT2G45500.2	2	58,3136	0,6828	0,011709	448,5662
ZjuHsp100-103	9	AT1G80350.1	1	54,1439	0,778	0,014369	416,4915
ZjuHsp100-103	9	AT2G34560.2	2	5,4083	0,638	0,117967	41,60231
ZjuHsp100-103	9	AT2G34560.1	2	5,4371	0,6276	0,115429	41,82385
ZjuHsp100-104	10	AT3G50940.1	3	10,3253	0,5157	0,049945	79,42538
ZjuHsp100-104	10	AT2G18193.1	2	19,9673	0,5537	0,02773	153,5946
ZjuHsp100-104	10	AT5G17760.1	5	10,5251	0,6349	0,060322	80,96231
ZjuHsp100-104	10	AT2G18190.1	2	15,5545	0,5981	0,038452	119,65
ZjuHsp100-104	10	AT5G17740.1	5	9,1057	0,6674	0,073295	70,04385
ZjuHsp100-104	10	AT5G17730.1	5	18,8546	0,6511	0,034533	145,0354
ZjuHsp100-104	10	AT2G18190.1	2	15,5752	0,5981	0,038401	119,8092
ZjuHsp100-104	10	AT2G18193.1	2	20,0254	0,5537	0,02765	154,0415
ZjuHsp100-104	10	AT5G17740.1	5	9,1054	0,6674	0,073297	70,04154
ZjuHsp100-104	10	AT5G17760.1	5	10,5165	0,6349	0,060372	80,89615
ZjuHsp100-105	10	AT3G16290.1	3	1,7564	0,1435	0,081701	13,51077
ZjuHsp100-105	10	AT1G50250.1	1	50,7247	0,7438	0,014663	390,19
ZjuHsp100-105	10	AT5G15250.1	5	51,5735	0,7544	0,014628	396,7192
ZjuHsp100-105	10	AT5G42270.1	5	26,5014	0,7213	0,027217	203,8569
ZjuHsp100-105	10	AT1G06430.1	1	52,6628	0,7507	0,014255	405,0985
ZjuHsp100-105	10	AT2G30950.1	2	54,1972	0,7689	0,014187	416,9015

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-105	10	AT5G53170.1	5	55,6293	0,8364	0,015035	427,9177
ZjuHsp100-105	10	AT5G15250.2	5	51,453	0,7538	0,01465	395,7923
ZjuHsp100-105	10	AT2G26140.1	2	53,2221	0,792	0,014881	409,4008
ZjuHsp100-105	10	AT3G47060.1	3	52,9393	0,9185	0,01735	407,2254
ZjuHsp100-105	10	AT1G07510.1	1	53,402	0,8781	0,016443	410,7846
ZjuHsp100-105	10	AT5G58870.1	5	16,9642	0,8908	0,052511	130,4938
ZjuHsp100-106	10	AT2G03670.1	2	1,7822	0,1794	0,100662	13,70923
ZjuHsp100-106	10	AT3G53230.1	3	52,969	0,6061	0,011443	407,4538
ZjuHsp100-106	10	AT3G09840.1	3	50,976	0,602	0,011809	392,1231
ZjuHsp100-106	10	AT5G03340.1	5	51,5882	0,6099	0,011822	396,8323
ZjuHsp100-106	10	AT3G56690.1	3	27,6851	0,6187	0,022348	212,9623
ZjuHsp100-106	10	AT3G01610.1	3	44,7541	0,6601	0,014749	344,2623
ZjuHsp100-106	10	AT5G08470.1	5	30,1298	0,7416	0,024614	231,7677
ZjuHsp100-107	10	AT2G03670.1	2	1,7332	0,1878	0,108354	13,33231
ZjuHsp100-107	10	AT3G53230.1	3	52,9592	0,6307	0,011909	407,3785
ZjuHsp100-107	10	AT5G03340.1	5	51,2357	0,6364	0,012421	394,1208
ZjuHsp100-107	10	AT3G09840.1	3	50,5008	0,6268	0,012412	388,4677
ZjuHsp100-107	10	AT3G01610.1	3	54,9207	0,6923	0,012605	422,4669
ZjuHsp100-108	10	AT3G53230.1	3	52,5507	0,6054	0,01152	404,2362
ZjuHsp100-108	10	AT2G03670.1	2	1,6444	0,1874	0,113963	12,64923
ZjuHsp100-108	10	AT3G09840.1	3	50,6883	0,602	0,011877	389,91
ZjuHsp100-108	10	AT5G03340.1	5	51,186	0,6113	0,011943	393,7385
ZjuHsp100-108	10	AT3G56690.1	3	47,6125	0,6136	0,012887	366,25
ZjuHsp100-108	10	AT3G01610.1	3	49,0218	0,6639	0,013543	377,0908
ZjuHsp100-108	10	AT5G08470.1	5	36,4795	0,7141	0,019575	280,6115
ZjuHsp100-109	10	AT3G19740.1	3	1,9403	0,2013	0,103747	14,92538
ZjuHsp100-109	10	AT1G50140.1	1	56,1883	0,2318	0,004125	432,2177
ZjuHsp100-109	10	AT1G02890.1	1	27,2442	0,6486	0,023807	209,5708
ZjuHsp100-109	10	AT1G50140.2	1	2,2553	0,2367	0,104953	17,34846
ZjuHsp100-109	10	AT1G02890.2	1	0,6702	0,0207	0,030886	5,155385
ZjuHsp100-109	10	AT4G02480.1	4	17,742	0,6695	0,037735	136,4769
ZjuHsp100-109	10	AT1G64110.1	1	31,1647	0,6379	0,020469	239,7285
ZjuHsp100-109	10	AT1G64110.3	1	20,5471	0,6336	0,030836	158,0546
ZjuHsp100-109	10	AT4G24860.1	4	18,8161	0,7196	0,038244	144,7392
ZjuHsp100-109	10	AT1G64110.2	1	20,7846	0,6369	0,030643	159,8815
ZjuHsp100-109	10	AT4G28000.1	4	42,8823	0,645	0,015041	329,8638
ZjuHsp100-109	10	AT5G52882.1	5	57,9415	0,6355	0,010968	445,7038
ZjuHsp100-109	10	AT4G27680.1	4	53,3213	0,6009	0,011269	410,1638
ZjuHsp100-109	10	AT1G62130.1	1	9,0907	0,7292	0,080214	69,92846
ZjuHsp100-109	10	AT2G45500.2	2	56,2427	0,7484	0,013307	432,6362
ZjuHsp100-109	10	AT5G53540.1	5	37,3011	0,6112	0,016386	286,9315
ZjuHsp100-109	10	AT2G45500.1	2	56,9621	0,7522	0,013205	438,17
ZjuHsp100-110	10	AT1G50140.1	1	2,0908	0,236	0,112875	16,08308
ZjuHsp100-110	10	AT3G19740.1	3	1,9402	0,2013	0,103752	14,92462
ZjuHsp100-110	10	AT1G02890.1	1	24,4472	0,6501	0,026592	188,0554
ZjuHsp100-110	10	AT1G50140.2	1	2,2553	0,2367	0,104953	17,34846
ZjuHsp100-110	10	AT4G02480.1	4	15,2707	0,6753	0,044222	117,4669
ZjuHsp100-110	10	AT1G02890.2	1	28,2081	0,672	0,023823	216,9854
ZjuHsp100-110	10	AT1G64110.3	1	20,64	0,6336	0,030698	158,7692
ZjuHsp100-110	10	AT1G64110.1	1	31,6458	0,6378	0,020154	243,4292
ZjuHsp100-110	10	AT4G24860.1	4	16,3923	0,7219	0,044039	126,0946
ZjuHsp100-110	10	AT1G64110.2	1	20,5537	0,6369	0,030987	158,1054
ZjuHsp100-110	10	AT4G28000.1	4	40,8808	0,644	0,015753	314,4677
ZjuHsp100-110	10	AT5G52882.1	5	57,8586	0,6358	0,010989	445,0662
ZjuHsp100-110	10	AT4G27680.1	4	53,319	0,6011	0,011274	410,1462
ZjuHsp100-110	10	AT1G62130.1	1	9,0849	0,7292	0,080265	69,88385
ZjuHsp100-110	10	AT2G45500.2	2	56,7157	0,754	0,013294	436,2746
ZjuHsp100-110	10	AT5G53540.1	5	37,2734	0,6112	0,016398	286,7185
ZjuHsp100-110	10	AT2G45500.1	2	57,4218	0,7577	0,013195	441,7062
ZjuHsp100-111	10	AT1G50140.2	1	2,0908	0,236	0,112875	16,08308
ZjuHsp100-111	10	AT3G19740.1	3	1,9402	0,2013	0,103752	14,92462
ZjuHsp100-111	10	AT1G02890.1	1	24,4472	0,6501	0,026592	188,0554
ZjuHsp100-111	10	AT1G50140.1	1	2,2553	0,2367	0,104953	17,34846
ZjuHsp100-111	10	AT4G02480.1	4	15,2707	0,6753	0,044222	117,4669
ZjuHsp100-111	10	AT1G02890.2	1	28,2081	0,672	0,023823	216,9854
ZjuHsp100-111	10	AT1G64110.3	1	20,64	0,6336	0,030698	158,7692
ZjuHsp100-111	10	AT1G64110.1	1	31,6458	0,6378	0,020154	243,4292
ZjuHsp100-111	10	AT4G24860.1	4	16,3923	0,7219	0,044039	126,0946
ZjuHsp100-111	10	AT1G64110.2	1	20,5537	0,6369	0,030987	158,1054

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-111	10	AT4G28000.1	4	40,8808	0,644	0,015753	314,4677
ZjuHsp100-111	10	AT5G52882.1	5	57,8586	0,6358	0,010989	445,0662
ZjuHsp100-111	10	AT4G27680.1	4	53,319	0,6011	0,011274	410,1462
ZjuHsp100-111	10	AT1G62130.1	1	9,0849	0,7292	0,080265	69,88385
ZjuHsp100-111	10	AT2G45500.2	2	56,7157	0,754	0,013294	436,2746
ZjuHsp100-111	10	AT5G53540.1	5	37,2734	0,6112	0,016398	286,7185
ZjuHsp100-111	10	AT2G45500.1	2	57,4218	0,7577	0,013195	441,7062
ZjuHsp100-112	10	AT1G50140.2	1	2,0908	0,236	0,112875	16,08308
ZjuHsp100-112	10	AT3G19740.1	3	1,9402	0,2013	0,103752	14,92462
ZjuHsp100-112	10	AT1G02890.1	1	24,4472	0,6501	0,026592	188,0554
ZjuHsp100-112	10	AT1G50140.1	1	2,2553	0,2367	0,104953	17,34846
ZjuHsp100-112	10	AT1G02890.2	1	28,2081	0,672	0,023823	216,9854
ZjuHsp100-112	10	AT4G02480.1	4	15,2707	0,6753	0,044222	117,4669
ZjuHsp100-112	10	AT1G64110.2	1	20,5537	0,6369	0,030987	158,1054
ZjuHsp100-112	10	AT1G64110.1	1	31,6458	0,6378	0,020154	243,4292
ZjuHsp100-112	10	AT4G24860.1	4	16,3923	0,7219	0,044039	126,0946
ZjuHsp100-112	10	AT1G64110.3	1	20,64	0,6336	0,030698	158,7692
ZjuHsp100-112	10	AT4G28000.1	4	40,8808	0,644	0,015753	314,4677
ZjuHsp100-112	10	AT5G52882.1	5	57,8586	0,6358	0,010989	445,0662
ZjuHsp100-112	10	AT4G27680.1	4	53,319	0,6011	0,011274	410,1462
ZjuHsp100-112	10	AT1G62130.1	1	9,0849	0,7292	0,080265	69,88385
ZjuHsp100-112	10	AT2G45500.2	2	56,7157	0,754	0,013294	436,2746
ZjuHsp100-112	10	AT5G53540.1	5	37,2734	0,6112	0,016398	286,7185
ZjuHsp100-112	10	AT2G45500.1	2	57,4218	0,7577	0,013195	441,7062
ZjuHsp100-113	10	AT2G39730.3	2	42,4395	0,5648	0,013308	326,4577
ZjuHsp100-113	10	AT1G73110.1	1	1,8969	0,158	0,083294	14,59154
ZjuHsp100-113	10	AT2G39730.1	2	45,9034	0,5681	0,012376	353,1031
ZjuHsp100-113	10	AT2G39730.2	2	48,7921	0,565	0,01158	375,3238
ZjuHsp100-114	11	AT5G03340.1	5	55,5807	0,6787	0,012211	427,5438
ZjuHsp100-114	11	AT3G01610.1	3	3,3522	0,4152	0,123859	25,78615
ZjuHsp100-114	11	AT3G09840.1	3	54,9032	0,678	0,012349	422,3323
ZjuHsp100-114	11	AT3G53230.1	3	56,9289	0,6653	0,011687	437,9146
ZjuHsp100-114	11	AT2G03670.1	2	54,6055	0,7077	0,01296	420,0423
ZjuHsp100-114	11	AT3G56690.1	3	54,4172	0,6827	0,012546	418,5938
ZjuHsp100-114	11	AT1G03000.1	1	3,8683	4,2224	1,091539	29,75615
ZjuHsp100-115	11	AT2G30950.1	2	51,9107	0,7162	0,013797	399,3131
ZjuHsp100-115	11	AT4G23940.1	4	2,2613	0,1533	0,067793	17,39462
ZjuHsp100-115	11	AT1G06430.1	1	29,2558	0,7354	0,025137	225,0446
ZjuHsp100-115	11	AT5G15250.1	5	50,1173	0,7614	0,015192	385,5177
ZjuHsp100-115	11	AT1G50250.1	1	52,3746	0,7591	0,014494	402,8815
ZjuHsp100-115	11	AT5G42270.1	5	54,5156	0,7778	0,014267	419,3508
ZjuHsp100-115	11	AT2G26140.1	2	50,7844	0,821	0,016166	390,6492
ZjuHsp100-115	11	AT5G15250.2	5	49,7157	0,7577	0,015241	382,4285
ZjuHsp100-116	11	AT1G63160.1	1	1,5517	0,0629	0,040536	11,93615
ZjuHsp100-119	11	AT1G64110.3	1	3,3852	0,1422	0,042006	26,04
ZjuHsp100-119	11	AT1G64110.2	1	3,3381	0,1466	0,043917	25,67769
ZjuHsp100-119	11	AT5G52882.1	5	3,2801	0,186	0,056706	25,23154
ZjuHsp100-119	11	AT1G64110.1	1	3,2983	0,1441	0,043689	25,37154
ZjuHsp100-119	11	AT1G02890.1	1	6,9947	0,534	0,076344	53,80538
ZjuHsp100-119	11	AT4G28000.1	4	2,5835	0,1943	0,075208	19,87308
ZjuHsp100-119	11	AT1G02890.2	1	6,5936	0,5511	0,083581	50,72
ZjuHsp100-119	11	AT4G02480.1	4	12,4405	0,5462	0,043905	95,69615
ZjuHsp100-119	11	AT4G24860.1	4	9,049	0,5694	0,062924	69,60769
ZjuHsp100-119	11	AT3G19740.1	3	5,7485	0,6554	0,114012	44,21923
ZjuHsp100-119	11	AT1G50140.1	1	11,6061	0,6812	0,058693	89,27769
ZjuHsp100-119	11	AT1G50140.2	1	12,5631	12,5631	1	96,63923
ZjuHsp100-119	11	AT4G27680.1	4	52,4301	0,6436	0,012275	403,3085
ZjuHsp100-119	11	AT1G62130.1	1	10,5203	0,6237	0,059285	80,92538
ZjuHsp100-119	11	AT5G53540.1	5	55,4187	0,6555	0,011828	426,2977
ZjuHsp100-120	11	AT5G26860.1	5	53,3435	0,6849	0,012839	410,3346
ZjuHsp100-120	11	AT5G47040.1	5	1,5847	0,0615	0,038809	12,19
ZjuHsp100-120	11	AT3G05780.1	3	18,5011	0,7087	0,038306	142,3162
ZjuHsp100-120	11	AT3G05790.1	3	52,5062	0,7371	0,014038	403,8938
ZjuHsp100-121	11	AT2G39730.3	2	4,7786	0,1443	0,030197	36,75846
ZjuHsp100-121	11	AT2G39730.2	2	4,7783	0,1443	0,030199	36,75615
ZjuHsp100-121	11	AT1G73110.1	1	17,538	0,5434	0,030984	134,9077
ZjuHsp100-121	11	AT2G39730.1	2	4,7776	0,1443	0,030203	36,75077
ZjuHsp100-122	11	AT1G53780.2	1	12,4405	0,5462	0,043905	95,69615
ZjuHsp100-122	11	AT1G53750.1	1	1,7187	0,0198	0,01152	13,22077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-122	11	AT1G53780.3	1	2,0923	0,1165	0,05568	16,09462
ZjuHsp100-122	11	AT1G53780.1	1	2,0083	0,1123	0,055918	15,44846
ZjuHsp100-122	11	AT5G20000.1	5	56,0212	0,5005	0,008934	430,9323
ZjuHsp100-122	11	AT5G19990.1	5	55,877	0,5009	0,008964	429,8231
ZjuHsp100-122	11	AT5G43010.1	5	53,8997	0,5585	0,010362	414,6131
ZjuHsp100-122	11	AT1G45000.1	1	55,3556	0,5437	0,009822	425,8123
ZjuHsp100-122	11	AT2G20140.1	2	14,3128	0,5566	0,038888	110,0985
ZjuHsp100-122	11	AT4G29040.1	4	22,4607	0,5591	0,024892	172,7746
ZjuHsp100-122	11	AT1G09100.1	1	54,3803	0,5614	0,010324	418,31
ZjuHsp100-122	11	AT3G05530.1	3	51,8075	0,5702	0,011006	398,5192
ZjuHsp100-122	11	AT5G58290.1	5	53,015	0,6062	0,011434	407,8077
ZjuHsp100-123	11	AT5G03340.1	5	52,9331	0,5959	0,011258	407,1777
ZjuHsp100-123	11	AT3G01610.1	3	45,858	0,3205	0,006989	352,7538
ZjuHsp100-123	11	AT3G09840.1	3	52,1275	0,6049	0,011604	400,9808
ZjuHsp100-123	11	AT3G53230.1	3	54,6955	0,6031	0,011027	420,7346
ZjuHsp100-123	11	AT1G03000.1	1	53,1977	0,8707	0,016367	409,2131
ZjuHsp100-123	11	AT2G03670.1	2	0,1726	16,6057	96,20915	1,327692
ZjuHsp100-123	11	AT3G56690.1	3	52,4815	0,7464	0,014222	403,7038
ZjuHsp100-124	11	AT1G33360.1	1	6,4465	0,2575	0,039944	49,58846
ZjuHsp100-124	11	AT5G49840.1	5	2,3678	0,2624	0,11082	18,21385
ZjuHsp100-124	11	AT5G53350.1	5	10,434	0,3217	0,030832	80,26154
ZjuHsp100-125	12	AT3G24530.1	2	2,4101	0,1349	0,055973	18,53923
ZjuHsp100-126	12	AT5G03340.1	5	2,2478	0,0357	0,015882	17,29077
ZjuHsp100-126	12	AT3G53230.1	3	2,7945	0,0392	0,014028	21,49615
ZjuHsp100-126	12	AT3G09840.1	3	2,2844	0,0408	0,01786	17,57231
ZjuHsp100-126	12	AT2G03670.1	2	51,1392	0,6067	0,011864	393,3785
ZjuHsp100-126	12	AT3G01610.1	3	51,1403	0,6067	0,011863	393,3869
ZjuHsp100-127	12	AT5G57710.1	5	12,1494	0,743	0,061155	93,45692
ZjuHsp100-127	12	AT3G52490.1	3	2,4425	0,3079	0,126059	18,78846
ZjuHsp100-127	12	AT4G30350.1	4	11,6831	0,7123	0,060968	89,87
ZjuHsp100-128	12	AT5G20000.1	5	1,4908	0,0385	0,025825	11,46769
ZjuHsp100-128	12	AT5G19990.1	5	1,5499	0,0285	0,018388	11,92231
ZjuHsp100-128	12	AT2G20140.1	2	16,2302	0,5175	0,031885	124,8477
ZjuHsp100-128	12	AT1G53750.1	1	55,2061	0,4994	0,009046	424,6623
ZjuHsp100-128	12	AT1G53780.1	1	53,2399	0,5466	0,010267	409,5377
ZjuHsp100-128	12	AT4G29040.1	4	14,6755	0,5172	0,035242	112,8885
ZjuHsp100-128	12	AT1G53780.2	1	6,5467	4,5113	0,689095	50,35923
ZjuHsp100-128	12	AT1G53780.3	1	53,7169	0,5088	0,009472	413,2069
ZjuHsp100-128	12	AT1G45000.1	1	54,1082	0,5343	0,009875	416,2169
ZjuHsp100-128	12	AT5G43010.1	5	51,8607	0,5348	0,010312	398,9285
ZjuHsp100-128	12	AT3G05530.1	3	50,5383	0,5426	0,010736	388,7562
ZjuHsp100-128	12	AT1G09100.1	1	52,9361	0,5362	0,010129	407,2008
ZjuHsp100-129	12	AT1G05910.1	1	10,9754	0,8689	0,079168	84,42615
ZjuHsp100-129	12	AT3G15120.1	3	2,1307	0,4027	0,188999	16,39
ZjuHsp100-130	12	AT1G05910.1	1	10,9754	0,8689	0,079168	84,42615
ZjuHsp100-130	12	AT3G15120.1	3	2,1307	0,4027	0,188999	16,39
ZjuHsp100-131	12	AT1G73170.2	1	3,8813	16,2188	4,178703	29,85615
ZjuHsp100-131	12	AT1G73170.1	1	3,3343	16,9352	5,079087	25,64846
ZjuHsp100-131	12	AT3G10420.1	3	9,3844	3,8115	0,406153	72,18769
ZjuHsp100-131	12	AT3G10420.2	3	7,6438	3,6504	0,477564	58,79846
ZjuHsp100-131	12	AT1G33290.1	1	5,1528	2,9621	0,574853	39,63692
ZjuHsp100-132	scaffold	AT4G30350.1	4	2,6039	0,2692	0,103383	20,03
ZjuHsp100-132	scaffold	AT5G57710.1	5	2,0969	0,2652	0,126472	16,13
ZjuHsp100-132	scaffold	AT5G57130.1	5	15,3139	0,5848	0,038188	117,7992
ZjuHsp100-132	scaffold	AT3G52490.1	3	3,8028	0,5814	0,152887	29,25231
ZjuHsp100-133	scaffold	AT5G42270.1	5	50,9314	0,7797	0,015309	391,78
ZjuHsp100-133	scaffold	AT3G16290.1	3	1,7246	0,1008	0,058448	13,26615
ZjuHsp100-133	scaffold	AT5G15250.1	5	37,0296	0,8079	0,021818	284,8431
ZjuHsp100-133	scaffold	AT1G50250.1	1	21,1329	0,8423	0,039857	162,5608
ZjuHsp100-133	scaffold	AT1G06430.1	1	52,435	0,7557	0,014412	403,3462
ZjuHsp100-133	scaffold	AT2G30950.1	2	53,3371	0,7533	0,014123	410,2854
ZjuHsp100-133	scaffold	AT5G15250.2	5	39,8319	0,8081	0,020288	306,3992
ZjuHsp100-133	scaffold	AT5G53170.1	5	55,4737	0,8189	0,014762	426,7208
ZjuHsp100-133	scaffold	AT2G26140.1	2	0,2813	16,1858	57,53928	2,163846
ZjuHsp100-133	scaffold	AT3G47060.1	3	53,5372	0,8768	0,016377	411,8246
ZjuHsp100-133	scaffold	AT5G58870.1	5	53,7415	0,8768	0,016315	413,3962
ZjuHsp100-134	scaffold	AT3G05790.1	3	1,6697	0,1663	0,099599	12,84385
ZjuHsp100-134	scaffold	AT5G26860.1	5	1,7269	0,1314	0,07609	13,28385
ZjuHsp100-134	scaffold	AT5G47040.1	5	35,0106	0,6818	0,019474	269,3123

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-134	scaffold	AT3G05780.1	3	1,7879	0,2053	0,114827	13,75308
ZjuHsp100-135	scaffold	AT3G50930.1	3	7,6596	0,4104	0,05358	58,92
ZjuHsp100-135	scaffold	AT3G50940.1	3	53,2769	0,4252	0,007981	409,8223
ZjuHsp100-135	scaffold	AT2G18190.1	2	22,2567	0,4993	0,022434	171,2054
ZjuHsp100-135	scaffold	AT2G18193.1	2	22,1487	0,4867	0,021974	170,3746
ZjuHsp100-135	scaffold	AT5G17760.1	5	18,546	0,5302	0,028588	142,6615
ZjuHsp100-135	scaffold	AT5G17730.1	5	45,6326	0,5768	0,01264	351,02
ZjuHsp100-135	scaffold	AT5G17740.1	5	25,6175	0,5741	0,02241	197,0577
ZjuHsp100-136	scaffold	AT3G50930.1	3	7,6596	0,4104	0,05358	58,92
ZjuHsp100-136	scaffold	AT3G50940.1	3	53,2769	0,4252	0,007981	409,8223
ZjuHsp100-136	scaffold	AT2G18190.1	2	22,2567	0,4993	0,022434	171,2054
ZjuHsp100-136	scaffold	AT2G18193.1	2	22,1487	0,4867	0,021974	170,3746
ZjuHsp100-136	scaffold	AT5G17760.1	5	18,546	0,5302	0,028588	142,6615
ZjuHsp100-136	scaffold	AT5G17730.1	5	45,6326	0,5768	0,01264	351,02
ZjuHsp100-136	scaffold	AT5G17740.1	5	25,6175	0,5741	0,02241	197,0577
ZjuHsp100-137	scaffold	AT4G24710.1	4	1,5312	0,1642	0,107236	11,77846
ZjuHsp100-138	scaffold	AT3G56690.1	3	1,7321	0,2575	0,148663	13,32385
ZjuHsp100-139	scaffold	AT1G21690.4	1	1,195	0,1034	0,086527	9,192308
ZjuHsp100-139	scaffold	AT1G21690.1	1	1,1473	0,1011	0,08812	8,825385
ZjuHsp100-139	scaffold	AT1G21690.3	1	1,2816	0,1452	0,113296	9,858462
ZjuHsp100-139	scaffold	AT1G21690.2	1	1,2196	0,103	0,084454	9,381538
ZjuHsp100-139	scaffold	AT1G77470.1	1	52,3498	0,6581	0,012571	402,6908
ZjuHsp100-139	scaffold	AT1G63160.1	1	53,5463	0,6701	0,012514	411,8946
ZjuHsp100-140	scaffold	AT1G21690.3	1	1,1135	0,0953	0,085586	8,565385
ZjuHsp100-140	scaffold	AT1G21690.1	1	1,1473	0,1011	0,08812	8,825385
ZjuHsp100-140	scaffold	AT1G21690.2	1	1,2196	0,103	0,084454	9,381538
ZjuHsp100-140	scaffold	AT1G21690.4	1	1,195	0,1034	0,086527	9,192308
ZjuHsp100-140	scaffold	AT1G63160.1	1	53,5463	0,6701	0,012514	411,8946
ZjuHsp100-140	scaffold	AT1G77470.1	1	52,3498	0,6581	0,012571	402,6908
ZjuHsp100-141	scaffold	AT3G50930.1	3	7,6596	0,4104	0,05358	58,92
ZjuHsp100-141	scaffold	AT3G50940.1	3	53,2769	0,4252	0,007981	409,8223
ZjuHsp100-141	scaffold	AT2G18190.1	2	22,2567	0,4993	0,022434	171,2054
ZjuHsp100-141	scaffold	AT2G18193.1	2	22,1487	0,4867	0,021974	170,3746
ZjuHsp100-141	scaffold	AT5G17760.1	5	18,546	0,5302	0,028588	142,6615
ZjuHsp100-141	scaffold	AT5G17730.1	5	45,6326	0,5768	0,01264	351,02
ZjuHsp100-141	scaffold	AT5G17740.1	5	25,6175	0,5741	0,02241	197,0577
ZjuHsp100-142	scaffold	AT4G24710.1	4	1,5464	0,1601	0,103531	11,89538
ZjuHsp100-143	scaffold	AT1G80350.1	1	47,717	0,5892	0,012348	367,0538
ZjuHsp100-143	scaffold	AT2G27600.1	2	3,2767	3,2767	1	25,20538
ZjuHsp100-143	scaffold	AT2G34560.2	2	54,0531	0,6183	0,011439	415,7931
ZjuHsp100-143	scaffold	AT2G34560.1	2	53,7514	0,5911	0,010997	413,4723
ZjuHsp100-143	scaffold	AT2G45500.2	2	57,7808	0,6	0,010384	444,4677
ZjuHsp100-143	scaffold	AT2G45500.1	2	57,6577	0,6026	0,010451	443,5208
ZjuHsp100-143	scaffold	AT1G50140.2	1	53,1206	0,7377	0,013887	408,62
ZjuHsp100-143	scaffold	AT3G27120.1	3	56,6611	0,6064	0,010702	435,8546
ZjuHsp100-143	scaffold	AT1G50140.1	1	53,119	0,7377	0,013888	408,6077
ZjuHsp100-144	scaffold	AT3G50930.1	3	28,2508	0,3005	0,010637	217,3138
ZjuHsp100-144	scaffold	AT3G50940.1	3	27,3246	0,307	0,011235	210,1892
ZjuHsp100-144	scaffold	AT2G18193.1	2	16,5317	0,4804	0,029059	127,1669
ZjuHsp100-144	scaffold	AT2G18190.1	2	13,9102	0,5396	0,038792	107,0015
ZjuHsp100-144	scaffold	AT5G17760.1	5	18,0097	0,5323	0,029556	138,5362
ZjuHsp100-144	scaffold	AT5G17740.1	5	8,6112	0,538	0,062477	66,24
ZjuHsp100-144	scaffold	AT5G17730.1	5	15,1661	0,5301	0,034953	116,6623
ZjuHsp100-144	scaffold	AT3G28600.1	3	52,6047	0,5692	0,01082	404,6515
ZjuHsp100-144	scaffold	AT3G28610.1	3	52,0166	0,5613	0,010791	400,1277
ZjuHsp100-144	scaffold	AT5G57480.1	5	25,7189	0,6098	0,02371	197,8377
ZjuHsp100-144	scaffold	AT4G25835.1	4	13,6408	0,6452	0,047299	104,9292
ZjuHsp100-144	scaffold	AT3G28540.2	3	52,1921	0,6026	0,011546	401,4777
ZjuHsp100-144	scaffold	AT3G28540.1	3	52,4255	0,6006	0,011456	403,2731
ZjuHsp100-144	scaffold	AT3G28510.1	3	51,8681	0,6023	0,011612	398,9854
ZjuHsp100-144	scaffold	AT5G40000.1	5	50,5123	0,6078	0,0206	23,07692
ZjuHsp100-144	scaffold	AT3G28570.1	3	51,7813	0,5625	0,010863	398,3177
ZjuHsp100-144	scaffold	AT3G28580.1	3	19,1958	0,5909	0,030783	147,66
ZjuHsp100-144	scaffold	AT5G17750.1	5	20,9364	0,5166	0,024675	161,0492
ZjuHsp100-144	scaffold	AT5G40010.1	5	41,2097	0,5856	0,01421	316,9977
ZjuHsp100-144	scaffold	AT1G43910.1	1	50,8529	0,6097	0,011989	391,1762
ZjuHsp100-144	scaffold	AT4G30250.1	4	47,6765	21,8104	0,457466	366,7423
ZjuHsp100-144	scaffold	AT3G28520.1	3	47,6765	0,6304	0,013222	366,7423
ZjuHsp100-145	scaffold	AT5G15250.2	5	3,6485	0,149	0,040839	28,06538

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-145	scaffold	AT5G15250.1	5	3,6488	0,1491	0,040863	28,06769
ZjuHsp100-145	scaffold	AT1G06430.1	1	48,8611	0,2366	0,004842	375,8546
ZjuHsp100-145	scaffold	AT2G30950.1	2	49,4272	0,2383	0,004821	380,2092
ZjuHsp100-145	scaffold	AT1G50250.1	1	48,2817	0,5022	0,010401	371,3977
ZjuHsp100-145	scaffold	AT5G42270.1	5	17,5358	0,4792	0,027327	134,8908
ZjuHsp100-145	scaffold	AT5G53170.1	5	51,6592	0,6154	0,011913	397,3785
ZjuHsp100-145	scaffold	AT2G26140.1	2	49,9981	0,6385	0,01277	384,6008
ZjuHsp100-145	scaffold	AT5G58870.1	5	50,9504	0,653	0,012816	391,9262
ZjuHsp100-145	scaffold	AT2G29080.1	2	51,2498	0,5947	0,011604	394,2292
ZjuHsp100-145	scaffold	AT1G07510.1	1	50,8127	0,6124	0,012052	390,8669
ZjuHsp100-145	scaffold	AT3G47060.1	3	49,8798	0,6229	0,012488	383,6908
ZjuHsp100-145	scaffold	AT3G02450.1	3	16,7121	0,5749	0,0344	128,5546
ZjuHsp100-145	scaffold	AT4G23940.1	4	22,3768	0,7605	0,033986	172,1292
ZjuHsp100-146	scaffold	AT3G48870.2	3	2,2715	0,0772	0,033986	17,47308
ZjuHsp100-146	scaffold	AT5G50920.1	5	2,3706	0,0599	0,025268	18,23538
ZjuHsp100-146	scaffold	AT5G51070.1	5	50,5515	0,4548	0,008997	388,8577
ZjuHsp100-146	scaffold	AT3G48870.1	3	2,3069	0,0829	0,035936	17,74538
ZjuHsp100-146	scaffold	AT5G15450.1	5	51,5495	0,4875	0,009457	396,5346
ZjuHsp100-146	scaffold	AT2G25140.1	2	45,7055	0,4916	0,010756	351,5808
ZjuHsp100-146	scaffold	AT1G74310.1	1	50,6932	0,5037	0,009936	389,9477
ZjuHsp100-146	scaffold	AT3G45450.1	3	3,4229	0,2793	0,081597	26,33
ZjuHsp100-146	scaffold	AT4G14670.1	4	19,7122	0,484	0,024553	151,6323
ZjuHsp100-147	scaffold	AT5G26860.1	5	51,3648	0,621	0,01209	395,1138
ZjuHsp100-147	scaffold	AT5G47040.1	5	1,8016	0,0858	0,047624	13,85846
ZjuHsp100-147	scaffold	AT3G05780.1	3	34,687	0,6882	0,01984	266,8231
ZjuHsp100-147	scaffold	AT3G05790.1	3	51,2249	0,6459	0,012609	394,0377
ZjuHsp100-148	scaffold	AT1G02890.1	1	5,4692	0,3542	0,064763	42,07077
ZjuHsp100-148	scaffold	AT4G02480.1	4	8,7009	0,3464	0,039812	66,93
ZjuHsp100-148	scaffold	AT4G24860.1	4	1,861	0,315	0,169264	14,31538
ZjuHsp100-148	scaffold	AT1G02890.2	1	5,3502	0,3663	0,068465	41,15538
ZjuHsp100-148	scaffold	AT1G64110.3	1	53,0434	0,5381	0,010145	408,0262
ZjuHsp100-148	scaffold	AT1G62130.1	1	2,0924	0,3259	0,155754	16,09538
ZjuHsp100-148	scaffold	AT1G64110.1	1	52,1838	0,5377	0,010304	401,4138
ZjuHsp100-148	scaffold	AT1G64110.2	1	53,2318	0,0102	0,000192	409,4754
ZjuHsp100-148	scaffold	AT4G28000.1	4	53,4414	0,5437	0,010174	411,0877
ZjuHsp100-148	scaffold	AT3G19740.1	3	23,6592	0,6684	0,028251	181,9938
ZjuHsp100-148	scaffold	AT5G52882.1	5	55,9577	0,5337	0,009538	430,4438
ZjuHsp100-148	scaffold	AT4G28000.1	4	53,4393	0,5439	0,010178	411,0715
ZjuHsp100-148	scaffold	AT1G50140.2	1	30,0535	0,6647	0,022117	231,1808
ZjuHsp100-148	scaffold	AT1G50140.1	1	39,1399	0,6583	0,016819	301,0762
ZjuHsp100-148	scaffold	AT5G53540.1	5	54,215	0,6048	0,011156	417,0385
ZjuHsp100-148	scaffold	AT4G27680.1	4	54,0427	0,5751	0,010642	415,7131
ZjuHsp100-148	scaffold	AT1G80350.1	1	53,485	0,8467	0,015831	411,4231
ZjuHsp100-148	scaffold	AT3G27120.1	3	57,3901	0,7458	0,012995	441,4623
ZjuHsp100-148	scaffold	AT2G45500.2	2	56,085	0,8239	0,01469	431,4231
ZjuHsp100-149	scaffold	AT1G02890.1	1	5,4692	0,3542	0,064763	42,07077
ZjuHsp100-149	scaffold	AT4G02480.1	4	8,7009	0,3464	0,039812	66,93
ZjuHsp100-149	scaffold	AT4G24860.1	4	1,861	0,315	0,169264	14,31538
ZjuHsp100-149	scaffold	AT1G02890.2	1	5,3502	0,3663	0,068465	41,15538
ZjuHsp100-149	scaffold	AT1G64110.3	1	53,0434	0,5381	0,010145	408,0262
ZjuHsp100-149	scaffold	AT1G62130.1	1	2,0924	0,3259	0,155754	16,09538
ZjuHsp100-149	scaffold	AT1G64110.1	1	52,1838	0,5377	0,010304	401,4138
ZjuHsp100-149	scaffold	AT1G64110.2	1	53,2318	0,0102	0,000192	409,4754
ZjuHsp100-149	scaffold	AT4G28000.1	4	53,4414	0,5437	0,010174	411,0877
ZjuHsp100-149	scaffold	AT3G19740.1	3	23,6592	0,6684	0,028251	181,9938
ZjuHsp100-149	scaffold	AT5G52882.1	5	55,9577	0,5337	0,009538	430,4438
ZjuHsp100-149	scaffold	AT4G28000.1	4	53,4393	0,5439	0,010178	411,0715
ZjuHsp100-149	scaffold	AT1G50140.2	1	30,0535	0,6647	0,022117	231,1808
ZjuHsp100-149	scaffold	AT1G50140.1	1	39,1399	0,6583	0,016819	301,0762
ZjuHsp100-149	scaffold	AT5G53540.1	5	54,215	0,6048	0,011156	417,0385
ZjuHsp100-149	scaffold	AT4G27680.1	4	54,0427	0,5751	0,010642	415,7131
ZjuHsp100-149	scaffold	AT1G80350.1	1	53,485	0,8467	0,015831	411,4231
ZjuHsp100-149	scaffold	AT3G27120.1	3	57,3901	0,7458	0,012995	441,4623
ZjuHsp100-149	scaffold	AT2G45500.2	2	56,0868	0,8236	0,014684	431,4369
ZjuHsp100-150	scaffold	AT3G28580.1	3	8,4122	0,3841	0,04566	64,70923
ZjuHsp100-150	scaffold	AT5G40010.1	5	16,2503	0,3607	0,022197	125,0023
ZjuHsp100-150	scaffold	AT3G28600.1	3	56,0647	0,4278	0,00763	431,2669
ZjuHsp100-150	scaffold	AT3G28510.1	3	6,2195	0,405	0,065118	47,84231
ZjuHsp100-150	scaffold	AT3G28540.2	3	58,0611	0,4045	0,006967	446,6238

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-150	scaffold	AT3G28540.1	3	58,4847	0,4045	0,006916	449,8823
ZjuHsp100-150	scaffold	AT3G28570.1	3	5,5786	0,4531	0,081221	42,91231
ZjuHsp100-150	scaffold	AT3G28520.1	5	12,2243	0,4582	0,037483	94,03308
ZjuHsp100-150	scaffold	AT5G40000.1	3	4,7402	0,4518	0,095312	36,46308
ZjuHsp100-150	scaffold	AT3G28610.1	3	30,1509	0,4475	0,014842	231,93
ZjuHsp100-150	scaffold	AT3G50930.1	3	26,4449	0,665	0,025147	203,4223
ZjuHsp100-150	scaffold	AT3G50940.1	3	52,0441	0,5989	0,011508	400,3392
ZjuHsp100-150	scaffold	AT4G25835.1	4	54,4912	0,6343	0,01164	419,1631
ZjuHsp100-150	scaffold	AT5G57480.1	5	54,5875	0,6148	0,011263	419,9038
ZjuHsp100-150	scaffold	AT5G17740.1	5	56,1088	0,5949	0,010603	431,6062
ZjuHsp100-150	scaffold	AT5G17760.1	5	52,8493	0,6157	0,01165	406,5331
ZjuHsp100-150	scaffold	AT2G18193.1	2	55,95	0,6696	0,011968	430,3846
ZjuHsp100-150	scaffold	AT4G30250.1	4	55,3625	0,5803	0,010482	425,8654
ZjuHsp100-150	scaffold	AT5G17750.1	5	53,9735	0,5585	0,010348	415,1808
ZjuHsp100-150	scaffold	AT1G43910.1	1	56,5815	0,6534	0,011548	435,2423
ZjuHsp100-150	scaffold	AT5G17730.1	5	53,4927	0,6406	0,011975	411,4823
ZjuHsp100-150	scaffold	AT2G18190.1	2	55,2818	0,6454	0,011675	425,2446
ZjuHsp100-150	scaffold	AT2G46620.1	2	55,4184	0,6806	0,012281	426,2954
ZjuHsp100-150	scaffold	AT4G05380.1	4	57,3479	0,439	0,007655	441,1377
ZjuHsp100-151	scaffold	AT2G27600.1	2	53,4878	0,6071	0,01135	411,4446
ZjuHsp100-151	scaffold	AT1G80350.1	1	52,2137	0,6149	0,011777	401,6438
ZjuHsp100-151	scaffold	AT2G34560.1	2	2,2272	0,1804	0,080999	17,13231
ZjuHsp100-151	scaffold	AT2G34560.2	2	2,229	0,1778	0,079767	17,14615
ZjuHsp100-151	scaffold	AT3G19740.1	3	16,8178	0,733	0,043585	129,3677
ZjuHsp100-151	scaffold	AT3G27120.1	3	47,7652	0,6033	0,012631	367,4246
ZjuHsp100-151	scaffold	AT2G45500.2	2	53,9682	0,6191	0,011472	415,14
ZjuHsp100-151	scaffold	AT2G45500.1	2	54,1444	0,6113	0,01129	416,4954
ZjuHsp100-151	scaffold	AT1G64110.1	1	49,8485	0,7263	0,01457	383,45
ZjuHsp100-151	scaffold	AT1G64110.2	1	49,8493	0,7262	0,014568	383,4562
ZjuHsp100-151	scaffold	AT1G64110.3	1	49,848	0,7263	0,01457	383,4462
ZjuHsp100-151	scaffold	AT5G52882.1	5	52,7361	0,7629	0,014466	405,6623
ZjuHsp100-151	scaffold	AT1G50140.2	1	50,5802	0,7356	0,014543	389,0785
ZjuHsp100-151	scaffold	AT4G28000.1	4	50,29	0,7865	0,015639	386,8462
ZjuHsp100-151	scaffold	AT1G50140.1	1	50,5804	0,7357	0,014545	389,08
ZjuHsp100-152	scaffold	AT2G27600.1	2	53,4878	0,6071	0,01135	411,4446
ZjuHsp100-152	scaffold	AT1G80350.1	1	52,2137	0,6149	0,011777	401,6438
ZjuHsp100-152	scaffold	AT2G34560.1	2	2,2272	0,1804	0,080999	17,13231
ZjuHsp100-152	scaffold	AT2G34560.2	2	2,229	0,1778	0,079767	17,14615
ZjuHsp100-152	scaffold	AT3G19740.1	3	16,8178	0,733	0,043585	129,3677
ZjuHsp100-152	scaffold	AT3G27120.1	3	47,7652	0,6033	0,012631	367,4246
ZjuHsp100-152	scaffold	AT2G45500.2	2	53,9682	0,6191	0,011472	415,14
ZjuHsp100-152	scaffold	AT2G45500.1	2	54,1444	0,6113	0,01129	416,4954
ZjuHsp100-152	scaffold	AT1G64110.1	1	49,8485	0,7263	0,01457	383,45
ZjuHsp100-152	scaffold	AT1G64110.2	1	49,8493	0,7262	0,014568	383,4562
ZjuHsp100-152	scaffold	AT1G64110.3	1	49,848	0,7263	0,01457	383,4462
ZjuHsp100-152	scaffold	AT5G52882.1	5	52,7361	0,7629	0,014466	405,6623
ZjuHsp100-152	scaffold	AT1G50140.2	1	50,5802	0,7356	0,014543	389,0785
ZjuHsp100-152	scaffold	AT4G28000.1	4	50,29	0,7865	0,015639	386,8462
ZjuHsp100-152	scaffold	AT1G50140.1	1	50,5804	0,7357	0,014545	389,08
ZjuHsp100-153	scaffold	AT5G15250.2	5	52,7773	0,5452	0,01033	405,9792
ZjuHsp100-153	scaffold	AT5G15250.1	5	0,1851	16,371	88,44408	1,423846
ZjuHsp100-153	scaffold	AT2G26140.1	2	50,7293	0,4404	8,68E-07	390,2254
ZjuHsp100-153	scaffold	AT5G53170.1	5	1,7569	0,1319	0,075075	13,51462
ZjuHsp100-153	scaffold	AT5G42270.1	5	55,3976	0,6281	0,011338	426,1354
ZjuHsp100-153	scaffold	AT1G50250.1	1	14,2468	0,6595	0,046291	109,5908
ZjuHsp100-153	scaffold	AT2G30950.1	2	20,1147	0,5852	0,029093	154,7285
ZjuHsp100-153	scaffold	AT1G06430.1	1	52,3195	0,6247	0,01194	402,4577
ZjuHsp100-153	scaffold	AT5G58870.1	5	40,4201	0,7503	0,018563	310,9238
ZjuHsp100-153	scaffold	AT3G47060.1	3	54,8681	0,7856	0,014318	422,0623
ZjuHsp100-153	scaffold	AT1G07510.1	1	54,2144	0,7092	0,013081	417,0338
ZjuHsp100-153	scaffold	AT2G29080.1	2	55,2539	0,6965	0,012605	425,03
ZjuHsp100-153	scaffold	AT3G02450.1	3	9,7278	0,7825	0,08044	74,82923
ZjuHsp100-153	scaffold	AT3G16290.1	3	8,1927	0,8218	0,100309	63,02077
ZjuHsp100-153	scaffold	AT4G23940.1	4	8,8863	0,78	0,087776	68,35615
ZjuHsp100-154	scaffold	AT4G25370.1	4	53,9319	1,1283	0,020921	414,8608
ZjuHsp100-154	scaffold	AT4G12060.1	4	17,6384	1,0573	0,059943	135,68
ZjuHsp100-155	scaffold	AT3G24530.1	3	2,4101	0,1349	0,055973	18,53923
ZjuHsp100-156	scaffold	AT3G28540.2	3	15,0395	0,355	0,023605	115,6885
ZjuHsp100-156	scaffold	AT3G28510.1	3	8,9548	0,3383	0,037779	68,88308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-156	scaffold	AT5G40010.1	5	4,9228	0,3234	0,065694	37,86769
ZjuHsp100-156	scaffold	AT3G28580.1	3	19,5875	0,3277	0,01673	150,6731
ZjuHsp100-156	scaffold	AT3G28520.1	3	13,2681	0,3949	0,029763	102,0623
ZjuHsp100-156	scaffold	AT3G28600.1	3	29,3291	0,395	0,013468	225,6085
ZjuHsp100-156	scaffold	AT3G28610.1	3	22,9207	0,382	0,016666	176,3131
ZjuHsp100-156	scaffold	AT3G28540.1	3	15,052	15,052	1	115,7846
ZjuHsp100-156	scaffold	AT5G57480.1	5	21,5722	0,5836	0,027053	165,94
ZjuHsp100-156	scaffold	AT4G25835.1	4	16,1385	0,5976	0,037029	124,1423
ZjuHsp100-156	scaffold	AT3G28570.1	3	10,7451	0,3908	0,03637	82,65462
ZjuHsp100-156	scaffold	AT5G40000.1	5	12,6311	0,3703	0,029317	97,16231
ZjuHsp100-156	scaffold	AT5G17740.1	5	54,4007	0,6114	0,011239	418,4669
ZjuHsp100-156	scaffold	AT4G30250.1	4	9,4305	0,5812	0,06163	72,54231
ZjuHsp100-156	scaffold	AT3G50940.1	3	21,9283	0,5874	0,026787	168,6792
ZjuHsp100-156	scaffold	AT3G50930.1	3	34,0516	0,5735	0,016842	261,9354
ZjuHsp100-156	scaffold	AT5G17730.1	5	42,4851	0,6705	0,015782	326,8085
ZjuHsp100-156	scaffold	AT2G18190.1	2	50,2353	0,6171	0,012284	386,4254
ZjuHsp100-156	scaffold	AT2G18193.1	2	54,7615	0,5834	0,010653	421,2423
ZjuHsp100-156	scaffold	AT2G46620.1	2	54,1128	0,6804	0,012574	416,2523
ZjuHsp100-156	scaffold	AT1G43910.1	1	42,1162	0,649	0,01541	323,9708
ZjuHsp100-157	scaffold	AT3G28510.1	3	11,6294	0,3649	0,031377	89,45692
ZjuHsp100-157	scaffold	AT3G28540.2	3	12,7449	0,3766	0,029549	98,03769
ZjuHsp100-157	scaffold	AT3G28580.1	3	23,5852	0,3414	0,014475	181,4246
ZjuHsp100-157	scaffold	AT5G40010.1	5	8,7638	0,3373	0,038488	67,41385
ZjuHsp100-157	scaffold	AT3G28580.1	3	19,5875	0,3277	0,01673	150,6731
ZjuHsp100-157	scaffold	AT3G28520.1	3	13,2681	0,3949	0,029763	102,0623
ZjuHsp100-157	scaffold	AT3G28600.1	3	29,3291	0,395	0,013468	225,6085
ZjuHsp100-157	scaffold	AT3G28610.1	3	22,9207	0,382	0,016666	176,3131
ZjuHsp100-157	scaffold	AT3G28540.1	3	15,052	15,052	1	115,7846
ZjuHsp100-157	scaffold	AT5G57480.1	5	21,5722	0,5836	0,027053	165,94
ZjuHsp100-157	scaffold	AT4G25835.1	4	16,1385	0,5976	0,037029	124,1423
ZjuHsp100-157	scaffold	AT3G28570.1	3	10,7451	0,3908	0,03637	82,65462
ZjuHsp100-157	scaffold	AT5G40000.1	5	12,6311	0,3703	0,029317	97,16231
ZjuHsp100-157	scaffold	AT5G17740.1	5	54,4007	0,6114	0,011239	418,4669
ZjuHsp100-157	scaffold	AT4G30250.1	4	9,4305	0,5812	0,06163	72,54231
ZjuHsp100-157	scaffold	AT3G50940.1	3	21,9283	0,5874	0,026787	168,6792
ZjuHsp100-157	scaffold	AT3G50930.1	3	34,0516	0,5735	0,016842	261,9354
ZjuHsp100-157	scaffold	AT5G17730.1	5	42,4851	0,6705	0,015782	326,8085
ZjuHsp100-157	scaffold	AT2G18190.1	2	50,2353	0,6171	0,012284	386,4254
ZjuHsp100-157	scaffold	AT2G18193.1	2	54,7615	0,5834	0,010653	421,2423
ZjuHsp100-157	scaffold	AT2G46620.1	2	54,1128	0,6804	0,012574	416,2523
ZjuHsp100-157	scaffold	AT1G43910.1	1	42,1162	0,649	0,01541	323,9708
ZjuHsp100-158	scaffold	AT3G28540.1	3	24,571	0,3755	0,015282	189,0077
ZjuHsp100-158	scaffold	AT3G28510.1	3	6,4895	0,3501	0,053949	49,91923
ZjuHsp100-158	scaffold	AT3G28580.1	3	17,0387	0,31	0,018194	131,0669
ZjuHsp100-158	scaffold	AT5G40010.1	5	9,5814	0,3067	0,03201	73,70308
ZjuHsp100-158	scaffold	AT5G40000.1	5	6,2702	0,4088	0,065197	48,23231
ZjuHsp100-158	scaffold	AT3G28600.1	3	9,7317	0,4037	0,041483	74,85923
ZjuHsp100-158	scaffold	AT3G28610.1	3	53,6771	0,3935	0,007331	412,9008
ZjuHsp100-158	scaffold	AT3G28540.2	3	23,7551	0,371	0,015618	182,7315
ZjuHsp100-158	scaffold	AT3G50930.1	3	39,703	0,6102	0,015369	305,4077
ZjuHsp100-158	scaffold	AT3G50940.1	3	50,3832	0,5504	0,010924	387,5631
ZjuHsp100-158	scaffold	AT3G28570.1	3	40,6378	0,4022	0,009897	312,5985
ZjuHsp100-158	scaffold	AT3G28520.1	3	12,3131	0,4208	0,034175	94,71615
ZjuHsp100-158	scaffold	AT2G18190.1	2	52,3439	0,6509	0,012435	402,6454
ZjuHsp100-158	scaffold	AT5G17740.1	2	53,5774	0,6135	0,011451	412,1338
ZjuHsp100-158	scaffold	AT4G25835.1	4	14,4602	0,6611	0,045719	111,2323
ZjuHsp100-158	scaffold	AT5G57480.1	5	54,9374	0,6554	0,01193	422,5954
ZjuHsp100-158	scaffold	AT4G30250.1	4	55,8041	0,6255	0,011209	429,2623
ZjuHsp100-158	scaffold	AT2G18193.1	2	55,5437	0,6178	0,011123	427,2592
ZjuHsp100-158	scaffold	AT5G17730.1	5	18,3967	0,6386	0,034713	141,5131
ZjuHsp100-158	scaffold	AT5G17760.1	5	50,9969	0,663	0,013001	392,2838
ZjuHsp100-158	scaffold	AT4G05380.1	4	54,5618	0,4804	0,008805	419,7062
ZjuHsp100-158	scaffold	AT1G43910.1	1	38,2706	0,6713	0,017541	294,3892
ZjuHsp100-158	scaffold	AT5G17750.1	5	51,6943	0,5807	0,011233	397,6485
ZjuHsp100-159	scaffold	AT3G28540.2	3	23,7493	0,371	0,015622	182,6869
ZjuHsp100-159	scaffold	AT3G28510.1	3	6,4885	0,3501	0,053957	49,91154
ZjuHsp100-159	scaffold	AT3G28580.1	3	17,1014	0,31	0,018127	131,5492
ZjuHsp100-159	scaffold	AT5G40010.1	5	9,5861	0,3067	0,031994	73,73923
ZjuHsp100-159	scaffold	AT5G40000.1	5	6,2701	0,4088	0,065198	48,23154

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-159	scaffold	AT3G28600.1	3	9,7418	0,4037	0,04144	74,93692
ZjuHsp100-159	scaffold	AT3G28610.1	3	53,6741	0,3937	0,007335	412,8777
ZjuHsp100-159	scaffold	AT3G28540.1	3	24,6719	0,3755	0,01522	189,7838
ZjuHsp100-159	scaffold	AT3G50930.1	3	39,5803	0,6102	0,015417	304,4638
ZjuHsp100-159	scaffold	AT3G50940.1	3	50,386	0,5506	0,010928	387,5846
ZjuHsp100-159	scaffold	AT3G28570.1	3	42,8509	0,4022	0,009386	329,6223
ZjuHsp100-159	scaffold	AT3G28520.1	3	12,3137	0,4208	0,034173	94,72077
ZjuHsp100-159	scaffold	AT2G18190.1	2	52,342	0,6508	0,012434	402,6308
ZjuHsp100-159	scaffold	AT5G17740.1	5	53,5702	0,6135	0,011452	412,0785
ZjuHsp100-159	scaffold	AT4G25835.1	4	14,4117	0,6611	0,045872	110,8592
ZjuHsp100-159	scaffold	AT5G57480.1	5	54,9319	0,6554	0,011931	422,5531
ZjuHsp100-159	scaffold	AT2G18193.1	2	55,5436	0,6178	0,011123	427,2585
ZjuHsp100-159	scaffold	AT4G30250.1	4	55,8029	0,6256	0,011211	429,2531
ZjuHsp100-159	scaffold	AT5G17730.1	5	55,8029	0,6256	0,011211	429,2531
ZjuHsp100-159	scaffold	AT5G17760.1	5	18,3774	0,6386	0,034749	141,3646
ZjuHsp100-159	scaffold	AT4G05380.1	4	54,5583	0,4805	0,008807	419,6792
ZjuHsp100-159	scaffold	AT5G17750.1	5	51,6933	0,5808	0,011235	397,6408
ZjuHsp100-159	scaffold	AT1G43910.1	1	36,4841	0,6714	0,018403	280,6469
ZjuHsp100-160	scaffold	AT5G57480.1	5	42,7655	0,698	0,016322	328,9654
ZjuHsp100-160	scaffold	AT4G25835.1	4	53,6543	0,7138	0,013304	412,7254
ZjuHsp100-160	scaffold	AT3G28580.1	3	54,152	0,7215	0,013324	416,5538
ZjuHsp100-160	scaffold	AT2G46620.1	2	3,024	0,2838	0,093849	23,26154
ZjuHsp100-160	scaffold	AT5G40000.1	5	57,1792	0,7011	0,012261	439,84
ZjuHsp100-160	scaffold	AT4G30250.1	4	50,4929	0,7031	0,013925	388,4069
ZjuHsp100-160	scaffold	AT5G40010.1	5	55,2421	0,6956	0,012592	424,9392
ZjuHsp100-160	scaffold	AT5G57480.1	5	40,3455	0,6981	0,017303	310,35
ZjuHsp100-160	scaffold	AT3G28600.1	3	55,0339	0,7075	0,012856	423,3377
ZjuHsp100-160	scaffold	AT3G28510.1	3	55,8112	0,7797	0,01397	429,3169
ZjuHsp100-160	scaffold	AT5G17760.1	5	52,9806	0,6931	0,013082	407,5431
ZjuHsp100-160	scaffold	AT3G28570.1	3	55,6433	0,7047	0,012665	428,0254
ZjuHsp100-160	scaffold	AT2G18193.1	2	55,5191	0,7574	0,013642	427,07
ZjuHsp100-160	scaffold	AT3G50930.1	3	51,5225	0,8071	0,015665	396,3269
ZjuHsp100-160	scaffold	AT3G28610.1	3	15,0695	0,699	0,046385	115,9192
ZjuHsp100-160	scaffold	AT5G17730.1	5	53,307	0,715	0,013413	410,0538
ZjuHsp100-160	scaffold	AT3G50940.1	3	51,33	0,7712	0,015024	394,8462
ZjuHsp100-160	scaffold	AT3G28540.1	3	55,7311	0,7491	0,013441	428,7008
ZjuHsp100-160	scaffold	AT3G28540.2	3	55,6572	0,7494	0,013465	428,1323
ZjuHsp100-161	scaffold	AT5G20000.1	5	54,9466	0,5069	0,009225	422,6662
ZjuHsp100-161	scaffold	AT1G45000.2	1	2,4817	0,0395	0,015917	19,09
ZjuHsp100-161	scaffold	AT1G45000.1	1	2,4048	0,0355	0,014762	18,49846
ZjuHsp100-161	scaffold	AT5G43010.1	5	2,4737	0,0351	0,014189	19,02846
ZjuHsp100-161	scaffold	AT2G20140.1	2	7,7621	0,5549	0,071488	59,70846
ZjuHsp100-161	scaffold	AT4G29040.1	4	7,72	0,5551	0,071904	59,38462
ZjuHsp100-161	scaffold	AT1G53750.1	1	55,5668	0,555	0,009988	427,4369
ZjuHsp100-161	scaffold	AT5G19990.1	5	55,1525	0,5404	0,009798	424,25
ZjuHsp100-161	scaffold	AT5G58290.1	5	46,9761	0,5831	0,012413	361,3546
ZjuHsp100-161	scaffold	AT1G53780.2	1	55,7091	0,5672	0,010181	428,5315
ZjuHsp100-161	scaffold	AT1G53780.1	1	55,5495	0,573	0,010315	427,3038
ZjuHsp100-161	scaffold	AT1G53780.3	1	55,7088	0,5674	0,010185	428,5292
ZjuHsp100-161	scaffold	AT1G09100.1	1	53,4641	0,5707	0,010674	411,2623
ZjuHsp100-161	scaffold	AT3G05530.1	3	50,8655	0,559	0,01099	391,2731
ZjuHsp100-162	scaffold	AT3G28580.1	3	21,6666	0,3046	0,014059	166,6662
ZjuHsp100-162	scaffold	AT5G40010.1	5	10,1374	0,3127	0,030846	77,98
ZjuHsp100-162	scaffold	AT3G28540.2	3	24,519	0,3828	0,015612	188,6077
ZjuHsp100-162	scaffold	AT3G28510.1	3	8,3728	0,3607	0,04308	64,40615
ZjuHsp100-162	scaffold	AT3G28610.1	3	55,2054	0,4101	0,007429	424,6569
ZjuHsp100-162	scaffold	AT3G28540.1	3	25,2097	0,3872	0,015359	193,9208
ZjuHsp100-162	scaffold	AT3G28520.1	3	11,5183	0,4167	0,036177	88,60231
ZjuHsp100-162	scaffold	AT3G28600.1	3	54,503	0,4129	0,007576	419,2538
ZjuHsp100-162	scaffold	AT3G50930.1	3	47,7651	0,6545	0,013702	367,4238
ZjuHsp100-162	scaffold	AT3G50940.1	3	50,9685	0,577	0,011321	392,0654
ZjuHsp100-162	scaffold	AT5G40000.1	5	6,3171	0,424	0,067119	48,59308
ZjuHsp100-162	scaffold	AT3G28570.1	3	53,5541	0,4357	0,008136	411,9546
ZjuHsp100-162	scaffold	AT4G30250.1	4	55,6977	0,6549	0,011758	428,4438
ZjuHsp100-162	scaffold	AT5G17740.1	5	56,1714	0,5992	0,010667	432,0877
ZjuHsp100-162	scaffold	AT5G57480.1	5	57,1162	0,6303	0,011035	439,3554
ZjuHsp100-162	scaffold	AT2G18190.1	2	53,9513	0,6393	0,01185	415,01
ZjuHsp100-162	scaffold	AT5G17760.1	5	51,0177	0,6944	0,013611	392,4438
ZjuHsp100-162	scaffold	AT1G43910.1	1	51,997	0,6253	0,012026	399,9769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-162	scaffold	AT5G17750.1	5	53,3849	0,5864	0,010984	410,6531
ZjuHsp100-162	scaffold	AT2G18193.1	2	55,4743	0,6337	0,011423	426,7254
ZjuHsp100-162	scaffold	AT5G17730.1	5	11,5422	0,6573	0,056948	88,78615
ZjuHsp100-162	scaffold	AT2G46620.1	2	54,2206	0,7653	0,014115	417,0815
ZjuHsp100-162	scaffold	AT4G05380.1	4	53,725	0,4972	0,009255	413,2692
		Mean		34,3250	0,694962873	0,476148383	262,8322198

Z. jujuba – *C. sinensis*

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	orange1.1g010133m	scaffold	5,4289	0,1501	0,027648327	41,76076923
ZjuHsp100-01	1	orange1.1g011573m	scaffold	53,512	0,5524	0,010322918	411,6307692
ZjuHsp100-01	1	orange1.1g009640m	scaffold	53,3474	0,541	0,010141075	410,3646154
ZjuHsp100-01	1	orange1.1g041423m	scaffold	7,2873	0,6109	0,083830774	56,05615385
ZjuHsp100-01	1	orange1.1g009791m	scaffold	53,2388	0,6533	0,012271126	409,5292308
ZjuHsp100-01	1	orange1.1g012846m	scaffold	18,1806	0,6064	0,033354235	139,8507692
ZjuHsp100-01	1	orange1.1g011935m	scaffold	53,1146	0,6052	0,011394231	408,5738462
ZjuHsp100-01	1	orange1.1g011254m	scaffold	30,2204	0,6136	0,020304165	232,4646154
ZjuHsp100-01	1	orange1.1g012016m	scaffold	50,3093	0,6074	0,012073314	386,9946154
ZjuHsp100-01	1	orange1.1g013083m	scaffold	52,8764	0,5890	0,011139185	406,7415385
ZjuHsp100-01	1	orange1.1g047029m	scaffold	52,1861	0,6508	0,012470754	401,4315385
ZjuHsp100-01	1	orange1.1g011374m	scaffold	15,6260	0,6391	0,040899782	120,2
ZjuHsp100-01	1	orange1.1g011286m	scaffold	16,7664	0,6401	0,038177546	128,9723077
ZjuHsp100-01	1	orange1.1g013128m	scaffold	25,1589	0,5838	0,023204512	193,53
ZjuHsp100-01	1	orange1.1g037859m	scaffold	55,3965	0,6318	0,011405053	426,1269231
ZjuHsp100-01	1	orange1.1g041382m	scaffold	56,174	0,6794	0,012094563	432,1076923
ZjuHsp100-01	1	orange1.1g040638m	scaffold	39,4001	0,637	0,016167472	303,0776923
ZjuHsp100-01	1	orange1.1g035603m	scaffold	56,5483	0,5884	0,010405264	434,9869231
ZjuHsp100-01	1	orange1.1g024550m	scaffold	45,1484	0,4541	0,010057942	347,2953846
ZjuHsp100-02	1	orange1.1g010133m	scaffold	5,0599	0,1308	0,025850313	38,92230769
ZjuHsp100-02	1	orange1.1g011573m	scaffold	53,3985	0,556	0,010412277	410,7576923
ZjuHsp100-02	1	orange1.1g009640m	scaffold	52,7106	0,5436	0,010312916	405,4661538
ZjuHsp100-02	1	orange1.1g041423m	scaffold	6,0111	0,6236	0,103741412	46,23923077
ZjuHsp100-02	1	orange1.1g009791m	scaffold	0,1639	15,5189	94,68517389	1,260769231
ZjuHsp100-02	1	orange1.1g012016m	scaffold	50,3014	0,6079	0,012085151	386,9338462
ZjuHsp100-02	1	orange1.1g011254m	scaffold	32,8996	0,6141	0,01866588	253,0738462
ZjuHsp100-02	1	orange1.1g012846m	scaffold	17,8632	0,606	0,033924493	137,4092308
ZjuHsp100-02	1	orange1.1g011935m	scaffold	53,5373	0,6044	0,011289325	411,8253846
ZjuHsp100-02	1	orange1.1g013083m	scaffold	52,8888	0,5906	0,011166825	406,8369231
ZjuHsp100-02	1	orange1.1g011286m	scaffold	16,7856	0,6223	0,037073444	129,12
ZjuHsp100-02	1	orange1.1g011374m	scaffold	15,4632	0,6204	0,040121062	118,9476923
ZjuHsp100-02	1	orange1.1g047029m	scaffold	52,339	0,6514	0,012445786	402,6076923
ZjuHsp100-02	1	orange1.1g013128m	scaffold	31,9279	0,5826	0,018247364	245,5992308
ZjuHsp100-02	1	orange1.1g037859m	scaffold	55,5415	0,6093	0,010970175	427,2423077
ZjuHsp100-02	1	orange1.1g040638m	scaffold	50,8359	0,6344	0,01247937	391,0453846
ZjuHsp100-02	1	orange1.1g041382m	scaffold	55,7303	0,6471	0,011611278	428,6946154
ZjuHsp100-02	1	orange1.1g035603m	scaffold	57,0813	0,5914	0,010360661	439,0869231
ZjuHsp100-02	1	orange1.1g024550m	scaffold	54,9902	0,4298	0,007815938	423,0015385
ZjuHsp100-03	1	orange1.1g003070m	scaffold	1,832	0,2594	0,141593886	14,09230769
ZjuHsp100-03	1	orange1.1g003038m	scaffold	18,1836	0,658	0,036186454	139,8738462
ZjuHsp100-04	1	orange1.1g009640m	scaffold	2,2171	0,1297	0,058499842	17,05461538
ZjuHsp100-04	1	orange1.1g010133m	scaffold	53,0597	0,5383	0,010145176	408,1515385
ZjuHsp100-04	1	orange1.1g041423m	scaffold	54,1661	0,5839	0,010779805	416,6623077
ZjuHsp100-04	1	orange1.1g011573m	scaffold	54,3139	0,571	0,010512963	417,7992308
ZjuHsp100-04	1	orange1.1g012846m	scaffold	50,3099	0,6078	0,012081121	386,9992308
ZjuHsp100-04	1	orange1.1g011935m	scaffold	51,6982	0,5856	0,01132728	397,6784615
ZjuHsp100-04	1	orange1.1g011664m	scaffold	28,1366	0,5837	0,020745222	216,4353846
ZjuHsp100-04	1	orange1.1g012016m	scaffold	50,7369	0,6172	0,012164716	390,2838462
ZjuHsp100-04	1	orange1.1g009791m	scaffold	54,5659	0,6349	0,011635472	419,7376923
ZjuHsp100-04	1	orange1.1g013128m	scaffold	49,8697	0,6396	0,012825423	383,6130769
ZjuHsp100-04	1	orange1.1g011254m	scaffold	51,6193	0,6342	0,012286102	397,0715385
ZjuHsp100-04	1	orange1.1g011374m	scaffold	52,3349	0,6328	0,012091358	402,5761538
ZjuHsp100-04	1	orange1.1g013083m	scaffold	51,6794	0,6579	0,012730411	397,5338462
ZjuHsp100-04	1	orange1.1g011286m	scaffold	52,8574	0,6419	0,012143995	406,5953846
ZjuHsp100-04	1	orange1.1g047029m	scaffold	41,5626	0,612	0,014724777	319,7123077
ZjuHsp100-04	1	orange1.1g044297m	scaffold	51,3135	0,6378	0,012429478	394,7192308
ZjuHsp100-04	1	orange1.1g037859m	scaffold	55,494	0,6328	0,011403035	426,8769231
ZjuHsp100-04	1	orange1.1g024550m	scaffold	16,1837	0,477	0,0294741	124,49
ZjuHsp100-04	1	orange1.1g041382m	scaffold	53,4513	0,7958	0,014888319	411,1638462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-05	1	orange1.1g047219m	scaffold	1,1581	0,1775	0,153268284	8,908461538
ZjuHsp100-06	1	orange1.1g047219m	scaffold	1,0941	0,1277	0,116716936	8,416153846
ZjuHsp100-07	1	orange1.1g002012m	scaffold	0,9385	0,0746	0,079488546	7,219230769
ZjuHsp100-07	1	orange1.1g002068m	scaffold	8,4138	0,1835	0,021809408	64,72153846
ZjuHsp100-07	1	orange1.1g002623m	scaffold	9,5035	0,1813	0,019077182	73,10384615
ZjuHsp100-07	1	orange1.1g006289m	scaffold	7,2897	0,1533	0,021029672	56,07461538
ZjuHsp100-07	1	orange1.1g046258m	scaffold	38,224	0,4589	0,012005546	294,0307692
ZjuHsp100-07	1	orange1.1g003094m	scaffold	54,3688	0,4979	0,009157826	418,2215385
ZjuHsp100-07	1	orange1.1g005517m	scaffold	54,4625	0,4229	0,007764976	418,9423077
ZjuHsp100-07	1	orange1.1g005505m	scaffold	54,4603	0,4231	0,007768962	418,9253846
ZjuHsp100-07	1	orange1.1g005511m	scaffold	54,4614	0,4229	0,007765133	418,9338462
ZjuHsp100-07	1	orange1.1g005515m	scaffold	54,4631	0,423	0,007766726	418,9469231
ZjuHsp100-07	1	orange1.1g047225m	scaffold	50,0868	0,449	0,008964438	385,2830769
ZjuHsp100-07	1	orange1.1g003088m	scaffold	14,2913	0,5643	0,039485561	109,9330769
ZjuHsp100-07	1	orange1.1g007723m	scaffold	9,169	0,643	0,070127604	70,53076923
ZjuHsp100-07	1	orange1.1g005179m	scaffold	9,9872	0,6571	0,065794217	76,82461538
ZjuHsp100-07	1	orange1.1g004878m	scaffold	11,9617	0,6212	0,051932418	92,01307692
ZjuHsp100-08	1	orange1.1g004584m	scaffold	0,9749	0,073	0,074879475	7,499230769
ZjuHsp100-08	1	orange1.1g004550m	scaffold	0,9771	0,0733	0,07501791	7,516153846
ZjuHsp100-08	1	orange1.1g007661m	scaffold	0,9623	0,0839	0,087186948	7,402307692
ZjuHsp100-09	1	orange1.1g014332m	scaffold	0,8593	0,0134	0,015594088	6,61
ZjuHsp100-09	1	orange1.1g015875m	scaffold	0,8756	0,011	0,012562814	6,735384615
ZjuHsp100-09	1	orange1.1g017161m	scaffold	0,9486	0,0162	0,017077799	7,296923077
ZjuHsp100-09	1	orange1.1g014665m	scaffold	1,4312	0,0821	0,057364449	11,00923077
ZjuHsp100-09	1	orange1.1g014712m	scaffold	1,4312	0,0821	0,057364449	11,00923077
ZjuHsp100-09	1	orange1.1g014743m	scaffold	55,0606	0,4999	0,009079087	423,5430769
ZjuHsp100-09	1	orange1.1g024249m	scaffold	24,9085	0,3566	0,014316398	191,6038462
ZjuHsp100-09	1	orange1.1g022768m	scaffold	56,5152	0,418	0,00739624	434,7323077
ZjuHsp100-09	1	orange1.1g017300m	scaffold	55,5307	0,4926	0,008870769	427,1592308
ZjuHsp100-09	1	orange1.1g014525m	scaffold	54,2957	0,5307	0,009774255	417,6592308
ZjuHsp100-09	1	orange1.1g013285m	scaffold	42,8402	0,5643	0,013172207	329,54
ZjuHsp100-09	1	orange1.1g013269m	scaffold	40,7327	0,5648	0,013866009	313,3284615
ZjuHsp100-09	1	orange1.1g013281m	scaffold	43,5548	0,5643	0,012956092	335,0369231
ZjuHsp100-09	1	orange1.1g039866m	scaffold	52,0165	0,5389	0,010360174	400,1269231
ZjuHsp100-09	1	orange1.1g011553m	scaffold	42,1028	0,5644	0,013405284	323,8676923
ZjuHsp100-09	1	orange1.1g026258m	scaffold	15,8535	0,4151	0,026183493	121,95
ZjuHsp100-09	1	orange1.1g007367m	scaffold	52,008	0,7017	0,013492155	400,0615385
ZjuHsp100-09	1	orange1.1g005815m	scaffold	51,0817	0,7537	0,014754795	392,9361538
ZjuHsp100-09	1	orange1.1g004921m	scaffold	52,0538	0,7091	0,013622444	400,4138462
ZjuHsp100-09	1	orange1.1g007053m	scaffold	38,6827	0,7739	0,020006359	297,5592308
ZjuHsp100-09	1	orange1.1g005015m	scaffold	32,7065	0,8278	0,025309954	251,5884615
ZjuHsp100-09	1	orange1.1g005014m	scaffold	32,009	0,8279	0,025864601	246,2230769
ZjuHsp100-09	1	orange1.1g003623m	scaffold	32,2212	0,8278	0,02569116	247,8553846
ZjuHsp100-09	1	orange1.1g010809m	scaffold	12,251	0,7069	0,057701412	94,23846154
ZjuHsp100-09	1	orange1.1g004267m	scaffold	52,7942	0,8225	0,015579363	406,1092308
ZjuHsp100-09	1	orange1.1g003620m	scaffold	53,3824	0,8174	0,015312163	410,6338462
ZjuHsp100-12	1	orange1.1g000005m	scaffold	1,3054	0,2798	0,214340432	10,04153846
ZjuHsp100-12	1	orange1.1g000003m	scaffold	1,3023	0,2776	0,21316133	10,01769231
ZjuHsp100-12	1	orange1.1g000006m	scaffold	1,3085	0,2744	0,20970577	10,06538462
ZjuHsp100-12	1	orange1.1g000002m	scaffold	1,3064	0,2783	0,213028169	10,04923077
ZjuHsp100-12	1	orange1.1g000001m	scaffold	1,3088	0,2779	0,212331907	10,06769231
ZjuHsp100-12	1	orange1.1g000004m	scaffold	1,3089	0,2808	0,214531286	10,06846154
ZjuHsp100-12	1	orange1.1g000008m	scaffold	1,2921	0,2817	0,218017181	9,939230769
ZjuHsp100-13	1	orange1.1g000005m	scaffold	1,3098	0,2789	0,212933272	10,07538462
ZjuHsp100-13	1	orange1.1g000003m	scaffold	1,3065	0,2768	0,211863758	10,05
ZjuHsp100-13	1	orange1.1g000006m	scaffold	1,3151	0,2738	0,208197095	10,11615385
ZjuHsp100-13	1	orange1.1g000002m	scaffold	1,3082	0,2771	0,211817765	10,06307692
ZjuHsp100-13	1	orange1.1g000001m	scaffold	1,313	0,2771	0,211043412	10,1
ZjuHsp100-13	1	orange1.1g000004m	scaffold	1,3132	0,2799	0,213143466	10,10153846
ZjuHsp100-13	1	orange1.1g000008m	scaffold	1,2927	0,2815	0,217761275	9,943846154
ZjuHsp100-14	1	orange1.1g009911m	scaffold	1,0053	0,053	0,052720581	7,733076923
ZjuHsp100-14	1	orange1.1g015768m	scaffold	0,9211	0,096	0,104223211	7,085384615
ZjuHsp100-14	1	orange1.1g015890m	scaffold	0,9282	0,0965	0,103964663	7,14
ZjuHsp100-14	1	orange1.1g011400m	scaffold	54,3296	0,7236	0,013318707	417,92
ZjuHsp100-14	1	orange1.1g011305m	scaffold	54,8573	0,7122	0,012982775	421,9792308
ZjuHsp100-14	1	orange1.1g010975m	scaffold	53,4382	0,6905	0,012921468	411,0630769
ZjuHsp100-14	1	orange1.1g010888m	scaffold	53,8248	0,6852	0,012730191	414,0369231
ZjuHsp100-14	1	orange1.1g042771m	scaffold	51,7694	0,6287	0,01214424	398,2261538
ZjuHsp100-14	1	orange1.1g011393m	scaffold	53,3773	0,7462	0,013979725	410,5946154

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-14	1	orange1.1g016911m	scaffold	54,0261	0,6643	0,012295909	415,5853846
ZjuHsp100-14	1	orange1.1g012000m	scaffold	53,0671	0,7667	0,014447746	408,2084615
ZjuHsp100-15	2	orange1.1g042771m	scaffold	0,9445	0,0361	0,038221281	7,265384615
ZjuHsp100-15	2	orange1.1g011393m	scaffold	53,3918	0,6061	0,01135193	410,7061538
ZjuHsp100-15	2	orange1.1g012000m	scaffold	56,7664	0,6124	0,010788072	436,6646154
ZjuHsp100-15	2	orange1.1g016911m	scaffold	57,3281	0,5566	0,009709026	440,9853846
ZjuHsp100-15	2	orange1.1g009911m	scaffold	52,4531	0,6083	0,011597027	403,4853846
ZjuHsp100-15	2	orange1.1g011400m	scaffold	56,4778	0,6277	0,011114101	434,4446154
ZjuHsp100-15	2	orange1.1g011305m	scaffold	55,9433	0,615	0,010993274	430,3330769
ZjuHsp100-15	2	orange1.1g010975m	scaffold	56,3442	0,6154	0,010922153	433,4169231
ZjuHsp100-15	2	orange1.1g010888m	scaffold	55,7879	0,6027	0,010803418	429,1376923
ZjuHsp100-16	2	orange1.1g042771m	scaffold	0,9445	0,0361	0,038221281	7,265384615
ZjuHsp100-15	2	orange1.1g009911m	scaffold	52,4566	0,6084	0,011598159	403,5123077
ZjuHsp100-16	2	orange1.1g011400m	scaffold	56,4762	0,6277	0,011114416	434,4323077
ZjuHsp100-15	2	orange1.1g011305m	scaffold	55,9419	0,6151	0,010995336	430,3223077
ZjuHsp100-16	2	orange1.1g010975m	scaffold	56,3436	0,6154	0,010922227	433,4123077
ZjuHsp100-15	2	orange1.1g010888m	scaffold	55,7879	0,6026	0,010801625	429,1376923
ZjuHsp100-16	2	orange1.1g011393m	scaffold	53,149	0,6062	0,011405671	408,8384615
ZjuHsp100-15	2	orange1.1g012000m	scaffold	56,7635	0,6123	0,010786861	436,6423077
ZjuHsp100-16	2	orange1.1g016911m	scaffold	57,3301	0,5568	0,009712176	441,0007692
ZjuHsp100-17	2	orange1.1g003867m	scaffold	1,0137	0,1646	0,162375456	7,797692308
ZjuHsp100-17	2	orange1.1g003873m	scaffold	1,0137	0,1646	0,162375456	7,797692308
ZjuHsp100-18	2	orange1.1g003867m	scaffold	1,0137	0,1646	0,162375456	7,797692308
ZjuHsp100-18	2	orange1.1g003873m	scaffold	1,0137	0,1646	0,162375456	7,797692308
ZjuHsp100-19	2	orange1.1g001355m	scaffold	1,121	0,4301	0,38367529	8,623076923
ZjuHsp100-19	2	orange1.1g002758m	scaffold	2,1586	0,6058	0,280644862	16,60461538
ZjuHsp100-19	2	orange1.1g005186m	scaffold	1,9773	0,5447	0,27547666	15,21
ZjuHsp100-20	2	orange1.1g003473m	scaffold	1,2199	0,1427	0,116976801	9,383846154
ZjuHsp100-20	2	orange1.1g003806m	scaffold	1,2800	0,1582	0,12359375	9,846153846
ZjuHsp100-20	2	orange1.1g004770m	scaffold	1,2142	0,144	0,118596607	9,34
ZjuHsp100-20	2	orange1.1g006534m	scaffold	1,371	0,1813	0,132239241	10,54615385
ZjuHsp100-20	2	orange1.1g006535m	scaffold	1,371	0,1813	0,132239241	10,54615385
ZjuHsp100-20	2	orange1.1g007591m	scaffold	1,3435	0,1598	0,118943059	10,33461538
ZjuHsp100-20	2	orange1.1g007575m	scaffold	1,4137	0,1874	0,132599949	10,87461538
ZjuHsp100-20	2	orange1.1g004921m	scaffold	48,6987	0,6111	0,01254859	374,6053846
ZjuHsp100-20	2	orange1.1g005480m	scaffold	26,7346	0,6222	0,023273211	205,6507692
ZjuHsp100-20	2	orange1.1g005495m	scaffold	26,638	0,6223	0,023361363	204,9076923
ZjuHsp100-20	2	orange1.1g005479m	scaffold	26,6555	0,6222	0,023342275	205,0423077
ZjuHsp100-20	2	orange1.1g005003m	scaffold	53,1892	0,6298	0,01184075	409,1476923
ZjuHsp100-20	2	orange1.1g005815m	scaffold	50,9234	0,6413	0,012593425	391,7184615
ZjuHsp100-20	2	orange1.1g005304m	scaffold	25,6598	0,6087	0,023721931	197,3830769
ZjuHsp100-20	2	orange1.1g007989m	scaffold	35,9494	0,5476	0,015232521	276,5338462
ZjuHsp100-20	2	orange1.1g007367m	scaffold	49,3079	0,5771	0,011704007	379,2915385
ZjuHsp100-20	2	orange1.1g005738m	scaffold	54,5701	0,7129	0,013063931	419,77
ZjuHsp100-20	2	orange1.1g047690m	scaffold	54,2482	0,7742	0,014271441	417,2938462
ZjuHsp100-20	2	orange1.1g005661m	scaffold	50,7042	0,7323	0,014442591	390,0323077
ZjuHsp100-20	2	orange1.1g009974m	scaffold	53,7344	0,6448	0,011999762	413,3415385
ZjuHsp100-20	2	orange1.1g005066m	scaffold	51,4923	0,7209	0,014000151	396,0946154
ZjuHsp100-20	2	orange1.1g007190m	scaffold	53,0947	0,7105	0,01338175	408,4207692
ZjuHsp100-20	2	orange1.1g003696m	scaffold	53,139	0,8049	0,015147067	408,7615385
ZjuHsp100-20	2	orange1.1g010809m	scaffold	36,8169	0,5437	0,014767675	283,2069231
ZjuHsp100-20	2	orange1.1g003807m	scaffold	53,0746	0,8169	0,015391543	408,2661538
ZjuHsp100-20	2	orange1.1g009263m	scaffold	53,6188	0,7128	0,013293845	412,4523077
ZjuHsp100-20	2	orange1.1g005611m	scaffold	51,1899	0,8119	0,015860551	393,7684615
ZjuHsp100-20	2	orange1.1g003619m	scaffold	53,5423	0,8638	0,016133039	411,8638462
ZjuHsp100-20	2	orange1.1g002307m	scaffold	53,1241	0,8926	0,016802167	408,6469231
ZjuHsp100-20	2	orange1.1g043863m	scaffold	54,6864	0,7201	0,013167808	420,6646154
ZjuHsp100-20	2	orange1.1g014798m	scaffold	39,2297	0,5715	0,014568044	301,7669231
ZjuHsp100-20	2	orange1.1g003677m	scaffold	55,902	0,8767	0,015682802	430,0153846
ZjuHsp100-20	2	orange1.1g003669m	scaffold	55,8969	0,8772	0,015693178	429,9761538
ZjuHsp100-20	2	orange1.1g003795m	scaffold	55,1624	0,862	0,015626586	424,3261538
ZjuHsp100-20	2	orange1.1g002754m	scaffold	55,3374	0,8678	0,01568198	425,6723077
ZjuHsp100-20	2	orange1.1g003000m	scaffold	55,6558	0,8497	0,015267052	428,1215385
ZjuHsp100-21	2	orange1.1g003473m	scaffold	1,2199	0,1427	0,116976801	9,383846154
ZjuHsp100-21	2	orange1.1g003476m	scaffold	1,2243	0,1431	0,116883117	9,417692308
ZjuHsp100-21	2	orange1.1g003806m	scaffold	1,2800	0,1582	0,12359375	9,846153846
ZjuHsp100-21	2	orange1.1g004770m	scaffold	1,2142	0,144	0,118596607	9,34
ZjuHsp100-21	2	orange1.1g006534m	scaffold	1,371	0,1813	0,132239241	10,54615385
ZjuHsp100-21	2	orange1.1g006535m	scaffold	1,371	0,1813	0,132239241	10,54615385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-21	2	orange1.1g007591m	scaffold	1,3435	0,1598	0,118943059	10,33461538
ZjuHsp100-21	2	orange1.1g007575m	scaffold	1,4137	0,1874	0,132559949	10,87461538
ZjuHsp100-21	2	orange1.1g004921m	scaffold	48,6501	0,6093	0,012524126	374,2315385
ZjuHsp100-21	2	orange1.1g005480m	scaffold	27,6615	0,6215	0,022468051	212,7807692
ZjuHsp100-21	2	orange1.1g005495m	scaffold	27,9458	0,6215	0,022239478	214,9676923
ZjuHsp100-21	2	orange1.1g005479m	scaffold	27,7334	0,6215	0,022409802	213,3338462
ZjuHsp100-21	2	orange1.1g005003m	scaffold	53,0709	0,6291	0,011853954	408,2376923
ZjuHsp100-21	2	orange1.1g005815m	scaffold	50,9233	0,6414	0,012595413	391,7176923
ZjuHsp100-21	2	orange1.1g005304m	scaffold	25,9331	0,6079	0,023441085	199,4853846
ZjuHsp100-21	2	orange1.1g007989m	scaffold	37,1302	0,5442	0,014656533	285,6169231
ZjuHsp100-21	2	orange1.1g007367m	scaffold	49,1987	0,5753	0,011693398	378,4515385
ZjuHsp100-21	2	orange1.1g005738m	scaffold	54,7459	0,711	0,012987274	421,1223077
ZjuHsp100-21	2	orange1.1g047690m	scaffold	54,1733	0,7756	0,014317016	416,7176923
ZjuHsp100-21	2	orange1.1g009974m	scaffold	53,7274	0,6406	0,011923153	413,2876923
ZjuHsp100-21	2	orange1.1g007190m	scaffold	53,0741	0,7067	0,013315346	408,2623077
ZjuHsp100-21	2	orange1.1g005661m	scaffold	50,6733	0,7368	0,014540202	389,7946154
ZjuHsp100-21	2	orange1.1g005066m	scaffold	51,4557	0,7255	0,014099507	395,8130769
ZjuHsp100-21	2	orange1.1g003696m	scaffold	53,1139	0,8014	0,015088329	408,5684615
ZjuHsp100-21	2	orange1.1g010809m	scaffold	41,6259	0,5398	0,012967888	320,1992308
ZjuHsp100-21	2	orange1.1g003807m	scaffold	53,0483	0,8134	0,015333196	408,0638462
ZjuHsp100-21	2	orange1.1g009263m	scaffold	53,6204	0,7128	0,013293448	412,4646154
ZjuHsp100-21	2	orange1.1g005611m	scaffold	51,1894	0,8119	0,015860706	393,7646154
ZjuHsp100-21	2	orange1.1g003619m	scaffold	53,5405	0,8639	0,016135449	411,85
ZjuHsp100-21	2	orange1.1g002307m	scaffold	53,1238	0,8926	0,016802262	408,6446154
ZjuHsp100-21	2	orange1.1g043863m	scaffold	54,6805	0,7209	0,013183859	420,6192308
ZjuHsp100-21	2	orange1.1g014798m	scaffold	42,0441	0,5703	0,013564329	323,4161538
ZjuHsp100-21	2	orange1.1g003677m	scaffold	55,9592	0,8694	0,015536319	430,4553846
ZjuHsp100-21	2	orange1.1g003669m	scaffold	55,9594	0,8694	0,015536264	430,4569231
ZjuHsp100-21	2	orange1.1g003795m	scaffold	55,0992	0,8617	0,015639066	423,84
ZjuHsp100-21	2	orange1.1g003000m	scaffold	55,1717	0,8364	0,015159946	424,3976923
ZjuHsp100-21	2	orange1.1g002754m	scaffold	55,2704	0,8674	0,015693753	425,1569231
ZjuHsp100-22	2	orange1.1g011914m	scaffold	1,2769	0,0865	0,067742188	9,822307692
ZjuHsp100-22	2	orange1.1g011983m	scaffold	1,2728	0,0876	0,068824639	9,790769231
ZjuHsp100-22	2	orange1.1g012418m	scaffold	1,2818	0,0889	0,069355594	9,86
ZjuHsp100-22	2	orange1.1g012383m	scaffold	1,3445	0,0926	0,068873187	10,34230769
ZjuHsp100-22	2	orange1.1g013704m	scaffold	1,3115	0,0834	0,063591308	10,08846154
ZjuHsp100-22	2	orange1.1g014244m	scaffold	1,3787	0,0934	0,067744977	10,60538462
ZjuHsp100-22	2	orange1.1g014243m	scaffold	1,3787	0,0934	0,067744977	10,60538462
ZjuHsp100-22	2	orange1.1g014246m	scaffold	1,3787	0,0934	0,067744977	10,60538462
ZjuHsp100-22	2	orange1.1g017204m	scaffold	1,7217	0,0581	0,033745716	13,24384615
ZjuHsp100-22	2	orange1.1g019694m	scaffold	1,5511	0,047	0,030301077	11,93153846
ZjuHsp100-22	2	orange1.1g022739m	scaffold	1,6107	0,0514	0,031911591	12,39
ZjuHsp100-22	2	orange1.1g022707m	scaffold	1,6107	0,0514	0,031911591	12,39
ZjuHsp100-22	2	orange1.1g018745m	scaffold	1,2684	0,1324	0,104383475	9,756923077
ZjuHsp100-22	2	orange1.1g019334m	scaffold	47,8397	0,4758	0,009945715	367,9976923
ZjuHsp100-22	2	orange1.1g020787m	scaffold	41,2643	0,4867	0,011794699	317,4176923
ZjuHsp100-23	2	orange1.1g047690m	scaffold	1,0765	0,1001	0,09298653	8,280769231
ZjuHsp100-23	2	orange1.1g005738m	scaffold	1,5149	0,0951	0,062776421	11,65307692
ZjuHsp100-23	2	orange1.1g004921m	scaffold	24,7609	0,5872	0,023714808	190,4684615
ZjuHsp100-23	2	orange1.1g005480m	scaffold	53,3728	0,611	0,011447779	410,56
ZjuHsp100-23	2	orange1.1g005495m	scaffold	53,3742	0,611	0,011447478	410,5707692
ZjuHsp100-23	2	orange1.1g005479m	scaffold	53,3711	0,6111	0,011450017	410,5469231
ZjuHsp100-23	2	orange1.1g005003m	scaffold	53,0302	0,6398	0,012064823	407,9246154
ZjuHsp100-23	2	orange1.1g005815m	scaffold	52,7049	0,5895	0,011184918	405,4223077
ZjuHsp100-23	2	orange1.1g005304m	scaffold	53,6872	0,6115	0,011390052	412,9784615
ZjuHsp100-23	2	orange1.1g007989m	scaffold	55,3436	0,5597	0,010113184	425,72
ZjuHsp100-23	2	orange1.1g009974m	scaffold	53,6002	0,5611	0,010468245	412,3092308
ZjuHsp100-23	2	orange1.1g007190m	scaffold	53,9068	0,6113	0,011339942	414,6676923
ZjuHsp100-23	2	orange1.1g005661m	scaffold	52,7842	0,7006	0,013272911	406,0323077
ZjuHsp100-23	2	orange1.1g005066m	scaffold	52,4244	0,7028	0,013405971	403,2646154
ZjuHsp100-23	2	orange1.1g003696m	scaffold	55,0252	0,6933	0,012599682	423,2707692
ZjuHsp100-23	2	orange1.1g007367m	scaffold	52,6436	0,5755	0,010932003	404,9507692
ZjuHsp100-23	2	orange1.1g003807m	scaffold	55,0587	0,7067	0,012835392	423,5284615
ZjuHsp100-23	2	orange1.1g004770m	scaffold	54,6066	0,7084	0,012972791	420,0507692
ZjuHsp100-23	2	orange1.1g003806m	scaffold	54,6241	0,741	0,013565441	420,1853846
ZjuHsp100-23	2	orange1.1g003476m	scaffold	54,2524	0,7482	0,013791095	417,3261538
ZjuHsp100-23	2	orange1.1g003473m	scaffold	54,6284	0,7325	0,013408776	420,2184615
ZjuHsp100-23	2	orange1.1g010809m	scaffold	56,8891	0,5515	0,0096943	437,6084615
ZjuHsp100-23	2	orange1.1g006534m	scaffold	56,0497	0,7183	0,012815412	431,1515385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-23	2	orange1.1g006535m	scaffold	56,0497	0,7183	0,012815412	431,1515385
ZjuHsp100-23	2	orange1.1g043863m	scaffold	56,3597	0,7132	0,012654432	433,5361538
ZjuHsp100-23	2	orange1.1g007591m	scaffold	56,9576	0,7045	0,01236885	438,1353846
ZjuHsp100-23	2	orange1.1g009263m	scaffold	53,1418	0,7208	0,013563711	408,7830769
ZjuHsp100-23	2	orange1.1g005611m	scaffold	53,8429	0,8082	0,015010336	414,1761538
ZjuHsp100-23	2	orange1.1g007575m	scaffold	57,018	0,7262	0,012736329	438,6
ZjuHsp100-23	2	orange1.1g002307m	scaffold	54,3421	0,8566	0,015763101	418,0161538
ZjuHsp100-23	2	orange1.1g003619m	scaffold	54,9211	0,8325	0,015158109	422,47
ZjuHsp100-23	2	orange1.1g003000m	scaffold	56,4365	0,8958	0,015872706	434,1269231
ZjuHsp100-23	2	orange1.1g002754m	scaffold	28,1366	0,8039	0,028571327	216,4353846
ZjuHsp100-23	2	orange1.1g014798m	scaffold	45,9436	0,5657	0,012312923	353,4123077
ZjuHsp100-23	2	orange1.1g003795m	scaffold	33,3175	0,7432	0,022306596	256,2884615
ZjuHsp100-24	2	orange1.1g003867m	scaffold	1,3197	0,3972	0,300977495	10,15153846
ZjuHsp100-24	2	orange1.1g003873m	scaffold	1,3197	0,3972	0,300977495	10,15153846
ZjuHsp100-26	2	orange1.1g003620m	scaffold	1,3346	0,0721	0,054023678	10,26615385
ZjuHsp100-26	2	orange1.1g004384m	scaffold	1,1256	0,0375	0,033315565	8,658461538
ZjuHsp100-26	2	orange1.1g003623m	scaffold	2,4172	0,0703	0,029083237	18,59384615
ZjuHsp100-26	2	orange1.1g003499m	scaffold	5,5525	0,0998	0,017973886	42,71153846
ZjuHsp100-26	2	orange1.1g003503m	scaffold	5,8655	0,0999	0,017031796	45,11923077
ZjuHsp100-26	2	orange1.1g003493m	scaffold	5,5971	0,0998	0,017830662	43,05461538
ZjuHsp100-26	2	orange1.1g005015m	scaffold	1,9837	0,0279	0,014064627	15,25923077
ZjuHsp100-26	2	orange1.1g005014m	scaffold	1,9836	0,0279	0,014065336	15,25846154
ZjuHsp100-26	2	orange1.1g003525m	scaffold	6,3435	0,1041	0,016410499	48,79615385
ZjuHsp100-26	2	orange1.1g003691m	scaffold	6,0499	0,1011	0,016711102	46,53769231
ZjuHsp100-26	2	orange1.1g004267m	scaffold	1,3794	0,0837	0,060678556	10,61076923
ZjuHsp100-26	2	orange1.1g042193m	scaffold	5,2709	0,0998	0,018934148	40,54538462
ZjuHsp100-26	2	orange1.1g044198m	scaffold	3,014	0,1549	0,051393497	23,18461538
ZjuHsp100-26	2	orange1.1g007764m	scaffold	2,9186	0,0797	0,027307613	22,45076923
ZjuHsp100-26	2	orange1.1g007053m	scaffold	2,7207	0,0904	0,033226743	20,92846154
ZjuHsp100-26	2	orange1.1g045279m	scaffold	53,8507	0,5906	0,01096736	414,2361538
ZjuHsp100-26	2	orange1.1g007255m	scaffold	53,2548	0,5943	0,011159557	409,6523077
ZjuHsp100-26	2	orange1.1g0113506m	scaffold	52,7676	0,573	0,010858936	405,9046154
ZjuHsp100-26	2	orange1.1g002159m	scaffold	55,1208	0,8095	0,014685926	424,0061538
ZjuHsp100-26	2	orange1.1g002088m	scaffold	54,2655	0,6649	0,01225272	417,4269231
ZjuHsp100-26	2	orange1.1g002169m	scaffold	54,9455	0,6683	0,012162961	422,6576923
ZjuHsp100-26	2	orange1.1g001395m	scaffold	53,9509	0,6716	0,012448356	415,0069231
ZjuHsp100-26	2	orange1.1g003743m	scaffold	55,6858	0,832	0,014940972	428,3523077
ZjuHsp100-26	2	orange1.1g039253m	scaffold	3,6575	0,2303	0,062966507	28,13461538
ZjuHsp100-26	2	orange1.1g002045m	scaffold	56,0791	0,8569	0,015280202	431,3776923
ZjuHsp100-26	2	orange1.1g000973m	scaffold	18,7465	0,817	0,043581469	144,2038462
ZjuHsp100-26	2	orange1.1g002337m	scaffold	55,1141	0,8444	0,015320943	423,9546154
ZjuHsp100-26	2	orange1.1g000974m	scaffold	16,6414	0,8543	0,051335825	128,0107692
ZjuHsp100-26	2	orange1.1g003859m	scaffold	17,6841	0,8393	0,047460713	136,0315385
ZjuHsp100-26	2	orange1.1g001491m	scaffold	56,0781	0,8863	0,015804744	431,37
ZjuHsp100-26	2	orange1.1g024249m	scaffold	55,0855	0,5722	0,010387489	423,7346154
ZjuHsp100-27	2	orange1.1g025979m	scaffold	2,5227	0,0429	0,017005589	19,40538462
ZjuHsp100-27	2	orange1.1g013285m	scaffold	54,947	0,5271	0,00959288	422,6692308
ZjuHsp100-27	2	orange1.1g013269m	scaffold	54,9291	0,5274	0,009601468	422,5315385
ZjuHsp100-27	2	orange1.1g013281m	scaffold	54,9444	0,5272	0,009595154	422,6492308
ZjuHsp100-27	2	orange1.1g011553m	scaffold	54,9523	0,5272	0,009593775	422,71
ZjuHsp100-27	2	orange1.1g030674m	scaffold	1,0998	0,0026	0,002364066	8,46
ZjuHsp100-27	2	orange1.1g030960m	scaffold	1,0531	0,0027	0,002563859	8,100769231
ZjuHsp100-27	2	orange1.1g015875m	scaffold	53,8053	0,5897	0,010959887	413,8869231
ZjuHsp100-27	2	orange1.1g014743m	scaffold	51,4497	0,5823	0,01131785	395,7669231
ZjuHsp100-27	2	orange1.1g014332m	scaffold	52,6099	0,6395	0,012155507	404,6915385
ZjuHsp100-27	2	orange1.1g014525m	scaffold	52,4843	0,5704	0,010868012	403,7253846
ZjuHsp100-27	2	orange1.1g039866m	scaffold	51,3049	0,6044	0,011780551	394,6530769
ZjuHsp100-27	2	orange1.1g024249m	scaffold	51,3037	0,6044	0,011780827	394,6438462
ZjuHsp100-27	2	orange1.1g017161m	scaffold	52,6922	0,6083	0,011544403	405,3246154
ZjuHsp100-27	2	orange1.1g014665m	scaffold	54,8711	0,6024	0,010978457	422,0853846
ZjuHsp100-27	2	orange1.1g014712m	scaffold	54,8751	0,6025	0,010979479	422,1161538
ZjuHsp100-27	2	orange1.1g017300m	scaffold	50,9071	0,565	0,011098648	391,5930769
ZjuHsp100-27	2	orange1.1g022768m	scaffold	56,2068	0,4856	0,008639524	432,36
ZjuHsp100-27	2	orange1.1g026258m	scaffold	56,9228	0,4333	0,007612064	437,8676923
ZjuHsp100-27	2	orange1.1g044198m	scaffold	34,0579	0,7278	0,021369491	261,9838462
ZjuHsp100-27	2	orange1.1g003691m	scaffold	53,4781	0,7469	0,013966465	411,37
ZjuHsp100-27	2	orange1.1g003620m	scaffold	42,0502	0,7665	0,018228213	323,4630769
ZjuHsp100-27	2	orange1.1g003623m	scaffold	53,3779	0,7632	0,014298052	410,5992308
ZjuHsp100-27	2	orange1.1g004384m	scaffold	43,1157	0,7664	0,017775428	331,6592308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-27	2	orange1.1g004267m	scaffold	41,7741	0,7677	0,018377416	321,3392308
ZjuHsp100-27	2	orange1.1g003525m	scaffold	53,4787	0,747	0,013968178	411,3746154
ZjuHsp100-27	2	orange1.1g003499m	scaffold	53,7765	0,7393	0,013747641	413,6653846
ZjuHsp100-27	2	orange1.1g003503m	scaffold	53,6529	0,7392	0,013777447	412,7146154
ZjuHsp100-27	2	orange1.1g003493m	scaffold	53,7713	0,7394	0,01375083	413,6253846
ZjuHsp100-27	2	orange1.1g007053m	scaffold	51,4209	0,7976	0,015511203	395,5453846
ZjuHsp100-27	2	orange1.1g005015m	scaffold	54,6096	0,7633	0,013977396	420,0738462
ZjuHsp100-27	2	orange1.1g005014m	scaffold	51,9619	0,7634	0,014691534	399,7069231
ZjuHsp100-27	2	orange1.1g042193m	scaffold	53,9874	0,7506	0,013903244	415,2876923
ZjuHsp100-28	2	orange1.1g025979m	scaffold	2,2715	0,0545	0,023992956	17,47307692
ZjuHsp100-28	2	orange1.1g009177m	scaffold	2,9136	0,605	0,207646897	22,41230769
ZjuHsp100-28	2	orange1.1g007944m	scaffold	2,5273	0,6023	0,238317572	19,44076923
ZjuHsp100-29	2	orange1.1g005548m	scaffold	1,4207	0,2008	0,141338777	10,92846154
ZjuHsp100-29	2	orange1.1g014525m	scaffold	1,2146	0,0105	0,008644821	9,343076923
ZjuHsp100-30	2	orange1.1g039866m	scaffold	1,4673	0,0217	0,014789068	11,28692308
ZjuHsp100-30	2	orange1.1g013285m	scaffold	37,4005	0,5138	0,013737784	287,6961538
ZjuHsp100-30	2	orange1.1g013269m	scaffold	37,0799	0,5142	0,013867351	285,23
ZjuHsp100-30	2	orange1.1g013281m	scaffold	37,7151	0,5139	0,013625842	290,1161538
ZjuHsp100-30	2	orange1.1g014743m	scaffold	26,2748	0,5331	0,0220289403	202,1138462
ZjuHsp100-30	2	orange1.1g015875m	scaffold	52,8639	0,5096	0,009639849	406,6453846
ZjuHsp100-30	2	orange1.1g014332m	scaffold	52,8089	0,539	0,010206613	406,2223077
ZjuHsp100-30	2	orange1.1g011553m	scaffold	38,1047	0,5138	0,013483901	293,1130769
ZjuHsp100-30	2	orange1.1g024249m	scaffold	30,7872	0,3789	0,012307063	236,8246154
ZjuHsp100-30	2	orange1.1g017161m	scaffold	53,7852	0,5114	0,009508192	413,7323077
ZjuHsp100-30	2	orange1.1g022768m	scaffold	54,3247	0,4455	0,00820069	417,8823077
ZjuHsp100-30	2	orange1.1g014665m	scaffold	54,4599	0,5435	0,00997982	418,9223077
ZjuHsp100-30	2	orange1.1g014712m	scaffold	54,4609	0,5437	0,009983309	418,93
ZjuHsp100-30	2	orange1.1g017300m	scaffold	18,8612	0,5143	0,027267618	145,0861538
ZjuHsp100-30	2	orange1.1g026258m	scaffold	55,3025	0,4447	0,008041228	425,4038462
ZjuHsp100-30	2	orange1.1g007367m	scaffold	51,1266	0,7335	0,014346739	393,2815385
ZjuHsp100-30	2	orange1.1g044198m	scaffold	14,1807	0,7273	0,051288018	109,0823077
ZjuHsp100-31	2	orange1.1g035561m	scaffold	0,8727	0,1227	0,140598144	6,713076923
ZjuHsp100-32	2	orange1.1g003175m	scaffold	1,2206	0,1654	0,135507128	9,389230769
ZjuHsp100-35	3	orange1.1g042771m	scaffold	1,5564	0,0866	0,055641223	11,97230769
ZjuHsp100-35	3	orange1.1g009911m	scaffold	41,0978	0,5781	0,014066446	316,1369231
ZjuHsp100-35	3	orange1.1g011400m	scaffold	55,8625	0,6756	0,012093981	429,7115385
ZjuHsp100-35	3	orange1.1g011305m	scaffold	55,6025	0,6789	0,012209883	427,7115385
ZjuHsp100-35	3	orange1.1g010975m	scaffold	24,9372	0,6621	0,026550695	191,8246154
ZjuHsp100-35	3	orange1.1g010888m	scaffold	26,1852	0,6739	0,025735912	201,4246154
ZjuHsp100-35	3	orange1.1g011393m	scaffold	58,0649	0,6393	0,011010094	446,6530769
ZjuHsp100-35	3	orange1.1g016911m	scaffold	14,3862	0,6133	0,042631133	110,6630769
ZjuHsp100-35	3	orange1.1g012000m	scaffold	57,7938	0,6559	0,011348968	444,5676923
ZjuHsp100-36	3	orange1.1g003038m	scaffold	2,0088	0,363	0,180704898	15,45230769
ZjuHsp100-36	3	orange1.1g003769m	scaffold	1,2583	0,3413	0,271238973	9,679230769
ZjuHsp100-36	3	orange1.1g001788m	scaffold	15,9599	0,7057	0,044217069	122,7684615
ZjuHsp100-37	3	orange1.1g042771m	scaffold	1,5628	0,0864	0,055285385	12,02153846
ZjuHsp100-37	3	orange1.1g009911m	scaffold	42,0218	0,5778	0,013750006	323,2446154
ZjuHsp100-37	3	orange1.1g011400m	scaffold	55,9199	0,6752	0,012074414	430,1530769
ZjuHsp100-37	3	orange1.1g011305m	scaffold	55,6626	0,6786	0,01219131	428,1738462
ZjuHsp100-37	3	orange1.1g010975m	scaffold	26,8821	0,6617	0,024614892	206,7853846
ZjuHsp100-37	3	orange1.1g010888m	scaffold	27,158	0,6735	0,024799322	208,9076923
ZjuHsp100-37	3	orange1.1g011393m	scaffold	58,1324	0,6391	0,010993869	447,1723077
ZjuHsp100-37	3	orange1.1g016911m	scaffold	14,5707	0,6129	0,042063868	112,0823077
ZjuHsp100-37	3	orange1.1g012000m	scaffold	57,8685	0,6557	0,011330862	445,1423077
ZjuHsp100-38	3	orange1.1g011914m	scaffold	1,3059	0,0952	0,072899916	10,04538462
ZjuHsp100-38	3	orange1.1g011983m	scaffold	1,3174	0,0965	0,073250342	10,13384615
ZjuHsp100-38	3	orange1.1g012383m	scaffold	1,0183	0,0963	0,09456938	7,833076923
ZjuHsp100-38	3	orange1.1g012418m	scaffold	1,2984	0,0979	0,075400493	9,987692308
ZjuHsp100-38	3	orange1.1g013704m	scaffold	1,3261	0,092	0,069376367	10,20076923
ZjuHsp100-38	3	orange1.1g014244m	scaffold	1,0715	0,0974	0,090900607	8,242307692
ZjuHsp100-38	3	orange1.1g014243m	scaffold	1,0715	0,0974	0,090900607	8,242307692
ZjuHsp100-38	3	orange1.1g014246m	scaffold	1,0715	0,0974	0,090900607	8,242307692
ZjuHsp100-38	3	orange1.1g017204m	scaffold	0,8304	0,0556	0,066955684	6,387692308
ZjuHsp100-38	3	orange1.1g019694m	scaffold	0,7808	0,0481	0,061603484	6,006153846
ZjuHsp100-38	3	orange1.1g018745m	scaffold	1,3509	0,1318	0,097564587	10,39153846
ZjuHsp100-38	3	orange1.1g022739m	scaffold	0,8408	0,0542	0,064462417	6,467692308
ZjuHsp100-38	3	orange1.1g022707m	scaffold	0,8408	0,0542	0,064462417	6,467692308
ZjuHsp100-38	3	orange1.1g019334m	scaffold	50,5307	0,4981	0,009857374	388,6976923
ZjuHsp100-38	3	orange1.1g020787m	scaffold	36,6383	0,5048	0,013777932	281,8330769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-39	3	orange1.1g013704m	scaffold	1,2956	0,0957	0,073865391	9,966153846
ZjuHsp100-39	3	orange1.1g011914m	scaffold	1,2956	0,0957	0,073865391	9,966153846
ZjuHsp100-39	3	orange1.1g011983m	scaffold	1,3071	0,097	0,074210083	10,05461538
ZjuHsp100-39	3	orange1.1g012418m	scaffold	1,2897	0,0987	0,076529425	9,920769231
ZjuHsp100-39	3	orange1.1g014244m	scaffold	1,0483	0,1000	0,09539254	8,063846154
ZjuHsp100-39	3	orange1.1g014243m	scaffold	1,0483	0,1000	0,09539254	8,063846154
ZjuHsp100-39	3	orange1.1g012383m	scaffold	1,0625	0,1000	0,094117647	8,173076923
ZjuHsp100-39	3	orange1.1g014246m	scaffold	1,0483	0,1000	0,09539254	8,063846154
ZjuHsp100-39	3	orange1.1g017204m	scaffold	0,8659	0,0557	0,064326135	6,660769231
ZjuHsp100-39	3	orange1.1g019694m	scaffold	0,8033	0,0475	0,059131084	6,179230769
ZjuHsp100-39	3	orange1.1g018745m	scaffold	1,3374	0,1352	0,10109167	10,28769231
ZjuHsp100-39	3	orange1.1g022739m	scaffold	0,8736	0,0542	0,062042125	6,72
ZjuHsp100-39	3	orange1.1g022707m	scaffold	0,8736	0,0542	0,062042125	6,72
ZjuHsp100-39	3	orange1.1g019334m	scaffold	40,038	0,5025	0,012550577	307,9846154
ZjuHsp100-39	3	orange1.1g020787m	scaffold	30,0215	0,5095	0,016971171	230,9346154
ZjuHsp100-40	3	orange1.1g005186m	scaffold	1,6608	0,5665	0,341100674	12,77538462
ZjuHsp100-40	3	orange1.1g002758m	scaffold	1,2432	0,3943	0,31716538	9,563076923
ZjuHsp100-40	3	orange1.1g001355m	scaffold	3,1168	0,4645	0,149031057	23,97538462
ZjuHsp100-41	3	orange1.1g026790m	scaffold	0,9975	0,2304	0,230977444	7,673076923
ZjuHsp100-41	3	orange1.1g026896m	scaffold	0,985	0,2563	0,260203046	7,576923077
ZjuHsp100-41	3	orange1.1g029953m	scaffold	1,1126	0,2676	0,240517706	8,558461538
ZjuHsp100-41	3	orange1.1g028498m	scaffold	1,1817	0,3043	0,257510366	9,09
ZjuHsp100-41	3	orange1.1g028460m	scaffold	1,1817	0,3043	0,257510366	9,09
ZjuHsp100-41	3	orange1.1g032554m	scaffold	1,8367	0,2149	0,117003321	14,12846154
ZjuHsp100-42	3	orange1.1g003231m	scaffold	0,9601	0,1167	0,121549839	7,385384615
ZjuHsp100-42	3	orange1.1g007208m	scaffold	1,9305	0,2567	0,132970733	14,85
ZjuHsp100-42	3	orange1.1g004916m	scaffold	55,8471	0,5344	0,009568984	429,5930769
ZjuHsp100-42	3	orange1.1g001861m	scaffold	54,9771	0,5649	0,010275187	422,9007692
ZjuHsp100-42	3	orange1.1g001862m	scaffold	54,9722	0,5649	0,010276103	422,8630769
ZjuHsp100-42	3	orange1.1g003253m	scaffold	56,3154	0,5056	0,008978006	433,1953846
ZjuHsp100-42	3	orange1.1g001309m	scaffold	54,9753	0,5647	0,010271886	422,8869231
ZjuHsp100-42	3	orange1.1g001227m	scaffold	54,9784	0,5648	0,010273125	422,9107692
ZjuHsp100-42	3	orange1.1g000914m	scaffold	54,5552	0,5574	0,010217175	419,6553846
ZjuHsp100-42	3	orange1.1g000950m	scaffold	54,977	0,5648	0,010273387	422,9
ZjuHsp100-42	3	orange1.1g000858m	scaffold	54,9722	0,5649	0,010276103	422,8630769
ZjuHsp100-42	3	orange1.1g000925m	scaffold	55,2666	0,5564	0,010067563	422,1276923
ZjuHsp100-42	3	orange1.1g000978m	scaffold	47,3414	0,5363	0,011328351	364,1646154
ZjuHsp100-42	3	orange1.1g000888m	scaffold	53,3228	0,5385	0,01009887	410,1753846
ZjuHsp100-42	3	orange1.1g000823m	scaffold	54,3694	0,5407	0,009944932	418,2261538
ZjuHsp100-42	3	orange1.1g001150m	scaffold	55,4209	0,5412	0,009765269	426,3146154
ZjuHsp100-42	3	orange1.1g001031m	scaffold	54,4282	0,5759	0,010580912	418,6784615
ZjuHsp100-42	3	orange1.1g000921m	scaffold	54,943	0,5827	0,010605537	422,6384615
ZjuHsp100-42	3	orange1.1g001076m	scaffold	54,3122	0,5828	0,010730554	417,7861538
ZjuHsp100-42	3	orange1.1g001746m	scaffold	47,2613	0,6148	0,013008529	363,5484615
ZjuHsp100-42	3	orange1.1g001735m	scaffold	54,5113	0,6071	0,01113714	419,3176923
ZjuHsp100-42	3	orange1.1g001707m	scaffold	50,2279	0,614	0,012224282	386,3684615
ZjuHsp100-42	3	orange1.1g001244m	scaffold	54,6168	0,5948	0,010890422	420,1292308
ZjuHsp100-42	3	orange1.1g016044m	scaffold	56,9179	0,5836	0,010253365	437,83
ZjuHsp100-42	3	orange1.1g011393m	scaffold	8,3133	0,7517	0,090421373	63,94846154
ZjuHsp100-43	3	orange1.1g005637m	scaffold	1,3071	0,1269	0,09708515	10,05461538
ZjuHsp100-43	3	orange1.1g005667m	scaffold	1,3027	0,1267	0,097259538	10,02076923
ZjuHsp100-43	3	orange1.1g005663m	scaffold	1,3015	0,1278	0,098194391	10,01153846
ZjuHsp100-43	3	orange1.1g005670m	scaffold	1,3027	0,1278	0,098103938	10,02076923
ZjuHsp100-43	3	orange1.1g008176m	scaffold	1,3491	0,1306	0,096805278	10,37769231
ZjuHsp100-43	3	orange1.1g008014m	scaffold	1,3452	0,1432	0,106452572	10,34769231
ZjuHsp100-43	3	orange1.1g008329m	scaffold	1,3985	0,1543	0,110332499	10,75769231
ZjuHsp100-43	3	orange1.1g005762m	scaffold	6,6064	0,2859	0,043276217	50,81846154
ZjuHsp100-43	3	orange1.1g007362m	scaffold	52,0645	0,2551	0,004899692	400,4961538
ZjuHsp100-43	3	orange1.1g038067m	scaffold	5,6824	0,2710	0,047691116	43,71076923
ZjuHsp100-43	3	orange1.1g008723m	scaffold	53,0092	0,2724	0,005138731	407,7630769
ZjuHsp100-43	3	orange1.1g012525m	scaffold	52,1752	0,4114	0,007884972	401,3476923
ZjuHsp100-44	3	orange1.1g006458m	scaffold	1,3608	0,1228	0,090241035	10,46769231
ZjuHsp100-44	3	orange1.1g010366m	scaffold	1,646	0,1245	0,07563791	12,66153846
ZjuHsp100-44	3	orange1.1g006700m	scaffold	7,7338	0,2676	0,03460136	59,49076923
ZjuHsp100-44	3	orange1.1g009856m	scaffold	9,1076	0,2112	0,023189424	70,05846154
ZjuHsp100-44	3	orange1.1g012305m	scaffold	4,7141	0,3042	0,064529815	36,26230769
ZjuHsp100-44	3	orange1.1g014938m	scaffold	5,5800	0,3384	0,060645161	42,92307692
ZjuHsp100-44	3	orange1.1g012671m	scaffold	6,1778	0,3812	0,061704814	47,52153846
ZjuHsp100-45	3	orange1.1g011664m	scaffold	2,1827	0,2464	0,112887708	16,79

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-45	3	orange1.1g044297m	scaffold	2,2823	0,2645	0,115891863	17,55615385
ZjuHsp100-45	3	orange1.1g009640m	scaffold	53,0543	0,5999	0,011307283	408,11
ZjuHsp100-45	3	orange1.1g012846m	scaffold	52,8342	0,6520	0,012340492	406,4169231
ZjuHsp100-45	3	orange1.1g011254m	scaffold	53,4005	0,6643	0,012439958	410,7730769
ZjuHsp100-45	3	orange1.1g011374m	scaffold	53,0891	0,6684	0,012590155	408,3776923
ZjuHsp100-45	3	orange1.1g011286m	scaffold	53,0133	0,6652	0,012547795	407,7946154
ZjuHsp100-45	3	orange1.1g012016m	scaffold	50,9362	0,7048	0,013836918	391,8169231
ZjuHsp100-45	3	orange1.1g010133m	scaffold	52,2632	0,7362	0,014086393	402,0246154
ZjuHsp100-45	3	orange1.1g013128m	scaffold	51,3316	0,7578	0,014762836	394,8584615
ZjuHsp100-45	3	orange1.1g011935m	scaffold	55,3615	0,6847	0,012367801	425,8576923
ZjuHsp100-45	3	orange1.1g041423m	scaffold	54,3947	0,7512	0,013810169	418,4207692
ZjuHsp100-45	3	orange1.1g009791m	scaffold	3,8182	0,7501	0,196453826	29,37076923
ZjuHsp100-45	3	orange1.1g013083m	scaffold	50,1105	0,7966	0,015896868	385,4653846
ZjuHsp100-45	3	orange1.1g011573m	scaffold	55,3923	0,7448	0,013445912	426,0946154
ZjuHsp100-45	3	orange1.1g041382m	scaffold	54,9614	0,6999	0,012734392	422,78
ZjuHsp100-45	3	orange1.1g047029m	scaffold	50,9258	0,7606	0,014935455	391,7369231
ZjuHsp100-45	3	orange1.1g040638m	scaffold	53,1731	0,6627	0,012463069	409,0238462
ZjuHsp100-46	3	orange1.1g016044m	scaffold	0,8862	0,1121	0,126495148	6,816923077
ZjuHsp100-46	3	orange1.1g004916m	scaffold	53,7047	0,5770	0,010743939	413,1130769
ZjuHsp100-46	3	orange1.1g001150m	scaffold	29,0429	0,5078	0,01748448	223,4069231
ZjuHsp100-46	3	orange1.1g001861m	scaffold	53,6245	0,5821	0,010855113	412,4961538
ZjuHsp100-46	3	orange1.1g001862m	scaffold	53,6248	0,5821	0,010855052	412,4984615
ZjuHsp100-46	3	orange1.1g003231m	scaffold	55,0655	0,5960	0,010823474	423,5807692
ZjuHsp100-46	3	orange1.1g000914m	scaffold	53,484	0,5795	0,010835016	411,4153846
ZjuHsp100-46	3	orange1.1g001031m	scaffold	53,5319	0,5077	0,009484065	411,7838462
ZjuHsp100-46	3	orange1.1g000925m	scaffold	53,4805	0,5795	0,010835725	411,3884615
ZjuHsp100-46	3	orange1.1g001309m	scaffold	53,5289	0,5860	0,010947357	411,7607692
ZjuHsp100-46	3	orange1.1g001227m	scaffold	53,5343	0,5859	0,010944385	411,8023077
ZjuHsp100-46	3	orange1.1g000950m	scaffold	53,6249	0,5820	0,010853167	412,4992308
ZjuHsp100-46	3	orange1.1g000858m	scaffold	53,4789	0,5796	0,010837919	411,3761538
ZjuHsp100-46	3	orange1.1g001746m	scaffold	51,7848	0,6217	0,012005453	398,3446154
ZjuHsp100-46	3	orange1.1g001735m	scaffold	49,8541	0,6218	0,012472394	383,4930769
ZjuHsp100-46	3	orange1.1g001707m	scaffold	17,6256	0,5997	0,034024374	135,5815385
ZjuHsp100-46	3	orange1.1g003253m	scaffold	8,1102	0,5868	0,072353333	62,38615385
ZjuHsp100-46	3	orange1.1g000978m	scaffold	22,3403	0,5835	0,026118718	171,8484615
ZjuHsp100-46	3	orange1.1g000888m	scaffold	21,3775	0,5860	0,027411999	164,4423077
ZjuHsp100-46	3	orange1.1g000823m	scaffold	21,2638	0,5845	0,027488031	163,5676923
ZjuHsp100-46	3	orange1.1g001076m	scaffold	53,5357	0,5176	0,009668315	411,8130769
ZjuHsp100-46	3	orange1.1g001244m	scaffold	53,6917	0,4819	0,008975316	413,0130769
ZjuHsp100-46	3	orange1.1g011393m	scaffold	53,8787	0,7031	0,013049684	414,4515385
ZjuHsp100-47	3	orange1.1g016044m	scaffold	0,8745	0,0673	0,076958262	6,726923077
ZjuHsp100-47	3	orange1.1g004916m	scaffold	54,4499	0,5401	0,00991921	418,8453846
ZjuHsp100-47	3	orange1.1g001150m	scaffold	51,1596	0,4912	0,009601326	393,5353846
ZjuHsp100-47	3	orange1.1g001861m	scaffold	0,1800	15,8617	88,12055556	1,384615385
ZjuHsp100-47	3	orange1.1g001862m	scaffold	54,4507	0,5402	0,009920901	418,8515385
ZjuHsp100-47	3	orange1.1g000914m	scaffold	54,4496	0,5401	0,009919265	418,8430769
ZjuHsp100-47	3	orange1.1g001031m	scaffold	54,869	0,4571	0,008330751	422,0692308
ZjuHsp100-47	3	orange1.1g000858m	scaffold	54,4489	0,5401	0,009919392	418,8376923
ZjuHsp100-47	3	orange1.1g001227m	scaffold	0,1639	15,8653	96,79865772	1,260769231
ZjuHsp100-47	3	orange1.1g001309m	scaffold	54,4448	0,5402	0,009921976	418,8061538
ZjuHsp100-47	3	orange1.1g000950m	scaffold	54,4469	0,5402	0,009921593	418,8223077
ZjuHsp100-47	3	orange1.1g000925m	scaffold	54,447	0,5402	0,009921575	418,8230769
ZjuHsp100-47	3	orange1.1g001746m	scaffold	51,0944	0,5989	0,011721441	393,0338462
ZjuHsp100-47	3	orange1.1g003253m	scaffold	51,6492	0,5672	0,010981777	397,3015385
ZjuHsp100-47	3	orange1.1g001735m	scaffold	51,0904	0,5988	0,011720401	393,0030769
ZjuHsp100-47	3	orange1.1g001707m	scaffold	24,6989	0,5747	0,023268243	189,9915385
ZjuHsp100-47	3	orange1.1g000978m	scaffold	51,3605	0,5674	0,0110474	395,0807692
ZjuHsp100-47	3	orange1.1g000888m	scaffold	51,2352	0,5674	0,011074418	394,1169231
ZjuHsp100-47	3	orange1.1g003231m	scaffold	54,3565	0,6307	0,011603028	418,1269231
ZjuHsp100-47	3	orange1.1g000823m	scaffold	53,6321	0,5584	0,010411675	412,5546154
ZjuHsp100-47	3	orange1.1g001076m	scaffold	54,5956	0,4679	0,008570288	419,9661538
ZjuHsp100-47	3	orange1.1g001244m	scaffold	55,2897	0,4298	0,0077736	425,3053846
ZjuHsp100-47	3	orange1.1g011393m	scaffold	53,7300	0,6753	0,012568398	413,3076923
ZjuHsp100-48	3	orange1.1g016044m	scaffold	0,8745	0,0673	0,076958262	6,726923077
ZjuHsp100-48	3	orange1.1g004916m	scaffold	54,4444	0,5402	0,009922049	418,8030769
ZjuHsp100-48	3	orange1.1g001150m	scaffold	52,0273	0,4912	0,009441197	400,21
ZjuHsp100-48	3	orange1.1g001861m	scaffold	54,3939	0,4643	0,008535884	418,4146154
ZjuHsp100-48	3	orange1.1g001862m	scaffold	54,4447	0,5402	0,009921994	418,8053846
ZjuHsp100-48	3	orange1.1g000914m	scaffold	0,1678	15,8644	94,54350417	1,290769231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-48	3	orange1.1g001031m	scaffold	54,868	0,4571	0,008330903	422,0615385
ZjuHsp100-48	3	orange1.1g000858m	scaffold	54,412	0,5422	0,009964714	418,5538462
ZjuHsp100-48	3	orange1.1g001227m	scaffold	54,4481	0,5401	0,009919538	418,8315385
ZjuHsp100-48	3	orange1.1g001309m	scaffold	54,4499	0,5401	0,00991921	418,8453846
ZjuHsp100-48	3	orange1.1g000950m	scaffold	54,4498	0,5401	0,009919228	418,8446154
ZjuHsp100-48	3	orange1.1g000925m	scaffold	54,4464	0,5403	0,009923521	418,8184615
ZjuHsp100-48	3	orange1.1g001746m	scaffold	51,094	0,5988	0,011719576	393,0307692
ZjuHsp100-48	3	orange1.1g003253m	scaffold	52,3637	0,5673	0,010833841	402,7976923
ZjuHsp100-48	3	orange1.1g001735m	scaffold	51,0928	0,5988	0,011719851	393,0215385
ZjuHsp100-48	3	orange1.1g001707m	scaffold	24,4010	0,5748	0,023556412	187,7
ZjuHsp100-48	3	orange1.1g000978m	scaffold	51,3799	0,5672	0,011039336	395,23
ZjuHsp100-48	3	orange1.1g000888m	scaffold	52,0869	0,5672	0,010889494	400,6684615
ZjuHsp100-48	3	orange1.1g003231m	scaffold	54,357	0,6307	0,011602921	418,1307692
ZjuHsp100-48	3	orange1.1g000823m	scaffold	53,6376	0,5585	0,010412472	412,5969231
ZjuHsp100-48	3	orange1.1g001076m	scaffold	54,5977	0,4678	0,008568126	419,9823077
ZjuHsp100-48	3	orange1.1g001244m	scaffold	55,2911	0,4300	0,00777702	425,3161538
ZjuHsp100-48	3	orange1.1g011393m	scaffold	53,7404	0,6743	0,012547357	413,3876923
ZjuHsp100-49	4	orange1.1g041423m	scaffold	4,8417	0,2948	0,060887705	37,24384615
ZjuHsp100-49	4	orange1.1g011573m	scaffold	7,33	0,2579	0,035184175	56,38461538
ZjuHsp100-49	4	orange1.1g037859m	scaffold	2,5042	0,2675	0,106820541	19,26307692
ZjuHsp100-49	4	orange1.1g035603m	scaffold	7,2779	0,2884	0,039626815	55,98384615
ZjuHsp100-49	4	orange1.1g011935m	scaffold	11,8827	0,5420	0,045612529	91,40538462
ZjuHsp100-49	4	orange1.1g012016m	scaffold	50,9084	0,5769	0,011332118	391,6030769
ZjuHsp100-49	4	orange1.1g011254m	scaffold	32,6527	0,5817	0,01781476	251,1746154
ZjuHsp100-49	4	orange1.1g012846m	scaffold	53,0495	0,6073	0,011447799	408,0730769
ZjuHsp100-49	4	orange1.1g009791m	scaffold	23,9164	0,6648	0,027796826	183,9723077
ZjuHsp100-49	4	orange1.1g010133m	scaffold	30,8362	0,6741	0,02186067	237,2015385
ZjuHsp100-49	4	orange1.1g013128m	scaffold	51,3605	0,5862	0,01141344	395,0807692
ZjuHsp100-49	4	orange1.1g011286m	scaffold	55,6817	0,5905	0,01060492	428,3207692
ZjuHsp100-49	4	orange1.1g011374m	scaffold	55,0884	0,5953	0,010806268	423,7569231
ZjuHsp100-49	4	orange1.1g013083m	scaffold	52,249	0,5831	0,011160022	401,9153846
ZjuHsp100-49	4	orange1.1g047029m	scaffold	17,4773	0,6109	0,034953912	134,4407692
ZjuHsp100-49	4	orange1.1g009640m	scaffold	52,5943	0,7156	0,013606037	404,5715385
ZjuHsp100-49	4	orange1.1g041382m	scaffold	52,2723	0,6917	0,01323263	402,0946154
ZjuHsp100-49	4	orange1.1g040638m	scaffold	53,7973	0,5946	0,011052599	413,8253846
ZjuHsp100-49	4	orange1.1g024550m	scaffold	53,526	0,4268	0,007973695	411,7384615
ZjuHsp100-49	4	orange1.1g048683m	scaffold	20,7317	0,5865	0,02829001	159,4746154
ZjuHsp100-49	4	orange1.1g011664m	scaffold	51,8509	0,7897	0,015230208	398,8530769
ZjuHsp100-50	4	orange1.1g041423m	scaffold	4,4339	0,2934	0,066171993	34,10692308
ZjuHsp100-50	4	orange1.1g011573m	scaffold	7,164	0,2704	0,037744277	55,10769231
ZjuHsp100-50	4	orange1.1g037859m	scaffold	2,9542	0,2685	0,09088755	22,72461538
ZjuHsp100-50	4	orange1.1g035603m	scaffold	3,9496	0,3135	0,079375127	30,38153846
ZjuHsp100-50	4	orange1.1g012016m	scaffold	48,4439	0,6064	0,012517572	372,6453846
ZjuHsp100-50	4	orange1.1g011935m	scaffold	55,2842	0,5829	0,0105437	425,2630769
ZjuHsp100-50	4	orange1.1g009791m	scaffold	15,5619	0,6442	0,041395973	119,7609231
ZjuHsp100-50	4	orange1.1g011254m	scaffold	53,0577	0,6187	0,01166089	408,1361538
ZjuHsp100-50	4	orange1.1g012846m	scaffold	50,0514	0,6227	0,01244121	385,0107692
ZjuHsp100-50	4	orange1.1g013128m	scaffold	49,8386	0,6034	0,012107082	383,3738462
ZjuHsp100-50	4	orange1.1g013083m	scaffold	49,6046	0,5981	0,01205735	381,5738462
ZjuHsp100-50	4	orange1.1g047029m	scaffold	11,81	0,6103	0,051676545	90,84615385
ZjuHsp100-50	4	orange1.1g010133m	scaffold	52,9918	0,6622	0,012496273	407,6292308
ZjuHsp100-50	4	orange1.1g011286m	scaffold	55,2488	0,6065	0,010977614	424,9907692
ZjuHsp100-50	4	orange1.1g011374m	scaffold	54,7463	0,6158	0,011248249	421,1253846
ZjuHsp100-50	4	orange1.1g041382m	scaffold	53,3538	0,6545	0,012267167	410,4138462
ZjuHsp100-50	4	orange1.1g009640m	scaffold	53,0505	0,6774	0,012768965	408,0807692
ZjuHsp100-50	4	orange1.1g040638m	scaffold	53,3851	0,6073	0,011375833	410,6546154
ZjuHsp100-50	4	orange1.1g024550m	scaffold	41,8229	0,4434	0,010601847	321,7146154
ZjuHsp100-51	4	orange1.1g005815m	scaffold	1,3405	0,0931	0,069451697	10,31153846
ZjuHsp100-51	4	orange1.1g005480m	scaffold	48,6381	0,2309	0,004747307	374,1392308
ZjuHsp100-51	4	orange1.1g005495m	scaffold	48,6459	0,2311	0,004750657	374,1992308
ZjuHsp100-51	4	orange1.1g005479m	scaffold	48,6368	0,2310	0,00474949	374,1292308
ZjuHsp100-51	4	orange1.1g005479m	scaffold	48,6404	0,2312	0,00475325	374,1569231
ZjuHsp100-51	4	orange1.1g005003m	scaffold	48,577	0,2386	0,00491179	373,6692308
ZjuHsp100-51	4	orange1.1g005304m	scaffold	48,6405	0,2311	0,004751185	374,1576923
ZjuHsp100-51	4	orange1.1g007989m	scaffold	48,9816	0,2251	0,004595603	376,7815385
ZjuHsp100-51	4	orange1.1g010809m	scaffold	50,013	0,2497	0,004992702	384,7153846
ZjuHsp100-51	4	orange1.1g004921m	scaffold	48,1977	0,4842	0,010046123	370,7515385
ZjuHsp100-51	4	orange1.1g007367m	scaffold	47,9131	0,4712	0,009834471	368,5623077
ZjuHsp100-51	4	orange1.1g005661m	scaffold	50,813	0,6625	0,013038002	390,8692308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-51	4	orange1.1g005066m	scaffold	49,879	0,6525	0,013081658	383,6846154
ZjuHsp100-51	4	orange1.1g009974m	scaffold	52,9408	0,5030	0,009501179	407,2369231
ZjuHsp100-51	4	orange1.1g014798m	scaffold	50,6329	0,3198	0,006316051	389,4838462
ZjuHsp100-51	4	orange1.1g007190m	scaffold	51,9869	0,5805	0,011166275	399,8992308
ZjuHsp100-51	4	orange1.1g003696m	scaffold	50,9626	0,6006	0,011785113	392,02
ZjuHsp100-51	4	orange1.1g005738m	scaffold	28,276	0,5888	0,020823313	217,5076923
ZjuHsp100-51	4	orange1.1g003807m	scaffold	51,1177	0,6098	0,011929332	393,2130769
ZjuHsp100-51	4	orange1.1g047690m	scaffold	51,9917	0,6008	0,011555691	399,9361538
ZjuHsp100-51	4	orange1.1g003806m	scaffold	50,1005	0,6415	0,012804263	385,3884615
ZjuHsp100-51	4	orange1.1g003476m	scaffold	49,7416	0,6464	0,012995159	382,6276923
ZjuHsp100-51	4	orange1.1g003473m	scaffold	50,0095	0,6542	0,013081515	384,6884615
ZjuHsp100-51	4	orange1.1g004770m	scaffold	49,4185	0,5791	0,011718284	380,1423077
ZjuHsp100-51	4	orange1.1g006534m	scaffold	50,1339	0,6013	0,01199388	385,6453846
ZjuHsp100-51	4	orange1.1g006535m	scaffold	50,1339	0,6014	0,011995875	385,6453846
ZjuHsp100-51	4	orange1.1g005611m	scaffold	49,5373	0,7182	0,014498166	381,0561538
ZjuHsp100-51	4	orange1.1g009263m	scaffold	50,5463	0,6595	0,013047444	388,8176923
ZjuHsp100-51	4	orange1.1g002307m	scaffold	49,9654	0,7118	0,014245858	384,3492308
ZjuHsp100-51	4	orange1.1g003619m	scaffold	50,3621	0,6811	0,013524059	387,4007692
ZjuHsp100-51	4	orange1.1g007591m	scaffold	51,1217	0,5587	0,010928823	393,2438462
ZjuHsp100-51	4	orange1.1g007575m	scaffold	51,1898	0,5787	0,011304987	393,7676923
ZjuHsp100-51	4	orange1.1g043863m	scaffold	0,1286	12,7303	98,99144635	0,989230769
ZjuHsp100-51	4	orange1.1g043051m	scaffold	53,1074	0,7386	0,013907666	408,5184615
ZjuHsp100-52	4	orange1.1g011573m	scaffold	2,3378	0,1754	0,075027804	17,98307692
ZjuHsp100-52	4	orange1.1g041423m	scaffold	4,1049	0,2684	0,065385271	31,57615385
ZjuHsp100-52	4	orange1.1g037859m	scaffold	4,5156	0,2642	0,058508282	34,73538462
ZjuHsp100-52	4	orange1.1g035603m	scaffold	5,3354	0,3308	0,062000975	41,04153846
ZjuHsp100-52	4	orange1.1g011935m	scaffold	7,0339	0,5732	0,081491065	54,10692308
ZjuHsp100-52	4	orange1.1g012016m	scaffold	15,2093	0,6099	0,040100465	116,9946154
ZjuHsp100-52	4	orange1.1g011254m	scaffold	7,2907	0,6035	0,082776688	56,08230769
ZjuHsp100-52	4	orange1.1g013128m	scaffold	17,212	0,5642	0,032779456	132,4
ZjuHsp100-52	4	orange1.1g012846m	scaffold	4,5536	0,6033	0,13248858	35,02769231
ZjuHsp100-52	4	orange1.1g009791m	scaffold	6,7875	0,6416	0,094526703	52,21153846
ZjuHsp100-52	4	orange1.1g011374m	scaffold	12,4122	0,6340	0,051078777	95,47846154
ZjuHsp100-52	4	orange1.1g011286m	scaffold	12,9053	0,6290	0,048739665	99,27153846
ZjuHsp100-52	4	orange1.1g010133m	scaffold	16,7168	0,6268	0,037495214	128,5907692
ZjuHsp100-52	4	orange1.1g009640m	scaffold	28,4628	0,6403	0,02249603	218,9446154
ZjuHsp100-52	4	orange1.1g013083m	scaffold	30,5423	0,5991	0,019615419	234,9407692
ZjuHsp100-52	4	orange1.1g047029m	scaffold	17,2713	0,6084	0,035226069	132,8561538
ZjuHsp100-52	4	orange1.1g041382m	scaffold	17,586	0,6408	0,036438076	135,2769231
ZjuHsp100-52	4	orange1.1g040638m	scaffold	9,3485	0,6128	0,065550623	71,91153846
ZjuHsp100-52	4	orange1.1g024550m	scaffold	52,7273	0,4409	0,008361892	405,5946154
ZjuHsp100-53	4	orange1.1g011573m	scaffold	2,4488	0,2161	0,088247305	18,83692308
ZjuHsp100-53	4	orange1.1g041423m	scaffold	9,5908	0,2628	0,02740126	73,77538462
ZjuHsp100-53	4	orange1.1g037859m	scaffold	40,7744	0,2816	0,006906294	313,6492308
ZjuHsp100-53	4	orange1.1g035603m	scaffold	5,4405	0,3514	0,064589652	41,85
ZjuHsp100-53	4	orange1.1g012016m	scaffold	49,905	0,5688	0,011397656	383,8846154
ZjuHsp100-53	4	orange1.1g011935m	scaffold	23,8401	0,5766	0,02418614	183,3853846
ZjuHsp100-53	4	orange1.1g011254m	scaffold	9,0462	0,6175	0,068260706	69,58615385
ZjuHsp100-53	4	orange1.1g012846m	scaffold	10,8949	0,5810	0,053327704	83,80692308
ZjuHsp100-53	4	orange1.1g013128m	scaffold	50,6623	0,5725	0,011300316	389,71
ZjuHsp100-53	4	orange1.1g011374m	scaffold	16,4912	0,5843	0,035431018	126,8553846
ZjuHsp100-53	4	orange1.1g011286m	scaffold	18,4858	0,5931	0,032084086	142,1984615
ZjuHsp100-53	4	orange1.1g009791m	scaffold	10,8971	0,6030	0,055335823	83,82384615
ZjuHsp100-53	4	orange1.1g010133m	scaffold	28,6238	0,6297	0,021999176	220,1830769
ZjuHsp100-53	4	orange1.1g013083m	scaffold	50,908	0,5628	0,011055237	391,6
ZjuHsp100-53	4	orange1.1g047029m	scaffold	51,6437	0,6096	0,011803957	397,2592308
ZjuHsp100-53	4	orange1.1g009640m	scaffold	52,3473	0,6395	0,012216485	402,6715385
ZjuHsp100-53	4	orange1.1g041382m	scaffold	51,558	0,6527	0,012659529	396,6
ZjuHsp100-53	4	orange1.1g040638m	scaffold	8,5374	0,6352	0,074402043	65,67230769
ZjuHsp100-53	4	orange1.1g024550m	scaffold	53,3017	0,4521	0,008481906	410,0130769
ZjuHsp100-54	4	orange1.1g041423m	scaffold	3,605	0,3448	0,095644938	27,73076923
ZjuHsp100-54	4	orange1.1g011573m	scaffold	11,1013	0,3187	0,028708349	85,39461538
ZjuHsp100-54	4	orange1.1g037859m	scaffold	17,6586	0,3729	0,021117189	135,8353846
ZjuHsp100-54	4	orange1.1g035603m	scaffold	2,5568	0,3848	0,150500626	19,66769231
ZjuHsp100-54	4	orange1.1g012016m	scaffold	14,9531	0,6018	0,040245835	115,0238462
ZjuHsp100-54	4	orange1.1g010133m	scaffold	27,1393	0,6505	0,023968931	208,7638462
ZjuHsp100-54	4	orange1.1g013128m	scaffold	40,0493	0,5801	0,014484648	308,0715385
ZjuHsp100-54	4	orange1.1g011935m	scaffold	4,7519	0,6251	0,131547381	36,55307692
ZjuHsp100-54	4	orange1.1g047029m	scaffold	50,023	0,6447	0,012888071	384,7923077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-54	4	orange1.1g011374m	scaffold	52,3569	0,6637	0,012676457	402,7453846
ZjuHsp100-54	4	orange1.1g011286m	scaffold	52,8442	0,6697	0,012673103	406,4938462
ZjuHsp100-54	4	orange1.1g011254m	scaffold	52,7598	0,6668	0,01263841	405,8446154
ZjuHsp100-54	4	orange1.1g009640m	scaffold	46,0229	0,6606	0,014353724	354,0223077
ZjuHsp100-54	4	orange1.1g013083m	scaffold	51,1208	0,6285	0,012294409	393,2369231
ZjuHsp100-54	4	orange1.1g009791m	scaffold	4,0237	0,7121	0,176976415	30,95153846
ZjuHsp100-54	4	orange1.1g012846m	scaffold	5,4103	0,6410	0,118477718	41,61769231
ZjuHsp100-54	4	orange1.1g041382m	scaffold	51,9821	0,7016	0,013496954	399,8623077
ZjuHsp100-54	4	orange1.1g013823m	scaffold	4,8037	0,6479	0,1348752	36,95153846
ZjuHsp100-54	4	orange1.1g024550m	scaffold	54,3400	0,4760	0,008759661	418
ZjuHsp100-54	4	orange1.1g040638m	scaffold	54,5008	0,6482	0,011893403	419,2369231
ZjuHsp100-55	4	orange1.1g011573m	scaffold	8,4112	0,3203	0,038080179	64,70153846
ZjuHsp100-55	4	orange1.1g041423m	scaffold	4,438	0,3441	0,077534926	34,13846154
ZjuHsp100-55	4	orange1.1g037859m	scaffold	2,6006	0,3083	0,118549565	20,00461538
ZjuHsp100-55	4	orange1.1g035603m	scaffold	6,1907	0,2991	0,048314407	47,62076923
ZjuHsp100-55	4	orange1.1g009791m	scaffold	20,5362	0,6428	0,031300825	157,9707692
ZjuHsp100-55	4	orange1.1g012846m	scaffold	40,9674	0,623	0,015207214	315,1338462
ZjuHsp100-55	4	orange1.1g011935m	scaffold	54,8463	0,5765	0,010511192	421,8946154
ZjuHsp100-55	4	orange1.1g012016m	scaffold	50,3032	0,5869	0,01166725	386,9476923
ZjuHsp100-55	4	orange1.1g011254m	scaffold	34,2308	0,5916	0,017282681	263,3138462
ZjuHsp100-55	4	orange1.1g013128m	scaffold	16,6892	0,6083	0,036448721	128,3784615
ZjuHsp100-55	4	orange1.1g047029m	scaffold	7,1889	0,6049	0,08414361	55,29923077
ZjuHsp100-55	4	orange1.1g011286m	scaffold	54,1353	0,5959	0,011007605	416,4253846
ZjuHsp100-55	4	orange1.1g011374m	scaffold	54,1359	0,5858	0,010820916	416,43
ZjuHsp100-55	4	orange1.1g013083m	scaffold	39,2948	0,6103	0,015531317	302,2676923
ZjuHsp100-55	4	orange1.1g010133m	scaffold	55,4929	0,663	0,011947474	426,8684615
ZjuHsp100-55	4	orange1.1g041382m	scaffold	52,6477	0,6385	0,012127785	404,9823077
ZjuHsp100-55	4	orange1.1g009640m	scaffold	53,458	0,6843	0,012800703	411,2153846
ZjuHsp100-55	4	orange1.1g040638m	scaffold	52,1328	0,6265	0,012017386	401,0215385
ZjuHsp100-55	4	orange1.1g024550m	scaffold	17,9597	0,4335	0,024137374	138,1515385
ZjuHsp100-56	4	orange1.1g011573m	scaffold	9,5916	0,3156	0,032903791	73,78153846
ZjuHsp100-56	4	orange1.1g041423m	scaffold	6,2138	0,3414	0,054942225	47,79846154
ZjuHsp100-56	4	orange1.1g037859m	scaffold	2,2043	0,3317	0,15047861	16,95615385
ZjuHsp100-56	4	orange1.1g035603m	scaffold	2,8102	0,3198	0,11379973	21,61692308
ZjuHsp100-56	4	orange1.1g009791m	scaffold	11,7622	0,6377	0,054216048	90,47846154
ZjuHsp100-56	4	orange1.1g013128m	scaffold	31,6503	0,5993	0,01893505	243,4638462
ZjuHsp100-56	4	orange1.1g012016m	scaffold	50,6337	0,6044	0,011936714	389,49
ZjuHsp100-56	4	orange1.1g012016m	scaffold	50,635	0,6043	0,011934433	389,5
ZjuHsp100-56	4	orange1.1g012846m	scaffold	20,9101	0,638	0,030511571	160,8469231
ZjuHsp100-56	4	orange1.1g011254m	scaffold	17,3175	0,6072	0,035062798	133,2115385
ZjuHsp100-56	4	orange1.1g011935m	scaffold	53,5885	0,625	0,01166295	412,2192308
ZjuHsp100-56	4	orange1.1g013083m	scaffold	49,6698	0,6019	0,012118027	382,0753846
ZjuHsp100-56	4	orange1.1g041382m	scaffold	51,4814	0,6546	0,012715272	396,0107692
ZjuHsp100-56	4	orange1.1g047029m	scaffold	9,7362	0,6193	0,063607978	74,89384615
ZjuHsp100-56	4	orange1.1g011286m	scaffold	52,9252	0,6091	0,011508695	407,1169231
ZjuHsp100-56	4	orange1.1g011374m	scaffold	52,2656	0,6215	0,011891187	402,0430769
ZjuHsp100-56	4	orange1.1g010133m	scaffold	30,0926	0,6772	0,022503871	231,4815385
ZjuHsp100-56	4	orange1.1g009640m	scaffold	50,6589	0,7453	0,014712124	389,6838462
ZjuHsp100-56	4	orange1.1g040638m	scaffold	11,5079	0,6725	0,058438116	88,52230769
ZjuHsp100-56	4	orange1.1g024550m	scaffold	29,5309	0,4217	0,014279958	227,1607692
ZjuHsp100-56	4	orange1.1g048683m	scaffold	17,7881	0,5801	0,03261169	136,8315385
ZjuHsp100-57	4	orange1.1g002068m	scaffold	0,9906	0,0736	0,074298405	7,62
ZjuHsp100-57	4	orange1.1g002012m	scaffold	50,8432	0,2269	0,00446274	391,1015385
ZjuHsp100-57	4	orange1.1g006289m	scaffold	0,8539	0,0355	0,041573955	6,568461538
ZjuHsp100-57	4	orange1.1g046258m	scaffold	40,3009	0,4278	0,010615148	310,0069231
ZjuHsp100-57	4	orange1.1g003094m	scaffold	53,7833	0,477	0,008868924	413,7176923
ZjuHsp100-57	4	orange1.1g005517m	scaffold	54,6946	0,3871	0,007077481	420,7276923
ZjuHsp100-57	4	orange1.1g002623m	scaffold	0,9867	0,0738	0,07479477	7,59
ZjuHsp100-57	4	orange1.1g005505m	scaffold	54,7017	0,3872	0,007078391	420,7823077
ZjuHsp100-57	4	orange1.1g005511m	scaffold	54,7003	0,3873	0,0070804	420,7715385
ZjuHsp100-57	4	orange1.1g005515m	scaffold	54,6949	0,3873	0,007081099	420,73
ZjuHsp100-57	4	orange1.1g003088m	scaffold	54,428	0,5861	0,010768355	418,6769231
ZjuHsp100-57	4	orange1.1g005179m	scaffold	55,3858	0,6615	0,011943495	426,0446154
ZjuHsp100-57	4	orange1.1g004878m	scaffold	55,0687	0,6318	0,011472942	423,6053846
ZjuHsp100-57	4	orange1.1g007723m	scaffold	55,3168	0,6815	0,012319946	425,5138462
ZjuHsp100-57	4	orange1.1g047225m	scaffold	48,4177	0,3633	0,007503454	372,4438462
ZjuHsp100-58	4	orange1.1g008664m	scaffold	1,8476	0,2237	0,12107599	14,21230769
ZjuHsp100-59	4	orange1.1g043863m	scaffold	0,9876	0,1817	0,183981369	7,596923077
ZjuHsp100-59	4	orange1.1g010809m	scaffold	54,8852	0,6078	0,011074024	422,1938462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-59	4	orange1.1g005815m	scaffold	16,6334	0,5748	0,034556976	127,9492308
ZjuHsp100-59	4	orange1.1g007989m	scaffold	54,5899	0,6284	0,011511287	419,9223077
ZjuHsp100-59	4	orange1.1g005480m	scaffold	54,5416	0,6294	0,011539815	419,5507692
ZjuHsp100-59	4	orange1.1g005495m	scaffold	54,5403	0,6293	0,011538257	419,5407692
ZjuHsp100-59	4	orange1.1g005479m	scaffold	54,5407	0,6294	0,011540006	419,5438462
ZjuHsp100-59	4	orange1.1g007367m	scaffold	12,906	0,6962	0,053943902	99,27692308
ZjuHsp100-59	4	orange1.1g005304m	scaffold	54,59	0,6283	0,011509434	419,9230769
ZjuHsp100-59	4	orange1.1g005003m	scaffold	55,2095	0,6525	0,011818618	424,6884615
ZjuHsp100-59	4	orange1.1g004921m	scaffold	13,2451	0,6947	0,052449585	101,8853846
ZjuHsp100-59	4	orange1.1g007591m	scaffold	55,6238	0,646	0,011613734	427,8753846
ZjuHsp100-59	4	orange1.1g006534m	scaffold	54,0694	0,6488	0,011999393	415,9184615
ZjuHsp100-59	4	orange1.1g006535m	scaffold	55,2361	0,6486	0,011742321	424,8930769
ZjuHsp100-59	4	orange1.1g007575m	scaffold	55,0805	0,6485	0,011773677	423,6961538
ZjuHsp100-59	4	orange1.1g004770m	scaffold	31,2297	0,6585	0,021085697	240,2284615
ZjuHsp100-59	4	orange1.1g003806m	scaffold	33,3498	0,6582	0,01973625	256,5369231
ZjuHsp100-59	4	orange1.1g003476m	scaffold	37,4484	0,6518	0,017405283	288,0646154
ZjuHsp100-59	4	orange1.1g003473m	scaffold	41,3015	0,6508	0,015757297	317,7038462
ZjuHsp100-59	4	orange1.1g047690m	scaffold	21,3404	0,7444	0,034882195	164,1569231
ZjuHsp100-59	4	orange1.1g005738m	scaffold	54,1482	0,6768	0,01249903	416,5246154
ZjuHsp100-59	4	orange1.1g005661m	scaffold	51,5808	0,6762	0,013109529	396,7753846
ZjuHsp100-59	4	orange1.1g005066m	scaffold	50,8179	0,7062	0,013896678	390,9069231
ZjuHsp100-59	4	orange1.1g009974m	scaffold	53,6504	0,5724	0,010669072	412,6953846
ZjuHsp100-59	4	orange1.1g007190m	scaffold	53,4235	0,6982	0,013069155	410,95
ZjuHsp100-59	4	orange1.1g003696m	scaffold	52,5209	0,8166	0,015548096	404,0069231
ZjuHsp100-59	4	orange1.1g043051m	scaffold	18,4943	0,7724	0,041764219	142,2638462
ZjuHsp100-59	4	orange1.1g003795m	scaffold	11,6753	0,8387	0,071835413	89,81
ZjuHsp100-59	4	orange1.1g003807m	scaffold	52,5206	0,8373	0,015942316	404,0046154
ZjuHsp100-59	4	orange1.1g003677m	scaffold	11,7478	0,8388	0,071400603	90,36769231
ZjuHsp100-59	4	orange1.1g003669m	scaffold	11,752	0,8387	0,071366576	90,4
ZjuHsp100-59	4	orange1.1g002754m	scaffold	11,6663	0,8387	0,071890831	89,74076923
ZjuHsp100-59	4	orange1.1g003000m	scaffold	58,3833	0,8330	0,014267779	449,1023077
ZjuHsp100-59	4	orange1.1g014798m	scaffold	55,0387	0,6446	0,011711759	423,2346154
ZjuHsp100-59	4	orange1.1g003619m	scaffold	8,6474	0,7909	0,091461017	66,51846154
ZjuHsp100-59	4	orange1.1g009263m	scaffold	51,3104	0,554	0,010797031	394,6953846
ZjuHsp100-59	4	orange1.1g005611m	scaffold	35,692	0,7061	0,019783145	274,5538462
ZjuHsp100-60	4	orange1.1g005003m	scaffold	0,935	0,0500	0,053475936	7,192307692
ZjuHsp100-60	4	orange1.1g005480m	scaffold	0,935	0,0500	0,053475936	7,192307692
ZjuHsp100-60	4	orange1.1g005495m	scaffold	0,935	0,0500	0,053475936	7,192307692
ZjuHsp100-60	4	orange1.1g005479m	scaffold	0,939	0,0506	0,053887114	7,223076923
ZjuHsp100-60	4	orange1.1g005304m	scaffold	0,935	0,0500	0,053475936	7,192307692
ZjuHsp100-60	4	orange1.1g007989m	scaffold	1,0578	0,0502	0,047456986	8,136923077
ZjuHsp100-60	4	orange1.1g005815m	scaffold	50,2009	0,2254	0,004489959	386,1607692
ZjuHsp100-60	4	orange1.1g010809m	scaffold	1,1108	0,0525	0,047263234	8,544615385
ZjuHsp100-60	4	orange1.1g014798m	scaffold	1,2116	0,0950	0,078408716	9,32
ZjuHsp100-60	4	orange1.1g004921m	scaffold	12,1893	0,4840	0,039706956	93,76384615
ZjuHsp100-60	4	orange1.1g007367m	scaffold	8,264	0,4518	0,054670862	63,56923077
ZjuHsp100-60	4	orange1.1g009974m	scaffold	51,7396	0,5119	0,009893776	397,9969231
ZjuHsp100-60	4	orange1.1g007190m	scaffold	52,0394	0,5697	0,010947474	400,3030769
ZjuHsp100-60	4	orange1.1g005661m	scaffold	49,6905	0,6614	0,013310391	382,2346154
ZjuHsp100-60	4	orange1.1g003696m	scaffold	52,1321	0,6041	0,01158787	401,0161538
ZjuHsp100-60	4	orange1.1g005066m	scaffold	50,2599	0,6291	0,012516937	386,6146154
ZjuHsp100-60	4	orange1.1g005738m	scaffold	51,7777	0,5896	0,011387142	398,29
ZjuHsp100-60	4	orange1.1g003807m	scaffold	52,2711	0,6170	0,011803846	402,0853846
ZjuHsp100-60	4	orange1.1g047690m	scaffold	50,5075	0,6270	0,012413998	388,5192308
ZjuHsp100-60	4	orange1.1g003806m	scaffold	19,8183	0,6385	0,032217698	152,4484615
ZjuHsp100-60	4	orange1.1g003473m	scaffold	23,4025	0,6291	0,026881743	180,0192308
ZjuHsp100-60	4	orange1.1g003476m	scaffold	21,9754	0,6327	0,028791285	169,0415385
ZjuHsp100-60	4	orange1.1g004770m	scaffold	25,141	0,6019	0,023940973	193,3923077
ZjuHsp100-60	4	orange1.1g009263m	scaffold	51,6506	0,6265	0,012129578	397,3123077
ZjuHsp100-60	4	orange1.1g005611m	scaffold	51,6627	0,6204	0,012008664	397,4053846
ZjuHsp100-60	4	orange1.1g002307m	scaffold	51,8675	0,7043	0,013578831	398,9807692
ZjuHsp100-60	4	orange1.1g003619m	scaffold	52,7079	0,6547	0,012421288	405,4453846
ZjuHsp100-60	4	orange1.1g006534m	scaffold	20,2113	0,5992	0,029646782	155,4715385
ZjuHsp100-60	4	orange1.1g006535m	scaffold	20,2703	0,5992	0,02956049	155,9253846
ZjuHsp100-60	4	orange1.1g007591m	scaffold	21,4657	0,5764	0,026852141	165,1207692
ZjuHsp100-60	4	orange1.1g007575m	scaffold	19,8271	0,5814	0,029323502	152,5161538
ZjuHsp100-60	4	orange1.1g003000m	scaffold	54,0917	0,7255	0,013412409	416,09
ZjuHsp100-60	4	orange1.1g002754m	scaffold	54,5047	0,7253	0,013307109	419,2669231
ZjuHsp100-60	4	orange1.1g003795m	scaffold	54,974	0,7051	0,012826063	422,8769231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-60	4	orange1.1g043863m	scaffold	52,7104	0,6196	0,011754796	405,4646154
ZjuHsp100-60	4	orange1.1g003677m	scaffold	55,9271	0,7039	0,012586027	430,2084615
ZjuHsp100-61	5	orange1.1g000978m	scaffold	0,9034	0,0433	0,047930042	6,949230769
ZjuHsp100-61	5	orange1.1g001150m	scaffold	0,9034	0,0433	0,047930042	6,949230769
ZjuHsp100-61	5	orange1.1g000888m	scaffold	0,9034	0,0433	0,047930042	6,949230769
ZjuHsp100-61	5	orange1.1g000823m	scaffold	0,9034	0,0433	0,047930042	6,949230769
ZjuHsp100-61	5	orange1.1g003253m	scaffold	0,9034	0,0433	0,047930042	6,949230769
ZjuHsp100-61	5	orange1.1g004916m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g001861m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g001862m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g001309m	scaffold	3,2384	0,1583	0,048882164	24,91076923
ZjuHsp100-61	5	orange1.1g001244m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g001227m	scaffold	3,2384	0,1583	0,048882164	24,91076923
ZjuHsp100-61	5	orange1.1g000921m	scaffold	3,2493	0,1510	0,046471548	24,99461538
ZjuHsp100-61	5	orange1.1g001076m	scaffold	3,2382	0,1583	0,048885183	24,90923077
ZjuHsp100-61	5	orange1.1g001031m	scaffold	3,2385	0,1583	0,048880655	24,91153846
ZjuHsp100-61	5	orange1.1g000914m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g000950m	scaffold	3,2383	0,1583	0,048883674	24,91
ZjuHsp100-61	5	orange1.1g000925m	scaffold	3,2384	0,1583	0,048882164	24,91076923
ZjuHsp100-61	5	orange1.1g000858m	scaffold	3,2385	0,1583	0,048880655	24,91153846
ZjuHsp100-62	5	orange1.1g005285m	scaffold	0,9205	0,0530	0,057577404	7,080769231
ZjuHsp100-62	5	orange1.1g005284m	scaffold	0,9205	0,0530	0,057577404	7,080769231
ZjuHsp100-62	5	orange1.1g005643m	scaffold	0,9264	0,0530	0,057210708	7,126153846
ZjuHsp100-62	5	orange1.1g007214m	scaffold	0,9457	0,0574	0,060695781	7,274615385
ZjuHsp100-62	5	orange1.1g004921m	scaffold	36,6559	0,7678	0,020946151	281,9684615
ZjuHsp100-62	5	orange1.1g035608m	scaffold	0,851	0,2303	0,270622797	6,546153846
ZjuHsp100-62	5	orange1.1g007367m	scaffold	53,900	0,7703	0,01429128	414,6153846
ZjuHsp100-62	5	orange1.1g005815m	scaffold	37,0569	0,8071	0,021780019	285,0530769
ZjuHsp100-62	5	orange1.1g005480m	scaffold	14,7443	0,8466	0,057418799	113,4176923
ZjuHsp100-62	5	orange1.1g005495m	scaffold	14,7363	0,8466	0,05744997	113,3561538
ZjuHsp100-62	5	orange1.1g005479m	scaffold	14,7324	0,8466	0,057465179	113,3261538
ZjuHsp100-62	5	orange1.1g005003m	scaffold	14,0697	0,8389	0,059624583	108,31692308
ZjuHsp100-62	5	orange1.1g005304m	scaffold	11,4711	0,8571	0,074718205	88,23923077
ZjuHsp100-62	5	orange1.1g007989m	scaffold	17,7901	0,8264	0,046452802	136,8469231
ZjuHsp100-63	5	orange1.1g012655m	scaffold	0,8881	0,0794	0,089404346	6,831538462
ZjuHsp100-63	5	orange1.1g014376m	scaffold	1,0006	0,0860	0,085948431	7,696923077
ZjuHsp100-64	5	orange1.1g041423m	scaffold	2,0731	0,1259	0,060730307	15,94692308
ZjuHsp100-64	5	orange1.1g011573m	scaffold	10,4323	0,2438	0,023369727	80,24846154
ZjuHsp100-64	5	orange1.1g037859m	scaffold	6,3133	0,3073	0,048675019	48,56384615
ZjuHsp100-64	5	orange1.1g035603m	scaffold	5,6312	0,3068	0,054482171	43,31692308
ZjuHsp100-64	5	orange1.1g012016m	scaffold	43,3035	0,4733	0,010929832	333,1038462
ZjuHsp100-64	5	orange1.1g010133m	scaffold	60,6182	0,5551	0,009157316	466,2938462
ZjuHsp100-64	5	orange1.1g011935m	scaffold	17,6492	0,4970	0,028159917	135,7630769
ZjuHsp100-64	5	orange1.1g009791m	scaffold	15,5599	0,5437	0,034942384	119,6915385
ZjuHsp100-64	5	orange1.1g011254m	scaffold	55,8694	0,5036	0,009013879	429,7646154
ZjuHsp100-64	5	orange1.1g009640m	scaffold	55,6406	0,5568	0,010007081	428,0046154
ZjuHsp100-64	5	orange1.1g011374m	scaffold	57,1041	0,5144	0,00900811	439,2623077
ZjuHsp100-64	5	orange1.1g012846m	scaffold	54,1167	0,5340	0,009867564	416,2823077
ZjuHsp100-64	5	orange1.1g011286m	scaffold	56,494	0,5327	0,00942932	434,5692308
ZjuHsp100-64	5	orange1.1g013128m	scaffold	14,1655	0,5020	0,035438213	108,9653846
ZjuHsp100-64	5	orange1.1g047029m	scaffold	9,2762	0,5283	0,0569522	71,35538462
ZjuHsp100-64	5	orange1.1g013083m	scaffold	52,4534	0,5372	0,010241471	403,4876923
ZjuHsp100-64	5	orange1.1g041382m	scaffold	20,9268	0,5654	0,027017987	160,9753846
ZjuHsp100-64	5	orange1.1g024550m	scaffold	58,0906	0,4356	0,007498631	446,8507692
ZjuHsp100-64	5	orange1.1g040638m	scaffold	59,5727	0,5211	0,008747295	458,2515385
ZjuHsp100-65	5	orange1.1g041423m	scaffold	2,1463	0,2336	0,108838466	16,51
ZjuHsp100-65	5	orange1.1g011573m	scaffold	6,8261	0,3197	0,046834942	52,50846154
ZjuHsp100-65	5	orange1.1g037859m	scaffold	54,3314	0,3684	0,006780609	417,9338462
ZjuHsp100-65	5	orange1.1g035603m	scaffold	3,8288	0,4061	0,106064563	29,45230769
ZjuHsp100-65	5	orange1.1g012016m	scaffold	50,5043	0,5580	0,011048564	388,4946154
ZjuHsp100-65	5	orange1.1g011935m	scaffold	56,0617	0,5901	0,010525903	431,2438462
ZjuHsp100-65	5	orange1.1g010133m	scaffold	53,0107	0,6682	0,012605002	407,7746154
ZjuHsp100-65	5	orange1.1g011254m	scaffold	40,741	0,6374	0,015645173	313,3923077
ZjuHsp100-65	5	orange1.1g011374m	scaffold	53,8177	0,6096	0,011327128	413,9823077
ZjuHsp100-65	5	orange1.1g011286m	scaffold	53,3703	0,6275	0,011757476	410,5407692
ZjuHsp100-65	5	orange1.1g013128m	scaffold	52,4436	0,5689	0,010847844	403,4123077
ZjuHsp100-65	5	orange1.1g009640m	scaffold	52,111	0,6657	0,012774654	400,8538462
ZjuHsp100-65	5	orange1.1g009791m	scaffold	7,3011	0,6572	0,090013834	56,16230769
ZjuHsp100-65	5	orange1.1g012846m	scaffold	53,0018	0,6351	0,011982612	407,7061538

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-65	5	orange1.1g047029m	scaffold	8,8047	0,6151	0,069860415	67,72846154
ZjuHsp100-65	5	orange1.1g013083m	scaffold	53,0899	0,5670	0,010679998	408,3838462
ZjuHsp100-65	5	orange1.1g041382m	scaffold	52,2129	0,6672	0,012778451	401,6376923
ZjuHsp100-65	5	orange1.1g040638m	scaffold	54,1997	0,6357	0,011728847	416,9207692
ZjuHsp100-65	5	orange1.1g024550m	scaffold	25,8667	0,4685	0,01811209	198,9746154
ZjuHsp100-65	5	orange1.1g013823m	scaffold	54,9186	0,6211	0,011309465	422,4507692
ZjuHsp100-66	5	orange1.1g041423m	scaffold	2,1514	0,2338	0,108673422	16,54923077
ZjuHsp100-66	5	orange1.1g011573m	scaffold	6,826	0,3197	0,046835628	52,50769231
ZjuHsp100-66	5	orange1.1g037859m	scaffold	54,079	0,3672	0,006790066	415,9923077
ZjuHsp100-66	5	orange1.1g035603m	scaffold	3,8286	0,4061	0,106070104	29,45076923
ZjuHsp100-66	5	orange1.1g012016m	scaffold	50,5038	0,5580	0,011048674	388,4907692
ZjuHsp100-66	5	orange1.1g011935m	scaffold	56,131	0,5847	0,010416704	431,7769231
ZjuHsp100-66	5	orange1.1g010133m	scaffold	53,1362	0,6749	0,012701322	408,74
ZjuHsp100-66	5	orange1.1g011254m	scaffold	40,9772	0,6374	0,015554992	315,2092308
ZjuHsp100-66	5	orange1.1g011374m	scaffold	53,8168	0,6097	0,011329176	413,9753846
ZjuHsp100-66	5	orange1.1g011286m	scaffold	53,3788	0,6275	0,011755603	410,6061538
ZjuHsp100-66	5	orange1.1g013128m	scaffold	52,442	0,5689	0,010848175	403,4
ZjuHsp100-66	5	orange1.1g009640m	scaffold	51,7331	0,6295	0,012168225	397,9469231
ZjuHsp100-66	5	orange1.1g009791m	scaffold	7,2679	0,6597	0,090768998	55,90692308
ZjuHsp100-66	5	orange1.1g012846m	scaffold	53,0065	0,6351	0,011981549	407,7423077
ZjuHsp100-66	5	orange1.1g047029m	scaffold	8,8058	0,6151	0,069851689	67,73692308
ZjuHsp100-66	5	orange1.1g013083m	scaffold	53,0935	0,5670	0,010679273	408,4115385
ZjuHsp100-66	5	orange1.1g041382m	scaffold	52,2942	0,6605	0,012630464	402,2630769
ZjuHsp100-66	5	orange1.1g040638m	scaffold	54,2016	0,6356	0,011726591	416,9353846
ZjuHsp100-66	5	orange1.1g024550m	scaffold	26,4227	0,4684	0,017727182	203,2515385
ZjuHsp100-66	5	orange1.1g013823m	scaffold	55,0043	0,6147	0,01117549	423,11
ZjuHsp100-67	5	orange1.1g041423m	scaffold	2,7315	0,2296	0,084056379	21,01153846
ZjuHsp100-67	5	orange1.1g011573m	scaffold	6,0298	0,2582	0,042820657	46,38307692
ZjuHsp100-67	5	orange1.1g035603m	scaffold	7,4161	0,2785	0,037553431	57,04692308
ZjuHsp100-67	5	orange1.1g037859m	scaffold	52,475	0,3179	0,006058123	403,6538462
ZjuHsp100-67	5	orange1.1g012016m	scaffold	55,5095	0,4261	0,007676164	426,9961538
ZjuHsp100-67	5	orange1.1g011254m	scaffold	57,0131	0,5107	0,00895759	438,5623077
ZjuHsp100-67	5	orange1.1g013128m	scaffold	4,2926	0,4207	0,098005871	33,02
ZjuHsp100-67	5	orange1.1g011935m	scaffold	50,7503	0,4779	0,009416693	390,3869231
ZjuHsp100-67	5	orange1.1g010133m	scaffold	64,3211	0,5542	0,008616146	494,7776923
ZjuHsp100-67	5	orange1.1g012846m	scaffold	29,6586	0,5172	0,01743845	228,1430769
ZjuHsp100-67	5	orange1.1g009640m	scaffold	4,3344	0,6031	0,139142673	33,34153846
ZjuHsp100-67	5	orange1.1g013083m	scaffold	5,7539	0,4764	0,082796017	44,26076923
ZjuHsp100-67	5	orange1.1g047029m	scaffold	8,1104	0,4817	0,059392878	62,38769231
ZjuHsp100-67	5	orange1.1g009791m	scaffold	30,3704	0,5697	0,018758396	233,6184615
ZjuHsp100-67	5	orange1.1g011374m	scaffold	57,25	0,5082	0,008876856	440,3846154
ZjuHsp100-67	5	orange1.1g011286m	scaffold	58,0013	0,5204	0,008972213	446,1638462
ZjuHsp100-67	5	orange1.1g024550m	scaffold	49,4919	0,4489	0,009070171	380,7069231
ZjuHsp100-67	5	orange1.1g041382m	scaffold	55,2772	0,6010	0,010872475	425,2092308
ZjuHsp100-67	5	orange1.1g040638m	scaffold	8,263	0,4932	0,059687765	63,56153846
ZjuHsp100-68	5	orange1.1g041423m	scaffold	2,8382	0,2389	0,084173067	21,83230769
ZjuHsp100-68	5	orange1.1g011573m	scaffold	8,3201	0,3314	0,039831252	64,00076923
ZjuHsp100-68	5	orange1.1g037859m	scaffold	60,3711	0,3620	0,005996247	464,3930769
ZjuHsp100-68	5	orange1.1g012016m	scaffold	15,8759	0,5311	0,033453222	122,1223077
ZjuHsp100-68	5	orange1.1g011935m	scaffold	12,8884	0,5528	0,042891282	99,14153846
ZjuHsp100-68	5	orange1.1g012846m	scaffold	9,7894	0,5806	0,059309049	75,30307692
ZjuHsp100-68	5	orange1.1g011254m	scaffold	18,3285	0,5963	0,032534032	140,9884615
ZjuHsp100-68	5	orange1.1g013128m	scaffold	6,4764	0,5676	0,087641282	49,81846154
ZjuHsp100-68	5	orange1.1g011286m	scaffold	56,1929	0,5961	0,010608102	432,2530769
ZjuHsp100-68	5	orange1.1g009791m	scaffold	53,1865	0,6114	0,011495398	409,1269231
ZjuHsp100-68	5	orange1.1g011374m	scaffold	56,2584	0,5822	0,010348677	432,7569231
ZjuHsp100-68	5	orange1.1g010133m	scaffold	54,9067	0,6172	0,011240887	422,3592308
ZjuHsp100-68	5	orange1.1g013083m	scaffold	4,7644	0,5842	0,122617748	36,64923077
ZjuHsp100-68	5	orange1.1g009640m	scaffold	53,2114	0,6319	0,011875275	409,3184615
ZjuHsp100-68	5	orange1.1g047029m	scaffold	7,9766	0,6155	0,077163202	61,35846154
ZjuHsp100-68	5	orange1.1g041382m	scaffold	54,7087	0,6080	0,011113406	420,8361538
ZjuHsp100-68	5	orange1.1g040638m	scaffold	20,0102	0,6069	0,030329532	153,9246154
ZjuHsp100-68	5	orange1.1g024550m	scaffold	59,8708	0,4215	0,00704016	460,5446154
ZjuHsp100-70	5	orange1.1g046258m	scaffold	1,5618	0,0548	0,035087719	12,01384615
ZjuHsp100-70	5	orange1.1g002068m	scaffold	27,3193	0,4619	0,016907461	210,1484615
ZjuHsp100-70	5	orange1.1g002012m	scaffold	54,0194	0,4947	0,009157821	415,5338462
ZjuHsp100-70	5	orange1.1g002623m	scaffold	42,6509	0,4508	0,010569531	328,0838462
ZjuHsp100-70	5	orange1.1g006289m	scaffold	22,5506	0,3576	0,015857671	173,4661538
ZjuHsp100-70	5	orange1.1g003094m	scaffold	47,292	0,5269	0,011141419	363,7846154

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-70	5	orange1.1g005517m	scaffold	45,6699	0,4639	0,010157675	351,3069231
ZjuHsp100-70	5	orange1.1g005505m	scaffold	44,4585	0,4639	0,01043445	341,9884615
ZjuHsp100-70	5	orange1.1g005511m	scaffold	44,1629	0,4640	0,010506556	339,7146154
ZjuHsp100-70	5	orange1.1g005515m	scaffold	43,5557	0,4639	0,01065073	335,0438462
ZjuHsp100-70	5	orange1.1g003088m	scaffold	51,0732	0,5503	0,010774731	392,8707692
ZjuHsp100-70	5	orange1.1g004878m	scaffold	50,7045	0,5952	0,011738603	390,0346154
ZjuHsp100-70	5	orange1.1g005179m	scaffold	51,0239	0,6209	0,012168807	392,4915385
ZjuHsp100-70	5	orange1.1g047225m	scaffold	50,3172	0,4794	0,009527557	387,0553846
ZjuHsp100-70	5	orange1.1g007723m	scaffold	39,7067	0,6719	0,016921577	305,4361538
ZjuHsp100-71	5	orange1.1g046258m	scaffold	1,5619	0,0548	0,035085473	12,01461538
ZjuHsp100-71	5	orange1.1g002068m	scaffold	27,2682	0,4619	0,016939145	209,7553846
ZjuHsp100-71	5	orange1.1g002012m	scaffold	54,0159	0,4945	0,009154712	415,5069231
ZjuHsp100-71	5	orange1.1g002623m	scaffold	41,7086	0,4508	0,010808323	320,8353846
ZjuHsp100-71	5	orange1.1g006289m	scaffold	22,5597	0,3575	0,015846842	173,5361538
ZjuHsp100-71	5	orange1.1g003094m	scaffold	50,3571	0,5268	0,010461285	387,3623077
ZjuHsp100-71	5	orange1.1g005517m	scaffold	43,2466	0,4639	0,010726855	332,6661538
ZjuHsp100-71	5	orange1.1g005505m	scaffold	43,2542	0,4640	0,010727282	332,7246154
ZjuHsp100-71	5	orange1.1g005511m	scaffold	44,4299	0,4639	0,010441167	341,7684615
ZjuHsp100-71	5	orange1.1g005515m	scaffold	43,6634	0,4638	0,010622169	337,3623077
ZjuHsp100-71	5	orange1.1g003088m	scaffold	51,0711	0,5502	0,010773216	392,8546154
ZjuHsp100-71	5	orange1.1g004878m	scaffold	50,7063	0,5951	0,011736214	390,0484615
ZjuHsp100-71	5	orange1.1g005179m	scaffold	51,0223	0,6210	0,012171149	392,4792308
ZjuHsp100-71	5	orange1.1g047225m	scaffold	50,3185	0,4794	0,009527311	387,0653846
ZjuHsp100-71	5	orange1.1g007723m	scaffold	39,2573	0,6719	0,017115288	301,9792308
ZjuHsp100-72	6	orange1.1g004921m	scaffold	1,5257	0,0583	0,038211968	11,73615385
ZjuHsp100-72	6	orange1.1g007367m	scaffold	1,8769	0,0841	0,044807928	14,43769231
ZjuHsp100-72	6	orange1.1g005480m	scaffold	48,801	0,4887	0,010014139	375,3923077
ZjuHsp100-72	6	orange1.1g005495m	scaffold	48,8016	0,4887	0,010014016	375,3969231
ZjuHsp100-72	6	orange1.1g005479m	scaffold	48,8023	0,4888	0,010015921	375,4023077
ZjuHsp100-72	6	orange1.1g005003m	scaffold	48,5363	0,5089	0,010484936	373,3561538
ZjuHsp100-72	6	orange1.1g005304m	scaffold	49,273	0,4918	0,009981126	379,0230769
ZjuHsp100-72	6	orange1.1g005815m	scaffold	48,2521	0,4997	0,010356026	371,17
ZjuHsp100-72	6	orange1.1g007989m	scaffold	49,018	0,4333	0,00883961	377,0615385
ZjuHsp100-72	6	orange1.1g0110809m	scaffold	50,2232	0,4250	0,008462225	386,3323077
ZjuHsp100-72	6	orange1.1g005661m	scaffold	48,2771	0,6503	0,013470155	371,3623077
ZjuHsp100-72	6	orange1.1g005066m	scaffold	48,2799	0,6688	0,013852556	381,3838462
ZjuHsp100-72	6	orange1.1g047690m	scaffold	49,2655	0,5930	0,012036821	378,9653846
ZjuHsp100-72	6	orange1.1g009974m	scaffold	50,1467	0,5399	0,010766411	385,7438462
ZjuHsp100-72	6	orange1.1g005738m	scaffold	50,9655	0,6046	0,011862927	392,0423077
ZjuHsp100-72	6	orange1.1g007190m	scaffold	49,6318	0,6261	0,012614896	381,7830769
ZjuHsp100-72	6	orange1.1g003696m	scaffold	49,8154	0,6825	0,013700583	383,1953846
ZjuHsp100-72	6	orange1.1g003807m	scaffold	49,9157	0,6977	0,013977566	383,9669231
ZjuHsp100-72	6	orange1.1g003806m	scaffold	47,1703	0,6874	0,014572729	362,8484615
ZjuHsp100-72	6	orange1.1g003476m	scaffold	46,9113	0,6707	0,014297195	360,8561538
ZjuHsp100-72	6	orange1.1g003473m	scaffold	46,8054	0,6634	0,014173578	360,0415385
ZjuHsp100-72	6	orange1.1g004770m	scaffold	47,2024	0,6381	0,01351838	363,0953846
ZjuHsp100-72	6	orange1.1g006534m	scaffold	48,1031	0,6479	0,013468986	370,0238462
ZjuHsp100-72	6	orange1.1g006535m	scaffold	48,1019	0,6479	0,013469322	370,0146154
ZjuHsp100-72	6	orange1.1g005611m	scaffold	48,4682	0,7149	0,014749877	372,8323077
ZjuHsp100-72	6	orange1.1g007591m	scaffold	48,3495	0,6138	0,012695064	371,9192308
ZjuHsp100-72	6	orange1.1g009263m	scaffold	49,1496	0,6600	0,01342839	378,0738462
ZjuHsp100-72	6	orange1.1g002307m	scaffold	49,5313	0,7508	0,015158092	381,01
ZjuHsp100-72	6	orange1.1g014798m	scaffold	49,775	0,4440	0,008920141	382,8846154
ZjuHsp100-72	6	orange1.1g003619m	scaffold	50,0254	0,7390	0,014772496	384,8107692
ZjuHsp100-72	6	orange1.1g007575m	scaffold	48,5228	0,6352	0,013090753	373,2523077
ZjuHsp100-72	6	orange1.1g003000m	scaffold	0,2091	16,4037	78,44906743	1,608461538
ZjuHsp100-72	6	orange1.1g002754m	scaffold	51,2708	0,7481	0,014591151	394,3907692
ZjuHsp100-72	6	orange1.1g043863m	scaffold	48,1839	0,6508	0,013506586	370,6453846
ZjuHsp100-72	6	orange1.1g043051m	scaffold	51,0289	0,7279	0,014264466	392,53
ZjuHsp100-72	6	orange1.1g003795m	scaffold	51,5582	0,7225	0,01401329	396,6015385
ZjuHsp100-72	6	orange1.1g003677m	scaffold	52,1106	0,7303	0,014014423	400,8507692
ZjuHsp100-73	6	orange1.1g004921m	scaffold	1,689	0,2506	0,148371818	12,99230769
ZjuHsp100-73	6	orange1.1g007367m	scaffold	3,0942	0,4159	0,134412772	23,80153846
ZjuHsp100-73	6	orange1.1g026977m	scaffold	1,9353	0,1725	0,089133468	14,88692308
ZjuHsp100-73	6	orange1.1g027564m	scaffold	1,1538	0,1449	0,125585023	8,875384615
ZjuHsp100-73	6	orange1.1g028644m	scaffold	1,1447	0,1277	0,111557613	8,805384615
ZjuHsp100-73	6	orange1.1g039983m	scaffold	1,0077	0,2188	0,217128114	7,751538462
ZjuHsp100-73	6	orange1.1g027287m	scaffold	3,3677	0,2351	0,069810256	25,90538462
ZjuHsp100-73	6	orange1.1g027662m	scaffold	4,9902	0,2523	0,050559096	38,38615385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-73	6	orange1.1g005815m	scaffold	46,6077	0,6554	0,014062054	358,5207692
ZjuHsp100-73	6	orange1.1g005480m	scaffold	48,3997	0,6653	0,013745953	372,3053846
ZjuHsp100-73	6	orange1.1g005495m	scaffold	48,4001	0,6652	0,013743773	372,3084615
ZjuHsp100-73	6	orange1.1g005479m	scaffold	48,3999	0,6653	0,013745896	372,3069231
ZjuHsp100-73	6	orange1.1g005003m	scaffold	48,3154	0,6597	0,013654032	371,6569231
ZjuHsp100-73	6	orange1.1g027323m	scaffold	5,9787	0,2600	0,043487715	45,99
ZjuHsp100-73	6	orange1.1g028138m	scaffold	7,8478	0,2407	0,030671016	60,36769231
ZjuHsp100-73	6	orange1.1g005304m	scaffold	48,9548	0,6693	0,013671795	376,5753846
ZjuHsp100-73	6	orange1.1g027869m	scaffold	6,1787	0,3137	0,050771198	47,52846154
ZjuHsp100-73	6	orange1.1g027857m	scaffold	6,1788	0,3137	0,050770376	47,52923077
ZjuHsp100-73	6	orange1.1g029078m	scaffold	5,0415	0,2284	0,045303977	38,78076923
ZjuHsp100-73	6	orange1.1g028256m	scaffold	4,5164	0,2506	0,055486671	34,74153846
ZjuHsp100-73	6	orange1.1g007989m	scaffold	48,5616	0,6150	0,012664327	373,5507692
ZjuHsp100-73	6	orange1.1g031213m	scaffold	1,0028	0,1330	0,13262864	7,713846154
ZjuHsp100-73	6	orange1.1g032051m	scaffold	1,2128	0,1294	0,106695251	9,329230769
ZjuHsp100-73	6	orange1.1g044681m	scaffold	1,0977	0,2533	0,230755215	8,443846154
ZjuHsp100-73	6	orange1.1g029797m	scaffold	3,9154	0,3116	0,079583184	30,11846154
ZjuHsp100-73	6	orange1.1g045940m	scaffold	2,7921	0,2810	0,100641095	21,47769231
ZjuHsp100-73	6	orange1.1g009974m	scaffold	50,0634	0,6979	0,013940324	47,529230769
ZjuHsp100-73	6	orange1.1g007190m	scaffold	0,1655	16,3810	98,97885196	1,273076923
ZjuHsp100-74	6	orange1.1g005066m	scaffold	1,0196	0,0589	0,057767752	7,843076923
ZjuHsp100-74	6	orange1.1g005661m	scaffold	1,0477	0,0555	0,052973179	8,059230769
ZjuHsp100-74	6	orange1.1g007190m	scaffold	52,4721	0,3918	0,007466825	403,6315385
ZjuHsp100-74	6	orange1.1g003696m	scaffold	53,4586	0,4371	0,008176421	411,22
ZjuHsp100-74	6	orange1.1g009974m	scaffold	53,2618	0,3417	0,00641548	409,7061538
ZjuHsp100-74	6	orange1.1g003807m	scaffold	53,4794	0,4459	0,00833779	411,38
ZjuHsp100-74	6	orange1.1g005815m	scaffold	52,3678	0,6398	0,012217431	402,8292308
ZjuHsp100-74	6	orange1.1g004921m	scaffold	49,6799	0,6758	0,013603087	382,1530769
ZjuHsp100-74	6	orange1.1g005480m	scaffold	52,6075	0,6375	0,012118044	404,6730769
ZjuHsp100-74	6	orange1.1g005495m	scaffold	52,6077	0,6374	0,012116097	404,6746154
ZjuHsp100-74	6	orange1.1g005479m	scaffold	52,6069	0,6375	0,012118182	404,6684615
ZjuHsp100-74	6	orange1.1g005003m	scaffold	52,5503	0,6349	0,012081758	404,2330769
ZjuHsp100-74	6	orange1.1g005304m	scaffold	52,4879	0,6343	0,01208469	403,7530769
ZjuHsp100-74	6	orange1.1g007989m	scaffold	53,0134	0,6107	0,011519729	407,7953846
ZjuHsp100-74	6	orange1.1g005738m	scaffold	54,2642	0,7013	0,012923806	417,4169231
ZjuHsp100-74	6	orange1.1g047690m	scaffold	52,8697	0,7256	0,013724307	406,69
ZjuHsp100-74	6	orange1.1g007367m	scaffold	49,9618	0,6895	0,013800544	384,3215385
ZjuHsp100-74	6	orange1.1g003806m	scaffold	50,9976	0,7048	0,013820258	392,2892308
ZjuHsp100-74	6	orange1.1g003476m	scaffold	50,2202	0,7237	0,014410536	386,3092308
ZjuHsp100-74	6	orange1.1g003473m	scaffold	49,9708	0,7335	0,014678572	384,3907692
ZjuHsp100-74	6	orange1.1g004770m	scaffold	50,888	0,6847	0,013455039	391,4461538
ZjuHsp100-74	6	orange1.1g010809m	scaffold	53,283	0,6430	0,012067639	409,8692308
ZjuHsp100-74	6	orange1.1g009263m	scaffold	41,5996	0,6893	0,016569871	319,9969231
ZjuHsp100-74	6	orange1.1g005611m	scaffold	23,545	0,7914	0,033612232	181,1153846
ZjuHsp100-74	6	orange1.1g002307m	scaffold	21,3341	0,7912	0,037086167	164,1084615
ZjuHsp100-74	6	orange1.1g003619m	scaffold	21,2031	0,7497	0,035358037	163,1007692
ZjuHsp100-74	6	orange1.1g006534m	scaffold	52,1206	0,6709	0,01287207	400,9276923
ZjuHsp100-74	6	orange1.1g006535m	scaffold	52,1231	0,6706	0,012865697	400,9469231
ZjuHsp100-74	6	orange1.1g003000m	scaffold	54,4463	0,7778	0,014285636	418,8176923
ZjuHsp100-74	6	orange1.1g002754m	scaffold	54,9686	0,7756	0,014109874	422,8353846
ZjuHsp100-74	6	orange1.1g007591m	scaffold	51,9762	0,6527	0,012557671	399,8169231
ZjuHsp100-74	6	orange1.1g043863m	scaffold	52,6375	0,6991	0,013281406	404,9038462
ZjuHsp100-75	6	orange1.1g005066m	scaffold	1,0196	0,0589	0,057767752	7,843076923
ZjuHsp100-75	6	orange1.1g005661m	scaffold	1,0477	0,0555	0,052973179	8,059230769
ZjuHsp100-75	6	orange1.1g007190m	scaffold	52,4748	0,3918	0,007466441	403,6523077
ZjuHsp100-75	6	orange1.1g003696m	scaffold	53,4575	0,4371	0,008176589	411,2115385
ZjuHsp100-75	6	orange1.1g009974m	scaffold	53,2637	0,3416	0,006413373	409,7207692
ZjuHsp100-75	6	orange1.1g003807m	scaffold	53,4792	0,4459	0,008337821	411,3784615
ZjuHsp100-75	6	orange1.1g005815m	scaffold	52,3674	0,6398	0,012217525	402,8261538
ZjuHsp100-75	6	orange1.1g004921m	scaffold	49,6793	0,6759	0,013605264	382,1484615
ZjuHsp100-75	6	orange1.1g005480m	scaffold	52,6087	0,6374	0,012115867	404,6823077
ZjuHsp100-75	6	orange1.1g005495m	scaffold	52,608	0,6375	0,012117929	404,6769231
ZjuHsp100-75	6	orange1.1g005479m	scaffold	52,6092	0,6375	0,012117652	404,6861538
ZjuHsp100-75	6	orange1.1g005003m	scaffold	52,5498	0,6350	0,012083776	404,2292308
ZjuHsp100-75	6	orange1.1g005304m	scaffold	52,5064	0,6318	0,012032819	403,8953846
ZjuHsp100-75	6	orange1.1g007989m	scaffold	53,0144	0,6108	0,011521398	407,8030769
ZjuHsp100-75	6	orange1.1g005738m	scaffold	54,2645	0,7011	0,012920049	417,4192308
ZjuHsp100-75	6	orange1.1g047690m	scaffold	52,8693	0,7256	0,013724411	406,6869231
ZjuHsp100-75	6	orange1.1g007367m	scaffold	49,9194	0,6946	0,01391443	383,9953846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-75	6	orange1.1g003806m	scaffold	50,9994	0,7049	0,013821731	392,3030769
ZjuHsp100-75	6	orange1.1g003476m	scaffold	50,220	0,7236	0,014408602	386,3076923
ZjuHsp100-75	6	orange1.1g003473m	scaffold	0,1929	16,5253	85,66770347	1,483846154
ZjuHsp100-75	6	orange1.1g004770m	scaffold	50,8858	0,6848	0,013457585	391,4292308
ZjuHsp100-75	6	orange1.1g010809m	scaffold	53,2828	0,6431	0,012069561	409,8676923
ZjuHsp100-75	6	orange1.1g009263m	scaffold	41,3993	0,6893	0,01665004	318,4561538
ZjuHsp100-75	6	orange1.1g005611m	scaffold	23,7753	0,7914	0,033286646	182,8869231
ZjuHsp100-75	6	orange1.1g002307m	scaffold	21,2473	0,7912	0,037237673	163,4407692
ZjuHsp100-75	6	orange1.1g003619m	scaffold	21,2105	0,7497	0,035345701	163,1576923
ZjuHsp100-75	6	orange1.1g006534m	scaffold	52,1222	0,6706	0,012865919	400,94
ZjuHsp100-75	6	orange1.1g006535m	scaffold	52,1346	0,6704	0,012859023	401,0353846
ZjuHsp100-75	6	orange1.1g003000m	scaffold	54,4441	0,7780	0,014289886	418,8007692
ZjuHsp100-75	6	orange1.1g002754m	scaffold	54,9644	0,7762	0,014121868	422,8030769
ZjuHsp100-75	6	orange1.1g007591m	scaffold	51,978	0,6526	0,012555312	399,8307692
ZjuHsp100-75	6	orange1.1g043863m	scaffold	52,6373	0,6989	0,013277657	404,9023077
ZjuHsp100-76	6	orange1.1g002012m	scaffold	1,0203	0,0987	0,096736254	7,848461538
ZjuHsp100-76	6	orange1.1g002623m	scaffold	35,0231	0,1971	0,005627714	269,4084615
ZjuHsp100-76	6	orange1.1g006289m	scaffold	7,1961	0,0977	0,013576799	55,35461538
ZjuHsp100-76	6	orange1.1g046258m	scaffold	9,2966	0,4142	0,044553923	71,51230769
ZjuHsp100-76	6	orange1.1g003094m	scaffold	55,8062	0,4530	0,008117378	429,2784615
ZjuHsp100-76	6	orange1.1g005517m	scaffold	55,9277	0,3563	0,006370725	430,2130769
ZjuHsp100-76	6	orange1.1g005505m	scaffold	55,9317	0,3563	0,006370269	430,2438462
ZjuHsp100-76	6	orange1.1g005511m	scaffold	55,9331	0,3564	0,006371898	430,2546154
ZjuHsp100-76	6	orange1.1g005515m	scaffold	55,9295	0,3563	0,00637052	430,2269231
ZjuHsp100-76	6	orange1.1g007723m	scaffold	21,7054	0,7201	0,033176076	166,9646154
ZjuHsp100-76	6	orange1.1g005179m	scaffold	31,1249	0,7111	0,02284666	239,4223077
ZjuHsp100-76	6	orange1.1g004878m	scaffold	54,2926	0,6748	0,01242895	417,6353846
ZjuHsp100-76	6	orange1.1g003088m	scaffold	54,3337	0,6039	0,011114649	417,9515385
ZjuHsp100-76	6	orange1.1g047225m	scaffold	47,7792	0,2367	0,004954039	367,5323077
ZjuHsp100-77	6	orange1.1g022768m	scaffold	1,1185	0,0015	0,001341082	8,603846154
ZjuHsp100-77	6	orange1.1g026258m	scaffold	1,3076	0,0158	0,012083206	10,05846154
ZjuHsp100-77	6	orange1.1g014743m	scaffold	55,4653	0,5281	0,009521268	426,6561538
ZjuHsp100-77	6	orange1.1g015875m	scaffold	58,3352	0,5380	0,009222562	448,7323077
ZjuHsp100-77	6	orange1.1g014332m	scaffold	57,7756	0,5435	0,009407085	444,4276923
ZjuHsp100-77	6	orange1.1g013285m	scaffold	8,9164	0,5548	0,062222422	68,58769231
ZjuHsp100-77	6	orange1.1g013269m	scaffold	7,9928	0,5563	0,06960014	61,48307692
ZjuHsp100-77	6	orange1.1g013281m	scaffold	8,9149	0,5548	0,062232891	68,57615385
ZjuHsp100-77	6	orange1.1g017300m	scaffold	55,9098	0,5278	0,009440205	430,0753846
ZjuHsp100-77	6	orange1.1g011553m	scaffold	8,912	0,5548	0,062253142	68,55384615
ZjuHsp100-77	6	orange1.1g039866m	scaffold	54,0291	0,5454	0,01009456	416,6084615
ZjuHsp100-77	6	orange1.1g014525m	scaffold	51,5537	0,5423	0,010519129	396,5669231
ZjuHsp100-77	6	orange1.1g024249m	scaffold	13,4421	0,4076	0,030322643	103,4007692
ZjuHsp100-77	6	orange1.1g017161m	scaffold	58,012	0,5566	0,009594567	446,2461538
ZjuHsp100-77	6	orange1.1g014665m	scaffold	58,6729	0,6194	0,010556833	451,33
ZjuHsp100-77	6	orange1.1g014712m	scaffold	58,6763	0,6195	0,010557925	451,3561538
ZjuHsp100-77	6	orange1.1g007053m	scaffold	7,3081	0,7659	0,104801522	56,21615385
ZjuHsp100-77	6	orange1.1g003691m	scaffold	54,5765	0,7815	0,01431935	419,8192308
ZjuHsp100-77	6	orange1.1g003499m	scaffold	54,9192	0,7786	0,014177191	422,4553846
ZjuHsp100-77	6	orange1.1g003503m	scaffold	54,7922	0,7787	0,014211877	421,4784615
ZjuHsp100-77	6	orange1.1g003493m	scaffold	54,9244	0,7786	0,014175849	422,4953846
ZjuHsp100-77	6	orange1.1g005015m	scaffold	12,8385	0,7957	0,061977645	98,75769231
ZjuHsp100-77	6	orange1.1g005014m	scaffold	12,8427	0,7957	0,061957377	98,79
ZjuHsp100-77	6	orange1.1g003525m	scaffold	54,5766	0,7815	0,014319324	419,82
ZjuHsp100-77	6	orange1.1g003623m	scaffold	12,8443	0,7957	0,061949659	98,80230769
ZjuHsp100-77	6	orange1.1g004384m	scaffold	27,312	0,7871	0,028818834	210,0923077
ZjuHsp100-77	6	orange1.1g004267m	scaffold	21,7975	0,7892	0,036205987	167,6730769
ZjuHsp100-77	6	orange1.1g003620m	scaffold	27,3201	0,7870	0,028806663	210,1546154
ZjuHsp100-78	6	orange1.1g016800m	scaffold	1,0308	0,0644	0,062475747	7,929230769
ZjuHsp100-78	6	orange1.1g019145m	scaffold	1,2203	0,1026	0,084077686	9,386923077
ZjuHsp100-78	6	orange1.1g022641m	scaffold	1,173	0,0777	0,066240409	9,023076923
ZjuHsp100-78	6	orange1.1g025762m	scaffold	2,6658	0,1730	0,064896091	20,50615385
ZjuHsp100-78	6	orange1.1g021660m	scaffold	51,4616	0,6106	0,011865158	395,8584615
ZjuHsp100-78	6	orange1.1g021937m	scaffold	51,9245	0,5869	0,011302949	399,4192308
ZjuHsp100-78	6	orange1.1g021959m	scaffold	51,9253	0,5868	0,011300849	399,4253846
ZjuHsp100-78	6	orange1.1g017884m	scaffold	52,1316	0,6417	0,012309233	401,0123077
ZjuHsp100-78	6	orange1.1g020071m	scaffold	55,404	0,6857	0,012376363	426,1846154
ZjuHsp100-79	6	orange1.1g016800m	scaffold	1,0711	0,0727	0,067874148	8,239230769
ZjuHsp100-79	6	orange1.1g019145m	scaffold	1,2363	0,1008	0,081533608	9,51
ZjuHsp100-79	6	orange1.1g022641m	scaffold	1,173	0,0777	0,066240409	9,023076923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-79	6	orange1.1g025762m	scaffold	2,6658	0,1730	0,064896091	20,50615385
ZjuHsp100-79	6	orange1.1g020071m	scaffold	54,3347	0,6698	0,012327297	417,9592308
ZjuHsp100-79	6	orange1.1g017884m	scaffold	52,4362	0,6802	0,012971954	403,3553846
ZjuHsp100-79	6	orange1.1g021660m	scaffold	51,28	0,6202	0,012094384	394,4615385
ZjuHsp100-79	6	orange1.1g021937m	scaffold	51,9245	0,5868	0,011301024	399,4192308
ZjuHsp100-79	6	orange1.1g021959m	scaffold	51,9227	0,5868	0,011301415	399,4053846
ZjuHsp100-80	7	orange1.1g001395m	scaffold	1,0600	0,2504	0,236226415	8,153846154
ZjuHsp100-80	7	orange1.1g002088m	scaffold	1,0569	0,2625	0,248367868	8,13
ZjuHsp100-80	7	orange1.1g005015m	scaffold	57,5437	0,2636	0,004580866	442,6438462
ZjuHsp100-80	7	orange1.1g005014m	scaffold	57,5428	0,6226	0,010819772	442,6369231
ZjuHsp100-80	7	orange1.1g004384m	scaffold	56,0693	0,6614	0,011796117	431,3023077
ZjuHsp100-80	7	orange1.1g003623m	scaffold	58,1069	0,6530	0,011237908	446,9761538
ZjuHsp100-80	7	orange1.1g003620m	scaffold	55,9232	0,6678	0,011941377	430,1784615
ZjuHsp100-80	7	orange1.1g004267m	scaffold	55,6412	0,6750	0,012131298	428,0092308
ZjuHsp100-80	7	orange1.1g003499m	scaffold	13,6928	0,6892	0,050333022	105,3292308
ZjuHsp100-80	7	orange1.1g003503m	scaffold	12,7941	0,6896	0,053899844	98,41615385
ZjuHsp100-80	7	orange1.1g003493m	scaffold	14,0255	0,6890	0,049124808	107,8884615
ZjuHsp100-80	7	orange1.1g003691m	scaffold	14,5418	0,6800	0,046761749	111,86
ZjuHsp100-80	7	orange1.1g003525m	scaffold	13,0796	0,6866	0,05249396	100,6123077
ZjuHsp100-80	7	orange1.1g042193m	scaffold	55,3281	0,6720	0,012145727	425,6007692
ZjuHsp100-80	7	orange1.1g045279m	scaffold	13,9906	0,6352	0,045401913	107,62
ZjuHsp100-80	7	orange1.1g007053m	scaffold	8,1886	0,6951	0,084886305	62,98923077
ZjuHsp100-80	7	orange1.1g007255m	scaffold	16,5199	0,6238	0,037760519	127,0761538
ZjuHsp100-80	7	orange1.1g044198m	scaffold	8,6977	0,6907	0,079411799	66,90538462
ZjuHsp100-80	7	orange1.1g003743m	scaffold	22,1236	0,8376	0,037860023	170,1815385
ZjuHsp100-80	7	orange1.1g001162m	scaffold	58,1017	0,8876	0,015276661	446,9361538
ZjuHsp100-81	7	orange1.1g000973m	scaffold	1,0188	0,1057	0,10375	7,836923
ZjuHsp100-81	7	orange1.1g000974m	scaffold	1,0188	0,1057	0,10375	7,836923
ZjuHsp100-81	7	orange1.1g002045m	scaffold	0,9753	0,0844	0,086537	7,502308
ZjuHsp100-81	7	orange1.1g003859m	scaffold	1,1367	0,1285	0,113047	8,743846
ZjuHsp100-81	7	orange1.1g001066m	scaffold	58,3536	0,7823	0,013406	448,8738
ZjuHsp100-81	7	orange1.1g007764m	scaffold	22,107	0,7866	0,035581	170,0538
ZjuHsp100-81	7	orange1.1g004384m	scaffold	14,6578	0,8525	0,05816	112,7523
ZjuHsp100-81	7	orange1.1g004267m	scaffold	30,461	0,8436	0,027694	234,3154
ZjuHsp100-81	7	orange1.1g003620m	scaffold	18,7945	0,8621	0,04587	144,5731
ZjuHsp100-81	7	orange1.1g005015m	scaffold	12,8164	0,8347	0,065127	98,58769
ZjuHsp100-81	7	orange1.1g005014m	scaffold	12,8179	0,8347	0,06512	98,59923
ZjuHsp100-81	7	orange1.1g003623m	scaffold	13,7473	0,8579	0,062405	105,7485
ZjuHsp100-81	7	orange1.1g003691m	scaffold	11,2177	0,8565	0,076353	86,29
ZjuHsp100-81	7	orange1.1g042193m	scaffold	53,8162	0,8436	0,015676	413,9708
ZjuHsp100-81	7	orange1.1g003499m	scaffold	10,9187	0,8979	0,082235	83,99
ZjuHsp100-81	7	orange1.1g003503m	scaffold	10,9095	0,8975	0,082268	83,91923
ZjuHsp100-81	7	orange1.1g003493m	scaffold	11,3598	0,8971	0,078971	87,38308
ZjuHsp100-81	7	orange1.1g003525m	scaffold	12,6763	0,8888	0,070115	97,51
ZjuHsp100-81	7	orange1.1g044198m	scaffold	12,4748	0,8656	0,069388	95,96
ZjuHsp100-82	7	orange1.1g000973m	scaffold	1,0172	0,1052	0,103421	7,824615
ZjuHsp100-82	7	orange1.1g000974m	scaffold	1,0172	0,1052	0,103421	7,824615
ZjuHsp100-82	7	orange1.1g002045m	scaffold	0,9736	0,0839	0,086175	7,489231
ZjuHsp100-82	7	orange1.1g003859m	scaffold	1,1356	0,1286	0,113244	8,735385
ZjuHsp100-82	7	orange1.1g001066m	scaffold	58,4355	0,7801	0,01335	449,5038
ZjuHsp100-82	7	orange1.1g007764m	scaffold	22,2166	0,7865	0,035401	170,8969
ZjuHsp100-82	7	orange1.1g004384m	scaffold	14,2418	0,8549	0,060028	109,5523
ZjuHsp100-82	7	orange1.1g004267m	scaffold	50,8607	4,1547	0,081688	391,2362
ZjuHsp100-82	7	orange1.1g003620m	scaffold	18,8115	0,8634	0,045897	144,7038
ZjuHsp100-82	7	orange1.1g005015m	scaffold	13,6803	0,8404	0,061431	105,2331
ZjuHsp100-82	7	orange1.1g005014m	scaffold	13,6803	0,8404	0,061431	105,2331
ZjuHsp100-82	7	orange1.1g003623m	scaffold	13,7473	0,8579	0,062405	105,7485
ZjuHsp100-82	7	orange1.1g003691m	scaffold	11,375	0,8688	0,076378	87,5
ZjuHsp100-82	7	orange1.1g042193m	scaffold	54,0721	0,8391	0,015518	415,9392
ZjuHsp100-82	7	orange1.1g003499m	scaffold	12,151	0,893	0,073492	93,46923
ZjuHsp100-82	7	orange1.1g003503m	scaffold	12,1166	0,8926	0,073668	93,20462
ZjuHsp100-82	7	orange1.1g003493m	scaffold	12,7295	0,8921	0,070081	97,91923
ZjuHsp100-82	7	orange1.1g003525m	scaffold	14,7496	0,8846	0,059975	113,4585
ZjuHsp100-82	7	orange1.1g044198m	scaffold	11,2209	0,8629	0,076901	86,31462
ZjuHsp100-83	7	orange1.1g002241m	scaffold	0,9506	0,2073	0,218073	7,312308
ZjuHsp100-84	7	orange1.1g002241m	scaffold	54,3743	1,1848	0,02179	418,2638
ZjuHsp100-85	7	orange1.1g003088m	scaffold	1,1017	0,2035	0,184715	8,474615
ZjuHsp100-85	7	orange1.1g004878m	scaffold	1,0586	0,2239	0,211506	8,143077
ZjuHsp100-85	7	orange1.1g005179m	scaffold	1,1361	0,2483	0,218555	8,739231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-85	7	orange1.1g007723m	scaffold	1,1211	0,258	0,230131	8,623846
ZjuHsp100-85	7	orange1.1g003094m	scaffold	53,5669	0,4605	0,008597	412,0531
ZjuHsp100-85	7	orange1.1g005517m	scaffold	54,9969	0,4089	0,007435	423,0531
ZjuHsp100-85	7	orange1.1g005505m	scaffold	54,9669	0,409	0,007441	422,8223
ZjuHsp100-85	7	orange1.1g005511m	scaffold	54,968	0,4091	0,007443	422,8308
ZjuHsp100-85	7	orange1.1g005515m	scaffold	54,9696	0,409	0,00744	422,8431
ZjuHsp100-85	7	orange1.1g002068m	scaffold	53,3066	0,5939	0,011141	410,0508
ZjuHsp100-85	7	orange1.1g002012m	scaffold	47,0367	0,604	0,012841	361,8208
ZjuHsp100-85	7	orange1.1g046258m	scaffold	0,2054	16,3562	79,63096	1,58
ZjuHsp100-85	7	orange1.1g002623m	scaffold	53,9798	0,5892	0,010915	415,2292
ZjuHsp100-85	7	orange1.1g002623m	scaffold	53,9797	0,589	0,010912	415,2285
ZjuHsp100-85	7	orange1.1g006289m	scaffold	56,0706	0,4584	0,008175	431,3123
ZjuHsp100-85	7	orange1.1g047225m	scaffold	51,3208	0,3815	0,007434	394,7754
ZjuHsp100-86	8	orange1.1g011393m	scaffold	0,8995	0,1363	0,151529	6,919231
ZjuHsp100-86	8	orange1.1g012000m	scaffold	0,9144	0,14	0,153106	7,033846
ZjuHsp100-86	8	orange1.1g011305m	scaffold	53,2136	0,6913	0,012991	409,3354
ZjuHsp100-86	8	orange1.1g011400m	scaffold	53,4843	0,6873	0,012851	411,4177
ZjuHsp100-86	8	orange1.1g010888m	scaffold	53,5855	0,6887	0,012852	412,1962
ZjuHsp100-86	8	orange1.1g010975m	scaffold	53,7239	0,688	0,012806	413,2608
ZjuHsp100-86	8	orange1.1g042771m	scaffold	51,9676	0,7606	0,014636	399,7508
ZjuHsp100-86	8	orange1.1g009911m	scaffold	54,6793	0,7315	0,013378	420,61
ZjuHsp100-86	8	orange1.1g001746m	scaffold	53,1653	0,7619	0,014331	408,9638
ZjuHsp100-86	8	orange1.1g001735m	scaffold	53,1658	0,7617	0,014327	408,9677
ZjuHsp100-86	8	orange1.1g001707m	scaffold	53,2528	0,759	0,014253	409,6369
ZjuHsp100-86	8	orange1.1g004916m	scaffold	9,7798	0,789	0,080676	75,22923
ZjuHsp100-86	8	orange1.1g001861m	scaffold	10,1599	0,7851	0,077274	78,15308
ZjuHsp100-86	8	orange1.1g001862m	scaffold	10,1578	0,7851	0,07729	78,13692
ZjuHsp100-86	8	orange1.1g001227m	scaffold	0,1663	15,9303	95,79254	1,279231
ZjuHsp100-86	8	orange1.1g001309m	scaffold	10,206	0,7821	0,076631	78,50769
ZjuHsp100-86	8	orange1.1g000914m	scaffold	10,1577	0,7851	0,077291	78,13615
ZjuHsp100-86	8	orange1.1g000950m	scaffold	10,158	0,7851	0,077289	78,13846
ZjuHsp100-86	8	orange1.1g000858m	scaffold	10,1608	0,7851	0,077268	78,16
ZjuHsp100-86	8	orange1.1g000925m	scaffold	10,1599	0,7851	0,077274	78,15308
ZjuHsp100-86	8	orange1.1g006411m	scaffold	55,1845	0,714	0,012938	424,4962
ZjuHsp100-86	8	orange1.1g016911m	scaffold	52,3471	0,6398	0,012222	402,67
ZjuHsp100-86	8	orange1.1g016044m	scaffold	54,3954	0,7114	0,013078	418,4262
ZjuHsp100-86	8	orange1.1g003231m	scaffold	50,1065	0,7837	0,015641	385,4346
ZjuHsp100-87	8	orange1.1g005762m	scaffold	1,1243	0,1856	0,16508	8,648462
ZjuHsp100-87	8	orange1.1g005667m	scaffold	52,4407	0,3321	0,006333	403,39
ZjuHsp100-87	8	orange1.1g005663m	scaffold	52,401	0,3337	0,006368	403,0846
ZjuHsp100-87	8	orange1.1g005670m	scaffold	52,4401	0,3336	0,006362	403,3854
ZjuHsp100-87	8	orange1.1g005637m	scaffold	52,571	0,3321	0,006317	404,3923
ZjuHsp100-87	8	orange1.1g038067m	scaffold	2,8203	0,2598	0,092118	21,69462
ZjuHsp100-87	8	orange1.1g007362m	scaffold	1,1742	0,1943	0,165474	9,032308
ZjuHsp100-87	8	orange1.1g008014m	scaffold	52,0797	0,3774	0,007247	400,6131
ZjuHsp100-87	8	orange1.1g008176m	scaffold	52,1324	0,3662	0,007024	401,0185
ZjuHsp100-87	8	orange1.1g008723m	scaffold	1,1634	0,2123	0,182482	8,949231
ZjuHsp100-87	8	orange1.1g008329m	scaffold	54,0776	0,3071	0,005679	415,9815
ZjuHsp100-87	8	orange1.1g012525m	scaffold	1,4779	0,306	0,207051	11,36846
ZjuHsp100-88	8	orange1.1g019702m	scaffold	1,0284	0,1321	0,128452	7,910769
ZjuHsp100-88	8	orange1.1g017797m	scaffold	1,0671	0,1582	0,148252	8,208462
ZjuHsp100-88	8	orange1.1g025371m	scaffold	0,9494	0,1111	0,117021	7,303077
ZjuHsp100-88	8	orange1.1g027392m	scaffold	0,9318	0,1163	0,124812	7,167692
ZjuHsp100-88	8	orange1.1g027390m	scaffold	0,9318	0,1163	0,124812	7,167692
ZjuHsp100-88	8	orange1.1g026207m	scaffold	1,2875	0,1984	0,154097	9,903846
ZjuHsp100-88	8	orange1.1g005344m	scaffold	55,371	0,4787	0,008645	425,9308
ZjuHsp100-88	8	orange1.1g038101m	scaffold	55,1118	0,5424	0,009842	423,9369
ZjuHsp100-89	8	orange1.1g006700m	scaffold	1,0667	0,1351	0,126652	8,205385
ZjuHsp100-89	8	orange1.1g009856m	scaffold	1,0492	0,1239	0,11809	8,070769
ZjuHsp100-89	8	orange1.1g006458m	scaffold	7,8436	0,2367	0,030177	60,33538
ZjuHsp100-89	8	orange1.1g010366m	scaffold	49,7542	0,2245	0,004512	382,7246
ZjuHsp100-89	8	orange1.1g012305m	scaffold	0,9746	0,1561	0,160168	7,496923
ZjuHsp100-89	8	orange1.1g014938m	scaffold	0,9585	0,1693	0,17663	7,373077
ZjuHsp100-89	8	orange1.1g012671m	scaffold	1,1032	0,227	0,205765	8,486154
ZjuHsp100-90	8	orange1.1g012016m	scaffold	3,384	0,233	0,068853	26,03077
ZjuHsp100-90	8	orange1.1g012846m	scaffold	4,2778	0,3487	0,081514	32,90615
ZjuHsp100-90	8	orange1.1g011254m	scaffold	21,1126	0,3805	0,018022	162,4046
ZjuHsp100-90	8	orange1.1g013128m	scaffold	21,6228	0,3335	0,015424	166,3292
ZjuHsp100-90	8	orange1.1g011935m	scaffold	17,4213	0,3808	0,021858	134,01

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-90	8	orange1.1g011374m	scaffold	49,5582	0,4053	0,008178	381,2169
ZjuHsp100-90	8	orange1.1g013083m	scaffold	7,2077	0,3517	0,048795	55,44385
ZjuHsp100-90	8	orange1.1g011286m	scaffold	49,8975	0,4048	0,008113	383,8269
ZjuHsp100-90	8	orange1.1g009791m	scaffold	8,5689	0,4409	0,051454	65,91462
ZjuHsp100-90	8	orange1.1g047029m	scaffold	23,2534	0,4198	0,018053	178,8723
ZjuHsp100-90	8	orange1.1g013823m	scaffold	3,7389	0,4101	0,109685	28,76077
ZjuHsp100-90	8	orange1.1g040638m	scaffold	6,2621	0,4177	0,066703	48,17
ZjuHsp100-90	8	orange1.1g041382m	scaffold	52,2693	0,5106	0,009769	402,0715
ZjuHsp100-90	8	orange1.1g048683m	scaffold	26,1604	0,4032	0,015413	201,2338
ZjuHsp100-90	8	orange1.1g041423m	scaffold	50,2364	0,59	0,011744	386,4338
ZjuHsp100-90	8	orange1.1g024550m	scaffold	7,09	0,2719	0,03835	54,53846
ZjuHsp100-90	8	orange1.1g011573m	scaffold	42,4196	0,604	0,014239	326,3046
ZjuHsp100-90	8	orange1.1g010133m	scaffold	51,4683	0,6358	0,012353	395,91
ZjuHsp100-90	8	orange1.1g009640m	scaffold	27,14	0,7027	0,025892	208,7692
ZjuHsp100-90	8	orange1.1g037859m	scaffold	52,3306	0,6069	0,011597	402,5431
ZjuHsp100-90	8	orange1.1g035603m	scaffold	53,0999	0,5586	0,01052	408,4608
ZjuHsp100-90	8	orange1.1g009791m	scaffold	3,0227	0,2932	0,096999	23,25154
ZjuHsp100-91	8	orange1.1g011935m	scaffold	4,0319	0,2879	0,071406	31,01462
ZjuHsp100-91	8	orange1.1g012016m	scaffold	4,1143	0,3937	0,095691	31,64846
ZjuHsp100-91	8	orange1.1g011254m	scaffold	8,5289	0,4385	0,051413	65,60692
ZjuHsp100-91	8	orange1.1g047029m	scaffold	11,3893	0,3737	0,032811	87,61
ZjuHsp100-91	8	orange1.1g013823m	scaffold	2,8878	0,3091	0,107036	22,21385
ZjuHsp100-91	8	orange1.1g012846m	scaffold	4,5215	0,4031	0,089152	34,78077
ZjuHsp100-91	8	orange1.1g011374m	scaffold	8,5899	0,4281	0,049838	66,07615
ZjuHsp100-91	8	orange1.1g011286m	scaffold	9,6147	0,4305	0,044775	73,95923
ZjuHsp100-91	8	orange1.1g013128m	scaffold	8,6268	0,4082	0,047318	66,36
ZjuHsp100-91	8	orange1.1g013083m	scaffold	14,3534	0,4203	0,029282	110,4108
ZjuHsp100-91	8	orange1.1g041423m	scaffold	46,276	0,5981	0,012925	355,9692
ZjuHsp100-91	8	orange1.1g041382m	scaffold	5,3095	0,5626	0,105961	40,84231
ZjuHsp100-91	8	orange1.1g040638m	scaffold	7,4159	0,4264	0,057498	57,04538
ZjuHsp100-91	8	orange1.1g011573m	scaffold	19,1544	0,5748	0,030009	147,3415
ZjuHsp100-91	8	orange1.1g024550m	scaffold	5,9423	0,3132	0,052707	45,71
ZjuHsp100-91	8	orange1.1g010133m	scaffold	54,8068	0,6821	0,012446	421,5908
ZjuHsp100-91	8	orange1.1g009640m	scaffold	52,8669	0,6289	0,011896	406,6685
ZjuHsp100-91	8	orange1.1g048683m	scaffold	10,8186	0,4692	0,04337	83,22
ZjuHsp100-91	8	orange1.1g037859m	scaffold	54,724	0,6243	0,011408	420,9538
ZjuHsp100-92	8	orange1.1g011935m	scaffold	2,6638	0,2169	0,081425	20,49077
ZjuHsp100-92	8	orange1.1g013823m	scaffold	2,8276	0,235	0,083109	21,75077
ZjuHsp100-92	8	orange1.1g047029m	scaffold	29,386	0,3459	0,011771	226,0462
ZjuHsp100-92	8	orange1.1g009791m	scaffold	4,7882	0,3664	0,076521	36,83231
ZjuHsp100-92	8	orange1.1g012016m	scaffold	14,3426	0,4007	0,027938	110,3277
ZjuHsp100-92	8	orange1.1g012846m	scaffold	53,5729	0,3973	0,007416	412,0992
ZjuHsp100-92	8	orange1.1g011254m	scaffold	34,614	0,4251	0,012281	266,2615
ZjuHsp100-92	8	orange1.1g011374m	scaffold	52,1664	0,4205	0,008061	401,28
ZjuHsp100-92	8	orange1.1g011286m	scaffold	53,2396	0,4168	0,007829	409,5354
ZjuHsp100-92	8	orange1.1g013083m	scaffold	9,1194	0,4144	0,045442	70,14923
ZjuHsp100-92	8	orange1.1g013128m	scaffold	16,559	0,4326	0,026125	127,3769
ZjuHsp100-92	8	orange1.1g041423m	scaffold	51,2736	0,5949	0,011602	394,4123
ZjuHsp100-92	8	orange1.1g040638m	scaffold	53,2169	0,4292	0,008065	409,3608
ZjuHsp100-92	8	orange1.1g041382m	scaffold	51,1603	0,5906	0,011544	393,5408
ZjuHsp100-92	8	orange1.1g011573m	scaffold	50,0799	0,5963	0,011907	385,23
ZjuHsp100-92	8	orange1.1g010133m	scaffold	55,6201	0,6244	0,011226	427,8469
ZjuHsp100-92	8	orange1.1g024550m	scaffold	54,4197	0,2686	0,004936	418,6131
ZjuHsp100-92	8	orange1.1g045456m	scaffold	53,5243	0,3952	0,007384	411,7254
ZjuHsp100-92	8	orange1.1g048683m	scaffold	35,3028	0,4752	0,013461	271,56
ZjuHsp100-92	8	orange1.1g037859m	scaffold	53,1656	0,6015	0,011314	408,9662
ZjuHsp100-92	8	orange1.1g009640m	scaffold	4,5604	0,6717	0,14729	35,08
ZjuHsp100-93	8	orange1.1g011935m	scaffold	2,6941	0,2505	0,092981	20,72385
ZjuHsp100-93	8	orange1.1g009791m	scaffold	7,5767	0,3632	0,047936	58,28231
ZjuHsp100-93	8	orange1.1g013823m	scaffold	2,7058	0,3663	0,135376	20,81385
ZjuHsp100-93	8	orange1.1g012846m	scaffold	53,7983	0,4451	0,008273	413,8331
ZjuHsp100-93	8	orange1.1g047029m	scaffold	55,3106	0,3731	0,006746	425,4662
ZjuHsp100-93	8	orange1.1g011254m	scaffold	52,5713	0,4941	0,009399	404,3946
ZjuHsp100-93	8	orange1.1g012016m	scaffold	9,7806	0,4473	0,045733	75,23538
ZjuHsp100-93	8	orange1.1g013083m	scaffold	3,5989	0,4768	0,132485	27,68385
ZjuHsp100-93	8	orange1.1g045456m	scaffold	52,6787	0,3916	0,007434	405,2208
ZjuHsp100-93	8	orange1.1g011286m	scaffold	52,703	0,4869	0,009239	405,4077
ZjuHsp100-93	8	orange1.1g013128m	scaffold	19,583	0,5033	0,025701	150,6385
ZjuHsp100-93	8	orange1.1g040638m	scaffold	54,0622	0,5302	0,009807	415,8631

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-93	8	orange1.1g011374m	scaffold	52,3849	0,4843	0,009245	402,9608
ZjuHsp100-93	8	orange1.1g041423m	scaffold	6,1632	0,6758	0,109651	47,40923
ZjuHsp100-93	8	orange1.1g010133m	scaffold	57,9438	0,6279	0,010836	445,7215
ZjuHsp100-93	8	orange1.1g041382m	scaffold	9,2077	0,6225	0,067606	70,82846
ZjuHsp100-93	8	orange1.1g048683m	scaffold	33,8236	0,5849	0,017293	260,1815
ZjuHsp100-93	8	orange1.1g035959m	scaffold	53,7923	0,5474	0,010176	413,7869
ZjuHsp100-93	8	orange1.1g011573m	scaffold	52,8108	0,643	0,012176	406,2369
ZjuHsp100-93	8	orange1.1g011573m	scaffold	52,812	0,643	0,012175	406,2462
ZjuHsp100-93	8	orange1.1g035959m	scaffold	53,7912	0,5473	0,010175	413,7785
ZjuHsp100-93	8	orange1.1g009640m	scaffold	58,655	0,6508	0,011095	451,1923
ZjuHsp100-94	8	orange1.1g001162m	scaffold	0,8603	0,1948	0,226433	6,617692
ZjuHsp100-94	8	orange1.1g001491m	scaffold	0,9485	0,2306	0,243121	7,296154
ZjuHsp100-94	8	orange1.1g001811m	scaffold	0,9581	0,2249	0,234735	7,37
ZjuHsp100-94	8	orange1.1g003743m	scaffold	0,8185	0,1722	0,210385	6,296154
ZjuHsp100-94	8	orange1.1g001560m	scaffold	0,9581	0,2249	0,234735	7,37
ZjuHsp100-94	8	orange1.1g001808m	scaffold	0,9581	0,2249	0,234735	7,37
ZjuHsp100-94	8	orange1.1g005015m	scaffold	54,2096	0,8437	0,015564	416,9969
ZjuHsp100-94	8	orange1.1g002386m	scaffold	0,9252	0,2317	0,250432	7,116923
ZjuHsp100-94	8	orange1.1g005014m	scaffold	54,2109	0,8437	0,015563	417,0069
ZjuHsp100-94	8	orange1.1g003623m	scaffold	54,5801	0,8647	0,015843	419,8469
ZjuHsp100-94	8	orange1.1g004267m	scaffold	52,7157	0,8839	0,016767	405,5054
ZjuHsp100-94	8	orange1.1g003691m	scaffold	42,2348	0,8589	0,020336	324,8831
ZjuHsp100-94	8	orange1.1g004384m	scaffold	54,0767	0,8571	0,01585	415,9746
ZjuHsp100-94	8	orange1.1g003620m	scaffold	53,5756	0,8759	0,016349	412,12
ZjuHsp100-94	8	orange1.1g003499m	scaffold	45,3481	0,8725	0,01924	348,8315
ZjuHsp100-94	8	orange1.1g003525m	scaffold	48,1251	0,8689	0,018055	370,1931
ZjuHsp100-94	8	orange1.1g003493m	scaffold	47,885	0,8724	0,018219	368,3462
ZjuHsp100-94	8	orange1.1g003503m	scaffold	46,8267	0,8723	0,018628	360,2054
ZjuHsp100-94	8	orange1.1g044198m	scaffold	55,032	0,852	0,015482	423,3231
ZjuHsp100-94	8	orange1.1g042193m	scaffold	0,1638	16,0879	98,21673	1,26
ZjuHsp100-95	8	orange1.1g001491m	scaffold	0,8881	0,2322	0,261457	6,831538
ZjuHsp100-95	8	orange1.1g001162m	scaffold	0,8264	0,2021	0,244555	6,356923
ZjuHsp100-95	8	orange1.1g001808m	scaffold	0,895	0,2273	0,253966	6,884615
ZjuHsp100-95	8	orange1.1g001811m	scaffold	0,895	0,2274	0,254078	6,884615
ZjuHsp100-95	8	orange1.1g002386m	scaffold	0,8684	0,233	0,26831	6,68
ZjuHsp100-95	8	orange1.1g001560m	scaffold	0,895	0,2273	0,253966	6,884615
ZjuHsp100-95	8	orange1.1g005015m	scaffold	54,2151	0,8411	0,015514	417,0392
ZjuHsp100-95	8	orange1.1g003743m	scaffold	0,8185	0,1722	0,210385	6,296154
ZjuHsp100-95	8	orange1.1g003623m	scaffold	54,5801	0,8648	0,015845	419,8469
ZjuHsp100-95	8	orange1.1g005014m	scaffold	54,2143	0,841	0,015513	417,0331
ZjuHsp100-95	8	orange1.1g003691m	scaffold	43,2927	0,8556	0,019763	333,0208
ZjuHsp100-95	8	orange1.1g004267m	scaffold	52,7176	0,8839	0,016767	405,52
ZjuHsp100-95	8	orange1.1g003525m	scaffold	48,9778	0,8656	0,017673	376,7523
ZjuHsp100-95	8	orange1.1g004384m	scaffold	54,1578	0,8565	0,015815	416,5985
ZjuHsp100-95	8	orange1.1g003503m	scaffold	47,2126	0,8691	0,018408	363,1738
ZjuHsp100-95	8	orange1.1g003499m	scaffold	46,8474	0,8693	0,018556	360,3646
ZjuHsp100-95	8	orange1.1g003499m	scaffold	45,3481	0,8725	0,01924	348,8315
ZjuHsp100-96	8	orange1.1g043051m	scaffold	0,9528	0,0617	0,064757	7,329231
ZjuHsp100-97	8	orange1.1g043051m	scaffold	0,9528	0,0617	0,064757	7,329231
ZjuHsp100-98	8	orange1.1g005762m	scaffold	2,6263	0,3339	0,127137	20,20231
ZjuHsp100-98	8	orange1.1g038067m	scaffold	1,215	0,2608	0,21465	9,346154
ZjuHsp100-98	8	orange1.1g005667m	scaffold	6,8748	0,4101	0,059653	52,88308
ZjuHsp100-98	8	orange1.1g005663m	scaffold	6,8898	0,4116	0,05974	52,99846
ZjuHsp100-98	8	orange1.1g005670m	scaffold	7,0149	0,4116	0,058675	53,96077
ZjuHsp100-98	8	orange1.1g005637m	scaffold	8,0319	0,4076	0,050748	61,78385
ZjuHsp100-98	8	orange1.1g007362m	scaffold	2,4627	0,329	0,133593	18,94385
ZjuHsp100-98	8	orange1.1g008176m	scaffold	50,6558	0,4448	0,008781	389,66
ZjuHsp100-98	8	orange1.1g008723m	scaffold	2,7465	0,3696	0,134571	21,12692
ZjuHsp100-98	8	orange1.1g008014m	scaffold	15,4891	0,4582	0,029582	119,1469
ZjuHsp100-98	8	orange1.1g012525m	scaffold	53,0166	0,4144	0,007816	407,82
ZjuHsp100-98	8	orange1.1g008329m	scaffold	51,522	0,4726	0,009173	396,3231
ZjuHsp100-99	9	orange1.1g000950m	scaffold	1,1496	0,1698	0,147704	8,843077
ZjuHsp100-99	9	orange1.1g000858m	scaffold	1,1482	0,1743	0,151803	8,832308
ZjuHsp100-99	9	orange1.1g000925m	scaffold	1,1445	0,1718	0,150109	8,803846
ZjuHsp100-99	9	orange1.1g000914m	scaffold	1,1361	0,1754	0,154388	8,739231
ZjuHsp100-99	9	orange1.1g001309m	scaffold	1,1212	0,1416	0,126293	8,624615
ZjuHsp100-99	9	orange1.1g001227m	scaffold	1,1199	0,1482	0,132333	8,614615
ZjuHsp100-99	9	orange1.1g000921m	scaffold	1,1479	0,1797	0,156547	8,83
ZjuHsp100-99	9	orange1.1g001031m	scaffold	1,1458	0,1823	0,159103	8,813846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-99	9	orange1.1g001076m	scaffold	1,1292	0,1868	0,165427	8,686154
ZjuHsp100-99	9	orange1.1g001862m	scaffold	1,1295	0,1219	0,107924	8,688462
ZjuHsp100-99	9	orange1.1g001861m	scaffold	1,1295	0,1219	0,107924	8,688462
ZjuHsp100-99	9	orange1.1g000888m	scaffold	4,4148	0,3184	0,072121	33,96
ZjuHsp100-99	9	orange1.1g001244m	scaffold	1,1517	0,19	0,164974	8,859231
ZjuHsp100-99	9	orange1.1g000978m	scaffold	4,3165	0,3245	0,075177	33,20385
ZjuHsp100-99	9	orange1.1g000823m	scaffold	4,3991	0,319	0,072515	33,83923
ZjuHsp100-99	9	orange1.1g003253m	scaffold	3,4226	0,2052	0,059954	26,32769
ZjuHsp100-99	9	orange1.1g004916m	scaffold	1,0418	0,1145	0,109906	8,013846
ZjuHsp100-99	9	orange1.1g003126m	scaffold	1,2659	0,2484	0,196224	9,737692
ZjuHsp100-99	9	orange1.1g001150m	scaffold	5,2659	0,3419	0,064927	40,50692
ZjuHsp100-99	9	orange1.1g001746m	scaffold	50,1184	0,6286	0,012542	385,5262
ZjuHsp100-99	9	orange1.1g004011m	scaffold	1,3406	0,2622	0,195584	10,31231
ZjuHsp100-99	9	orange1.1g001735m	scaffold	57,6229	0,6303	0,010938	443,2531
ZjuHsp100-99	9	orange1.1g003231m	scaffold	54,2085	0,5454	0,010061	416,9885
ZjuHsp100-99	9	orange1.1g001707m	scaffold	61,2994	0,6349	0,010357	471,5338
ZjuHsp100-99	9	orange1.1g016044m	scaffold	55,7796	0,5746	0,010301	429,0738
ZjuHsp100-100	9	orange1.1g001227m	scaffold	1,2795	0,1799	0,140602	9,842308
ZjuHsp100-100	9	orange1.1g000858m	scaffold	1,1721	0,1613	0,137616	9,016154
ZjuHsp100-100	9	orange1.1g001309m	scaffold	1,2705	0,1722	0,135537	9,773077
ZjuHsp100-100	9	orange1.1g000950m	scaffold	1,1778	0,1588	0,134828	9,06
ZjuHsp100-100	9	orange1.1g001862m	scaffold	1,1295	0,1219	0,107924	8,688462
ZjuHsp100-100	9	orange1.1g001861m	scaffold	1,1295	0,1219	0,107924	8,688462
ZjuHsp100-100	9	orange1.1g000925m	scaffold	1,1687	0,1583	0,13545	8,99
ZjuHsp100-100	9	orange1.1g000914m	scaffold	1,1593	0,1622	0,139912	8,917692
ZjuHsp100-100	9	orange1.1g001031m	scaffold	1,171	0,169	0,144321	9,007692
ZjuHsp100-100	9	orange1.1g000921m	scaffold	1,1722	0,1667	0,142211	9,016923
ZjuHsp100-100	9	orange1.1g001244m	scaffold	1,1794	0,1763	0,149483	9,072308
ZjuHsp100-100	9	orange1.1g001076m	scaffold	1,1529	0,1736	0,150577	8,868462
ZjuHsp100-100	9	orange1.1g000888m	scaffold	5,0126	0,3162	0,063081	38,55846
ZjuHsp100-100	9	orange1.1g004916m	scaffold	1,0418	0,1145	0,109906	8,013846
ZjuHsp100-100	9	orange1.1g004916m	scaffold	4,8475	0,3226	0,06655	37,28846
ZjuHsp100-100	9	orange1.1g000823m	scaffold	4,9955	0,3168	0,063417	38,42692
ZjuHsp100-100	9	orange1.1g001150m	scaffold	6,0163	0,3412	0,056713	46,27923
ZjuHsp100-100	9	orange1.1g003253m	scaffold	3,4226	0,2052	0,059954	26,32769
ZjuHsp100-100	9	orange1.1g004011m	scaffold	1,4429	0,2496	0,172985	11,09923
ZjuHsp100-100	9	orange1.1g003126m	scaffold	1,3335	0,2355	0,176603	10,25769
ZjuHsp100-100	9	orange1.1g003126m	scaffold	61,272	0,6356	0,010373	471,3231
ZjuHsp100-100	9	orange1.1g001735m	scaffold	61,1683	0,6324	0,010339	470,5254
ZjuHsp100-100	9	orange1.1g003231m	scaffold	54,2079	0,5456	0,010065	416,9838
ZjuHsp100-100	9	orange1.1g001707m	scaffold	61,3629	0,6403	0,010435	472,0223
ZjuHsp100-100	9	orange1.1g016044m	scaffold	55,8712	0,5688	0,010181	429,7785
ZjuHsp100-101	9	orange1.1g002159m	scaffold	0,8855	0,1727	0,195031	6,811538
ZjuHsp100-101	9	orange1.1g004267m	scaffold	53,036	0,8131	0,015331	407,9692
ZjuHsp100-101	9	orange1.1g002337m	scaffold	0,8874	0,178	0,200586	6,826154
ZjuHsp100-101	9	orange1.1g004384m	scaffold	54,8636	0,7837	0,014285	422,0277
ZjuHsp100-101	9	orange1.1g042193m	scaffold	54,1298	0,7614	0,014066	416,3831
ZjuHsp100-101	9	orange1.1g005015m	scaffold	56,3311	0,7599	0,01349	433,3162
ZjuHsp100-101	9	orange1.1g003620m	scaffold	53,5598	0,8144	0,015205	411,9985
ZjuHsp100-101	9	orange1.1g003623m	scaffold	54,6455	0,8077	0,014781	420,35
ZjuHsp100-101	9	orange1.1g005014m	scaffold	56,33	0,7599	0,01349	433,3077
ZjuHsp100-101	9	orange1.1g003499m	scaffold	14,4532	0,8272	0,057233	111,1785
ZjuHsp100-101	9	orange1.1g003691m	scaffold	15,9304	0,8177	0,05133	122,5415
ZjuHsp100-101	9	orange1.1g003493m	scaffold	14,9747	0,8269	0,05522	115,19
ZjuHsp100-101	9	orange1.1g003503m	scaffold	13,6431	0,8276	0,060661	104,9469
ZjuHsp100-101	9	orange1.1g007053m	scaffold	33,061	0,8116	0,024549	254,3154
ZjuHsp100-101	9	orange1.1g003525m	scaffold	14,7428	0,822	0,055756	113,4062
ZjuHsp100-101	9	orange1.1g045279m	scaffold	54,8972	0,8578	0,015626	422,2862
ZjuHsp100-101	9	orange1.1g044198m	scaffold	56,2564	0,8336	0,014818	432,7415
ZjuHsp100-101	9	orange1.1g003743m	scaffold	56,8126	0,8113	0,01428	437,02
ZjuHsp100-101	9	orange1.1g002169m	scaffold	52,3985	0,8468	0,016161	403,0654
ZjuHsp100-101	9	orange1.1g002088m	scaffold	52,4706	0,8337	0,015889	403,62
ZjuHsp100-102	9	orange1.1g013269m	scaffold	1,5214	0,0089	0,00585	11,70308
ZjuHsp100-102	9	orange1.1g013285m	scaffold	1,5209	0,009	0,005918	11,69923
ZjuHsp100-102	9	orange1.1g011553m	scaffold	1,521	0,009	0,005917	11,7
ZjuHsp100-102	9	orange1.1g013281m	scaffold	1,5209	0,009	0,005918	11,69923
ZjuHsp100-102	9	orange1.1g014525m	scaffold	51,8833	0,5202	0,010026	399,1023
ZjuHsp100-102	9	orange1.1g014743m	scaffold	53,3501	0,5343	0,010015	410,3854
ZjuHsp100-102	9	orange1.1g024249m	scaffold	55,0694	0,3315	0,00602	423,6108

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-102	9	orange1.1g039866m	scaffold	51,2438	0,5274	0,010292	394,1831
ZjuHsp100-102	9	orange1.1g014332m	scaffold	35,6223	0,5654	0,015872	274,0177
ZjuHsp100-102	9	orange1.1g015875m	scaffold	37,9236	0,5903	0,015566	291,72
ZjuHsp100-102	9	orange1.1g022768m	scaffold	7,8018	0,4186	0,053654	60,01385
ZjuHsp100-102	9	orange1.1g017300m	scaffold	53,1919	0,5502	0,010344	409,1685
ZjuHsp100-102	9	orange1.1g014665m	scaffold	54,8372	0,6116	0,011153	421,8246
ZjuHsp100-102	9	orange1.1g017161m	scaffold	53,2781	0,566	0,010624	409,8315
ZjuHsp100-102	9	orange1.1g026258m	scaffold	7,908	0,3922	0,049595	60,83077
ZjuHsp100-102	9	orange1.1g014712m	scaffold	54,8368	0,6116	0,011153	421,8215
ZjuHsp100-102	9	orange1.1g044198m	scaffold	20,7318	0,6997	0,03375	159,4754
ZjuHsp100-102	9	orange1.1g007764m	scaffold	53,6619	0,7682	0,014316	412,7838
ZjuHsp100-102	9	orange1.1g005014m	scaffold	54,3949	0,6923	0,012727	418,4223
ZjuHsp100-102	9	orange1.1g005015m	scaffold	54,3918	0,6922	0,012726	418,3985
ZjuHsp100-102	9	orange1.1g004384m	scaffold	54,1027	0,7084	0,013094	416,1746
ZjuHsp100-102	9	orange1.1g004267m	scaffold	54,4752	0,7512	0,01379	419,04
ZjuHsp100-102	9	orange1.1g003620m	scaffold	54,4785	0,7512	0,013789	419,0654
ZjuHsp100-102	9	orange1.1g003623m	scaffold	53,6612	0,7682	0,014316	412,7785
ZjuHsp100-102	9	orange1.1g042193m	scaffold	51,0594	0,7208	0,014117	392,7646
ZjuHsp100-103	9	orange1.1g006411m	scaffold	1,079	0,2083	0,193049	8,3
ZjuHsp100-103	9	orange1.1g011393m	scaffold	57,5857	0,6308	0,010954	442,9669
ZjuHsp100-103	9	orange1.1g012000m	scaffold	57,3043	0,6584	0,01149	440,8023
ZjuHsp100-103	9	orange1.1g009911m	scaffold	54,6627	0,765	0,013995	420,4823
ZjuHsp100-103	9	orange1.1g048683m	scaffold	2,3809	0,4589	0,192742	18,31462
ZjuHsp100-104	10	orange1.1g012846m	scaffold	3,071	0,5067	0,164995	23,62308
ZjuHsp100-104	10	orange1.1g013083m	scaffold	1,6526	0,3616	0,218807	12,71231
ZjuHsp100-104	10	orange1.1g013128m	scaffold	1,9863	0,3238	0,163017	15,27923
ZjuHsp100-104	10	orange1.1g013823m	scaffold	9,5868	0,5663	0,059071	73,74462
ZjuHsp100-104	10	orange1.1g012016m	scaffold	1,9768	0,5153	0,260674	15,20615
ZjuHsp100-104	10	orange1.1g047029m	scaffold	3,2242	0,5547	0,172043	24,80154
ZjuHsp100-104	10	orange1.1g011935m	scaffold	9,1341	0,5222	0,05717	70,26231
ZjuHsp100-104	10	orange1.1g011254m	scaffold	18,807	0,5787	0,03077	144,6692
ZjuHsp100-104	10	orange1.1g011374m	scaffold	11,323	0,5541	0,048936	87,1
ZjuHsp100-104	10	orange1.1g011286m	scaffold	9,134	0,5614	0,061463	70,26154
ZjuHsp100-104	10	orange1.1g041382m	scaffold	13,2706	0,5796	0,043675	102,0815
ZjuHsp100-105	10	orange1.1g002754m	scaffold	1,185	0,151	0,127426	9,115385
ZjuHsp100-105	10	orange1.1g003000m	scaffold	1,1619	0,147	0,126517	8,937692
ZjuHsp100-105	10	orange1.1g003795m	scaffold	1,2864	0,1435	0,111552	9,895385
ZjuHsp100-105	10	orange1.1g002961m	scaffold	1,1669	0,1561	0,133773	8,976154
ZjuHsp100-105	10	orange1.1g003669m	scaffold	1,5266	0,1867	0,122298	11,74308
ZjuHsp100-105	10	orange1.1g003677m	scaffold	1,5266	0,1867	0,122298	11,74308
ZjuHsp100-105	10	orange1.1g005815m	scaffold	52,4893	0,7833	0,014923	403,7638
ZjuHsp100-105	10	orange1.1g004921m	scaffold	50,7068	0,763	0,015047	390,0523
ZjuHsp100-105	10	orange1.1g007989m	scaffold	55,7633	0,7035	0,012616	428,9485
ZjuHsp100-105	10	orange1.1g007367m	scaffold	45,2681	0,7429	0,016411	348,2162
ZjuHsp100-105	10	orange1.1g005495m	scaffold	54,6395	0,7454	0,013642	420,3038
ZjuHsp100-105	10	orange1.1g005480m	scaffold	54,6398	0,7453	0,01364	420,3062
ZjuHsp100-105	10	orange1.1g005003m	scaffold	54,6852	0,7631	0,013954	420,6554
ZjuHsp100-105	10	orange1.1g005479m	scaffold	54,6418	0,7453	0,01364	420,3215
ZjuHsp100-105	10	orange1.1g005304m	scaffold	54,2759	0,7483	0,013787	417,5069
ZjuHsp100-105	10	orange1.1g005003m	scaffold	54,6846	0,763	0,013953	420,6508
ZjuHsp100-105	10	orange1.1g007190m	scaffold	55,335	0,7536	0,013619	425,6538
ZjuHsp100-105	10	orange1.1g009974m	scaffold	55,2992	0,7203	0,013026	425,3785
ZjuHsp100-105	10	orange1.1g004770m	scaffold	52,7233	0,8197	0,015547	405,5638
ZjuHsp100-105	10	orange1.1g003696m	scaffold	54,6914	0,8776	0,016046	420,7031
ZjuHsp100-105	10	orange1.1g010809m	scaffold	57,2872	0,6726	0,011741	440,6708
ZjuHsp100-105	10	orange1.1g003806m	scaffold	53,101	0,8527	0,016058	408,4692
ZjuHsp100-105	10	orange1.1g003473m	scaffold	52,4613	0,8375	0,015964	403,5485
ZjuHsp100-105	10	orange1.1g003476m	scaffold	52,3675	0,8263	0,015779	402,8269
ZjuHsp100-105	10	orange1.1g005661m	scaffold	54,2049	0,7659	0,01413	416,9608
ZjuHsp100-105	10	orange1.1g005738m	scaffold	54,8972	0,7658	0,01395	422,2862
ZjuHsp100-105	10	orange1.1g005066m	scaffold	53,3589	0,7643	0,014324	410,4531
ZjuHsp100-105	10	orange1.1g003807m	scaffold	54,7379	0,8798	0,016073	421,0608
ZjuHsp100-105	10	orange1.1g009263m	scaffold	52,6298	0,7595	0,014431	404,8446
ZjuHsp100-105	10	orange1.1g047690m	scaffold	0,136	13,462	98,98529	1,046154
ZjuHsp100-105	10	orange1.1g006534m	scaffold	53,3847	0,7925	0,014845	410,6515
ZjuHsp100-105	10	orange1.1g043863m	scaffold	53,7417	0,8219	0,015294	413,3977
ZjuHsp100-105	10	orange1.1g003619m	scaffold	14,1768	0,8939	0,063054	109,0523
ZjuHsp100-105	10	orange1.1g006535m	scaffold	53,3854	0,7925	0,014845	410,6569
ZjuHsp100-105	10	orange1.1g007575m	scaffold	52,9802	0,7814	0,014749	407,54

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-105	10	orange1.1g005611m	scaffold	19,5879	0,8336	0,042557	150,6762
ZjuHsp100-105	10	orange1.1g007591m	scaffold	53,5731	0,7834	0,014623	412,1008
ZjuHsp100-105	10	orange1.1g002307m	scaffold	17,5202	0,9265	0,052882	134,7708
ZjuHsp100-106	10	orange1.1g013506m	scaffold	1,1022	0,1552	0,140809	8,478462
ZjuHsp100-106	10	orange1.1g007255m	scaffold	1,0721	0,1315	0,122656	8,246923
ZjuHsp100-106	10	orange1.1g005014m	scaffold	54,4555	0,5836	0,010717	418,8885
ZjuHsp100-106	10	orange1.1g005015m	scaffold	54,4538	0,5835	0,010716	418,8754
ZjuHsp100-106	10	orange1.1g004384m	scaffold	53,2874	0,5922	0,011113	409,9031
ZjuHsp100-106	10	orange1.1g003623m	scaffold	54,4522	0,5836	0,010718	418,8631
ZjuHsp100-106	10	orange1.1g003620m	scaffold	53,2866	0,5922	0,011113	409,8969
ZjuHsp100-106	10	orange1.1g004267m	scaffold	53,0863	0,5986	0,011276	408,3562
ZjuHsp100-106	10	orange1.1g003691m	scaffold	53,8021	0,5924	0,011011	413,8623
ZjuHsp100-106	10	orange1.1g042193m	scaffold	52,4608	0,5915	0,011275	403,5446
ZjuHsp100-106	10	orange1.1g003503m	scaffold	53,9026	0,5885	0,010918	414,6354
ZjuHsp100-106	10	orange1.1g003499m	scaffold	53,9763	0,5885	0,010903	415,2023
ZjuHsp100-106	10	orange1.1g003525m	scaffold	53,8024	0,5923	0,011009	413,8646
ZjuHsp100-106	10	orange1.1g003493m	scaffold	53,9719	0,5886	0,010906	415,1685
ZjuHsp100-106	10	orange1.1g007764m	scaffold	55,1976	0,5634	0,010207	424,5969
ZjuHsp100-106	10	orange1.1g044198m	scaffold	52,6029	0,5935	0,011283	404,6377
ZjuHsp100-106	10	orange1.1g007053m	scaffold	54,1748	0,7212	0,013312	416,7292
ZjuHsp100-106	10	orange1.1g045279m	scaffold	33,9791	0,6233	0,018344	261,3777
ZjuHsp100-106	10	orange1.1g001162m	scaffold	56,274	0,7739	0,013752	432,8769
ZjuHsp100-106	10	orange1.1g003743m	scaffold	56,2738	0,7738	0,013751	432,8754
ZjuHsp100-106	10	orange1.1g001395m	scaffold	18,4415	0,6302	0,034173	141,8577
ZjuHsp100-106	10	orange1.1g002169m	scaffold	23,7796	0,6267	0,026355	182,92
ZjuHsp100-106	10	orange1.1g002088m	scaffold	18,3638	0,6302	0,034318	141,26
ZjuHsp100-107	10	orange1.1g007255m	scaffold	1,105	0,1377	0,124615	8,5
ZjuHsp100-107	10	orange1.1g013506m	scaffold	1,1397	0,1678	0,147232	8,766923
ZjuHsp100-107	10	orange1.1g003691m	scaffold	53,1489	0,618	0,011628	408,8377
ZjuHsp100-107	10	orange1.1g004267m	scaffold	52,7563	0,6241	0,01183	405,8177
ZjuHsp100-107	10	orange1.1g003503m	scaffold	53,0892	0,6141	0,011567	408,3785
ZjuHsp100-107	10	orange1.1g003499m	scaffold	53,1665	0,6142	0,011552	408,9731
ZjuHsp100-107	10	orange1.1g003525m	scaffold	53,1458	0,6181	0,011163	408,8138
ZjuHsp100-107	10	orange1.1g003493m	scaffold	53,2808	0,614	0,011524	409,8523
ZjuHsp100-107	10	orange1.1g044198m	scaffold	52,607	0,6126	0,011645	404,6692
ZjuHsp100-107	10	orange1.1g005015m	scaffold	54,0605	0,6071	0,01123	415,85
ZjuHsp100-107	10	orange1.1g042193m	scaffold	52,0401	0,6105	0,011731	400,3085
ZjuHsp100-107	10	orange1.1g005014m	scaffold	54,0578	0,6073	0,011234	415,8292
ZjuHsp100-107	10	orange1.1g004384m	scaffold	52,9537	0,617	0,011652	407,3362
ZjuHsp100-107	10	orange1.1g003623m	scaffold	54,0578	0,6074	0,011236	415,8292
ZjuHsp100-107	10	orange1.1g007764m	scaffold	54,4472	0,6358	0,011677	418,8246
ZjuHsp100-107	10	orange1.1g003620m	scaffold	52,9519	0,617	0,011652	407,3223
ZjuHsp100-108	10	orange1.1g013506m	scaffold	1,1336	0,1666	0,146965	8,72
ZjuHsp100-108	10	orange1.1g007255m	scaffold	1,0892	0,1375	0,126239	8,378462
ZjuHsp100-108	10	orange1.1g005014m	scaffold	53,563	0,5843	0,010909	412,0231
ZjuHsp100-108	10	orange1.1g005015m	scaffold	53,5634	0,5845	0,010912	412,0262
ZjuHsp100-108	10	orange1.1g004384m	scaffold	52,7953	0,5915	0,011204	406,1177
ZjuHsp100-108	10	orange1.1g003623m	scaffold	53,5608	0,5845	0,010913	412,0062
ZjuHsp100-108	10	orange1.1g003620m	scaffold	52,7925	0,5914	0,011202	406,0962
ZjuHsp100-108	10	orange1.1g004267m	scaffold	52,5776	0,5986	0,011385	404,4431
ZjuHsp100-108	10	orange1.1g003525m	scaffold	53,0724	0,5893	0,011104	408,2492
ZjuHsp100-108	10	orange1.1g003691m	scaffold	53,0716	0,5895	0,011108	408,2431
ZjuHsp100-108	10	orange1.1g003503m	scaffold	53,17	0,5853	0,011008	409
ZjuHsp100-108	10	orange1.1g003499	scaffold	53,2544	0,5853	0,010991	409,6492
ZjuHsp100-108	10	orange1.1g042193m	scaffold	51,8917	0,5925	0,011418	399,1669
ZjuHsp100-108	10	orange1.1g003493m	scaffold	53,2527	0,5853	0,010991	409,6362
ZjuHsp100-108	10	orange1.1g007764m	scaffold	53,9242	0,5642	0,010463	414,8015
ZjuHsp100-108	10	orange1.1g044198m	scaffold	51,3418	0,5956	0,011601	394,9369
ZjuHsp100-108	10	orange1.1g007053m	scaffold	52,6249	0,7348	0,013963	404,8069
ZjuHsp100-108	10	orange1.1g045279m	scaffold	36,1344	0,6227	0,017233	277,9569
ZjuHsp100-108	10	orange1.1g002088m	scaffold	19,133	0,6283	0,032839	147,1769
ZjuHsp100-108	10	orange1.1g002169m	scaffold	26,7066	0,6265	0,023459	205,4354
ZjuHsp100-108	10	orange1.1g001395m	scaffold	19,1676	0,6283	0,032779	147,4431
ZjuHsp100-109	10	orange1.1g001735m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-109	10	orange1.1g001746m	scaffold	0,974	0,1338	0,137372	7,492308
ZjuHsp100-109	10	orange1.1g004916m	scaffold	59,6998	0,566	0,009481	459,2292
ZjuHsp100-109	10	orange1.1g001707m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-109	10	orange1.1g001861m	scaffold	60,8124	0,6323	0,010398	467,7877
ZjuHsp100-109	10	orange1.1g001862m	scaffold	60,8105	0,6324	0,0104	467,7731

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-109	10	orange1.1g001227m	scaffold	61,0298	0,6201	0,010161	469,46
ZjuHsp100-109	10	orange1.1g001309m	scaffold	61,0352	0,6215	0,010183	469,5015
ZjuHsp100-109	10	orange1.1g000950m	scaffold	60,9452	0,6195	0,010165	468,8092
ZjuHsp100-109	10	orange1.1g000914m	scaffold	60,6659	0,6151	0,010139	466,6608
ZjuHsp100-109	10	orange1.1g000858m	scaffold	61,005	0,6208	0,010176	469,2692
ZjuHsp100-109	10	orange1.1g000925m	scaffold	61,9435	0,6033	0,00974	476,4885
ZjuHsp100-109	10	orange1.1g000925m	scaffold	61,9435	0,6033	0,00974	476,4885
ZjuHsp100-109	10	orange1.1g000888m	scaffold	20,7459	0,6564	0,03164	159,5838
ZjuHsp100-109	10	orange1.1g003253m	scaffold	18,2936	0,5826	0,031847	140,72
ZjuHsp100-109	10	orange1.1g000978m	scaffold	15,7135	0,6489	0,041296	120,8731
ZjuHsp100-109	10	orange1.1g001150m	scaffold	16,5334	0,6553	0,039635	127,18
ZjuHsp100-109	10	orange1.1g000823m	scaffold	20,7902	0,6564	0,031573	159,9246
ZjuHsp100-109	10	orange1.1g000921m	scaffold	61,3732	0,6404	0,010435	472,1015
ZjuHsp100-109	10	orange1.1g001031m	scaffold	60,9022	0,6301	0,010346	468,4785
ZjuHsp100-109	10	orange1.1g001076m	scaffold	61,0628	0,6425	0,010522	469,7138
ZjuHsp100-109	10	orange1.1g001244m	scaffold	61,2207	0,6554	0,010706	470,9285
ZjuHsp100-109	10	orange1.1g0116044m	scaffold	55,0495	0,5898	0,010714	423,4577
ZjuHsp100-109	10	orange1.1g011393m	scaffold	55,3494	0,7034	0,012708	425,7646
ZjuHsp100-110	10	orange1.1g001746m	scaffold	0,974	0,1338	0,137372	7,492308
ZjuHsp100-110	10	orange1.1g001735m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-110	10	orange1.1g004916m	scaffold	60,0725	0,5697	0,009484	462,0962
ZjuHsp100-110	10	orange1.1g001707m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-110	10	orange1.1g001862m	scaffold	60,8258	0,6383	0,010494	467,8908
ZjuHsp100-110	10	orange1.1g001861m	scaffold	58,3847	0,6387	0,01094	449,1131
ZjuHsp100-110	10	orange1.1g001227m	scaffold	61,0431	0,626	0,010255	469,5623
ZjuHsp100-110	10	orange1.1g001309m	scaffold	61,0486	0,6276	0,01028	469,6046
ZjuHsp100-110	10	orange1.1g000914m	scaffold	60,8413	0,6171	0,010143	468,01
ZjuHsp100-110	10	orange1.1g000858m	scaffold	61,2548	0,6242	0,01019	471,1908
ZjuHsp100-110	10	orange1.1g000925m	scaffold	62,2156	0,6066	0,00975	478,5815
ZjuHsp100-110	10	orange1.1g000950m	scaffold	61,1909	0,6226	0,010175	470,6992
ZjuHsp100-110	10	orange1.1g000978m	scaffold	17,1268	0,6397	0,037351	131,7446
ZjuHsp100-110	10	orange1.1g003253m	scaffold	18,6025	0,5827	0,031324	143,0962
ZjuHsp100-110	10	orange1.1g000823m	scaffold	22,7186	0,6473	0,028492	174,7585
ZjuHsp100-110	10	orange1.1g000888m	scaffold	22,8681	0,6473	0,028306	175,9085
ZjuHsp100-110	10	orange1.1g001031m	scaffold	61,126	0,6348	0,010385	470,2
ZjuHsp100-110	10	orange1.1g001150m	scaffold	16,4562	0,6559	0,039857	126,5862
ZjuHsp100-110	10	orange1.1g001076m	scaffold	61,2967	0,6476	0,010565	471,5131
ZjuHsp100-110	10	orange1.1g000921m	scaffold	61,658	0,6433	0,010433	474,2923
ZjuHsp100-110	10	orange1.1g001244m	scaffold	61,626	0,6597	0,010705	474,0462
ZjuHsp100-110	10	orange1.1g003231m	scaffold	18,6637	0,6414	0,034366	143,5669
ZjuHsp100-110	10	orange1.1g011393m	scaffold	55,4317	0,7053	0,012724	426,3977
ZjuHsp100-110	10	orange1.1g0116044m	scaffold	50,816	3,9006	0,076759	390,8923
ZjuHsp100-111	10	orange1.1g001746m	scaffold	0,974	0,1338	0,137372	7,492308
ZjuHsp100-111	10	orange1.1g001735m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-111	10	orange1.1g004916m	scaffold	60,0725	0,5697	0,009484	462,0962
ZjuHsp100-111	10	orange1.1g001707m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-111	10	orange1.1g001861m	scaffold	60,8124	0,6323	0,010398	467,7877
ZjuHsp100-111	10	orange1.1g001862m	scaffold	60,8105	0,6324	0,0104	467,7731
ZjuHsp100-111	10	orange1.1g001309m	scaffold	61,0352	0,6215	0,010183	469,5015
ZjuHsp100-111	10	orange1.1g001227m	scaffold	61,0431	0,626	0,010255	469,5623
ZjuHsp100-111	10	orange1.1g000858m	scaffold	61,2548	0,6242	0,01019	471,1908
ZjuHsp100-111	10	orange1.1g000950m	scaffold	61,1909	0,6226	0,010175	470,6992
ZjuHsp100-111	10	orange1.1g000914m	scaffold	60,6659	0,6171	0,010172	466,6608
ZjuHsp100-111	10	orange1.1g000925m	scaffold	62,2156	0,6066	0,00975	478,5815
ZjuHsp100-111	10	orange1.1g000978m	scaffold	15,7135	0,6397	0,04071	120,8731
ZjuHsp100-111	10	orange1.1g003253m	scaffold	18,6025	0,5827	0,031324	143,0962
ZjuHsp100-111	10	orange1.1g000823m	scaffold	22,7186	0,6473	0,028492	174,7585
ZjuHsp100-111	10	orange1.1g000888m	scaffold	20,7459	0,6564	0,03164	159,5838
ZjuHsp100-111	10	orange1.1g001150m	scaffold	16,4562	0,6559	0,039857	126,5862
ZjuHsp100-111	10	orange1.1g001031m	scaffold	61,126	0,6348	0,010385	470,2
ZjuHsp100-111	10	orange1.1g000921m	scaffold	61,658	0,6433	0,010433	474,2923
ZjuHsp100-111	10	orange1.1g001076m	scaffold	61,2967	0,6476	0,010565	471,5131
ZjuHsp100-111	10	orange1.1g003231m	scaffold	18,6637	0,6414	0,034366	143,5669
ZjuHsp100-111	10	orange1.1g001244m	scaffold	61,626	0,6597	0,010705	474,0462
ZjuHsp100-111	10	orange1.1g011393m	scaffold	55,4317	0,7053	0,012724	426,3977
ZjuHsp100-111	10	orange1.1g0116044m	scaffold	50,816	0,6597	0,012982	390,8923
ZjuHsp100-112	10	orange1.1g001746m	scaffold	0,974	0,1338	0,137372	7,492308
ZjuHsp100-112	10	orange1.1g001735m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-112	10	orange1.1g004916m	scaffold	60,0725	0,5697	0,009484	462,0962

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-112	10	orange1.1g001707m	scaffold	0,9764	0,1343	0,137546	7,510769
ZjuHsp100-112	10	orange1.1g001862m	scaffold	60,8105	0,6324	0,0104	467,7731
ZjuHsp100-112	10	orange1.1g001861m	scaffold	60,8124	0,6323	0,010398	467,7877
ZjuHsp100-112	10	orange1.1g001227m	scaffold	61,0431	0,626	0,010255	469,5623
ZjuHsp100-112	10	orange1.1g001309m	scaffold	61,0352	0,6215	0,010183	469,5015
ZjuHsp100-112	10	orange1.1g001227m	scaffold	61,0431	0,626	0,010255	469,5623
ZjuHsp100-112	10	orange1.1g000950m	scaffold	61,1909	0,6226	0,010175	470,6992
ZjuHsp100-112	10	orange1.1g000914m	scaffold	60,6659	0,6171	0,010172	466,6608
ZjuHsp100-112	10	orange1.1g000858m	scaffold	61,2548	0,6242	0,01019	471,1908
ZjuHsp100-112	10	orange1.1g000978m	scaffold	15,7135	0,6397	0,04071	120,8731
ZjuHsp100-112	10	orange1.1g003253m	scaffold	18,6025	0,5827	0,031324	143,0962
ZjuHsp100-112	10	orange1.1g000823m	scaffold	22,7186	0,6473	0,028492	174,7585
ZjuHsp100-112	10	orange1.1g000888m	scaffold	20,7459	0,6564	0,03164	159,5838
ZjuHsp100-112	10	orange1.1g001031m	scaffold	61,126	0,6348	0,010385	470,2
ZjuHsp100-112	10	orange1.1g001150m	scaffold	16,4562	0,6559	0,039857	126,5862
ZjuHsp100-112	10	orange1.1g001076m	scaffold	61,2967	0,6476	0,010565	471,5131
ZjuHsp100-112	10	orange1.1g000921m	scaffold	61,658	0,6433	0,010433	474,2923
ZjuHsp100-112	10	orange1.1g001244m	scaffold	61,626	0,6597	0,010705	474,0462
ZjuHsp100-112	10	orange1.1g003231m	scaffold	18,6637	0,6414	0,034366	143,5669
ZjuHsp100-112	10	orange1.1g011393m	scaffold	55,4317	0,7053	0,012724	426,3977
ZjuHsp100-112	10	orange1.1g016044m	scaffold	50,816	0,6597	0,012982	390,8923
ZjuHsp100-113	10	orange1.1g020787m	scaffold	1,2551	0,0497	0,039598	9,654615
ZjuHsp100-113	10	orange1.1g019334m	scaffold	1,1711	0,0565	0,048245	9,008462
ZjuHsp100-113	10	orange1.1g013704m	scaffold	52,1605	0,5543	0,010627	401,2346
ZjuHsp100-113	10	orange1.1g011983m	scaffold	52,4607	0,5477	0,01044	403,5438
ZjuHsp100-113	10	orange1.1g017204m	scaffold	51,7126	0,4344	0,0084	397,7892
ZjuHsp100-113	10	orange1.1g011914m	scaffold	52,3479	0,5536	0,010575	402,6762
ZjuHsp100-113	10	orange1.1g014243m	scaffold	54,6519	0,5107	0,009345	420,3992
ZjuHsp100-113	10	orange1.1g014244m	scaffold	54,646	0,5109	0,009349	420,3538
ZjuHsp100-113	10	orange1.1g012383m	scaffold	54,6477	0,5109	0,009349	420,3669
ZjuHsp100-113	10	orange1.1g017204m	scaffold	51,714	0,4344	0,0084	397,8
ZjuHsp100-113	10	orange1.1g014243m	scaffold	54,6436	0,5109	0,00935	420,3354
ZjuHsp100-113	10	orange1.1g014244m	scaffold	54,6432	0,5108	0,009348	420,3323
ZjuHsp100-113	10	orange1.1g012383m	scaffold	54,6506	0,5107	0,009345	420,3892
ZjuHsp100-113	10	orange1.1g014246m	scaffold	54,6529	0,5108	0,009346	420,4069
ZjuHsp100-113	10	orange1.1g012418m	scaffold	52,4095	0,5645	0,010771	403,15
ZjuHsp100-113	10	orange1.1g019694m	scaffold	52,1266	0,3879	0,007441	400,9738
ZjuHsp100-113	10	orange1.1g022739m	scaffold	51,9419	0,4295	0,008269	399,5531
ZjuHsp100-113	10	orange1.1g018745m	scaffold	57,3521	0,5148	0,008976	441,17
ZjuHsp100-113	10	orange1.1g022707m	scaffold	51,9512	0,4294	0,008265	399,6246
ZjuHsp100-114	11	orange1.1g005015m	scaffold	58,0371	0,6528	0,011248	446,4392
ZjuHsp100-114	11	orange1.1g045279m	scaffold	1,849	0,3253	0,175933	14,22308
ZjuHsp100-114	11	orange1.1g004384m	scaffold	21,7102	0,6776	0,031211	167,0015
ZjuHsp100-114	11	orange1.1g005014m	scaffold	58,0366	0,6528	0,011248	446,4354
ZjuHsp100-114	11	orange1.1g003623m	scaffold	58,0396	0,6548	0,011282	446,4585
ZjuHsp100-114	11	orange1.1g004267m	scaffold	56,6423	0,6498	0,011472	435,71
ZjuHsp100-114	11	orange1.1g003499m	scaffold	57,1621	0,6369	0,011142	439,7085
ZjuHsp100-114	11	orange1.1g003620m	scaffold	21,4261	0,6777	0,03163	164,8162
ZjuHsp100-114	11	orange1.1g003493m	scaffold	57,1645	0,6371	0,011145	439,7269
ZjuHsp100-114	11	orange1.1g003503m	scaffold	57,0803	0,6369	0,011158	439,0792
ZjuHsp100-114	11	orange1.1g003525m	scaffold	57,0888	0,6393	0,011198	439,1446
ZjuHsp100-114	11	orange1.1g003691m	scaffold	57,0921	0,6392	0,011196	439,17
ZjuHsp100-114	11	orange1.1g044198m	scaffold	56,4377	0,6424	0,011382	434,1362
ZjuHsp100-114	11	orange1.1g042193m	scaffold	55,8638	0,6527	0,011684	429,7215
ZjuHsp100-114	11	orange1.1g007255m	scaffold	55,4986	0,6867	0,012373	426,9123
ZjuHsp100-114	11	orange1.1g007764m	scaffold	60,4107	0,5844	0,009674	464,6977
ZjuHsp100-114	11	orange1.1g013506m	scaffold	56,223	0,6934	0,012333	432,4846
ZjuHsp100-114	11	orange1.1g002159m	scaffold	50,1554	0,8187	0,016323	385,8108
ZjuHsp100-115	11	orange1.1g003619m	scaffold	0,9321	0,1365	0,146444	7,17
ZjuHsp100-115	11	orange1.1g002307m	scaffold	0,9539	0,1229	0,12884	7,337692
ZjuHsp100-115	11	orange1.1g009263m	scaffold	1,0528	0,0864	0,082067	8,098462
ZjuHsp100-115	11	orange1.1g005611m	scaffold	0,8986	0,078	0,086802	6,912308
ZjuHsp100-115	11	orange1.1g005495m	scaffold	52,4067	0,7208	0,013754	403,1285
ZjuHsp100-115	11	orange1.1g005480m	scaffold	52,4067	0,7208	0,013754	403,1285
ZjuHsp100-115	11	orange1.1g005815m	scaffold	51,9708	0,7403	0,014245	399,7754
ZjuHsp100-115	11	orange1.1g005479m	scaffold	52,4094	0,7208	0,013753	403,1492
ZjuHsp100-115	11	orange1.1g007989m	scaffold	53,6048	0,6764	0,012618	412,3446
ZjuHsp100-115	11	orange1.1g005003m	scaffold	51,6998	0,6974	0,013489	397,6908
ZjuHsp100-115	11	orange1.1g004921m	scaffold	50,3114	0,7484	0,014875	387,0108

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-115	11	orange1.1g005304m	scaffold	52,4691	0,7316	0,013943	403,6085
ZjuHsp100-116	11	orange1.1g020071m	scaffold	0,8587	0,0654	0,076162	6,605385
ZjuHsp100-116	11	orange1.1g021959m	scaffold	53,4926	0,6512	0,012174	411,4815
ZjuHsp100-116	11	orange1.1g021937m	scaffold	53,4915	0,6512	0,012174	411,4731
ZjuHsp100-116	11	orange1.1g017884m	scaffold	53,4878	0,6392	0,01195	411,4446
ZjuHsp100-116	11	orange1.1g021660m	scaffold	53,3781	0,6487	0,012153	410,6008
ZjuHsp100-119	11	orange1.1g007208m	scaffold	1,2054	0,1892	0,15696	9,272308
ZjuHsp100-119	11	orange1.1g003231m	scaffold	1,6475	0,1541	0,093536	12,67308
ZjuHsp100-119	11	orange1.1g001861m	scaffold	20,2298	0,5483	0,027104	155,6138
ZjuHsp100-119	11	orange1.1g004916m	scaffold	23,6047	0,52	0,02203	181,5746
ZjuHsp100-119	11	orange1.1g001309m	scaffold	19,5335	0,5467	0,027988	150,2577
ZjuHsp100-119	11	orange1.1g001862m	scaffold	20,2505	0,5483	0,027076	155,7731
ZjuHsp100-119	11	orange1.1g000914m	scaffold	456,608	0,5507	1,21E-06	351,2369
ZjuHsp100-119	11	orange1.1g001227m	scaffold	19,5309	0,5467	0,027992	150,2377
ZjuHsp100-119	11	orange1.1g000950m	scaffold	19,4372	0,5467	0,028126	149,5169
ZjuHsp100-119	11	orange1.1g000925m	scaffold	52,3506	0,5566	0,010632	402,6969
ZjuHsp100-119	11	orange1.1g003253m	scaffold	43,7838	0,4876	0,011137	336,7985
ZjuHsp100-119	11	orange1.1g000858m	scaffold	20,1379	0,5467	0,027148	154,9069
ZjuHsp100-119	11	orange1.1g000888m	scaffold	24,5068	0,5212	0,021268	188,5138
ZjuHsp100-119	11	orange1.1g000978m	scaffold	21,6681	0,5208	0,024035	166,6777
ZjuHsp100-119	11	orange1.1g001031m	scaffold	24,2524	0,55	0,022678	186,5569
ZjuHsp100-119	11	orange1.1g000823m	scaffold	19,9091	0,5091	0,025571	153,1469
ZjuHsp100-119	11	orange1.1g001150m	scaffold	40,3534	0,5216	0,012926	310,4108
ZjuHsp100-119	11	orange1.1g000921m	scaffold	17,4448	0,563	0,032273	134,1908
ZjuHsp100-119	11	orange1.1g001746m	scaffold	7,0469	0,6401	0,090834	54,20692
ZjuHsp100-119	11	orange1.1g001076m	scaffold	41,4682	0,554	0,01336	318,9862
ZjuHsp100-119	11	orange1.1g001707m	scaffold	6,0888	0,6462	0,106129	46,83692
ZjuHsp100-119	11	orange1.1g001735m	scaffold	6,1908	0,6405	0,10346	47,62154
ZjuHsp100-119	11	orange1.1g016044m	scaffold	53,0636	0,6197	0,011678	408,1815
ZjuHsp100-119	11	orange1.1g001244m	scaffold	52,451	0,5626	0,010726	403,4692
ZjuHsp100-120	11	orange1.1g004834m	scaffold	0,7925	0,0365	0,046057	6,096154
ZjuHsp100-120	11	orange1.1g003349m	scaffold	0,9536	0,0623	0,065331	7,335385
ZjuHsp100-120	11	orange1.1g005548m	scaffold	55,3659	0,6712	0,012123	425,8915
ZjuHsp100-121	11	orange1.1g011914m	scaffold	1,3383	0,0998	0,074572	10,29462
ZjuHsp100-121	11	orange1.1g013704m	scaffold	1,3432	0,1024	0,076236	10,33231
ZjuHsp100-121	11	orange1.1g014244m	scaffold	1,3038	0,1379	0,105768	10,02923
ZjuHsp100-121	11	orange1.1g011983m	scaffold	1,2976	0,0988	0,076141	9,981538
ZjuHsp100-121	11	orange1.1g014243m	scaffold	1,3038	0,1379	0,105768	10,02923
ZjuHsp100-121	11	orange1.1g012383m	scaffold	1,3038	0,1379	0,105768	10,02923
ZjuHsp100-121	11	orange1.1g014246m	scaffold	1,3038	0,1379	0,105768	10,02923
ZjuHsp100-121	11	orange1.1g017204m	scaffold	1,2479	0,0987	0,079093	9,599231
ZjuHsp100-121	11	orange1.1g012418m	scaffold	1,3288	0,1001	0,075331	10,22154
ZjuHsp100-121	11	orange1.1g018745m	scaffold	1,7333	0,1614	0,093117	13,33308
ZjuHsp100-121	11	orange1.1g019694m	scaffold	1,0937	0,0898	0,082107	8,413077
ZjuHsp100-121	11	orange1.1g022707m	scaffold	1,1023	0,0987	0,08954	8,479231
ZjuHsp100-121	11	orange1.1g022739m	scaffold	1,1023	0,0987	0,08954	8,479231
ZjuHsp100-121	11	orange1.1g019334m	scaffold	20,2744	4,798	0,236653	155,9569
ZjuHsp100-121	11	orange1.1g019334m	scaffold	20,3408	0,4798	0,023588	156,4677
ZjuHsp100-122	11	orange1.1g015875m	scaffold	0,7786	0,0154	0,019779	5,989231
ZjuHsp100-122	11	orange1.1g014332m	scaffold	0,8001	0,0113	0,014123	6,154615
ZjuHsp100-122	11	orange1.1g014665m	scaffold	1,2468	0,0797	0,063924	9,590769
ZjuHsp100-122	11	orange1.1g017161m	scaffold	0,8803	0,0127	0,014427	6,771538
ZjuHsp100-122	11	orange1.1g014743m	scaffold	56,5967	0,4976	0,008792	435,3592
ZjuHsp100-122	11	orange1.1g014712m	scaffold	1,2468	0,0797	0,063924	9,590769
ZjuHsp100-122	11	orange1.1g022768m	scaffold	17,3995	0,4099	0,023558	133,8423
ZjuHsp100-122	11	orange1.1g024249m	scaffold	21,7084	0,3498	0,016114	166,9877
ZjuHsp100-122	11	orange1.1g017300m	scaffold	40,9328	0,491	0,011995	314,8677
ZjuHsp100-122	11	orange1.1g014525m	scaffold	55,6676	0,5337	0,009587	428,2123
ZjuHsp100-122	11	orange1.1g013269m	scaffold	56,5849	0,5531	0,009775	435,2685
ZjuHsp100-122	11	orange1.1g013285m	scaffold	56,6422	0,5527	0,009758	435,7092
ZjuHsp100-122	11	orange1.1g039866m	scaffold	53,6933	0,5209	0,009701	413,0254
ZjuHsp100-122	11	orange1.1g013281m	scaffold	56,6416	0,5527	0,009758	435,7046
ZjuHsp100-123	11	orange1.1g042193m	scaffold	52,2501	0,618	0,011828	401,9238
ZjuHsp100-123	11	orange1.1g045279m	scaffold	1,7785	0,1559	0,087658	13,68077
ZjuHsp100-123	11	orange1.1g003691m	scaffold	54,5617	0,6208	0,011378	419,7054
ZjuHsp100-123	11	orange1.1g003525m	scaffold	54,8065	0,5846	0,010667	421,5885
ZjuHsp100-123	11	orange1.1g003503m	scaffold	54,5542	0,5944	0,010896	419,6477
ZjuHsp100-123	11	orange1.1g003499m	scaffold	54,5997	0,5943	0,010885	419,9977
ZjuHsp100-123	11	orange1.1g005015m	scaffold	48,9494	0,5621	0,011483	376,5338

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-123	11	orange1.1g003493m	scaffold	54,5999	0,5943	0,010885	419,9992
ZjuHsp100-123	11	orange1.1g003623m	scaffold	53,6971	0,5994	0,011163	413,0546
ZjuHsp100-123	11	orange1.1g005014m	scaffold	0,177	16,1234	91,09266	1,361538
ZjuHsp100-123	11	orange1.1g003620m	scaffold	53,1118	0,6084	0,011455	408,5523
ZjuHsp100-123	11	orange1.1g004384m	scaffold	53,5438	0,5892	0,011004	411,8754
ZjuHsp100-123	11	orange1.1g044198m	scaffold	53,7481	0,6118	0,011383	413,4469
ZjuHsp100-123	11	orange1.1g004267m	scaffold	53,0541	0,6055	0,011413	408,1085
ZjuHsp100-123	11	orange1.1g007255m	scaffold	52,8096	0,6263	0,01186	406,2277
ZjuHsp100-123	11	orange1.1g007764m	scaffold	53,3575	0,5846	0,010956	410,4423
ZjuHsp100-123	11	orange1.1g007053m	scaffold	27,0138	0,698	0,025839	207,7985
ZjuHsp100-123	11	orange1.1g013506m	scaffold	53,156	0,6455	0,012144	408,8923
ZjuHsp100-123	11	orange1.1g003743m	scaffold	44,1563	0,7978	0,018068	339,6638
ZjuHsp100-123	11	orange1.1g002159m	scaffold	52,7807	0,8609	0,016311	406,0054
ZjuHsp100-123	11	orange1.1g001491m	scaffold	22,0442	0,914	0,041462	169,5708
ZjuHsp100-123	11	orange1.1g001162m	scaffold	39,2225	0,8738	0,022278	301,7115
ZjuHsp100-123	11	orange1.1g002088m	scaffold	52,7658	0,7111	0,013477	405,8908
ZjuHsp100-123	11	orange1.1g002169m	scaffold	53,1118	0,711	0,013387	408,5523
ZjuHsp100-123	11	orange1.1g001395m	scaffold	53,2064	0,7073	0,013294	409,28
ZjuHsp100-124	11	orange1.1g038067m	scaffold	1,148	0,2181	0,189983	8,830769
ZjuHsp100-124	11	orange1.1g005762m	scaffold	2,2199	0,2288	0,103068	17,07615
ZjuHsp100-124	11	orange1.1g005663m	scaffold	5,9851	0,294	0,049122	46,03923
ZjuHsp100-124	11	orange1.1g005667m	scaffold	59,868	0,2926	0,004887	460,5231
ZjuHsp100-124	11	orange1.1g005670m	scaffold	6,044	0,294	0,048643	46,49231
ZjuHsp100-124	11	orange1.1g005637m	scaffold	6,0983	0,2901	0,047571	46,91
ZjuHsp100-124	11	orange1.1g008176m	scaffold	7,3945	0,2981	0,040314	56,88077
ZjuHsp100-124	11	orange1.1g007362m	scaffold	2,0682	0,2097	0,101393	15,90923
ZjuHsp100-124	11	orange1.1g008723m	scaffold	2,3979	0,2333	0,097293	18,44538
ZjuHsp100-124	11	orange1.1g008014m	scaffold	6,8073	0,3128	0,045951	52,36385
ZjuHsp100-124	11	orange1.1g012525m	scaffold	53,2282	0,3422	0,006429	409,4477
ZjuHsp100-124	11	orange1.1g008329m	scaffold	12,2977	0,3226	0,026233	94,59769
ZjuHsp100-125	12	orange1.1g013706m	scaffold	0,9601	0,0783	0,081554	7,385385
ZjuHsp100-125	12	orange1.1g011578m	scaffold	0,8846	0,0762	0,086141	6,804615
ZjuHsp100-125	12	orange1.1g021192m	scaffold	0,8294	0,1184	0,142754	6,38
ZjuHsp100-125	12	orange1.1g013316m	scaffold	0,9099	0,0728	0,080009	6,999231
ZjuHsp100-126	12	orange1.1g003503m	scaffold	7,7857	0,0633	0,00813	59,89
ZjuHsp100-126	12	orange1.1g003620m	scaffold	2,0649	0,0298	0,014432	15,88385
ZjuHsp100-126	12	orange1.1g004384m	scaffold	2,0856	0,023	0,011028	16,04308
ZjuHsp100-126	12	orange1.1g003691m	scaffold	8,085	0,0637	0,007879	62,19231
ZjuHsp100-126	12	orange1.1g003503m	scaffold	7,7838	0,0633	0,008132	59,87538
ZjuHsp100-126	12	orange1.1g003499m	scaffold	7,3836	0,0632	0,00856	56,79692
ZjuHsp100-126	12	orange1.1g003525m	scaffold	7,8819	0,0634	0,008044	60,63
ZjuHsp100-126	12	orange1.1g003493m	scaffold	7,4209	0,0632	0,008516	57,08385
ZjuHsp100-126	12	orange1.1g042193m	scaffold	6,0352	0,0767	0,012709	46,42462
ZjuHsp100-126	12	orange1.1g004267m	scaffold	6,0344	0,0767	0,01271	46,41846
ZjuHsp100-126	12	orange1.1g005014m	scaffold	2,0961	0,0382	0,018224	16,12385
ZjuHsp100-126	12	orange1.1g005015m	scaffold	1,1615	0,0203	0,017477	8,934615
ZjuHsp100-126	12	orange1.1g007764m	scaffold	1,1968	0,0188	0,015709	9,206154
ZjuHsp100-126	12	orange1.1g044198m	scaffold	3,7493	0,1327	0,035393	28,84077
ZjuHsp100-126	12	orange1.1g045279m	scaffold	53,0208	0,5761	0,010866	407,8523
ZjuHsp100-126	12	orange1.1g007053m	scaffold	1,1679	0,0264	0,022605	8,983846
ZjuHsp100-127	12	orange1.1g003769m	scaffold	1,8006	0,3853	0,213984	13,85077
ZjuHsp100-127	12	orange1.1g003038m	scaffold	1,3609	0,149	0,109486	10,46846
ZjuHsp100-128	12	orange1.1g0117300m	scaffold	0,8051	0,0222	0,027574	6,193077
ZjuHsp100-128	12	orange1.1g014743m	scaffold	0,8235	0,0196	0,023801	6,334615
ZjuHsp100-128	12	orange1.1g015875m	scaffold	55,0787	0,4751	0,008626	423,6823
ZjuHsp100-128	12	orange1.1g024249m	scaffold	0,8023	0,0065	0,008102	6,171538
ZjuHsp100-128	12	orange1.1g013285m	scaffold	54,0201	0,5175	0,00958	415,5392
ZjuHsp100-128	12	orange1.1g014332m	scaffold	55,551	0,4933	0,00888	427,3154
ZjuHsp100-128	12	orange1.1g013281m	scaffold	54,0184	0,5175	0,00958	415,5262
ZjuHsp100-128	12	orange1.1g013269m	scaffold	53,9639	0,5179	0,009597	415,1069
ZjuHsp100-128	12	orange1.1g014525m	scaffold	21,7912	0,5297	0,024308	167,6246
ZjuHsp100-128	12	orange1.1g011553m	scaffold	54,0237	0,5175	0,009579	415,5669
ZjuHsp100-128	12	orange1.1g039866m	scaffold	25,4477	0,5206	0,020458	195,7515
ZjuHsp100-129	12	orange1.1g003859m	scaffold	20,1138	0,7257	0,03608	154,7215
ZjuHsp100-129	12	orange1.1g001066m	scaffold	1,1648	0,2371	0,203554	8,96
ZjuHsp100-129	12	orange1.1g000973m	scaffold	39,7033	0,8458	0,021303	305,41
ZjuHsp100-129	12	orange1.1g002045m	scaffold	33,2906	0,7735	0,023235	256,0815
ZjuHsp100-129	12	orange1.1g000974m	scaffold	37,8117	0,846	0,022374	290,8592
ZjuHsp100-130	12	orange1.1g003859m	scaffold	20,1138	0,7257	0,03608	154,7215

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-130	12	orange1.1g001066m	scaffold	1,1648	0,2371	0,203554	8,96
ZjuHsp100-130	12	orange1.1g000973m	scaffold	39,7033	0,8458	0,021303	305,41
ZjuHsp100-130	12	orange1.1g002045m	scaffold	33,2906	0,7735	0,023235	256,0815
ZjuHsp100-130	12	orange1.1g000974m	scaffold	37,8117	0,846	0,022374	290,8592
ZjuHsp100-131	12	orange1.1g005344m	scaffold	38,5339	3,3744	0,08757	296,4146
ZjuHsp100-131	12	orange1.1g038101m	scaffold	3,9104	4,1392	1,058511	30,08
ZjuHsp100-131	12	orange1.1g017797m	scaffold	3,1351	4,2627	1,35967	24,11615
ZjuHsp100-131	12	orange1.1g019702m	scaffold	4,1902	3,6508	0,871271	32,23231
ZjuHsp100-131	12	orange1.1g027392m	scaffold	0,5683	9,9452	17,49991	4,371538
ZjuHsp100-131	12	orange1.1g025371m	scaffold	4,145	2,9173	0,703812	31,88462
ZjuHsp100-131	12	orange1.1g026207m	scaffold	0,1649	16,3247	98,99757	1,268462
ZjuHsp100-131	12	orange1.1g027390m	scaffold	0,1653	16,3642	98,99698	1,271538
ZjuHsp100-132	scaffold	orange1.1g003038m	scaffold	8,5825	0,597	0,06956	66,01923
ZjuHsp100-132	scaffold	orange1.1g001788m	scaffold	1,3269	0,1562	0,117718	10,20692
ZjuHsp100-132	scaffold	orange1.1g003769m	scaffold	10,3028	0,654	0,063478	79,25231
ZjuHsp100-133	scaffold	orange1.1g003000m	scaffold	1,0396	0,1133	0,108984	7,996923
ZjuHsp100-133	scaffold	orange1.1g002754m	scaffold	1,0335	0,1038	0,100435	7,95
ZjuHsp100-133	scaffold	orange1.1g003795m	scaffold	1,1271	0,0876	0,077722	8,67
ZjuHsp100-133	scaffold	orange1.1g002961m	scaffold	0,9999	0,1084	0,108411	7,691538
ZjuHsp100-133	scaffold	orange1.1g003669m	scaffold	1,4438	0,1425	0,098698	11,10615
ZjuHsp100-133	scaffold	orange1.1g003677m	scaffold	1,4438	0,1425	0,098698	11,10615
ZjuHsp100-133	scaffold	orange1.1g005815m	scaffold	52,0148	0,8116	0,015603	400,1138
ZjuHsp100-133	scaffold	orange1.1g004921m	scaffold	52,0148	0,8116	0,015603	400,1138
ZjuHsp100-133	scaffold	orange1.1g007367m	scaffold	52,9992	0,7923	0,014949	407,6862
ZjuHsp100-133	scaffold	orange1.1g007989m	scaffold	55,7212	0,7051	0,012654	428,6246
ZjuHsp100-133	scaffold	orange1.1g005495m	scaffold	54,3383	0,7505	0,013812	417,9869
ZjuHsp100-133	scaffold	orange1.1g005480m	scaffold	54,4322	0,7492	0,013764	418,7092
ZjuHsp100-133	scaffold	orange1.1g005003m	scaffold	54,2509	0,7558	0,013932	417,3146
ZjuHsp100-133	scaffold	orange1.1g005479m	scaffold	54,4345	0,7492	0,013763	418,7269
ZjuHsp100-133	scaffold	orange1.1g009974m	scaffold	55,1671	0,7481	0,013561	424,3623
ZjuHsp100-133	scaffold	orange1.1g005304m	scaffold	54,0714	0,7523	0,013913	415,9338
ZjuHsp100-133	scaffold	orange1.1g003696m	scaffold	52,1566	0,8108	0,015545	401,2046
ZjuHsp100-133	scaffold	orange1.1g007190m	scaffold	55,439	0,7907	0,014263	426,4538
ZjuHsp100-133	scaffold	orange1.1g003806m	scaffold	23,9898	0,816	0,034014	184,5369
ZjuHsp100-133	scaffold	orange1.1g004770m	scaffold	44,0667	0,774	0,017564	338,9746
ZjuHsp100-133	scaffold	orange1.1g003473m	scaffold	34,3299	0,7999	0,0233	264,0762
ZjuHsp100-133	scaffold	orange1.1g010809m	scaffold	57,2228	0,6741	0,01178	440,1754
ZjuHsp100-133	scaffold	orange1.1g003476m	scaffold	22,7401	0,7981	0,035097	174,9238
ZjuHsp100-133	scaffold	orange1.1g003807m	scaffold	50,6442	0,812	0,016033	389,5708
ZjuHsp100-133	scaffold	orange1.1g005738m	scaffold	55,1104	0,7995	0,014507	423,9262
ZjuHsp100-134	scaffold	orange1.1g004834m	scaffold	53,9142	0,6127	0,011364	414,7246
ZjuHsp100-134	scaffold	orange1.1g005548m	scaffold	1,0894	0,0927	0,085093	8,38
ZjuHsp100-134	scaffold	orange1.1g003349m	scaffold	53,0289	0,6606	0,012457	407,9146
ZjuHsp100-135	scaffold	orange1.1g013083m	scaffold	2,0072	0,2929	0,145925	15,44
ZjuHsp100-135	scaffold	orange1.1g013128m	scaffold	2,1339	0,2829	0,132574	16,41462
ZjuHsp100-135	scaffold	orange1.1g012846m	scaffold	3,3477	0,4103	0,122562	25,75154
ZjuHsp100-135	scaffold	orange1.1g012016m	scaffold	2,6219	0,4231	0,161372	20,16846
ZjuHsp100-135	scaffold	orange1.1g011935m	scaffold	54,8808	0,4272	0,007784	422,16
ZjuHsp100-135	scaffold	orange1.1g047029m	scaffold	4,6163	0,4217	0,09135	35,51
ZjuHsp100-135	scaffold	orange1.1g009791m	scaffold	4,3025	0,4725	0,10982	33,09615
ZjuHsp100-135	scaffold	orange1.1g011254m	scaffold	51,814	0,4504	0,008693	398,5692
ZjuHsp100-135	scaffold	orange1.1g041382m	scaffold	24,3479	0,4405	0,018092	187,2915
ZjuHsp100-135	scaffold	orange1.1g048683m	scaffold	2,0961	0,3436	0,163923	16,12385
ZjuHsp100-135	scaffold	orange1.1g011374m	scaffold	20,5645	0,48	0,023341	158,1885
ZjuHsp100-135	scaffold	orange1.1g011286m	scaffold	19,0347	0,4706	0,024723	146,4208
ZjuHsp100-135	scaffold	orange1.1g013823m	scaffold	54,0852	0,4387	0,008111	416,04
ZjuHsp100-136	scaffold	orange1.1g013128m	scaffold	2,1339	0,2829	0,132574	16,41462
ZjuHsp100-136	scaffold	orange1.1g012846m	scaffold	3,3477	0,4103	0,122562	25,75154
ZjuHsp100-136	scaffold	orange1.1g012016m	scaffold	2,6219	0,4231	0,161372	20,16846
ZjuHsp100-136	scaffold	orange1.1g011935m	scaffold	54,8808	0,4272	0,007784	422,16
ZjuHsp100-136	scaffold	orange1.1g047029m	scaffold	4,6163	0,4217	0,09135	35,51
ZjuHsp100-136	scaffold	orange1.1g009791m	scaffold	4,3025	0,4725	0,10982	33,09615
ZjuHsp100-136	scaffold	orange1.1g011254m	scaffold	51,814	0,4504	0,008693	398,5692
ZjuHsp100-136	scaffold	orange1.1g041382m	scaffold	24,3479	0,4405	0,018092	187,2915
ZjuHsp100-136	scaffold	orange1.1g048683m	scaffold	2,0961	0,3436	0,163923	16,12385
ZjuHsp100-136	scaffold	orange1.1g011374m	scaffold	20,5645	0,48	0,023341	158,1885
ZjuHsp100-136	scaffold	orange1.1g011286m	scaffold	19,0347	0,4706	0,024723	146,4208
ZjuHsp100-136	scaffold	orange1.1g013823m	scaffold	54,0852	0,4387	0,008111	416,04
ZjuHsp100-137	scaffold	orange1.1g014376m	scaffold	1,0237	0,1129	0,110286	7,874615

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-137	scaffold	orange1.1g012655m	scaffold	0,9185	0,1056	0,11497	7,065385
ZjuHsp100-138	scaffold	orange1.1g002088m	scaffold	1,4569	0,2189	0,150251	11,20692
ZjuHsp100-138	scaffold	orange1.1g002169m	scaffold	1,4521	0,2211	0,152262	11,17
ZjuHsp100-138	scaffold	orange1.1g001395m	scaffold	1,4521	0,2211	0,152262	11,17
ZjuHsp100-139	scaffold	orange1.1g019145m	scaffold	1,2294	0,0992	0,08069	9,456923
ZjuHsp100-139	scaffold	orange1.1g016800m	scaffold	1,0696	0,0698	0,065258	8,227692
ZjuHsp100-139	scaffold	orange1.1g025762m	scaffold	14,1118	0,1691	0,011983	108,5523
ZjuHsp100-139	scaffold	orange1.1g022641m	scaffold	1,1901	0,0778	0,065373	9,154615
ZjuHsp100-139	scaffold	orange1.1g017884m	scaffold	52,5255	0,6758	0,012866	404,0423
ZjuHsp100-139	scaffold	orange1.1g020071m	scaffold	54,6036	0,6699	0,012268	420,0277
ZjuHsp100-139	scaffold	orange1.1g021937m	scaffold	51,7772	0,5872	0,011341	398,2862
ZjuHsp100-139	scaffold	orange1.1g021660m	scaffold	51,3329	0,6114	0,01191	394,8685
ZjuHsp100-139	scaffold	orange1.1g021959m	scaffold	51,7777	0,5874	0,011345	398,29
ZjuHsp100-140	scaffold	orange1.1g019145m	scaffold	1,2294	0,0992	0,08069	9,456923
ZjuHsp100-140	scaffold	orange1.1g016800m	scaffold	1,0696	0,0698	0,065258	8,227692
ZjuHsp100-140	scaffold	orange1.1g025762m	scaffold	14,1118	0,1691	0,011983	108,5523
ZjuHsp100-140	scaffold	orange1.1g022641m	scaffold	1,1901	0,0778	0,065373	9,154615
ZjuHsp100-140	scaffold	orange1.1g021937m	scaffold	51,7772	0,5872	0,011341	398,2862
ZjuHsp100-140	scaffold	orange1.1g021660m	scaffold	51,3329	0,6114	0,01191	394,8685
ZjuHsp100-140	scaffold	orange1.1g020071m	scaffold	54,6036	0,6699	0,012268	420,0277
ZjuHsp100-140	scaffold	orange1.1g021937m	scaffold	51,7772	0,5872	0,011341	398,2862
ZjuHsp100-140	scaffold	orange1.1g017884m	scaffold	52,5255	0,6758	0,012866	404,0423
ZjuHsp100-141	scaffold	orange1.1g013128m	scaffold	2,1339	0,2829	0,132574	16,41462
ZjuHsp100-141	scaffold	orange1.1g012846m	scaffold	3,3477	0,4103	0,122562	25,75154
ZjuHsp100-141	scaffold	orange1.1g012016m	scaffold	2,6219	0,4231	0,161372	20,16846
ZjuHsp100-141	scaffold	orange1.1g011935m	scaffold	54,8808	0,4272	0,007784	422,16
ZjuHsp100-141	scaffold	orange1.1g047029m	scaffold	4,6163	0,4217	0,09135	35,51
ZjuHsp100-141	scaffold	orange1.1g009791m	scaffold	4,3025	0,4725	0,10982	33,09615
ZjuHsp100-141	scaffold	orange1.1g011254m	scaffold	51,814	0,4504	0,008693	398,5692
ZjuHsp100-141	scaffold	orange1.1g041382m	scaffold	24,3479	0,4405	0,018092	187,2915
ZjuHsp100-141	scaffold	orange1.1g048683m	scaffold	2,0961	0,3436	0,163923	16,12385
ZjuHsp100-141	scaffold	orange1.1g011374m	scaffold	20,5645	0,48	0,023341	158,1885
ZjuHsp100-141	scaffold	orange1.1g011286m	scaffold	19,0347	0,4706	0,024723	146,4208
ZjuHsp100-141	scaffold	orange1.1g013823m	scaffold	54,0852	0,4387	0,008111	416,04
ZjuHsp100-142	scaffold	orange1.1g014376m	scaffold	1,0118	0,1099	0,108618	7,783077
ZjuHsp100-142	scaffold	orange1.1g012655m	scaffold	0,9093	0,1017	0,111844	6,994615
ZjuHsp100-143	scaffold	orange1.1g009911m	scaffold	42,4234	0,5777	0,013617	326,3338
ZjuHsp100-143	scaffold	orange1.1g042771m	scaffold	1,5421	0,0865	0,056092	11,86231
ZjuHsp100-143	scaffold	orange1.1g011305m	scaffold	55,7387	0,6784	0,012171	428,7592
ZjuHsp100-143	scaffold	orange1.1g011400m	scaffold	55,9983	0,6751	0,012056	430,7562
ZjuHsp100-143	scaffold	orange1.1g010888m	scaffold	28,6927	0,6733	0,023466	220,7131
ZjuHsp100-143	scaffold	orange1.1g010975m	scaffold	26,9567	0,6615	0,024539	207,3592
ZjuHsp100-143	scaffold	orange1.1g016911m	scaffold	14,9305	0,6127	0,041037	114,85
ZjuHsp100-143	scaffold	orange1.1g011393m	scaffold	58,1896	0,639	0,010981	447,6123
ZjuHsp100-143	scaffold	orange1.1g012000m	scaffold	57,923	0,6553	0,011313	445,5615
ZjuHsp100-144	scaffold	orange1.1g012016m	scaffold	3,384	0,233	0,068853	26,03077
ZjuHsp100-144	scaffold	orange1.1g012846m	scaffold	4,2778	0,3487	0,081514	32,90615
ZjuHsp100-144	scaffold	orange1.1g011254m	scaffold	21,1126	0,3805	0,018022	162,4046
ZjuHsp100-144	scaffold	orange1.1g013128m	scaffold	21,6228	0,3335	0,015424	166,3292
ZjuHsp100-144	scaffold	orange1.1g011935m	scaffold	17,4213	0,3808	0,021858	134,01
ZjuHsp100-144	scaffold	orange1.1g011374m	scaffold	49,5582	0,4053	0,008178	381,2169
ZjuHsp100-144	scaffold	orange1.1g013083m	scaffold	7,2077	0,3517	0,048795	55,44385
ZjuHsp100-144	scaffold	orange1.1g011286m	scaffold	49,8975	0,4048	0,008113	383,8269
ZjuHsp100-144	scaffold	orange1.1g009791m	scaffold	8,5689	0,4409	0,051454	65,91462
ZjuHsp100-144	scaffold	orange1.1g047029m	scaffold	23,2534	0,4198	0,018053	178,8723
ZjuHsp100-144	scaffold	orange1.1g013823m	scaffold	3,7389	0,4101	0,109685	28,76077
ZjuHsp100-144	scaffold	orange1.1g040638m	scaffold	6,2621	0,4177	0,066703	48,17
ZjuHsp100-144	scaffold	orange1.1g041382m	scaffold	52,2693	0,5106	0,009769	402,0715
ZjuHsp100-144	scaffold	orange1.1g048683m	scaffold	26,1604	0,4032	0,015413	201,2338
ZjuHsp100-144	scaffold	orange1.1g041423m	scaffold	50,2364	0,59	0,011744	386,4338
ZjuHsp100-144	scaffold	orange1.1g024550m	scaffold	7,09	0,2719	0,03835	54,53846
ZjuHsp100-144	scaffold	orange1.1g011573m	scaffold	42,4196	0,604	0,014239	326,3046
ZjuHsp100-144	scaffold	orange1.1g010133m	scaffold	51,4683	0,6358	0,012353	395,91
ZjuHsp100-144	scaffold	orange1.1g009640m	scaffold	27,14	0,7027	0,025892	208,7692
ZjuHsp100-144	scaffold	orange1.1g037859m	scaffold	52,3306	0,6069	0,011597	402,5431
ZjuHsp100-144	scaffold	orange1.1g035603m	scaffold	53,0999	0,5586	0,01052	408,4608
ZjuHsp100-144	scaffold	orange1.1g009791m	scaffold	3,0227	0,2932	0,096999	23,25154
ZjuHsp100-145	scaffold	orange1.1g005480m	scaffold	48,8463	0,2317	0,004743	375,7408
ZjuHsp100-145	scaffold	orange1.1g005815m	scaffold	1,3351	0,0938	0,070257	10,27

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-145	scaffold	orange1.1g005479m	scaffold	48,844	0,2318	0,004746	375,7231
ZjuHsp100-145	scaffold	orange1.1g005495m	scaffold	48,8393	0,2316	0,004742	375,6869
ZjuHsp100-145	scaffold	orange1.1g005304m	scaffold	48,8443	0,2316	0,004742	375,7254
ZjuHsp100-145	scaffold	orange1.1g005003m	scaffold	48,7647	0,2392	0,004905	375,1131
ZjuHsp100-145	scaffold	orange1.1g010809m	scaffold	50,3104	0,2504	0,004977	387,0031
ZjuHsp100-145	scaffold	orange1.1g007989m	scaffold	49,2334	0,2262	0,004594	378,7185
ZjuHsp100-145	scaffold	orange1.1g007367m	scaffold	48,0183	0,4709	0,009807	369,3715
ZjuHsp100-145	scaffold	orange1.1g004921m	scaffold	48,2844	0,4838	0,01002	371,4185
ZjuHsp100-145	scaffold	orange1.1g005066m	scaffold	49,9402	0,6559	0,013134	384,1554
ZjuHsp100-145	scaffold	orange1.1g005661m	scaffold	50,5429	0,6441	0,012744	388,7915
ZjuHsp100-145	scaffold	orange1.1g014798m	scaffold	50,9962	0,3222	0,006318	392,2785
ZjuHsp100-145	scaffold	orange1.1g009974m	scaffold	52,9428	0,5029	0,009499	407,2523
ZjuHsp100-145	scaffold	orange1.1g003696m	scaffold	51,0535	0,5829	0,011417	392,7192
ZjuHsp100-145	scaffold	orange1.1g007190m	scaffold	51,811	0,5791	0,011177	398,5462
ZjuHsp100-145	scaffold	orange1.1g003476m	scaffold	50,326	0,6416	0,012749	387,1231
ZjuHsp100-145	scaffold	orange1.1g003473m	scaffold	50,6089	0,6497	0,012838	389,2992
ZjuHsp100-145	scaffold	orange1.1g006534m	scaffold	51,0263	0,5985	0,011729	392,51
ZjuHsp100-145	scaffold	orange1.1g004770m	scaffold	50,2055	0,5765	0,011483	386,1962
ZjuHsp100-145	scaffold	orange1.1g002307m	scaffold	49,92	0,7178	0,014379	384
ZjuHsp100-145	scaffold	orange1.1g009263m	scaffold	50,6081	0,6559	0,01296	389,2931
ZjuHsp100-145	scaffold	orange1.1g003619m	scaffold	34,5266	0,6853	0,019848	265,5892
ZjuHsp100-145	scaffold	orange1.1g007575m	scaffold	52,0404	0,572	0,010991	400,3108
ZjuHsp100-145	scaffold	orange1.1g007591m	scaffold	52,1584	0,5558	0,010656	401,2185
ZjuHsp100-145	scaffold	orange1.1g043051m	scaffold	52,2847	0,7449	0,014247	402,19
ZjuHsp100-145	scaffold	orange1.1g043863m	scaffold	41,0381	0,6123	0,01492	315,6777
ZjuHsp100-146	scaffold	orange1.1g005517m	scaffold	1,0437	0,0137	0,013126	8,028462
ZjuHsp100-146	scaffold	orange1.1g003094m	scaffold	1,0213	0,0434	0,042495	7,856154
ZjuHsp100-146	scaffold	orange1.1g005505m	scaffold	1,0437	0,0137	0,013126	8,028462
ZjuHsp100-146	scaffold	orange1.1g047225m	scaffold	5,7757	0,2622	0,045397	44,42846
ZjuHsp100-146	scaffold	orange1.1g005515m	scaffold	1,0437	0,0137	0,013126	8,028462
ZjuHsp100-146	scaffold	orange1.1g003088m	scaffold	52,5604	0,4137	0,007871	404,3108
ZjuHsp100-146	scaffold	orange1.1g002012m	scaffold	33,9678	0,4939	0,01454	261,2908
ZjuHsp100-146	scaffold	orange1.1g002623m	scaffold	18,5501	0,4987	0,026884	142,6931
ZjuHsp100-146	scaffold	orange1.1g002068m	scaffold	21,9667	0,4994	0,022734	168,9746
ZjuHsp100-146	scaffold	orange1.1g046258m	scaffold	50,1316	0,5106	0,010185	385,6277
ZjuHsp100-146	scaffold	orange1.1g006289m	scaffold	32,9955	0,3176	0,009626	253,8115
ZjuHsp100-146	scaffold	orange1.1g005179m	scaffold	52,1464	0,4975	0,00954	401,1262
ZjuHsp100-146	scaffold	orange1.1g007723m	scaffold	53,1633	0,5814	0,010936	408,9485
ZjuHsp100-146	scaffold	orange1.1g004878m	scaffold	52,4272	0,455	0,008679	403,2862
ZjuHsp100-147	scaffold	orange1.1g004834m	scaffold	0,9319	0,0455	0,048825	7,168462
ZjuHsp100-147	scaffold	orange1.1g003349m	scaffold	0,9304	0,0574	0,061694	7,156923
ZjuHsp100-147	scaffold	orange1.1g005548m	scaffold	56,4779	0,6272	0,011105	434,4454
ZjuHsp100-148	scaffold	orange1.1g000823m	scaffold	0,7925	0,1115	0,140694	6,096154
ZjuHsp100-148	scaffold	orange1.1g000888m	scaffold	0,7927	0,1111	0,140154	6,097692
ZjuHsp100-148	scaffold	orange1.1g003253m	scaffold	0,8338	0,0635	0,076157	6,413846
ZjuHsp100-148	scaffold	orange1.1g000978m	scaffold	0,8306	0,1098	0,132194	6,389231
ZjuHsp100-148	scaffold	orange1.1g001227m	scaffold	3,4898	0,2876	0,082412	26,84462
ZjuHsp100-148	scaffold	orange1.1g000950m	scaffold	3,8048	0,3054	0,080267	29,26769
ZjuHsp100-148	scaffold	orange1.1g000921m	scaffold	4,0816	0,3198	0,078352	31,39692
ZjuHsp100-148	scaffold	orange1.1g001309m	scaffold	3,5367	0,2798	0,079113	27,20538
ZjuHsp100-148	scaffold	orange1.1g001862m	scaffold	3,2955	0,2589	0,078562	25,35
ZjuHsp100-148	scaffold	orange1.1g001861m	scaffold	3,2956	0,2589	0,078559	25,35077
ZjuHsp100-148	scaffold	orange1.1g003126m	scaffold	7,6574	0,4703	0,061418	58,90308
ZjuHsp100-148	scaffold	orange1.1g001076m	scaffold	4,0946	0,3294	0,080447	31,49692
ZjuHsp100-148	scaffold	orange1.1g001707m	scaffold	20,4144	0,6149	0,030121	157,0338
ZjuHsp100-148	scaffold	orange1.1g011393m	scaffold	57,1463	0,744	0,013019	439,5869
ZjuHsp100-148	scaffold	orange1.1g016044m	scaffold	54,4511	0,5464	0,010035	418,8546
ZjuHsp100-148	scaffold	orange1.1g009911m	scaffold	53,5185	0,8191	0,015305	411,6808
ZjuHsp100-149	scaffold	orange1.1g000823m	scaffold	0,7925	0,1115	0,140694	6,096154
ZjuHsp100-149	scaffold	orange1.1g000888m	scaffold	0,7927	0,1111	0,140154	6,097692
ZjuHsp100-149	scaffold	orange1.1g003253m	scaffold	0,8338	0,0635	0,076157	6,413846
ZjuHsp100-149	scaffold	orange1.1g000978m	scaffold	0,8306	0,1098	0,132194	6,389231
ZjuHsp100-149	scaffold	orange1.1g001227m	scaffold	3,4898	0,2876	0,082412	26,84462
ZjuHsp100-149	scaffold	orange1.1g000950m	scaffold	3,8048	0,3054	0,080267	29,26769
ZjuHsp100-149	scaffold	orange1.1g000921m	scaffold	4,0816	0,3198	0,078352	31,39692
ZjuHsp100-149	scaffold	orange1.1g001309m	scaffold	3,5367	0,2798	0,079113	27,20538
ZjuHsp100-149	scaffold	orange1.1g001862m	scaffold	3,2955	0,2589	0,078562	25,35
ZjuHsp100-149	scaffold	orange1.1g001861m	scaffold	3,2956	0,2589	0,078559	25,35077
ZjuHsp100-149	scaffold	orange1.1g003126m	scaffold	7,6574	0,4703	0,061418	58,90308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-149	scaffold	orange1.1g001076m	scaffold	4,0946	0,3294	0,080447	31,49692
ZjuHsp100-149	scaffold	orange1.1g001707m	scaffold	20,4144	0,6149	0,030121	157,0338
ZjuHsp100-149	scaffold	orange1.1g011393m	scaffold	57,1463	0,744	0,013019	439,5869
ZjuHsp100-149	scaffold	orange1.1g016044m	scaffold	54,4511	0,5464	0,010035	418,8546
ZjuHsp100-149	scaffold	orange1.1g009911m	scaffold	53,5185	0,8191	0,015305	411,6808
ZjuHsp100-150	scaffold	orange1.1g035603m	scaffold	3,4362	0,4004	0,116524	26,43231
ZjuHsp100-150	scaffold	orange1.1g037859m	scaffold	54,7357	0,3715	0,006787	421,0438
ZjuHsp100-150	scaffold	orange1.1g011573m	scaffold	6,8494	0,3209	0,046851	52,68769
ZjuHsp100-150	scaffold	orange1.1g041423m	scaffold	2,1568	0,2364	0,109607	16,59077
ZjuHsp100-150	scaffold	orange1.1g011254m	scaffold	47,7736	0,6363	0,013319	367,4892
ZjuHsp100-150	scaffold	orange1.1g010133m	scaffold	53,1846	0,6815	0,012814	409,1123
ZjuHsp100-150	scaffold	orange1.1g011935m	scaffold	55,6439	0,5878	0,010564	428,03
ZjuHsp100-150	scaffold	orange1.1g012016m	scaffold	50,3936	0,5554	0,011021	387,6431
ZjuHsp100-150	scaffold	orange1.1g009640m	scaffold	52,7176	0,6368	0,012079	405,52
ZjuHsp100-150	scaffold	orange1.1g013128m	scaffold	52,4107	0,5702	0,010879	403,1592
ZjuHsp100-150	scaffold	orange1.1g011286m	scaffold	53,766	0,6275	0,011671	413,5846
ZjuHsp100-150	scaffold	orange1.1g011374m	scaffold	53,9053	0,6141	0,011392	414,6562
ZjuHsp100-150	scaffold	orange1.1g013083m	scaffold	53,0714	0,5674	0,010691	408,2415
ZjuHsp100-150	scaffold	orange1.1g047029m	scaffold	8,8748	0,6194	0,069793	68,26769
ZjuHsp100-150	scaffold	orange1.1g012846m	scaffold	53,0725	0,6318	0,011904	408,25
ZjuHsp100-150	scaffold	orange1.1g009791m	scaffold	7,2952	0,6572	0,090087	56,11692
ZjuHsp100-150	scaffold	orange1.1g013823m	scaffold	54,6146	0,6177	0,01131	420,1123
ZjuHsp100-150	scaffold	orange1.1g024550m	scaffold	24,569	0,4678	0,01904	188,9923
ZjuHsp100-150	scaffold	orange1.1g040638m	scaffold	54,346	0,6405	0,011786	418,0462
ZjuHsp100-150	scaffold	orange1.1g041382m	scaffold	52,5061	0,6553	0,01248	403,8931
ZjuHsp100-151	scaffold	orange1.1g011305m	scaffold	0,8726	0,1179	0,135113	6,712308
ZjuHsp100-151	scaffold	orange1.1g011400m	scaffold	0,8726	0,1179	0,135113	6,712308
ZjuHsp100-151	scaffold	orange1.1g010888m	scaffold	0,8876	0,1156	0,130239	6,827692
ZjuHsp100-151	scaffold	orange1.1g010975m	scaffold	0,8876	0,1156	0,130239	6,827692
ZjuHsp100-151	scaffold	orange1.1g042771m	scaffold	52,903	0,6212	0,011742	406,9462
ZjuHsp100-151	scaffold	orange1.1g009911m	scaffold	55,9331	0,6233	0,011144	430,2546
ZjuHsp100-151	scaffold	orange1.1g016911m	scaffold	0,8349	0,1461	0,174991	6,422308
ZjuHsp100-151	scaffold	orange1.1g001746m	scaffold	39,8375	0,7538	0,018922	306,4423
ZjuHsp100-151	scaffold	orange1.1g001735m	scaffold	53,0306	0,7532	0,014203	407,9277
ZjuHsp100-151	scaffold	orange1.1g003231m	scaffold	50,9162	0,7611	0,014948	391,6631
ZjuHsp100-151	scaffold	orange1.1g012000m	scaffold	54,4946	0,6467	0,011867	419,1892
ZjuHsp100-151	scaffold	orange1.1g001150m	scaffold	54,9176	0,6873	0,012515	422,4431
ZjuHsp100-151	scaffold	orange1.1g001707m	scaffold	45,3545	0,749	0,016514	348,8808
ZjuHsp100-152	scaffold	orange1.1g011305m	scaffold	0,8726	0,1179	0,135113	6,712308
ZjuHsp100-152	scaffold	orange1.1g011400m	scaffold	0,8726	0,1179	0,135113	6,712308
ZjuHsp100-152	scaffold	orange1.1g010888m	scaffold	0,8876	0,1156	0,130239	6,827692
ZjuHsp100-152	scaffold	orange1.1g010975m	scaffold	0,8876	0,1156	0,130239	6,827692
ZjuHsp100-152	scaffold	orange1.1g042771m	scaffold	52,903	0,6212	0,011742	406,9462
ZjuHsp100-152	scaffold	orange1.1g009911m	scaffold	55,9331	0,6233	0,011144	430,2546
ZjuHsp100-152	scaffold	orange1.1g016911m	scaffold	0,8349	0,1461	0,174991	6,422308
ZjuHsp100-152	scaffold	orange1.1g001746m	scaffold	39,8375	0,7538	0,018922	306,4423
ZjuHsp100-152	scaffold	orange1.1g001735m	scaffold	53,0306	0,7532	0,014203	407,9277
ZjuHsp100-152	scaffold	orange1.1g003231m	scaffold	50,9162	0,7611	0,014948	391,6631
ZjuHsp100-152	scaffold	orange1.1g012000m	scaffold	54,4946	0,6467	0,011867	419,1892
ZjuHsp100-152	scaffold	orange1.1g001150m	scaffold	54,9176	0,6873	0,012515	422,4431
ZjuHsp100-152	scaffold	orange1.1g001707m	scaffold	45,3545	0,749	0,016514	348,8808
ZjuHsp100-153	scaffold	orange1.1g009974m	scaffold	0,96	0,0328	0,034167	7,384615
ZjuHsp100-153	scaffold	orange1.1g007190m	scaffold	0,9937	0,0555	0,055852	7,643846
ZjuHsp100-153	scaffold	orange1.1g003807m	scaffold	1,2426	0,1311	0,105505	9,558462
ZjuHsp100-153	scaffold	orange1.1g003696m	scaffold	1,2231	0,1298	0,106124	9,408462
ZjuHsp100-153	scaffold	orange1.1g005495m	scaffold	50,3729	0,5979	0,011869	387,4838
ZjuHsp100-153	scaffold	orange1.1g005480m	scaffold	49,4164	0,598	0,012101	380,1262
ZjuHsp100-153	scaffold	orange1.1g005066m	scaffold	44,2101	0,4444	0,010052	340,0777
ZjuHsp100-153	scaffold	orange1.1g005661m	scaffold	50,3841	0,4337	0,008608	387,57
ZjuHsp100-153	scaffold	orange1.1g007989m	scaffold	44,2216	0,5557	0,012566	340,1662
ZjuHsp100-153	scaffold	orange1.1g005304m	scaffold	47,7114	0,5588	0,011712	367,0108
ZjuHsp100-153	scaffold	orange1.1g005003m	scaffold	53,3735	0,5687	0,010655	410,5654
ZjuHsp100-153	scaffold	orange1.1g005479m	scaffold	50,5383	0,5978	0,011829	388,7562
ZjuHsp100-153	scaffold	orange1.1g007367m	scaffold	49,3333	0,6418	0,013009	379,4869
ZjuHsp100-153	scaffold	orange1.1g005738m	scaffold	55,5664	0,663	0,011932	427,4338
ZjuHsp100-153	scaffold	orange1.1g005815m	scaffold	53,7961	0,6141	0,011415	413,8162
ZjuHsp100-153	scaffold	orange1.1g004921m	scaffold	16,3447	0,6329	0,038722	125,7285
ZjuHsp100-153	scaffold	orange1.1g003476m	scaffold	53,965	0,7546	0,013983	415,1154
ZjuHsp100-153	scaffold	orange1.1g003806m	scaffold	54,6533	0,7542	0,0138	420,41

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-153	scaffold	orange1.1g004770m	scaffold	54,5113	0,7279	0,013353	419,3177
ZjuHsp100-153	scaffold	orange1.1g047690m	scaffold	55,6698	0,6958	0,012499	428,2292
ZjuHsp100-153	scaffold	orange1.1g005611m	scaffold	9,7571	0,7087	0,072634	75,05462
ZjuHsp100-153	scaffold	orange1.1g010809m	scaffold	26,6054	0,5731	0,021541	204,6569
ZjuHsp100-153	scaffold	orange1.1g003473m	scaffold	53,9008	0,7534	0,013978	414,6215
ZjuHsp100-153	scaffold	orange1.1g002307m	scaffold	55,1408	0,7759	0,014071	424,16
ZjuHsp100-153	scaffold	orange1.1g003619m	scaffold	55,5391	0,7681	0,01383	427,2238
ZjuHsp100-153	scaffold	orange1.1g006535m	scaffold	55,4395	0,7308	0,013182	426,4577
ZjuHsp100-153	scaffold	orange1.1g006534m	scaffold	55,4395	0,7308	0,013182	426,4577
ZjuHsp100-153	scaffold	orange1.1g007575m	scaffold	55,5086	0,7121	0,012829	426,9892
ZjuHsp100-153	scaffold	orange1.1g002754m	scaffold	57,0155	0,879	0,015417	438,5808
ZjuHsp100-153	scaffold	orange1.1g003000m	scaffold	57,8739	0,8386	0,01449	445,1838
ZjuHsp100-153	scaffold	orange1.1g007591m	scaffold	55,9784	0,7137	0,01275	430,6031
ZjuHsp100-153	scaffold	orange1.1g002961m	scaffold	57,464	0,8651	0,015055	442,0308
ZjuHsp100-153	scaffold	orange1.1g003669m	scaffold	57,3671	0,8654	0,015085	441,2854
ZjuHsp100-153	scaffold	orange1.1g003677m	scaffold	57,3654	0,8654	0,015086	441,2723
ZjuHsp100-153	scaffold	orange1.1g043863m	scaffold	55,5627	0,7956	0,014319	427,4054
ZjuHsp100-153	scaffold	orange1.1g003795m	scaffold	56,9249	0,8566	0,015048	437,8838
ZjuHsp100-154	scaffold	orange1.1g026896m	scaffold	0,1322	13,0854	98,98185	1,016923
ZjuHsp100-154	scaffold	orange1.1g026790m	scaffold	46,2776	0,995	0,021501	355,9815
ZjuHsp100-155	scaffold	orange1.1g021192m	scaffold	0,8294	0,1184	0,142754	6,38
ZjuHsp100-155	scaffold	orange1.1g013316m	scaffold	0,9099	0,0728	0,080009	6,999231
ZjuHsp100-155	scaffold	orange1.1g013706m	scaffold	0,9601	0,0783	0,081554	7,385385
ZjuHsp100-155	scaffold	orange1.1g011578m	scaffold	0,8846	0,0762	0,086141	6,804615
ZjuHsp100-156	scaffold	orange1.1g035603m	scaffold	4,9751	0,3314	0,066612	38,27
ZjuHsp100-156	scaffold	orange1.1g037859m	scaffold	4,5802	0,2662	0,05812	35,23231
ZjuHsp100-156	scaffold	orange1.1g041423m	scaffold	4,1058	0,2684	0,065371	31,58308
ZjuHsp100-156	scaffold	orange1.1g011573m	scaffold	2,3327	0,174	0,074592	17,94385
ZjuHsp100-156	scaffold	orange1.1g013128m	scaffold	17,2052	0,5642	0,032792	132,3477
ZjuHsp100-156	scaffold	orange1.1g011254m	scaffold	7,7045	0,6111	0,079317	59,26538
ZjuHsp100-156	scaffold	orange1.1g012016m	scaffold	12,5969	0,6112	0,04852	96,89923
ZjuHsp100-156	scaffold	orange1.1g011935m	scaffold	6,5679	0,5833	0,088811	50,52231
ZjuHsp100-156	scaffold	orange1.1g011286m	scaffold	12,9941	0,6257	0,048153	99,95462
ZjuHsp100-156	scaffold	orange1.1g011374m	scaffold	12,5464	0,6307	0,050269	96,51077
ZjuHsp100-156	scaffold	orange1.1g009791m	scaffold	7,1101	0,6455	0,090786	54,69308
ZjuHsp100-156	scaffold	orange1.1g012846m	scaffold	4,5537	0,6033	0,132486	35,02846
ZjuHsp100-156	scaffold	orange1.1g047029m	scaffold	17,274	0,6084	0,035221	132,8769
ZjuHsp100-156	scaffold	orange1.1g013083m	scaffold	30,9554	0,5991	0,019354	238,1185
ZjuHsp100-156	scaffold	orange1.1g009640m	scaffold	28,8321	0,6398	0,022191	221,7854
ZjuHsp100-156	scaffold	orange1.1g010133m	scaffold	16,5809	0,6307	0,038038	127,5454
ZjuHsp100-156	scaffold	orange1.1g024550m	scaffold	52,595	0,4378	0,008324	404,5769
ZjuHsp100-156	scaffold	orange1.1g040638m	scaffold	9,3493	0,6128	0,065545	71,91769
ZjuHsp100-156	scaffold	orange1.1g041382m	scaffold	18,0643	0,6452	0,035717	138,9562
ZjuHsp100-157	scaffold	orange1.1g035603m	scaffold	4,9751	0,3314	0,066612	38,27
ZjuHsp100-157	scaffold	orange1.1g037859m	scaffold	4,5802	0,2662	0,05812	35,23231
ZjuHsp100-157	scaffold	orange1.1g041423m	scaffold	4,1058	0,2684	0,065371	31,58308
ZjuHsp100-157	scaffold	orange1.1g011573m	scaffold	2,3327	0,174	0,074592	17,94385
ZjuHsp100-157	scaffold	orange1.1g013128m	scaffold	17,2052	0,5642	0,032792	132,3477
ZjuHsp100-157	scaffold	orange1.1g011254m	scaffold	7,7045	0,6111	0,079317	59,26538
ZjuHsp100-157	scaffold	orange1.1g012016m	scaffold	12,5969	0,6112	0,04852	96,89923
ZjuHsp100-157	scaffold	orange1.1g011935m	scaffold	6,5679	0,5833	0,088811	50,52231
ZjuHsp100-157	scaffold	orange1.1g011286m	scaffold	12,9941	0,6257	0,048153	99,95462
ZjuHsp100-157	scaffold	orange1.1g011374m	scaffold	12,5464	0,6307	0,050269	96,51077
ZjuHsp100-157	scaffold	orange1.1g009791m	scaffold	7,1101	0,6455	0,090786	54,69308
ZjuHsp100-157	scaffold	orange1.1g012846m	scaffold	4,5537	0,6033	0,132486	35,02846
ZjuHsp100-157	scaffold	orange1.1g047029m	scaffold	17,274	0,6084	0,035221	132,8769
ZjuHsp100-157	scaffold	orange1.1g013083m	scaffold	30,9554	0,5991	0,019354	238,1185
ZjuHsp100-157	scaffold	orange1.1g009640m	scaffold	28,8321	0,6398	0,022191	221,7854
ZjuHsp100-157	scaffold	orange1.1g010133m	scaffold	16,5809	0,6307	0,038038	127,5454
ZjuHsp100-157	scaffold	orange1.1g024550m	scaffold	52,595	0,4378	0,008324	404,5769
ZjuHsp100-157	scaffold	orange1.1g040638m	scaffold	9,3493	0,6128	0,065545	71,91769
ZjuHsp100-157	scaffold	orange1.1g041382m	scaffold	18,0643	0,6452	0,035717	138,9562
ZjuHsp100-158	scaffold	orange1.1g035603m	scaffold	6,0819	0,3035	0,049902	46,78385
ZjuHsp100-158	scaffold	orange1.1g037859m	scaffold	2,5856	0,311	0,120282	19,88923
ZjuHsp100-158	scaffold	orange1.1g041423m	scaffold	4,3788	0,3408	0,07783	33,68308
ZjuHsp100-158	scaffold	orange1.1g011573m	scaffold	8,2334	0,3185	0,038684	63,33385
ZjuHsp100-158	scaffold	orange1.1g012016m	scaffold	50,531	0,5862	0,011601	388,7
ZjuHsp100-158	scaffold	orange1.1g011935m	scaffold	54,5755	0,5858	0,010734	419,8115
ZjuHsp100-158	scaffold	orange1.1g012846m	scaffold	44,6204	0,636	0,014254	343,2338

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-158	scaffold	orange1.1g009791m	scaffold	21,1245	0,6499	0,030765	162,4962
ZjuHsp100-158	scaffold	orange1.1g011374m	scaffold	53,899	0,593	0,011002	414,6077
ZjuHsp100-158	scaffold	orange1.1g047029m	scaffold	7,0628	0,608	0,086085	54,32923
ZjuHsp100-158	scaffold	orange1.1g013128m	scaffold	16,3827	0,6084	0,037137	126,0208
ZjuHsp100-158	scaffold	orange1.1g011254m	scaffold	35,1409	0,5906	0,016807	270,3146
ZjuHsp100-158	scaffold	orange1.1g041382m	scaffold	52,6644	0,6386	0,012126	405,1108
ZjuHsp100-158	scaffold	orange1.1g010133m	scaffold	55,3449	0,6661	0,012035	425,73
ZjuHsp100-158	scaffold	orange1.1g013083m	scaffold	48,8775	0,6213	0,012711	375,9808
ZjuHsp100-158	scaffold	orange1.1g011286m	scaffold	54,8886	0,6033	0,010991	422,22
ZjuHsp100-158	scaffold	orange1.1g024550m	scaffold	17,9398	0,4372	0,02437	137,9985
ZjuHsp100-158	scaffold	orange1.1g040638m	scaffold	51,8312	0,6392	0,012332	398,7015
ZjuHsp100-158	scaffold	orange1.1g009640m	scaffold	53,3656	0,6874	0,012881	410,5046
ZjuHsp100-159	scaffold	orange1.1g035603m	scaffold	6,0816	0,3035	0,049905	46,78154
ZjuHsp100-158	scaffold	orange1.1g037859m	scaffold	6,0828	0,3035	0,049895	46,79077
ZjuHsp100-159	scaffold	orange1.1g041423m	scaffold	4,3789	0,3408	0,077828	33,68385
ZjuHsp100-158	scaffold	orange1.1g011573m	scaffold	8,2325	0,3185	0,038688	63,32692
ZjuHsp100-159	scaffold	orange1.1g012016m	scaffold	50,5295	0,5863	0,011603	388,6885
ZjuHsp100-158	scaffold	orange1.1g011935m	scaffold	54,6201	0,5847	0,010705	420,1546
ZjuHsp100-159	scaffold	orange1.1g012846m	scaffold	46,0118	0,636	0,013823	353,9369
ZjuHsp100-158	scaffold	orange1.1g009791m	scaffold	21,0828	0,6499	0,030826	162,1754
ZjuHsp100-159	scaffold	orange1.1g013083m	scaffold	48,777	0,6224	0,01276	375,2077
ZjuHsp100-158	scaffold	orange1.1g047029m	scaffold	7,0638	0,608	0,086073	54,33692
ZjuHsp100-159	scaffold	orange1.1g013128m	scaffold	16,4067	0,6084	0,037082	126,2054
ZjuHsp100-158	scaffold	orange1.1g011254m	scaffold	34,0973	0,5906	0,017321	262,2869
ZjuHsp100-159	scaffold	orange1.1g041382m	scaffold	52,6668	0,6385	0,012123	405,1292
ZjuHsp100-158	scaffold	orange1.1g010133m	scaffold	55,3435	0,6662	0,012038	425,7192
ZjuHsp100-159	scaffold	orange1.1g011286m	scaffold	53,888	0,6033	0,011195	414,5231
ZjuHsp100-158	scaffold	orange1.1g011374m	scaffold	53,9057	0,593	0,011001	414,6592
ZjuHsp100-159	scaffold	orange1.1g024550m	scaffold	17,9004	0,4372	0,024424	137,6954
ZjuHsp100-158	scaffold	orange1.1g040638m	scaffold	51,831	0,6391	0,01233	398,7
ZjuHsp100-159	scaffold	orange1.1g009640m	scaffold	53,3595	0,6874	0,012882	410,4577
ZjuHsp100-160	scaffold	orange1.1g012846m	scaffold	52,8287	0,652	0,012342	406,3746
ZjuHsp100-160	scaffold	orange1.1g009640m	scaffold	53,049	0,6001	0,011312	408,0692
ZjuHsp100-160	scaffold	orange1.1g044297m	scaffold	2,2823	0,2645	0,115892	17,55615
ZjuHsp100-160	scaffold	orange1.1g011664m	scaffold	2,1827	0,2464	0,112888	16,79
ZjuHsp100-160	scaffold	orange1.1g012016m	scaffold	50,9391	0,7048	0,013836	391,8392
ZjuHsp100-160	scaffold	orange1.1g011286m	scaffold	52,9899	0,6661	0,01257	407,6146
ZjuHsp100-160	scaffold	orange1.1g011374m	scaffold	53,0914	0,6684	0,01259	408,3954
ZjuHsp100-160	scaffold	orange1.1g011254m	scaffold	53,4014	0,6643	0,01244	410,78
ZjuHsp100-160	scaffold	orange1.1g009791m	scaffold	3,8182	0,7501	0,196454	29,37077
ZjuHsp100-160	scaffold	orange1.1g041423m	scaffold	54,3983	0,7512	0,013809	418,4485
ZjuHsp100-160	scaffold	orange1.1g011935m	scaffold	55,3363	0,685	0,012379	425,6638
ZjuHsp100-160	scaffold	orange1.1g013128m	scaffold	51,3303	0,7578	0,014763	394,8485
ZjuHsp100-160	scaffold	orange1.1g010133m	scaffold	52,2598	0,7363	0,014089	401,9985
ZjuHsp100-160	scaffold	orange1.1g040638m	scaffold	53,1727	0,6628	0,012465	409,0208
ZjuHsp100-160	scaffold	orange1.1g047029m	scaffold	50,9226	0,7607	0,014938	391,7123
ZjuHsp100-160	scaffold	orange1.1g041382m	scaffold	54,9638	0,6998	0,012732	422,7985
ZjuHsp100-160	scaffold	orange1.1g011573m	scaffold	55,3979	0,7447	0,013443	426,1377
ZjuHsp100-160	scaffold	orange1.1g013083m	scaffold	50,1105	0,7966	0,015897	385,4654
ZjuHsp100-161	scaffold	orange1.1g015875m	scaffold	58,1652	0,5385	0,009258	447,4246
ZjuHsp100-161	scaffold	orange1.1g014743m	scaffold	55,3121	0,5286	0,009557	425,4777
ZjuHsp100-161	scaffold	orange1.1g026258m	scaffold	1,3153	0,0158	0,012012	10,11769
ZjuHsp100-161	scaffold	orange1.1g022768m	scaffold	1,1266	0,0015	0,001331	8,666154
ZjuHsp100-161	scaffold	orange1.1g013281m	scaffold	8,9642	0,5553	0,061946	68,95538
ZjuHsp100-161	scaffold	orange1.1g013269m	scaffold	8,0499	0,5568	0,069169	61,92231
ZjuHsp100-161	scaffold	orange1.1g014332m	scaffold	57,622	0,5439	0,009439	443,2462
ZjuHsp100-161	scaffold	orange1.1g014525m	scaffold	46,937	0,5419	0,011545	361,0538
ZjuHsp100-161	scaffold	orange1.1g039866m	scaffold	53,8721	0,5458	0,010131	414,4008
ZjuHsp100-161	scaffold	orange1.1g011553m	scaffold	8,9624	0,5553	0,061959	68,94154
ZjuHsp100-161	scaffold	orange1.1g017300m	scaffold	55,7353	0,5282	0,009477	428,7331
ZjuHsp100-161	scaffold	orange1.1g014712m	scaffold	58,496	0,6199	0,010597	449,9692
ZjuHsp100-161	scaffold	orange1.1g014665m	scaffold	58,4925	0,6198	0,010596	449,9423
ZjuHsp100-161	scaffold	orange1.1g017161m	scaffold	57,8185	0,5572	0,009637	444,7577
ZjuHsp100-161	scaffold	orange1.1g024249m	scaffold	13,8352	0,4079	0,029483	106,4246
ZjuHsp100-161	scaffold	orange1.1g003503m	scaffold	54,6377	0,7792	0,014261	420,29
ZjuHsp100-161	scaffold	orange1.1g003499m	scaffold	54,7616	0,7792	0,014229	421,2431
ZjuHsp100-161	scaffold	orange1.1g003691m	scaffold	54,4166	0,7821	0,014372	418,5892
ZjuHsp100-161	scaffold	orange1.1g007053m	scaffold	7,535	0,7658	0,101627	57,96462
ZjuHsp100-161	scaffold	orange1.1g003525m	scaffold	54,4187	0,782	0,01437	418,6054

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-161	scaffold	orange1.1g005014m	scaffold	13,1868	0,7961	0,060371	101,4369
ZjuHsp100-161	scaffold	orange1.1g003493m	scaffold	54,7669	0,779	0,014224	421,2838
ZjuHsp100-161	scaffold	orange1.1g003620m	scaffold	28,4143	0,7873	0,027708	218,5715
ZjuHsp100-161	scaffold	orange1.1g004267m	scaffold	22,3984	0,7896	0,035253	172,2954
ZjuHsp100-161	scaffold	orange1.1g004384m	scaffold	28,7201	0,7873	0,027413	220,9238
ZjuHsp100-161	scaffold	orange1.1g003623m	scaffold	13,1888	0,7961	0,060362	101,4523
ZjuHsp100-162	scaffold	orange1.1g009791m	scaffold	11,7715	0,6366	0,05408	90,55
ZjuHsp100-162	scaffold	orange1.1g035603m	scaffold	2,8549	0,3162	0,110757	21,96077
ZjuHsp100-162	scaffold	orange1.1g037859m	scaffold	2,2092	0,33	0,149375	16,99385
ZjuHsp100-162	scaffold	orange1.1g041423m	scaffold	6,3071	0,3398	0,053876	48,51615
ZjuHsp100-162	scaffold	orange1.1g011573m	scaffold	9,7656	0,314	0,032154	75,12
ZjuHsp100-162	scaffold	orange1.1g011935m	scaffold	53,5795	0,623	0,011628	412,15
ZjuHsp100-162	scaffold	orange1.1g012846m	scaffold	22,7146	0,6377	0,028074	174,7277
ZjuHsp100-162	scaffold	orange1.1g012016m	scaffold	50,8278	0,6039	0,011881	390,9831
ZjuHsp100-162	scaffold	orange1.1g013128m	scaffold	32,3516	0,6008	0,018571	248,8585
ZjuHsp100-162	scaffold	orange1.1g013083m	scaffold	49,7429	0,5999	0,01206	382,6377
ZjuHsp100-162	scaffold	orange1.1g011254m	scaffold	18,2195	0,6068	0,033305	140,15
ZjuHsp100-162	scaffold	orange1.1g011374m	scaffold	52,1251	0,6213	0,011919	400,9623
ZjuHsp100-162	scaffold	orange1.1g011286m	scaffold	52,7781	0,6091	0,011541	405,9854
ZjuHsp100-162	scaffold	orange1.1g047029m	scaffold	10,0806	0,6181	0,061316	77,54308
ZjuHsp100-162	scaffold	orange1.1g048683m	scaffold	17,933	0,577	0,032175	137,9462
ZjuHsp100-162	scaffold	orange1.1g024550m	scaffold	33,0901	0,4203	0,012702	254,5392
ZjuHsp100-162	scaffold	orange1.1g040638m	scaffold	12,041	0,6722	0,055826	92,62308
ZjuHsp100-162	scaffold	orange1.1g009640m	scaffold	50,9285	0,7481	0,014689	391,7577
ZjuHsp100-162	scaffold	orange1.1g010133m	scaffold	30,3203	0,6796	0,022414	233,2331
Mean				32,49276353	0,621637696	0,684844309	248,6054411

Z. jujuba – M. accuminata

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	GSMUA_Achr5T21820_001	5	9,1745	0,1797	0,0195869	70,57307692
ZjuHsp100-01	1	GSMUA_Achr5T16360_001	5	26,4591	0,1874	0,00708263	203,5315385
ZjuHsp100-01	1	GSMUA_Achr3T05030_001	3	51,8196	0,2525	0,00487267	398,6123077
ZjuHsp100-01	1	GSMUA_Achr6T03880_001	6	5,7936	0,2057	0,03550469	44,56615385
ZjuHsp100-01	1	GSMUA_Achr9T27350_001	9	55,8990	0,5350	0,00957083	429,9923077
ZjuHsp100-01	1	GSMUA_Achr4T17530_001	4	72,5301	0,5352	0,00737901	557,9238462
ZjuHsp100-01	1	GSMUA_Achr3T10890_001	3	64,1448	0,5167	0,00805521	493,4215385
ZjuHsp100-01	1	GSMUA_Achr4T17520_001	4	75,7482	0,4941	0,00652293	582,6784615
ZjuHsp100-01	1	GSMUA_Achr5T10060_001	5	25,1762	0,5568	0,02211613	193,6630769
ZjuHsp100-01	1	GSMUA_Achr1T27100_001	1	14,7865	0,5183	0,03505224	113,7423077
ZjuHsp100-01	1	GSMUA_Achr3T05230_001	3	64,6876	0,5487	0,00848231	497,5969231
ZjuHsp100-02	1	GSMUA_Achr5T21820_001	5	10,0711	0,1662	0,01650267	77,47
ZjuHsp100-02	1	GSMUA_Achr5T16360_001	5	12,3149	0,1684	0,01367449	94,73
ZjuHsp100-02	1	GSMUA_Achr3T05030_001	3	37,4844	0,2274	0,00606652	288,3415385
ZjuHsp100-02	1	GSMUA_Achr6T03880_001	6	4,7626	0,1902	0,03993617	36,63538462
ZjuHsp100-02	1	GSMUA_Achr9T27350_001	9	57,1065	0,5026	0,0088011	439,2807692
ZjuHsp100-02	1	GSMUA_Achr4T17530_001	4	53,8137	0,5085	0,00944927	413,9515385
ZjuHsp100-02	1	GSMUA_Achr3T10890_001	3	63,4734	0,5192	0,0081798	488,2569231
ZjuHsp100-02	1	GSMUA_Achr4T17520_001	4	75,6288	0,4942	0,00653455	581,76
ZjuHsp100-02	1	GSMUA_Achr1T27100_001	1	15,0181	0,519	0,0345583	115,5238462
ZjuHsp100-02	1	GSMUA_Achr5T10060_001	5	23,5363	0,5524	0,02347013	181,0484615
ZjuHsp100-03	1	GSMUA_Achr7T15980_001	7	2,5868	0,4986	0,1927478	19,89846154
ZjuHsp100-03	1	GSMUA_Achr5T04920_001	5	2,9368	0,5184	0,17651866	22,59076923
ZjuHsp100-03	1	GSMUA_Achr3T05630_001	3	2,6363	0,4756	0,18040435	20,27923077
ZjuHsp100-03	1	GSMUA_Achr9T13860_001	9	2,4269	0,4839	0,19939017	18,66846154
ZjuHsp100-03	1	GSMUA_Achr3T04960_001	3	47,9802	0,7907	0,01647971	369,0784615
ZjuHsp100-04	1	GSMUA_Achr9T27350_001	9	4,5482	0,3345	0,07354558	34,98615385
ZjuHsp100-04	1	GSMUA_Achr5T21820_001	5	71,3944	0,454	0,00635904	549,1876923
ZjuHsp100-04	1	GSMUA_Achr5T16360_001	5	68,5922	0,4488	0,00654302	527,6323077
ZjuHsp100-04	1	GSMUA_Achr3T10890_001	3	61,8188	0,5457	0,00882741	475,5292308
ZjuHsp100-04	1	GSMUA_Achr1T27100_001	1	63,989	0,5375	0,00839988	492,2230769
ZjuHsp100-04	1	GSMUA_Achr5T10060_001	5	5,9181	0,6015	0,10163735	45,52384615
ZjuHsp100-04	1	GSMUA_Achr4T17530_001	4	73,4635	0,5568	0,0356252	565,1038462
ZjuHsp100-04	1	GSMUA_Achr4T17520_001	4	15,0736	0,537	0,0356252	115,9507692
ZjuHsp100-05	1	GSMUA_Achr7T19880_001	7	3,6641	0,2255	0,06154308	28,18538462
ZjuHsp100-05	1	GSMUA_Achr10T31180_001	10	2,4518	0,289	0,11787258	18,86
ZjuHsp100-06	1	GSMUA_Achr7T19880_001	7	3,6643	0,2255	0,06153972	28,18692308
ZjuHsp100-06	1	GSMUA_Achr10T31180_001	10	2,4517	0,289	0,11787739	18,85923077
ZjuHsp100-07	1	GSMUA_Achr9T22420_001	9	2,1267	0,0781	0,03672356	16,35923077
ZjuHsp100-07	1	GSMUA_Achr6T16670_001	6	10,6866	0,1764	0,01650665	82,20461538
ZjuHsp100-07	1	GSMUA_Achr3T16240_001	3	50,0252	0,5129	0,01025283	384,8092308
ZjuHsp100-07	1	GSMUA_Achr1T13710_001	1	16,4091	0,5149	0,03137893	126,2238462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-07	1	GSMUA_Achr6T08040_001	6	53,4349	0,3982	0,00745206	411,0376923
ZjuHsp100-07	1	GSMUA_Achr3T18630_001	3	51,6448	0,4758	0,00921293	397,2676923
ZjuHsp100-07	1	GSMUA_Achr8T09160_001	8	52,2314	0,4867	0,00931815	401,78
ZjuHsp100-07	1	GSMUA_Achr6T16470_001	6	52,1834	0,4979	0,00954135	401,4107692
ZjuHsp100-07	1	GSMUA_Achr10T12430_001	10	54,0819	0,6219	0,01149923	416,0146154
ZjuHsp100-07	1	GSMUA_Achr6T23780_001	6	50,9103	0,5917	0,0116224	391,6176923
ZjuHsp100-07	1	GSMUA_AchrUn_randomT22440_001	scaffold	19,9312	0,522	0,02619009	153,3169231
ZjuHsp100-08	1	GSMUA_Achr9T05850_001	9	2,1702	0,1342	0,06183762	16,69384615
ZjuHsp100-08	1	GSMUA_Achr8T27650_001	8	1,8733	0,1404	0,07494795	14,41
ZjuHsp100-09	1	GSMUA_AchrUn_randomT12540_001		1,5457	0,0156	0,01009251	11,89
ZjuHsp100-09	1	GSMUA_Achr8T16830_001	8	1,8191	0,0188	0,01033478	13,99307692
ZjuHsp100-09	1	GSMUA_AchrUn_randomT26560_001	scaffold	3,0695	0,0071	0,00231308	23,61153846
ZjuHsp100-09	1	GSMUA_Achr10T27140_001	10	53,5668	0,5114	0,00954696	412,0523077
ZjuHsp100-09	1	GSMUA_Achr7T09950_001	7	53,7712	0,5015	0,00932655	413,6246154
ZjuHsp100-09	1	GSMUA_AchrUn_randomT00180_001	scaffold	54,3843	0,5225	0,00960755	418,3407692
ZjuHsp100-09	1	GSMUA_Achr4T03720_001	4	54,3466	0,5279	0,00971358	418,0507692
ZjuHsp100-09	1	GSMUA_Achr7T17620_001	7	53,9615	0,5343	0,0099015	415,0884615
ZjuHsp100-09	1	GSMUA_Achr5T04520_001	5	52,2976	0,5424	0,01037141	402,2892308
ZjuHsp100-09	1	GSMUA_Achr9T13230_001	9	52,0099	0,5423	0,01042686	400,0761538
ZjuHsp100-09	1	GSMUA_Achr3T04570_001	3	52,9618	0,5912	0,01116276	407,3984615
ZjuHsp100-09	1	GSMUA_Achr4T05840_001	4	51,8171	0,5845	0,01128006	398,5930769
ZjuHsp100-09	1	GSMUA_Achr4T05850_001	4	52,6049	0,5902	0,01121949	404,6530769
ZjuHsp100-09	1	GSMUA_Achr6T12250_001	6	24,7418	0,4953	0,02001875	190,3215385
ZjuHsp100-09	1	GSMUA_Achr11T10600_001	11	37,8585	0,5177	0,0136746	291,2192308
ZjuHsp100-09	1	GSMUA_Achr7T21960_001	7	32,8771	0,6026	0,01832887	252,9007692
ZjuHsp100-09	1	GSMUA_Achr9T24030_001	9	23,5301	0,7506	0,03189957	181,0007692
ZjuHsp100-09	1	GSMUA_AchrUn_randomT03040_001	scaffold	49,5839	0,5536	0,01116491	381,4146154
ZjuHsp100-09	1	GSMUA_Achr4T05050_001	4	8,7468	0,7943	0,09081035	67,28307692
ZjuHsp100-12	1	GSMUA_Achr1T01240_001	1	2,6613	0,4993	0,18761508	23,61153846
ZjuHsp100-12	1	GSMUA_Achr1T01230_001	1	3,2199	0,3908	0,12137023	24,76846154
ZjuHsp100-12	1	GSMUA_Achr1T01220_001	1	2,6054	0,295	0,11322638	20,04153846
ZjuHsp100-13	1	GSMUA_Achr1T01240_001	1	2,6377	0,4989	0,18914206	20,29
ZjuHsp100-13	1	GSMUA_Achr1T01230_001	1	3,2199	0,3908	0,12137023	24,76846154
ZjuHsp100-13	1	GSMUA_Achr1T01220_001	1	2,6019	0,2946	0,11322495	20,01461538
ZjuHsp100-14	1	GSMUA_Achr4T00810_001	4	1,6797	0,1261	0,07507293	12,92076923
ZjuHsp100-14	1	GSMUA_Achr7T09910_001	7	4,4348	0,1581	0,03564986	34,11384615
ZjuHsp100-14	1	GSMUA_Achr10T21590_001	10	50,5213	0,6548	0,01296087	388,6253846
ZjuHsp100-14	1	GSMUA_Achr7T25300_001	7	51,6765	0,6135	0,01187193	397,5115385
ZjuHsp100-14	1	GSMUA_Achr2T2550_001	2	49,5117	0,5919	0,01195475	380,8592308
ZjuHsp100-14	1	GSMUA_Achr4T24320_001	4	49,2883	0,6087	0,01234979	379,1407692
ZjuHsp100-14	1	GSMUA_Achr3T01430_001	3	50,5048	0,5992	0,01186422	388,4984615
ZjuHsp100-14	1	GSMUA_Achr10T07490_001	10	51,1952	0,7641	0,01492523	393,8092308
ZjuHsp100-14	1	GSMUA_Achr6T27610_001	6	53,8436	0,8457	0,0157066	414,1815385
ZjuHsp100-14	1	GSMUA_Achr9T05420_001	9	53,5581	0,8278	0,01545611	411,9853846
ZjuHsp100-15	2	GSMUA_Achr2T22550_001	2	1,6882	0,0492	0,02914347	12,98615385
ZjuHsp100-15	2	GSMUA_Achr4T24320_001	4	1,8769	0,0511	0,02722574	14,43769231
ZjuHsp100-15	2	GSMUA_Achr3T01430_001	3	1,859	0,0527	0,02834857	14,3
ZjuHsp100-15	2	GSMUA_Achr6T09890_001	6	1,5525	0,246	0,15845411	11,94230769
ZjuHsp100-15	2	GSMUA_Achr4T00810_001	4	52,2452	0,6158	0,01178673	401,8861538
ZjuHsp100-15	2	GSMUA_Achr10T07490_001	10	54,7734	0,706	0,01288947	421,3338462
ZjuHsp100-15	2	GSMUA_Achr6T27610_001	6	54,4509	0,7001	0,01285746	418,8530769
ZjuHsp100-15	2	GSMUA_Achr10T21590_001	10	50,9774	0,5624	0,01103234	392,1338462
ZjuHsp100-15	2	GSMUA_Achr7T2550_001	7	50,6909	0,6082	0,01199821	389,93
ZjuHsp100-16	2	GSMUA_Achr2T22550_001	2	1,6882	0,0492	0,02914347	12,98615385
ZjuHsp100-16	2	GSMUA_Achr4T24320_001	4	1,8769	0,0511	0,02722574	14,43769231
ZjuHsp100-16	2	GSMUA_Achr3T01430_001	3	1,859	0,0527	0,02834857	14,3
ZjuHsp100-16	2	GSMUA_Achr6T09890_001	6	1,5525	0,246	0,15845411	11,94230769
ZjuHsp100-16	2	GSMUA_Achr10T21590_001	10	50,9775	0,5623	0,01103036	392,1346154
ZjuHsp100-16	2	GSMUA_Achr7T25300_001	7	50,6923	0,6082	0,01199788	389,9407692
ZjuHsp100-16	2	GSMUA_Achr4T00810_001	4	52,2466	0,6157	0,0117845	401,8969231
ZjuHsp100-16	2	GSMUA_Achr10T07490_001	10	54,7762	0,7061	0,01289063	421,3553846
ZjuHsp100-16	2	GSMUA_Achr6T27610_001	6	54,4524	0,7001	0,0128571	418,8646154
ZjuHsp100-17	2	GSMUA_Achr4T14720_001	4	2,0361	0,2241	0,11006336	15,66230769
ZjuHsp100-18	2	GSMUA_Achr4T14720_001	4	2,0361	0,2241	0,11006336	15,66230769
ZjuHsp100-19	2	GSMUA_Achr10T29410_001	10	2,0094	0,569	0,28316911	15,45692308
ZjuHsp100-19	2	GSMUA_Achr7T22460_001	7	1,8132	0,524	0,28899184	13,94769231
ZjuHsp100-19	2	GSMUA_Achr10T05930_001	10	1,8634	0,506	0,27154664	14,33384615
ZjuHsp100-20	2	GSMUA_Achr6T33650_001	6	2,1304	0,084	0,03942922	16,38769231
ZjuHsp100-20	2	GSMUA_Achr4T05050_001	4	46,3736	0,647	0,0139519	356,72
ZjuHsp100-20	2	GSMUA_Achr9T24030_001	9	45,9181	0,644	0,01402497	353,2161538
ZjuHsp100-20	2	GSMUA_AchrUn_randomT03040_001	scaffold	52,3383	0,5081	0,009708	402,6023077
ZjuHsp100-20	2	GSMUA_AchrUn_randomT18700_001	scaffold	51,4242	0,746	0,01450679	395,5707692
ZjuHsp100-20	2	GSMUA_Achr9T03360_001	9	54,1076	0,7815	0,01444344	416,2123077
ZjuHsp100-20	2	GSMUA_Achr11T24090_001	11	54,8197	0,7785	0,0142011	421,69
ZjuHsp100-20	2	GSMUA_Achr7T04590_001	7	51,2785	0,6022	0,01174371	394,45

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-20	2	GSMUA_Achr4T08480_001	4	49,6663	0,8226	0,01656254	382,0484615
ZjuHsp100-20	2	GSMUA_Achr4T15660_001	4	49,3887	0,8165	0,01653212	379,9130769
ZjuHsp100-20	2	GSMUA_Achr5T09650_001	5	53,1245	0,7603	0,01431166	408,65
ZjuHsp100-20	2	GSMUA_Achr1T05180_001	1	52,1314	0,6696	0,01284447	401,0107692
ZjuHsp100-20	2	GSMUA_Achr3T1630_001	3	48,4126	0,8762	0,01809859	372,4046154
ZjuHsp100-20	2	GSMUA_Achr9T18420_001	9	52,8426	0,6933	0,0131201	406,4815385
ZjuHsp100-20	2	GSMUA_Achr3T16280_001	3	49,9484	0,8962	0,01794252	384,2184615
ZjuHsp100-21	2	GSMUA_Achr6T33650_001	6	2,1305	0,084	0,03942736	16,38846154
ZjuHsp100-21	2	GSMUA_Achr4T05050_001	4	46,28	0,6437	0,01390882	356
ZjuHsp100-21	2	GSMUA_Achr9T24030_001	9	45,8234	0,6408	0,01398412	352,4876923
ZjuHsp100-21	2	GSMUA_AchrUn_randomT03040_001	scaffold	52,2003	0,5045	0,0096647	401,5407692
ZjuHsp100-21	2	GSMUA_AchrUn_randomT18700_001	scaffold	51,2879	0,7464	0,01455314	394,5223077
ZjuHsp100-21	2	GSMUA_Achr9T03360_001	9	54,1066	0,7815	0,01444371	416,2046154
ZjuHsp100-21	2	GSMUA_Achr11T24090_001	11	54,8791	0,7765	0,01414928	422,1469231
ZjuHsp100-21	2	GSMUA_Achr7T04590_001	7	51,1524	0,5984	0,01169838	393,48
ZjuHsp100-21	2	GSMUA_Achr4T08480_001	4	49,6571	0,8227	0,01656762	381,9776923
ZjuHsp100-21	2	GSMUA_Achr4T15660_001	4	49,4056	0,8189	0,01657504	380,0430769
ZjuHsp100-21	2	GSMUA_Achr5T09650_001	5	53,1826	0,7429	0,01396885	409,0969231
ZjuHsp100-21	2	GSMUA_Achr1T05180_001	1	52,0800	0,6741	0,01294355	400,6153846
ZjuHsp100-21	2	GSMUA_Achr3T1630_001	3	48,5139	0,873	0,01799484	373,1838462
ZjuHsp100-21	2	GSMUA_Achr9T18420_001	9	0,1439	14,2436	98,9826268	1,106923077
ZjuHsp100-21	2	GSMUA_Achr3T16280_001	3	49,8463	0,8953	0,01796121	383,4330769
ZjuHsp100-22	2	GSMUA_Achr2T16450_001	2	2,3997	0,1011	0,04213027	18,45923077
ZjuHsp100-22	2	GSMUA_Achr11T24320_001	11	2,6169	0,0924	0,03530895	20,13
ZjuHsp100-22	2	GSMUA_Achr10T00480_001	10	2,4905	0,0907	0,03641839	19,15769231
ZjuHsp100-22	2	GSMUA_Achr10T30850_001	10	36,6142	0,5526	0,01509251	281,6476923
ZjuHsp100-23	2	GSMUA_Achr11T24090_001	11	2,6988	0,1348	0,04994813	20,76
ZjuHsp100-23	2	GSMUA_Achr9T03360_001	9	2,2312	0,1381	0,06189494	17,16307692
ZjuHsp100-23	2	GSMUA_AchrUn_randomT18700_001	scaffold	2,6921	0,1542	0,0572787	20,70846154
ZjuHsp100-23	2	GSMUA_Achr4T05050_001	4	49,1966	0,5993	0,01218174	378,4353846
ZjuHsp100-23	2	GSMUA_Achr9T24030_001	9	47,6096	0,627	0,01316961	366,2276923
ZjuHsp100-23	2	GSMUA_AchrUn_randomT03040_001	scaffold	50,4951	0,4682	0,00927219	388,4238462
ZjuHsp100-23	2	GSMUA_Achr7T04590_001	7	50,3369	0,5789	0,01150051	387,2069231
ZjuHsp100-23	2	GSMUA_Achr4T08480_001	4	51,2778	0,7169	0,01398071	394,4446154
ZjuHsp100-23	2	GSMUA_Achr6T33650_001	6	50,291	0,6631	0,01318526	386,8538462
ZjuHsp100-23	2	GSMUA_Achr4T15660_001	4	51,1724	0,719	0,01405054	393,6338462
ZjuHsp100-23	2	GSMUA_Achr5T09650_001	5	55,4487	0,7261	0,01309499	426,5284615
ZjuHsp100-23	2	GSMUA_Achr1T05180_001	1	53,7879	0,6967	0,01295273	413,7530769
ZjuHsp100-23	2	GSMUA_Achr9T18420_001	9	54,9951	0,7649	0,01398581	423,0392308
ZjuHsp100-23	2	GSMUA_Achr3T1630_001	3	50,4117	0,855	0,01696035	387,7823077
ZjuHsp100-23	2	GSMUA_Achr10T29710_001	10	51,2556	0,5982	0,01167092	394,2738462
ZjuHsp100-23	2	GSMUA_Achr3T16280_001	3	51,6194	0,8869	0,01718152	397,0723077
ZjuHsp100-26	2	GSMUA_Achr5T15500_001	5	7,0288	0,0853	0,01213578	54,06769231
ZjuHsp100-26	2	GSMUA_Achr4T26800_001	4	5,8152	0,0848	0,01458247	44,73230769
ZjuHsp100-26	2	GSMUA_Achr7T04540_001	7	5,1139	0,0796	0,01556542	39,33769231
ZjuHsp100-26	2	GSMUA_Achr9T23550_001	9	4,4569	0,0932	0,0209114	34,28384615
ZjuHsp100-26	2	GSMUA_Achr4T03560_001	4	51,3552	0,6157	0,01198905	395,04
ZjuHsp100-26	2	GSMUA_Achr3T00260_001	3	4,8707	0,1304	0,02677233	37,46692308
ZjuHsp100-26	2	GSMUA_Achr6T11080_001	6	51,4844	0,6244	0,01212795	396,0338462
ZjuHsp100-26	2	GSMUA_Achr3T00250_001	3	2,098	0,1064	0,05071497	16,13846154
ZjuHsp100-26	2	GSMUA_Achr5T13290_001	5	2,4814	0,161	0,06488273	19,08769231
ZjuHsp100-26	2	GSMUA_Achr6T29120_001	6	54,829	0,5303	0,00967189	421,7615385
ZjuHsp100-26	2	GSMUA_Achr6T20300_001	6	56,0602	0,804	0,01434173	431,2323077
ZjuHsp100-26	2	GSMUA_Achr11T18410_001	11	57,043	0,868	0,01521659	438,7923077
ZjuHsp100-27	2	GSMUA_Achr7T21960_001	7	2,1721	0,044	0,02025689	16,70846154
ZjuHsp100-27	2	GSMUA_Achr11T10600_001	11	2,6763	0,0078	0,00291447	20,58692308
ZjuHsp100-27	2	GSMUA_Achr6T12250_001	6	2,7141	0,0336	0,01237979	20,87769231
ZjuHsp100-27	2	GSMUA_Achr4T05850_001	4	51,2544	0,5251	0,01024497	394,2646154
ZjuHsp100-27	2	GSMUA_Achr4T05840_001	4	51,5819	0,494	0,009577	396,7838462
ZjuHsp100-27	2	GSMUA_Achr7T09950_001	7	50,5903	0,5685	0,01123733	389,1561538
ZjuHsp100-27	2	GSMUA_AchrUn_randomT12540_001	scaffold	50,8956	0,638	0,01253546	391,5046154
ZjuHsp100-27	2	GSMUA_Achr10T27140_001	10	51,1174	0,5803	0,0113523	393,2107692
ZjuHsp100-27	2	GSMUA_Achr8T16830_001	8	51,1235	0,6383	0,01248545	393,2576923
ZjuHsp100-27	2	GSMUA_Achr9T13230_001	9	50,5034	0,5821	0,01152596	388,4876923
ZjuHsp100-27	2	GSMUA_Achr4T03720_001	4	52,1885	0,6026	0,01154661	401,45
ZjuHsp100-27	2	GSMUA_Achr5T04520_001	5	51,205	0,5786	0,01129968	393,8846154
ZjuHsp100-27	2	GSMUA_AchrUn_randomT00180_001	scaffold	50,8986	0,6115	0,01201408	391,5276923
ZjuHsp100-27	2	GSMUA_Achr7T17620_001	7	42,2588	0,5859	0,01386457	325,0676923
ZjuHsp100-27	2	GSMUA_Achr3T04570_001	3	49,9504	0,6083	0,01217808	384,2338462
ZjuHsp100-27	2	GSMUA_Achr4T26800_001	4	54,0883	0,7573	0,01400118	416,0638462
ZjuHsp100-27	2	GSMUA_Achr5T15500_001	5	56,0187	0,7588	0,01354548	430,9130769
ZjuHsp100-28	2	GSMUA_Achr7T21960_001	7	56,2503	0,318	0,0056533	432,6946154
ZjuHsp100-28	2	GSMUA_Achr11T10600_001	11	57,3428	0,3566	0,00621874	441,0984615
ZjuHsp100-28	2	GSMUA_Achr5T29690_001	5	52,0142	0,5885	0,01131422	400,1092308
ZjuHsp100-28	2	GSMUA_Achr11T23590_001	11	53,7516	0,6145	0,01143222	413,4738462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-28	2	GSMUA_Achr6T12250_001	6	54,2234	0,4451	0,00820863	417,1030769
ZjuHsp100-29	2	GSMUA_Achr7T05610_001	7	3,2217	0,2171	0,06738678	24,78230769
ZjuHsp100-30	2	GSMUA_Achr9T13230_001	9	1,8383	0,0151	0,00821411	14,14076923
ZjuHsp100-30	2	GSMUA_Achr5T04520_001	5	1,6275	0,0205	0,01259601	12,51923077
ZjuHsp100-30	2	GSMUA_Achr3T04570_001	3	2,0742	0,068	0,03278372	15,95538462
ZjuHsp100-30	2	GSMUA_Achr4T05840_001	4	49,9944	0,5307	0,01061519	384,5723077
ZjuHsp100-30	2	GSMUA_Achr4T05850_001	4	50,2327	0,5263	0,01047724	386,4053846
ZjuHsp100-30	2	GSMUA_Achr10T27140_001	10	23,6524	0,5181	0,02190475	181,9415385
ZjuHsp100-30	2	GSMUA_Achr7T09950_001	7	42,5812	0,5449	0,01279673	327,5476923
ZjuHsp100-30	2	GSMUA_Achr8T16830_001	8	51,9602	0,5501	0,01058695	399,6938462
ZjuHsp100-30	2	GSMUA_AchrUn_randomT12540_001	scaffold	50,8328	0,5364	0,01055224	391,0215385
ZjuHsp100-30	2	GSMUA_Achr11T10600_001	11	49,478	0,4932	0,00996807	380,6
ZjuHsp100-30	2	GSMUA_Achr6T12250_001	6	50,8795	0,4738	0,0093122	391,3807692
ZjuHsp100-30	2	GSMUA_Achr7T21960_001	7	50,1237	0,5832	0,01163521	385,5669231
ZjuHsp100-30	2	GSMUA_Achr4T03720_001	4	47,7165	0,568	0,01190364	367,05
ZjuHsp100-30	2	GSMUA_AchrUn_randomT00180_001	scaffold	52,2936	0,5578	0,0106667	402,2584615
ZjuHsp100-30	2	GSMUA_Achr7T17620_001	7	36,2574	0,5685	0,01567956	278,9030769
ZjuHsp100-30	2	GSMUA_AchrUn_randomT03040_001	scaffold	52,9274	0,5477	0,01034814	407,1338462
ZjuHsp100-30	2	GSMUA_Achr4T05050_001	4	0,1384	13,7032	99,0115607	1,064615385
ZjuHsp100-30	2	GSMUA_Achr9T24030_001	9	49,5547	0,7511	0,01515699	381,19
ZjuHsp100-31	2	GSMUA_Achr8T08720_001	8	1,9296	0,1388	0,07193201	14,84307692
ZjuHsp100-31	2	GSMUA_Achr8T08730_001	8	2,3878	0,4082	0,08419049	18,36769231
ZjuHsp100-32	2	GSMUA_Achr8T31340_001	8	2,5406	0,2161	0,08505865	19,54307692
ZjuHsp100-33	2	GSMUA_AchrUn_randomT22440_001	scaffold	2,0817	0,1616	0,07762886	16,01307692
ZjuHsp100-33	2	GSMUA_Achr3T18630_001	3	2,2069	0,1858	0,08419049	16,97615385
ZjuHsp100-33	2	GSMUA_Achr8T09160_001	8	1,692	0,1791	0,10585106	13,01538462
ZjuHsp100-33	2	GSMUA_Achr6T16470_001	6	2,6543	0,1481	0,05579626	20,41769231
ZjuHsp100-35	3	GSMUA_Achr2T22550_001	2	2,2861	0,0832	0,03639386	17,58538462
ZjuHsp100-35	3	GSMUA_Achr4T24320_001	4	2,3574	0,0851	0,03609909	18,13384615
ZjuHsp100-35	3	GSMUA_Achr3T01430_001	3	2,158	0,0902	0,04179796	16,6
ZjuHsp100-35	3	GSMUA_Achr6T09890_001	6	1,6302	0,2563	0,15721997	12,54
ZjuHsp100-35	3	GSMUA_Achr10T21590_001	10	19,3871	0,6095	0,03143843	149,1315385
ZjuHsp100-35	3	GSMUA_Achr7T25300_001	7	52,065	0,625	0,01200423	400,5
ZjuHsp100-35	3	GSMUA_Achr4T00810_001	4	54,168	0,6345	0,01171356	416,6769231
ZjuHsp100-35	3	GSMUA_Achr6T27610_001	6	56,8264	0,657	0,01156153	437,1261538
ZjuHsp100-35	3	GSMUA_Achr10T07490_001	10	59,092	0,6801	0,01150917	454,5538462
ZjuHsp100-36	3	GSMUA_Achr6T35590_001	6	2,1567	0,4356	0,20197524	16,59
ZjuHsp100-36	3	GSMUA_Achr5T00990_001	5	2,2675	0,4986	0,21988975	17,44230769
ZjuHsp100-36	3	GSMUA_Achr8T30370_001	8	3,1691	0,4842	0,15278786	24,37769231
ZjuHsp100-36	3	GSMUA_Achr9T13860_001	9	50,3747	0,6621	0,0131435	387,4976923
ZjuHsp100-36	3	GSMUA_Achr3T05630_001	3	49,0391	0,6882	0,0140337	377,2238462
ZjuHsp100-36	3	GSMUA_Achr7T15980_001	7	8,5443	0,668	0,07818078	65,72538462
ZjuHsp100-36	3	GSMUA_Achr9T08970_001	9	3,1873	0,4602	0,14438553	24,51769231
ZjuHsp100-36	3	GSMUA_Achr1T23360_001	1	49,1657	0,7489	0,01523216	378,1976923
ZjuHsp100-36	3	GSMUA_Achr2T20440_001	2	2,5624	0,4296	0,16765532	19,71076923
ZjuHsp100-36	3	GSMUA_AchrUn_randomT18100_001	scaffold	49,029	0,741	0,0151135	377,1461538
ZjuHsp100-36	3	GSMUA_Achr7T05100_001	7	50,0594	0,7128	0,01423908	385,0723077
ZjuHsp100-36	3	GSMUA_Achr9T13560_001	9	51,6607	0,7698	0,01490108	397,39
ZjuHsp100-36	3	GSMUA_Achr2T05020_001	2	51,1812	0,7677	0,01499965	393,7015385
ZjuHsp100-36	3	GSMUA_Achr3T04960_001	3	50,899	0,7869	0,01546003	391,5307692
ZjuHsp100-37	3	GSMUA_Achr2T22550_001	2	2,3075	0,0831	0,036013	17,75
ZjuHsp100-37	3	GSMUA_Achr4T24320_001	4	2,3791	0,085	0,0357278	18,30076923
ZjuHsp100-37	3	GSMUA_Achr3T01430_001	3	2,1737	0,0901	0,04145006	16,72076923
ZjuHsp100-37	3	GSMUA_Achr6T09890_001	6	1,5923	0,2566	0,16115054	12,24846154
ZjuHsp100-37	3	GSMUA_Achr10T21590_001	10	19,9521	0,6094	0,03054315	153,4776923
ZjuHsp100-37	3	GSMUA_Achr7T25300_001	7	52,1236	0,6245	0,01198114	400,9507692
ZjuHsp100-37	3	GSMUA_Achr4T00810_001	4	54,2243	0,6343	0,01169771	417,11
ZjuHsp100-37	3	GSMUA_Achr6T27610_001	6	56,8874	0,6568	0,01154561	437,5953846
ZjuHsp100-37	3	GSMUA_Achr10T07490_001	10	59,1553	0,6798	0,01149179	455,0407692
ZjuHsp100-38	3	GSMUA_Achr2T16450_001	2	1,9354	0,1079	0,05575075	14,88769231
ZjuHsp100-38	3	GSMUA_Achr11T24320_001	11	2,3449	0,097	0,04136637	18,03769231
ZjuHsp100-38	3	GSMUA_Achr10T00480_001	10	2,6038	0,0977	0,03752208	20,02923077
ZjuHsp100-38	3	GSMUA_Achr10T30850_001	10	25,1862	0,584	0,0231873	193,74
ZjuHsp100-39	3	GSMUA_Achr11T24320_001	11	2,3884	0,1005	0,04207838	18,37230769
ZjuHsp100-39	3	GSMUA_Achr2T16450_001	2	1,9145	0,1107	0,05782189	14,72692308
ZjuHsp100-39	3	GSMUA_Achr10T00480_001	10	2,4257	0,1017	0,04192604	18,65923077
ZjuHsp100-39	3	GSMUA_Achr10T30850_001	10	21,6813	0,5914	0,02727696	166,7792308
ZjuHsp100-40	3	GSMUA_Achr7T22460_001	7	3,5403	0,4402	0,12433975	27,23307692
ZjuHsp100-40	3	GSMUA_Achr10T05930_001	10	2,8113	0,4378	0,15572867	21,62538462
ZjuHsp100-40	3	GSMUA_Achr10T29410_001	10	2,9149	0,502	0,1722186	22,42230769
ZjuHsp100-41	3	GSMUA_Achr5T18820_001	5	2,2001	0,2639	0,11994909	16,92384615
ZjuHsp100-41	3	GSMUA_Achr11T00980_001	11	2,2799	0,0836	0,03666827	17,53769231
ZjuHsp100-42	3	GSMUA_Achr9T05420_001	9	2,1678	0,1843	0,08501707	16,67538462
ZjuHsp100-42	3	GSMUA_Achr7T14270_001	7	1,972	0,1827	0,09264706	15,16923077
ZjuHsp100-42	3	GSMUA_Achr8T33760_001	8	55,3071	0,5589	0,01010539	425,4392308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-42	3	GSMUA_Achr11T15820_001	11	56,9319	0,5817	0,01021747	437,9376923
ZjuHsp100-42	3	GSMUA_Achr8T10090_001	8	56,242	0,5706	0,01014544	432,6307692
ZjuHsp100-42	3	GSMUA_Achr3T00740_001	3	54,8894	0,5482	0,00998736	422,2261538
ZjuHsp100-42	3	GSMUA_Achr11T05650_001	11	54,1065	0,5016	0,00927061	416,2038462
ZjuHsp100-42	3	GSMUA_Achr11T20320_001	11	3,6318	0,2495	0,06869872	27,93692308
ZjuHsp100-42	3	GSMUA_Achr7T07310_001	7	55,9135	0,6402	0,01144983	430,1038462
ZjuHsp100-42	3	GSMUA_Achr11T20330_001	11	3,9002	0,2927	0,07504743	30,00153846
ZjuHsp100-42	3	GSMUA_Achr11T06710_001	11	6,9656	0,6304	0,0905019	53,58153846
ZjuHsp100-42	3	GSMUA_Achr4T05220_001	4	55,2699	0,6231	0,01127377	425,1530769
ZjuHsp100-42	3	GSMUA_Achr10T07490_001	10	11,2459	0,7449	0,06623747	86,50692308
ZjuHsp100-42	3	GSMUA_Achr6T27610_001	6	58,3877	0,8004	0,01370837	449,1361538
ZjuHsp100-43	3	GSMUA_Achr6T12620_001	6	3,5619	0,2406	0,06754822	27,39923077
ZjuHsp100-43	3	GSMUA_Achr10T04420_001	10	51,4402	0,3253	0,00632385	395,6938462
ZjuHsp100-43	3	GSMUA_Achr10T11010_001	10	5,9818	0,2458	0,04109131	46,01384615
ZjuHsp100-43	3	GSMUA_Achr10T16250_001	10	3,5189	0,2304	0,06547501	27,06846154
ZjuHsp100-44	3	GSMUA_Achr4T17050_001	4	4,3771	0,1500	0,03426927	33,67
ZjuHsp100-44	3	GSMUA_Achr10T20480_001	10	7,1797	0,2245	0,03126872	55,22846154
ZjuHsp100-44	3	GSMUA_Achr5T03650_001	5	3,0504	0,0977	0,03202859	23,46461538
ZjuHsp100-45	3	GSMUA_Achr1T27100_001	1	61,0976	0,6106	0,00999385	469,9815385
ZjuHsp100-45	3	GSMUA_Achr11T03420_001	11	27,7817	0,3339	0,0120187	213,7053846
ZjuHsp100-45	3	GSMUA_Achr1T04030_001	1	58,9241	0,4296	0,00729074	453,2623077
ZjuHsp100-45	3	GSMUA_Achr8T11820_001	8	33,0868	0,4001	0,01209244	254,5138462
ZjuHsp100-45	3	GSMUA_Achr9T27350_001	9	51,903	0,6674	0,0128586	399,2538462
ZjuHsp100-45	3	GSMUA_Achr5T21820_001	5	6,4603	0,6498	0,10058356	49,69461538
ZjuHsp100-45	3	GSMUA_Achr5T16360_001	5	6,2012	0,6368	0,1026898	47,70153846
ZjuHsp100-45	3	GSMUA_Achr3T10890_001	3	61,8873	0,5927	0,00957709	476,0561538
ZjuHsp100-45	3	GSMUA_Achr4T17530_001	4	69,4686	0,6672	0,00960434	534,3738462
ZjuHsp100-45	3	GSMUA_Achr1T27100_001	1	61,1061	0,6104	0,00998918	470,0469231
ZjuHsp100-46	3	GSMUA_Achr11T06710_001	11	1,479	0,1801	0,12177147	11,37692308
ZjuHsp100-46	3	GSMUA_Achr4T05220_001	4	1,3993	0,1716	0,12263274	10,76384615
ZjuHsp100-46	3	GSMUA_Achr11T05650_001	11	55,9671	0,5875	0,01049724	430,5161538
ZjuHsp100-46	3	GSMUA_Achr7T14270_001	7	55,1703	0,6121	0,01109474	424,3869231
ZjuHsp100-46	3	GSMUA_Achr8T33760_001	8	53,979	0,6268	0,01161192	415,2230769
ZjuHsp100-46	3	GSMUA_Achr8T10090_001	8	54,7618	0,6017	0,01098759	421,2446154
ZjuHsp100-46	3	GSMUA_Achr3T00740_001	3	54,8261	0,6257	0,01141245	421,7392308
ZjuHsp100-46	3	GSMUA_Achr9T05420_001	9	52,926	0,5983	0,01123046	407,1230769
ZjuHsp100-46	3	GSMUA_Achr11T15820_001	11	56,7713	0,5818	0,01024814	436,7023077
ZjuHsp100-46	3	GSMUA_Achr7T07310_001	7	53,3027	0,6042	0,01133526	410,0207692
ZjuHsp100-46	3	GSMUA_Achr10T07490_001	10	54,2138	0,731	0,01348365	417,0292308
ZjuHsp100-47	3	GSMUA_Achr4T05220_001	4	1,3129	0,1295	0,09863661	10,09923077
ZjuHsp100-47	3	GSMUA_Achr11T06710_001	11	1,4948	0,1373	0,09185175	11,49846154
ZjuHsp100-47	3	GSMUA_Achr11T05650_001	11	54,4021	0,5567	0,01023306	418,4776923
ZjuHsp100-47	3	GSMUA_Achr8T33760_001	8	53,4904	0,5927	0,01108049	411,4646154
ZjuHsp100-47	3	GSMUA_Achr8T10090_001	8	53,8659	0,5587	0,01037205	414,3530769
ZjuHsp100-47	3	GSMUA_Achr7T14270_001	7	41,6547	0,6637	0,01593338	320,4207692
ZjuHsp100-47	3	GSMUA_Achr3T00740_001	3	54,1787	0,5911	0,01091019	416,7592308
ZjuHsp100-47	3	GSMUA_Achr9T05420_001	9	39,1499	0,6186	0,01580081	301,1530769
ZjuHsp100-47	3	GSMUA_Achr11T15820_001	11	54,6321	0,5717	0,01046454	420,2469231
ZjuHsp100-47	3	GSMUA_Achr7T07310_001	7	51,6018	0,6046	0,01171665	396,9369231
ZjuHsp100-47	3	GSMUA_Achr10T07490_001	10	54,484	0,6955	0,01276522	419,1076923
ZjuHsp100-48	3	GSMUA_Achr4T05220_001	4	1,3129	0,1295	0,09863661	10,09923077
ZjuHsp100-48	3	GSMUA_Achr11T06710_001	11	1,4948	0,1373	0,09185175	11,49846154
ZjuHsp100-48	3	GSMUA_Achr11T05650_001	11	54,3984	0,5567	0,01023376	418,4492308
ZjuHsp100-48	3	GSMUA_Achr8T33760_001	8	53,4896	0,5928	0,01108253	411,4584615
ZjuHsp100-48	3	GSMUA_Achr8T10090_001	8	53,8612	0,5588	0,01037482	414,3169231
ZjuHsp100-48	3	GSMUA_Achr7T14270_001	7	42,3704	0,6636	0,01566188	325,9261538
ZjuHsp100-48	3	GSMUA_Achr3T00740_001	3	54,2081	0,5895	0,01087476	416,9853846
ZjuHsp100-48	3	GSMUA_Achr9T05420_001	9	38,7903	0,6186	0,01594729	298,3869231
ZjuHsp100-48	3	GSMUA_Achr11T15820_001	11	54,6279	0,5719	0,01046901	420,2146154
ZjuHsp100-48	3	GSMUA_Achr7T07310_001	7	51,6024	0,6047	0,01117845	396,9415385
ZjuHsp100-48	3	GSMUA_Achr10T07490_001	10	54,483	0,6955	0,01276545	419,1
ZjuHsp100-49	4	GSMUA_Achr4T17530_001	4	60,8596	0,3169	0,00520707	468,1507692
ZjuHsp100-49	4	GSMUA_Achr4T17520_001	4	62,1364	0,2939	0,00472992	477,9723077
ZjuHsp100-49	4	GSMUA_Achr3T10890_001	3	57,9703	0,4065	0,00701221	445,9253846
ZjuHsp100-49	4	GSMUA_Achr1T27100_001	1	35,8206	0,388	0,01083176	275,5430769
ZjuHsp100-49	4	GSMUA_Achr5T21820_001	5	26,5647	0,5497	0,02069287	204,3438462
ZjuHsp100-49	4	GSMUA_Achr5T16360_001	5	25,4898	0,539	0,02114571	196,0753846
ZjuHsp100-49	4	GSMUA_Achr5T10060_001	5	8,5432	0,5444	0,0637232	65,71692308
ZjuHsp100-49	4	GSMUA_Achr3T05230_001	3	58,3984	0,584	0,01000027	449,2184615
ZjuHsp100-49	4	GSMUA_Achr9T27350_001	9	13,2122	0,714	0,05404096	101,6323077
ZjuHsp100-50	4	GSMUA_Achr4T17530_001	4	61,048	0,3219	0,0052729	469,6
ZjuHsp100-50	4	GSMUA_Achr4T17520_001	4	62,6475	0,2996	0,00478231	481,9038462
ZjuHsp100-50	4	GSMUA_Achr3T10890_001	3	56,5824	0,4100	0,00724607	435,2492308
ZjuHsp100-50	4	GSMUA_Achr1T27100_001	1	18,6539	0,4121	0,02209189	143,4915385
ZjuHsp100-50	4	GSMUA_Achr5T21820_001	5	62,592	0,5335	0,00852345	481,4769231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-50	4	GSMUA_Achr5T16360_001	5	62,1278	0,5356	0,00862094	477,9061538
ZjuHsp100-50	4	GSMUA_Achr5T10060_001	5	17,0201	0,5453	0,03203859	130,9238462
ZjuHsp100-50	4	GSMUA_Achr3T05230_001	3	58,3218	0,5962	0,01022259	448,6292308
ZjuHsp100-50	4	GSMUA_Achr9T27350_001	9	54,0656	0,684	0,0126513	415,8892308
ZjuHsp100-51	4	GSMUA_AchrUn_randomT03040_001	scaffold	20,9262	0,1281	0,00612151	160,9707692
ZjuHsp100-51	4	GSMUA_Achr7T04590_001	7	15,1579	0,1865	0,01230382	116,5992308
ZjuHsp100-51	4	GSMUA_Achr10T29710_001	10	2,2175	0,0989	0,04459977	17,05769231
ZjuHsp100-51	4	GSMUA_Achr9T24030_001	9	45,2467	0,4751	0,01050021	348,0515385
ZjuHsp100-51	4	GSMUA_Achr4T05050_001	4	46,2811	0,4677	0,01010564	356,0084615
ZjuHsp100-51	4	GSMUA_Achr4T08480_001	4	48,872	0,6114	0,01251023	375,9384615
ZjuHsp100-51	4	GSMUA_Achr11T24090_001	11	52,1016	0,5912	0,01134706	400,7815385
ZjuHsp100-51	4	GSMUA_Achr9T03360_001	9	51,745	0,5955	0,01150836	398,0384615
ZjuHsp100-51	4	GSMUA_AchrUn_randomT18700_001	scaffold	50,515	0,6095	0,01206572	388,5769231
ZjuHsp100-51	4	GSMUA_Achr4T15660_001	4	49,5751	0,602	0,01214319	381,3469231
ZjuHsp100-51	4	GSMUA_Achr6T33650_001	6	48,7506	0,5519	0,01132089	375,0046154
ZjuHsp100-51	4	GSMUA_Achr1T05180_001	1	50,4158	0,6143	0,01218467	387,8138462
ZjuHsp100-51	4	GSMUA_Achr5T09650_001	5	51,8313	0,6243	0,01204485	398,7023077
ZjuHsp100-51	4	GSMUA_Achr3T31630_001	3	48,3032	0,7783	0,0161128	371,5630769
ZjuHsp100-51	4	GSMUA_Achr3T16280_001	3	51,9619	0,77	0,01481855	399,7069231
ZjuHsp100-51	4	GSMUA_Achr10T29700_001	10	1,6781	0,2527	0,15058697	12,90846154
ZjuHsp100-51	4	GSMUA_AchrUn_randomT23050_001	scaffold	15,089	0,7051	0,04672941	116,0692308
ZjuHsp100-51	4	GSMUA_Achr9T18420_001	9	50,2778	0,619	0,0123116	386,7523077
ZjuHsp100-51	4	GSMUA_Achr4T33170_001	4	51,7193	0,7899	0,01527283	397,8407692
ZjuHsp100-52	4	GSMUA_Achr4T17530_001	4	22,4139	0,321	0,01432147	172,4146154
ZjuHsp100-52	4	GSMUA_Achr4T17520_001	4	12,8594	0,3302	0,02567771	98,91846154
ZjuHsp100-52	4	GSMUA_Achr3T10890_001	3	12,5214	0,3808	0,03041193	96,31846154
ZjuHsp100-52	4	GSMUA_Achr1T27100_001	1	18,6471	0,3782	0,02028197	143,4392308
ZjuHsp100-52	4	GSMUA_Achr5T21820_001	5	28,9573	0,4885	0,01686967	222,7484615
ZjuHsp100-52	4	GSMUA_Achr5T16360_001	5	30,9691	0,4989	0,01610961	238,2238462
ZjuHsp100-52	4	GSMUA_Achr3T05230_001	3	53,8093	0,6202	0,01152589	413,9176923
ZjuHsp100-52	4	GSMUA_Achr5T10060_001	5	3,9171	0,5882	0,15016211	30,13153846
ZjuHsp100-52	4	GSMUA_Achr9T27350_001	9	39,6172	0,7257	0,0183178	304,7476923
ZjuHsp100-53	4	GSMUA_Achr4T17530_001	4	30,0979	0,298	0,00990102	231,5223077
ZjuHsp100-53	4	GSMUA_Achr4T17520_001	4	19,1651	0,3184	0,01661353	147,4238462
ZjuHsp100-53	4	GSMUA_Achr3T10890_001	3	23,3124	0,3935	0,01687943	179,3261538
ZjuHsp100-53	4	GSMUA_Achr1T27100_001	1	21,8838	0,3603	0,01646423	168,3369231
ZjuHsp100-53	4	GSMUA_Achr5T21820_001	5	62,3963	0,4862	0,00779213	479,9715385
ZjuHsp100-53	4	GSMUA_Achr5T16360_001	5	63,8962	0,4933	0,00772033	491,5092308
ZjuHsp100-53	4	GSMUA_Achr5T10060_001	5	11,3636	0,5812	0,05114576	87,41230769
ZjuHsp100-53	4	GSMUA_Achr3T05230_001	3	62,1843	0,5864	0,00943003	478,3407692
ZjuHsp100-53	4	GSMUA_Achr9T27350_001	9	26,3416	0,6943	0,02635755	202,6276923
ZjuHsp100-54	4	GSMUA_Achr4T17530_001	4	59,2731	0,3663	0,00617987	455,9469231
ZjuHsp100-54	4	GSMUA_Achr4T17520_001	4	59,1362	0,3331	0,00563276	454,8938462
ZjuHsp100-54	4	GSMUA_Achr3T10890_001	3	48,2278	0,417	0,00864647	370,9830769
ZjuHsp100-54	4	GSMUA_Achr1T27100_001	1	53,4359	0,4248	0,00794971	411,0453846
ZjuHsp100-54	4	GSMUA_Achr5T21820_001	5	14,1092	0,5752	0,04076773	108,5323077
ZjuHsp100-54	4	GSMUA_Achr5T16360_001	5	10,1952	0,5701	0,05591847	78,42461538
ZjuHsp100-54	4	GSMUA_Achr5T10060_001	5	4,1586	0,6305	0,15161352	31,98923077
ZjuHsp100-54	4	GSMUA_Achr9T27350_001	9	45,193	0,6996	0,01548027	347,6384615
ZjuHsp100-54	4	GSMUA_Achr3T05230_001	3	58,5258	0,5721	0,00977518	450,1984615
ZjuHsp100-55	4	GSMUA_Achr4T17530_001	4	47,1219	0,3523	0,007476	362,4762
ZjuHsp100-55	4	GSMUA_Achr4T17520_001	4	48,636	0,339	0,00697	374,1231
ZjuHsp100-55	4	GSMUA_Achr3T10890_001	3	55,7893	0,4225	0,007573	429,1485
ZjuHsp100-55	4	GSMUA_Achr1T27100_001	1	17,9573	0,3804	0,021184	138,1331
ZjuHsp100-55	4	GSMUA_Achr5T21820_001	5	63,9423	0,5659	0,00885	491,8638
ZjuHsp100-55	4	GSMUA_Achr5T16360_001	5	62,7243	0,5531	0,008818	482,4946
ZjuHsp100-55	4	GSMUA_Achr5T10060_001	5	5,4857	0,5346	0,097453	42,19769
ZjuHsp100-55	4	GSMUA_Achr3T05230_001	3	59,905	0,5812	0,009702	460,8077
ZjuHsp100-55	4	GSMUA_Achr9T27350_001	9	12,052	0,6646	0,055144	92,70769
ZjuHsp100-56	4	GSMUA_Achr4T17530_001	4	61,864	0,3728	0,006026	475,8769
ZjuHsp100-56	4	GSMUA_Achr4T17520_001	4	60,8082	0,3597	0,005915	467,7554
ZjuHsp100-56	4	GSMUA_Achr3T10890_001	3	56,7692	0,4231	0,007453	436,6862
ZjuHsp100-56	4	GSMUA_Achr1T27100_001	1	9,7698	0,4243	0,04343	75,15231
ZjuHsp100-56	4	GSMUA_Achr5T16360_001	5	22,7215	0,5686	0,025025	174,7808
ZjuHsp100-56	4	GSMUA_Achr5T21820_001	5	63,4249	0,5782	0,009116	487,8838
ZjuHsp100-56	4	GSMUA_Achr5T10060_001	5	9,8943	0,5426	0,05484	76,11
ZjuHsp100-56	4	GSMUA_Achr3T05230_001	3	57,0027	0,6205	0,010885	438,4823
ZjuHsp100-56	4	GSMUA_Achr9T27350_001	9	11,1136	0,7448	0,067017	85,48923
ZjuHsp100-57	4	GSMUA_Achr6T16670_001	6	2,0675	0,0959	0,04638452	15,90384615
ZjuHsp100-57	4	GSMUA_Achr9T22420_001	9	16,329	0,1571	0,00962092	125,6076923
ZjuHsp100-57	4	GSMUA_Achr1T13710_001	1	40,717	0,4593	0,0112803	313,2076923
ZjuHsp100-57	4	GSMUA_Achr3T16240_001	3	49,3145	0,4584	0,00929544	379,3423077
ZjuHsp100-57	4	GSMUA_Achr8T09160_001	8	52,4097	0,5238	0,00999433	403,1515385
ZjuHsp100-57	4	GSMUA_Achr6T08040_001	6	53,7908	0,3556	0,0066108	413,7753846
ZjuHsp100-57	4	GSMUA_Achr3T18630_001	3	52,6166	0,5261	0,00999875	404,7430769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-57	4	GSMUA_Achr6T16470_001	6	51,6251	0,504	0,00976269	397,1161538
ZjuHsp100-57	4	GSMUA_AchrUn_randomT22440_001	scaffold	53,5493	0,5591	0,01044085	411,9176923
ZjuHsp100-57	4	GSMUA_Achr6T23780_001	6	50,8748	0,5501	0,01081282	391,3446154
ZjuHsp100-57	4	GSMUA_Achr10T12430_001	10	52,7779	0,6202	0,01175113	405,9838462
ZjuHsp100-59	4	GSMUA_Achr9T18420_001	9	2,7894	0,3059	0,10966516	21,45692308
ZjuHsp100-59	4	GSMUA_AchrUn_randomT03040_001	scaffold	51,7514	0,4525	0,00874372	398,0876923
ZjuHsp100-59	4	GSMUA_Achr4T05050_001	4	23,4821	0,6662	0,02837055	180,6315385
ZjuHsp100-59	4	GSMUA_Achr9T24030_001	9	44,6762	0,7071	0,01582722	343,6630769
ZjuHsp100-59	4	GSMUA_Achr6T33650_001	6	12,756	0,5104	0,04001254	98,12307692
ZjuHsp100-59	4	GSMUA_Achr11T24090_001	11	54,4554	0,7105	0,01304737	418,8876923
ZjuHsp100-59	4	GSMUA_AchrUn_randomT18700_001	scaffold	55,7217	0,8112	0,01455806	428,6284615
ZjuHsp100-59	4	GSMUA_Achr9T03360_001	9	56,5578	0,7486	0,01323602	435,06
ZjuHsp100-59	4	GSMUA_Achr1T05180_001	1	51,4339	0,6308	0,01226428	395,6453846
ZjuHsp100-59	4	GSMUA_Achr5T09650_001	5	7,3709	0,6642	0,09011111	56,69923077
ZjuHsp100-59	4	GSMUA_Achr7T04590_001	7	51,2684	0,6062	0,01182405	394,3723077
ZjuHsp100-59	4	GSMUA_Achr4T08480_001	4	50,2814	0,8307	0,01652102	386,78
ZjuHsp100-59	4	GSMUA_Achr4T15660_001	4	49,983	0,8033	0,01607146	384,4846154
ZjuHsp100-59	4	GSMUA_AchrUn_randomT23050_001	scaffold	55,586	0,8167	0,01469255	427,5846154
ZjuHsp100-59	4	GSMUA_Achr3T16280_001	3	50,3884	0,8155	0,01618428	387,6030769
ZjuHsp100-60	4	GSMUA_AchrUn_randomT03040_001	scaffold	1,8885	0,0296	0,01567382	14,52692308
ZjuHsp100-60	4	GSMUA_Achr7T04590_001	7	2,6014	0,072	0,0276774	20,01076923
ZjuHsp100-60	4	GSMUA_Achr10T29710_001	10	11,5992	0,1398	0,01205256	89,22461538
ZjuHsp100-60	4	GSMUA_Achr4T05050_001	4	44,0705	0,434	0,00984786	339,0038462
ZjuHsp100-60	4	GSMUA_Achr9T24030_001	9	10,7743	0,487	0,04520015	82,87923077
ZjuHsp100-60	4	GSMUA_Achr4T08480_001	4	50,847	0,6032	0,01186304	391,1307692
ZjuHsp100-60	4	GSMUA_Achr11T24090_001	11	52,3044	0,6348	0,01213665	402,3415385
ZjuHsp100-60	4	GSMUA_AchrUn_randomT18700_001	scaffold	51,0104	0,6478	0,01269937	392,3876923
ZjuHsp100-60	4	GSMUA_Achr9T03360_001	9	51,4421	0,6275	0,01219818	395,7084615
ZjuHsp100-60	4	GSMUA_Achr4T15660_001	4	49,5014	0,6193	0,01215076	380,78
ZjuHsp100-60	4	GSMUA_Achr6T33650_001	6	47,8935	0,5491	0,01146502	368,4115385
ZjuHsp100-60	4	GSMUA_Achr5T09650_001	5	51,8615	0,6401	0,01234249	398,9346154
ZjuHsp100-60	4	GSMUA_Achr1T05180_001	1	50,7669	0,6185	0,01218314	390,5146154
ZjuHsp100-60	4	GSMUA_Achr3T31630_001	3	49,0657	0,7314	0,01490654	377,4284615
ZjuHsp100-60	4	GSMUA_Achr3T16280_001	3	52,451	0,7933	0,01512459	403,4692308
ZjuHsp100-60	4	GSMUA_Achr9T18420_001	9	51,6411	0,6316	0,01223057	397,2392308
ZjuHsp100-61	5	GSMUA_Achr8T33760_001	8	2,6458	0,1869	0,07064026	20,35230769
ZjuHsp100-61	5	GSMUA_Achr3T00740_001	3	2,4013	0,1985	0,08266356	18,47153846
ZjuHsp100-61	5	GSMUA_Achr8T10090_001	8	2,8572	0,2224	0,07783844	21,97846154
ZjuHsp100-61	5	GSMUA_Achr11T05650_001	11	3,3608	0,2338	0,06956677	25,85230769
ZjuHsp100-61	5	GSMUA_Achr11T15820_001	11	3,0327	0,2794	0,09212913	23,32846154
ZjuHsp100-62	5	GSMUA_Achr4T33170_001	4	2,0218	0,0904	0,04471263	15,55230769
ZjuHsp100-62	5	GSMUA_Achr4T33160_001	4	51,7233	0,3771	0,00729072	397,8715385
ZjuHsp100-62	5	GSMUA_Achr4T05050_001	4	11,6098	0,775	0,06675395	89,30615385
ZjuHsp100-62	5	GSMUA_Achr9T24030_001	9	6,9666	0,7798	0,11193409	53,58923077
ZjuHsp100-62	5	GSMUA_AchrUn_randomT03040_001	scaffold	51,8514	0,7467	0,01440077	398,8569231
ZjuHsp100-63	5	GSMUA_Achr3T17180_001	3	1,8011	0,1406	0,07806341	13,85461538
ZjuHsp100-64	5	GSMUA_Achr4T17530_001	4	56,656	0,277	0,00488916	435,8153846
ZjuHsp100-64	5	GSMUA_Achr1T27100_001	1	17,3597	0,3613	0,02081257	133,5361538
ZjuHsp100-64	5	GSMUA_Achr3T10890_001	3	41,3835	0,3578	0,00864596	318,3346154
ZjuHsp100-64	5	GSMUA_Achr4T17520_001	4	56,9144	0,2634	0,004628	437,8030769
ZjuHsp100-64	5	GSMUA_Achr5T21820_001	5	44,3235	0,4894	0,01104155	340,95
ZjuHsp100-64	5	GSMUA_Achr5T16360_001	5	61,5246	0,4909	0,00797892	473,2661538
ZjuHsp100-64	5	GSMUA_Achr5T10060_001	5	0,1693	15,4286	91,1317188	1,302307692
ZjuHsp100-64	5	GSMUA_Achr3T05230_001	3	58,8815	0,5238	0,00889583	452,9346154
ZjuHsp100-64	5	GSMUA_Achr9T27350_001	9	50,7763	0,5787	0,01139705	390,5869231
ZjuHsp100-65	5	GSMUA_Achr4T17530_001	4	55,6068	0,3261	0,00586439	427,7446154
ZjuHsp100-65	5	GSMUA_Achr4T17520_001	4	12,6341	0,3291	0,02604855	97,18538462
ZjuHsp100-65	5	GSMUA_Achr3T10890_001	3	28,8435	0,4188	0,01451974	221,8730769
ZjuHsp100-65	5	GSMUA_Achr1T27100_001	1	14,7857	0,3728	0,02521355	113,7361538
ZjuHsp100-65	5	GSMUA_Achr5T21820_001	5	59,7667	0,5631	0,00942163	459,7438462
ZjuHsp100-65	5	GSMUA_Achr5T16360_001	5	60,3645	0,5496	0,00910469	464,3423077
ZjuHsp100-65	5	GSMUA_Achr5T10060_001	5	53,4975	0,5681	0,01061919	411,5192308
ZjuHsp100-65	5	GSMUA_Achr3T05230_001	3	57,1963	0,5775	0,01009681	439,9715385
ZjuHsp100-65	5	GSMUA_Achr9T27350_001	9	50,145	0,6986	0,0139316	385,7307692
ZjuHsp100-66	5	GSMUA_Achr4T17530_001	4	60,2987	0,3328	0,00551919	463,8361538
ZjuHsp100-66	5	GSMUA_Achr4T17520_001	4	12,6308	0,3291	0,02605536	97,16
ZjuHsp100-66	5	GSMUA_Achr3T10890_001	3	28,8102	0,4188	0,01453652	221,6169231
ZjuHsp100-66	5	GSMUA_Achr1T27100_001	1	14,7651	0,3728	0,02524873	113,5776923
ZjuHsp100-66	5	GSMUA_Achr5T21820_001	5	59,7194	0,5684	0,00951785	459,38
ZjuHsp100-66	5	GSMUA_Achr5T16360_001	5	59,7919	0,5613	0,00938756	459,9376923
ZjuHsp100-66	5	GSMUA_Achr5T10060_001	5	53,4961	0,5682	0,01062134	411,5084615
ZjuHsp100-66	5	GSMUA_Achr3T05230_001	3	56,8589	0,5775	0,01015672	437,3761538
ZjuHsp100-66	5	GSMUA_Achr9T27350_001	9	49,8448	0,7036	0,01411582	383,4215385
ZjuHsp100-67	5	GSMUA_Achr4T17530_001	4	56,8499	0,2774	0,00487952	437,3069231
ZjuHsp100-67	5	GSMUA_Achr3T10890_001	3	50,8878	0,3489	0,00685626	391,4446154

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-67	5	GSMUA_Achr1T27100_001	1	6,4475	0,3629	0,05628538	49,59615385
ZjuHsp100-67	5	GSMUA_Achr4T17520_001	4	56,1617	0,2706	0,00481823	432,0130769
ZjuHsp100-67	5	GSMUA_Achr5T21820_001	5	21,3549	0,4352	0,0203794	164,2684615
ZjuHsp100-67	5	GSMUA_Achr5T16360_001	5	31,7257	0,4927	0,015553	244,0438462
ZjuHsp100-67	5	GSMUA_Achr3T05230_001	3	58,8662	0,5596	0,0095063	452,8169231
ZjuHsp100-67	5	GSMUA_Achr5T10060_001	5	18,4531	0,4642	0,02515566	141,9469231
ZjuHsp100-67	5	GSMUA_Achr9T27350_001	9	44,8164	0,6153	0,01372935	344,7415385
ZjuHsp100-68	5	GSMUA_Achr4T17530_001	4	22,3798	0,3254	0,0145399	172,1523077
ZjuHsp100-68	5	GSMUA_Achr4T17520_001	4	13,3123	0,3131	0,0235196	102,4023077
ZjuHsp100-68	5	GSMUA_Achr3T10890_001	3	55,5935	0,4317	0,0077653	427,6423077
ZjuHsp100-68	5	GSMUA_Achr1T27100_001	1	50,3603	0,4015	0,00797255	387,3869231
ZjuHsp100-68	5	GSMUA_Achr5T21820_001	5	62,164	0,5539	0,0089103	478,1846154
ZjuHsp100-68	5	GSMUA_Achr5T16360_001	5	62,3493	0,5507	0,0088325	479,61
ZjuHsp100-68	5	GSMUA_Achr3T05230_001	3	58,2196	0,5885	0,01010828	447,8430769
ZjuHsp100-68	5	GSMUA_Achr5T10060_001	5	45,963	0,5658	0,0123099	353,5615385
ZjuHsp100-68	5	GSMUA_Achr9T27350_001	9	49,7535	0,6973	0,01401509	382,7192308
ZjuHsp100-70	5	GSMUA_Achr1T13710_001	1	6,2212	0,1013	0,01628303	47,85538462
ZjuHsp100-70	5	GSMUA_Achr3T16240_001	3	6,2713	0,1053	0,01679078	48,24076923
ZjuHsp100-70	5	GSMUA_Achr9T22420_001	9	25,529	0,4801	0,01880606	196,3769231
ZjuHsp100-70	5	GSMUA_Achr6T16670_001	6	19,2514	0,4484	0,02329181	148,0876923
ZjuHsp100-70	5	GSMUA_Achr6T08040_001	6	25,2709	0,4154	0,01643788	194,3915385
ZjuHsp100-70	5	GSMUA_Achr8T09160_001	8	49,7978	0,5258	0,0105587	383,06
ZjuHsp100-70	5	GSMUA_Achr3T18630_001	3	49,0181	0,5025	0,01025132	377,0623077
ZjuHsp100-70	5	GSMUA_Achr6T16470_001	6	35,2152	0,535	0,0151923	270,8861538
ZjuHsp100-70	5	GSMUA_Achr10T12430_001	10	42,8099	0,6473	0,01512033	329,3069231
ZjuHsp100-70	5	GSMUA_Achr6T23780_001	6	49,0628	0,6043	0,01231687	377,4061538
ZjuHsp100-70	5	GSMUA_AchrUn_randomT22440_001	scaffold	51,0526	0,5622	0,01101217	392,7123077
ZjuHsp100-71	5	GSMUA_Achr1T13710_001	1	6,2194	0,1013	0,01628774	47,84153846
ZjuHsp100-71	5	GSMUA_Achr3T16240_001	3	6,2697	0,1053	0,01679078	48,22846154
ZjuHsp100-71	5	GSMUA_Achr9T22420_001	9	25,5797	0,4800	0,01876488	196,7669231
ZjuHsp100-71	5	GSMUA_Achr6T16670_001	6	19,1566	0,4484	0,02340708	147,3584615
ZjuHsp100-71	5	GSMUA_Achr6T08040_001	6	24,7584	0,4155	0,01678218	190,4492308
ZjuHsp100-71	5	GSMUA_Achr8T09160_001	8	49,7958	0,526	0,01056314	383,0446154
ZjuHsp100-71	5	GSMUA_Achr3T18630_001	3	49,0169	0,5026	0,01025361	377,0530769
ZjuHsp100-71	5	GSMUA_Achr6T16470_001	6	35,2289	0,5351	0,01518923	270,9915385
ZjuHsp100-71	5	GSMUA_Achr6T23780_001	6	49,0601	0,6043	0,01231755	377,3853846
ZjuHsp100-71	5	GSMUA_AchrUn_randomT22440_001	scaffold	51,0553	0,5621	0,01100963	392,7330769
ZjuHsp100-72	5	GSMUA_Achr4T05050_001	4	2,7996	0,0933	0,03332619	21,53538462
ZjuHsp100-72	6	GSMUA_Achr9T24030_001	9	2,6205	0,1100	0,04197672	20,15769231
ZjuHsp100-72	6	GSMUA_AchrUn_randomT03040_001	scaffold	49,064	0,3685	0,0075106	377,4153846
ZjuHsp100-72	6	GSMUA_Achr7T04590_001	7	48,0263	0,4549	0,00947189	369,4330769
ZjuHsp100-72	6	GSMUA_Achr1T24090_001	11	50,1629	0,6021	0,01200289	385,8684615
ZjuHsp100-72	6	GSMUA_AchrUn_randomT18700_001	scaffold	49,1164	0,6118	0,01245612	377,8184615
ZjuHsp100-72	6	GSMUA_Achr9T03360_001	9	50,3167	0,594	0,01180523	387,0515385
ZjuHsp100-72	6	GSMUA_Achr4T08480_001	4	47,4812	0,6179	0,01301357	365,24
ZjuHsp100-72	6	GSMUA_Achr5T09650_001	5	50,9588	0,6416	0,01259056	391,9907692
ZjuHsp100-72	6	GSMUA_Achr6T33650_001	6	25,012	0,5749	0,02298497	192,4
ZjuHsp100-72	6	GSMUA_Achr4T15660_001	4	46,6729	0,6285	0,01346606	359,0223077
ZjuHsp100-72	6	GSMUA_Achr1T05180_001	1	48,1075	0,6517	0,01354674	370,0576923
ZjuHsp100-72	6	GSMUA_Achr10T29710_001	10	9,1865	0,4434	0,04826648	70,66538462
ZjuHsp100-72	6	GSMUA_Achr3T31630_001	3	48,5164	0,7348	0,01514539	373,2030769
ZjuHsp100-72	6	GSMUA_Achr3T16280_001	3	48,4932	0,7434	0,01532998	373,0246154
ZjuHsp100-73	6	GSMUA_Achr4T05050_001	4	3,4412	0,2651	0,07703708	26,47076923
ZjuHsp100-73	6	GSMUA_Achr9T24030_001	9	2,646	0,2758	0,1042328	20,35384615
ZjuHsp100-73	6	GSMUA_Achr2T03620_001	2	2,4131	0,1737	0,0719821	18,56230769
ZjuHsp100-73	6	GSMUA_Achr1T07310_001	1	2,4793	0,1843	0,0743355	19,07153846
ZjuHsp100-73	6	GSMUA_Achr7T04070_001	7	46,3187	0,1757	0,00379328	356,2976923
ZjuHsp100-73	6	GSMUA_AchrUn_randomT07220_001	scaffold	2,7155	0,2438	0,08978089	20,88846154
ZjuHsp100-73	6	GSMUA_AchrUn_randomT17750_001	scaffold	2,4118	0,1547	0,06414296	18,55230769
ZjuHsp100-73	6	GSMUA_Achr10T29710_001	10	48,8256	0,4876	0,00998656	375,5815385
ZjuHsp100-73	6	GSMUA_AchrUn_randomT03040_001	scaffold	48,0862	0,5996	0,01246927	369,8938462
ZjuHsp100-73	6	GSMUA_Achr6T36490_001	6	5,8767	0,2315	0,03939286	45,20538462
ZjuHsp100-73	6	GSMUA_Achr1T09040_001	1	3,5071	0,2368	0,06752017	26,97769231
ZjuHsp100-73	6	GSMUA_Achr8T19190_001	8	4,3622	0,2631	0,0603136	33,55538462
ZjuHsp100-73	6	GSMUA_Achr11T00800_001	11	2,9226	0,2424	0,08293985	22,48153846
ZjuHsp100-73	6	GSMUA_Achr4T04940_001	4	3,9447	0,256	0,0648972	30,34384615
ZjuHsp100-73	6	GSMUA_Achr7T04590_001	7	48,7799	0,6216	0,01274295	375,23
ZjuHsp100-73	6	GSMUA_Achr2T08380_001	2	3,6900	0,2938	0,0796206	28,38461538
ZjuHsp100-73	6	GSMUA_Achr2T00980_001	2	2,5777	0,2597	0,10074873	19,82846154
ZjuHsp100-73	6	GSMUA_Achr8T04060_001	8	4,4151	0,3196	0,07238794	33,96230769
ZjuHsp100-73	6	GSMUA_Achr2T08480_001	2	5,5376	0,338	0,06103727	42,59692308
ZjuHsp100-73	6	GSMUA_Achr3T25920_001	3	7,8709	0,3396	0,04314627	60,54538462
ZjuHsp100-73	6	GSMUA_AchrUn_randomT06680_001	scaffold	4,2018	0,2995	0,07127898	32,32153846
ZjuHsp100-73	6	GSMUA_Achr11T24090_001	11	51,2776	0,7041	0,01373114	394,4430769
ZjuHsp100-73	6	GSMUA_AchrUn_randomT18700_001	scaffold	51,0552	0,7703	0,01508759	392,7323077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-73	6	GSMUA_Achr9T03360_001	9	50,9047	0,7639	0,01500647	391,5746154
ZjuHsp100-74	6	GSMUA_Achr5T09650_001	5	3,0519	0,1097	0,03594482	23,47615385
ZjuHsp100-74	6	GSMUA_Achr1T05180_001	1	2,1485	0,1185	0,05515476	16,52692308
ZjuHsp100-74	6	GSMUA_Achr4T08480_001	4	52,1212	0,4242	0,00813872	400,9323077
ZjuHsp100-74	6	GSMUA_Achr4T15660_001	4	51,3881	0,4593	0,00893787	395,2930769
ZjuHsp100-74	6	GSMUA_Achr4T05050_001	4	47,224	0,6519	0,01380442	363,2615385
ZjuHsp100-74	6	GSMUA_Achr9T24030_001	9	13,5471	0,6576	0,04854175	104,2084615
ZjuHsp100-74	6	GSMUA_AchrUn_randomT03040_001	scaffold	51,7382	0,499	0,00964471	397,9861538
ZjuHsp100-74	6	GSMUA_Achr7T04590_001	7	50,7922	0,5594	0,0110135	390,7092308
ZjuHsp100-74	6	GSMUA_Achr9T03360_001	9	30,9276	0,6796	0,0219739	237,9046154
ZjuHsp100-74	6	GSMUA_Achr11T24090_001	11	55,1795	0,711	0,01288522	424,4576923
ZjuHsp100-74	6	GSMUA_AchrUn_randomT18700_001	scaffold	52,7374	0,7183	0,01362031	405,6723077
ZjuHsp100-74	6	GSMUA_Achr6T33650_001	6	49,4191	0,6062	0,01226651	380,1469231
ZjuHsp100-74	6	GSMUA_Achr10T29710_001	10	52,4198	0,544	0,01037776	403,2292308
ZjuHsp100-74	6	GSMUA_Achr3T31630_001	3	50,1516	0,8115	0,01618094	385,7815385
ZjuHsp100-74	6	GSMUA_Achr3T16280_001	3	54,2332	0,774	0,0142717	417,1784615
ZjuHsp100-75	6	GSMUA_Achr5T09650_001	5	3,0519	0,1097	0,03594482	23,47615385
ZjuHsp100-75	6	GSMUA_Achr1T05180_001	1	2,1485	0,1185	0,05515476	16,52692308
ZjuHsp100-75	6	GSMUA_Achr4T08480_001	4	52,1211	0,4242	0,00813874	400,9315385
ZjuHsp100-75	6	GSMUA_Achr4T15660_001	4	51,3847	0,4593	0,00893846	395,2669231
ZjuHsp100-75	6	GSMUA_Achr4T05050_001	4	47,2245	0,6519	0,01380428	363,2653846
ZjuHsp100-75	6	GSMUA_Achr9T24030_001	9	13,5435	0,6576	0,04855466	104,1807692
ZjuHsp100-75	6	GSMUA_AchrUn_randomT03040_001	scaffold	51,7355	0,4991	0,00964715	397,9653846
ZjuHsp100-75	6	GSMUA_Achr7T04590_001	7	50,7915	0,5593	0,01101169	390,7038462
ZjuHsp100-75	6	GSMUA_Achr9T03360_001	9	0,1962	15,9528	81,3088685	1,509230769
ZjuHsp100-75	6	GSMUA_Achr11T24090_001	11	55,1813	0,7108	0,01288118	424,4715385
ZjuHsp100-75	6	GSMUA_AchrUn_randomT18700_001	scaffold	52,7358	0,7183	0,01362073	405,66
ZjuHsp100-75	6	GSMUA_Achr6T33650_001	6	49,4193	0,6063	0,01226849	380,1484615
ZjuHsp100-75	6	GSMUA_Achr10T29710_001	10	52,4213	0,544	0,01037746	403,2407692
ZjuHsp100-75	6	GSMUA_Achr3T31630_001	3	50,151	0,8116	0,01618313	385,7769231
ZjuHsp100-75	6	GSMUA_Achr3T16280_001	3	54,2329	0,7742	0,01427547	417,1761538
ZjuHsp100-76	6	GSMUA_Achr9T24240_001	9	2,0453	0,0563	0,02752652	15,73307692
ZjuHsp100-76	6	GSMUA_Achr6T16670_001	6	54,295	0,2017	0,00371489	417,6538462
ZjuHsp100-76	6	GSMUA_Achr1T13710_001	1	39,4981	0,445	0,01126636	303,8315385
ZjuHsp100-76	6	GSMUA_Achr3T16240_001	3	49,7559	0,4425	0,00889342	382,7376923
ZjuHsp100-76	6	GSMUA_Achr6T08040_001	6	55,5757	0,3286	0,00591266	427,5053846
ZjuHsp100-76	6	GSMUA_Achr3T18630_001	3	52,0512	0,497	0,00954829	400,3938462
ZjuHsp100-76	6	GSMUA_Achr8T09160_001	8	53,3079	0,5071	0,00951266	410,0607692
ZjuHsp100-76	6	GSMUA_Achr6T16470_001	6	52,5177	0,4942	0,00941016	403,9823077
ZjuHsp100-76	6	GSMUA_Achr10T12430_001	10	52,531	0,6211	0,01182349	404,0846154
ZjuHsp100-76	6	GSMUA_Achr6T23780_001	6	51,9086	0,5591	0,01077085	399,2969231
ZjuHsp100-76	6	GSMUA_AchrUn_randomT22440_001	scaffold	37,0448	0,536	0,01446897	284,96
ZjuHsp100-77	6	GSMUA_AchrUn_randomT00180_001	scaffold	2,7079	0,0238	0,0087891	20,83
ZjuHsp100-77	6	GSMUA_Achr7T17620_001	7	2,139	0,0277	0,01294998	16,45384615
ZjuHsp100-77	6	GSMUA_Achr4T03720_001	4	2,4300	0,0392	0,01613169	18,69230769
ZjuHsp100-77	6	GSMUA_Achr7T09950_001	7	50,2179	0,4999	0,00995462	386,2915385
ZjuHsp100-77	6	GSMUA_Achr10T27140_001	10	18,4952	0,5276	0,02852632	142,2707692
ZjuHsp100-77	6	GSMUA_AchrUn_randomT12540_001	scaffold	55,945	0,5513	0,00985432	430,3461538
ZjuHsp100-77	6	GSMUA_Achr8T16830_001	8	56,1916	0,5554	0,00988404	432,2430769
ZjuHsp100-77	6	GSMUA_Achr4T05850_001	4	16,0901	0,5684	0,03532607	123,77
ZjuHsp100-77	6	GSMUA_Achr4T05840_001	4	42,4052	0,5556	0,01310217	326,1938462
ZjuHsp100-77	6	GSMUA_Achr7T21960_001	7	50,1606	0,5844	0,01165058	385,8507692
ZjuHsp100-77	6	GSMUA_Achr9T13230_001	9	53,0625	0,5441	0,01025395	408,1730769
ZjuHsp100-77	6	GSMUA_Achr5T04520_001	5	35,9607	0,5489	0,01526389	276,6207692
ZjuHsp100-77	6	GSMUA_Achr3T04570_001	3	44,765	0,5712	0,01275997	344,3461538
ZjuHsp100-77	6	GSMUA_Achr11T10600_001	11	41,4812	0,5166	0,01245383	319,0861538
ZjuHsp100-77	6	GSMUA_Achr6T12250_001	6	19,2483	0,5023	0,02609581	148,0638462
ZjuHsp100-77	6	GSMUA_Achr9T23550_001	9	54,1433	0,7608	0,0140516	416,4869231
ZjuHsp100-77	6	GSMUA_Achr5T15500_001	5	27,1628	0,7864	0,02895136	208,9446154
ZjuHsp100-77	6	GSMUA_Achr7T04540_001	7	52,3848	0,7303	0,01394107	402,96
ZjuHsp100-77	6	GSMUA_Achr4T26800_001	4	52,9888	0,8084	0,01525605	407,6061538
ZjuHsp100-78	6	GSMUA_Achr3T19040_001	3	1,3271	0,0752	0,05666491	10,20846154
ZjuHsp100-78	6	GSMUA_Achr7T12340_001	7	49,8053	0,7222	0,01450046	383,1176923
ZjuHsp100-78	6	GSMUA_Achr4T24860_001	4	53,1132	0,6800	0,01280284	408,5630769
ZjuHsp100-79	6	GSMUA_Achr3T19040_001	3	1,4351	0,089	0,06201658	11,03923077
ZjuHsp100-79	6	GSMUA_Achr7T12340_001	7	50,0754	0,7413	0,01480368	385,1953846
ZjuHsp100-79	6	GSMUA_Achr4T24860_001	4	52,0907	0,685	0,01315014	400,6976923
ZjuHsp100-80	7	GSMUA_Achr6T29120_001	6	2,5656	0,2428	0,09463673	19,73538462
ZjuHsp100-80	7	GSMUA_Achr4T26800_001	4	55,6634	0,6811	0,01223605	428,18
ZjuHsp100-80	7	GSMUA_Achr5T15500_001	5	58,6832	0,6759	0,01151778	451,4092308
ZjuHsp100-80	7	GSMUA_Achr4T03560_001	4	52,7726	0,6656	0,01261261	405,9430769
ZjuHsp100-80	7	GSMUA_Achr9T23550_001	9	54,4188	0,6921	0,01271803	418,6061538
ZjuHsp100-80	7	GSMUA_Achr7T04540_001	7	53,5100	0,6600	0,01233414	411,6153846
ZjuHsp100-80	7	GSMUA_Achr6T11080_001	6	52,3054	0,6190	0,01183434	402,3492308
ZjuHsp100-80	7	GSMUA_Achr6T20030_001	6	55,0323	0,8917	0,01620321	423,3253846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-81	7	GSMUA_Achr11T08850_001	11	2,2963	0,2236	0,097374	17,66384615
ZjuHsp100-81	7	GSMUA_Achr10T04260_001	10	2,1215	0,2218	0,104549	16,31923077
ZjuHsp100-81	7	GSMUA_Achr1T13870_001	1	11,1984	0,8429	0,07527	86,14153846
ZjuHsp100-81	7	GSMUA_Achr5T15500_001	5	51,0535	0,8326	0,016308	392,7192308
ZjuHsp100-81	7	GSMUA_Achr4T26800_001	4	55,3769	0,8648	0,015617	425,9761538
ZjuHsp100-81	7	GSMUA_Achr7T04540_001	7	10,7025	0,8911	0,083261	82,32692308
ZjuHsp100-81	7	GSMUA_Achr9T23550_001	9	17,6176	0,8799	0,049944	135,52
ZjuHsp100-82	7	GSMUA_Achr11T08850_001	11	2,3038	0,2223	0,096493	17,72153846
ZjuHsp100-82	7	GSMUA_Achr10T04260_001	10	2,1308	0,2217	0,104045	16,39076923
ZjuHsp100-82	7	GSMUA_Achr1T13870_001	1	12,0525	0,8415	0,06982	92,71153846
ZjuHsp100-82	7	GSMUA_Achr5T15500_001	5	52,3672	0,8329	0,015905	402,8246154
ZjuHsp100-82	7	GSMUA_Achr4T26800_001	4	55,9659	0,8628	0,015417	430,5069231
ZjuHsp100-82	7	GSMUA_Achr7T04540_001	7	11,8133	0,8862	0,075017	90,87153846
ZjuHsp100-82	7	GSMUA_Achr9T23550_001	9	15,8479	0,8767	0,05532	121,9069231
ZjuHsp100-83	7	GSMUA_Achr6T21440_001	6	2,1671	0,3589	0,165613	16,67
ZjuHsp100-84	7	GSMUA_Achr6T21440_001	6	52,6012	1,1589	0,022032	404,6246154
ZjuHsp100-85	7	GSMUA_Achr6T23780_001	6	2,1342	0,2018	0,094555	16,41692308
ZjuHsp100-85	7	GSMUA_Achr10T12430_001	10	2,408	0,2563	0,106437	18,52307692
ZjuHsp100-85	7	GSMUA_Achr3T18630_001	3	51,1887	0,4927	0,009625	393,7592308
ZjuHsp100-85	7	GSMUA_Achr8T09160_001	8	51,2622	0,4959	0,009674	394,3246154
ZjuHsp100-85	7	GSMUA_Achr6T16470_001	6	51,76	0,4803	0,009279	398,1538462
ZjuHsp100-85	7	GSMUA_Achr6T08040_001	6	53,9133	0,4097	0,007599	414,7176923
ZjuHsp100-85	7	GSMUA_Achr6T16670_001	6	51,357	0,5775	0,011245	395,0538462
ZjuHsp100-85	7	GSMUA_Achr9T22420_001	9	24,295	0,5734	0,023602	186,8846154
ZjuHsp100-85	7	GSMUA_Achr1T13710_001	1	47,1483	0,6243	0,013241	362,6792308
ZjuHsp100-85	7	GSMUA_Achr3T16240_001	3	47,4339	0,6159	0,012984	364,8761538
ZjuHsp100-85	7	GSMUA_AchrUn_randomT22440_001	scaffold	52,2781	0,5418	0,010364	402,1392308
ZjuHsp100-86	8	GSMUA_Achr10T07490_001	10	1,6846	0,2821	0,167458	12,95846154
ZjuHsp100-86	8	GSMUA_Achr6T27610_001	6	54,7631	0,668	0,012198	421,2546154
ZjuHsp100-86	8	GSMUA_Achr7T25300_001	7	51,3081	0,6534	0,012735	394,6776923
ZjuHsp100-86	8	GSMUA_Achr4T24320_001	4	52,9193	0,6322	0,011946	407,0715385
ZjuHsp100-86	8	GSMUA_Achr10T21590_001	2	50,2369	0,6707	0,013351	386,4376923
ZjuHsp100-86	8	GSMUA_Achr3T01430_001	3	54,4006	0,6047	0,011116	418,4661538
ZjuHsp100-86	8	GSMUA_Achr2T22550_001	2	53,488	0,659	0,012321	411,4461538
ZjuHsp100-86	8	GSMUA_Achr4T00810_001	4	52,4901	0,7999	0,015239	403,77
ZjuHsp100-86	8	GSMUA_Achr3T00740_001	3	57,7314	0,7815	0,013537	444,0876923
ZjuHsp100-86	8	GSMUA_Achr11T06710_001	11	25,7557	0,6995	0,027159	198,1207692
ZjuHsp100-86	8	GSMUA_Achr9T05420_001	9	13,3302	0,7604	0,057043	102,54
ZjuHsp100-86	8	GSMUA_Achr8T33760_001	8	56,4502	0,7892	0,01398	434,2323077
ZjuHsp100-86	8	GSMUA_Achr4T05220_001	4	54,0822	0,7402	0,013687	416,0169231
ZjuHsp100-86	8	GSMUA_Achr11T05650_001	11	56,7162	0,7608	0,013414	436,2784615
ZjuHsp100-86	8	GSMUA_Achr8T10090_001	8	55,8075	0,7707	0,01381	429,2884615
ZjuHsp100-86	8	GSMUA_Achr7T14270_001	7	54,0163	0,807	0,01494	415,51
ZjuHsp100-87	8	GSMUA_Achr10T11010_001	10	1,9241	0,2845	0,147861	14,80076923
ZjuHsp100-87	8	GSMUA_Achr10T16250_001	10	2,5116	0,2016	0,080268	19,32
ZjuHsp100-87	8	GSMUA_Achr6T12620_001	6	3,8406	0,2371	0,061735	29,54307692
ZjuHsp100-87	8	GSMUA_Achr10T04420_001	10	2,0549	0,2855	0,138936	15,80692308
ZjuHsp100-88	8	GSMUA_Achr9T25490_001	9	9,4679	0,3958	0,041804	72,83
ZjuHsp100-88	8	GSMUA_Achr6T14420_001	6	18	0,4549	0,025272	138,4615385
ZjuHsp100-88	8	GSMUA_Achr6T12630_001	6	1,7475	0,1593	0,091159	13,44230769
ZjuHsp100-88	8	GSMUA_Achr6T12640_001	6	27,5368	0,3214	0,011672	211,8215385
ZjuHsp100-89	8	GSMUA_Achr10T20480_001	10	3,3689	0,1798	0,053371	25,91461538
ZjuHsp100-89	8	GSMUA_Achr4T17050_001	4	13,5292	0,2432	0,017976	104,0707692
ZjuHsp100-89	8	GSMUA_Achr5T03650_001	5	5,9323	0,1828	0,030814	45,63307692
ZjuHsp100-90	8	GSMUA_Achr5T10060_001	5	10,2394	0,3647	0,035617	78,76461538
ZjuHsp100-90	8	GSMUA_Achr4T17530_001	4	65,924	0,5315	0,008062	507,1076923
ZjuHsp100-90	8	GSMUA_Achr3T10890_001	3	55,9481	0,5791	0,010351	430,37
ZjuHsp100-90	8	GSMUA_Achr5T21820_001	5	17,6688	0,608	0,034411	135,9138462
ZjuHsp100-90	8	GSMUA_Achr5T16360_001	5	15,0016	0,5821	0,038803	115,3969231
ZjuHsp100-90	8	GSMUA_Achr3T05230_001	3	63,6301	0,5733	0,00901	489,4623077
ZjuHsp100-90	8	GSMUA_Achr1T27100_001	1	56,939	0,523	0,009185	437,9923077
ZjuHsp100-90	8	GSMUA_Achr5T10060_001	5	8,1253	0,3853	0,04742	62,50230769
ZjuHsp100-91	8	GSMUA_Achr4T17530_001	4	58,5665	0,5498	0,009388	450,5115385
ZjuHsp100-91	8	GSMUA_Achr5T16360_001	5	53,3863	0,5546	0,010388	410,6638462
ZjuHsp100-91	8	GSMUA_Achr5T21820_001	5	38,4412	0,5887	0,015314	295,7015385
ZjuHsp100-91	8	GSMUA_Achr3T10890_001	3	53,5844	0,5574	0,010402	412,1876923
ZjuHsp100-91	8	GSMUA_Achr4T17520_001	4	58,2515	0,5822	0,009995	448,0884615
ZjuHsp100-92	8	GSMUA_Achr5T10060_001	5	7,8676	0,3775	0,047982	60,52
ZjuHsp100-92	8	GSMUA_Achr4T17530_001	4	69,0989	0,5309	0,007683	531,53
ZjuHsp100-92	8	GSMUA_Achr3T10890_001	3	59,2483	0,5759	0,00972	455,7561538
ZjuHsp100-92	8	GSMUA_Achr5T16360_001	5	23,5168	0,5773	0,024548	180,8984615
ZjuHsp100-92	8	GSMUA_Achr5T21820_001	5	21,4332	0,5716	0,026669	164,8707692
ZjuHsp100-92	8	GSMUA_Achr3T05230_001	3	69,1102	0,5475	0,007922	531,6169231
ZjuHsp100-93	8	GSMUA_Achr5T10060_001	5	10,9638	0,462	0,042139	84,33692308
ZjuHsp100-93	8	GSMUA_Achr4T17520_001	4	58,2515	0,5822	0,009995	448,0884615

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-94	8	GSMUA_Achr4T26800_001	4	53,9844	0,8833	0,016362	415,2646154
ZjuHsp100-94	8	GSMUA_Achr11T18410_001	11	2,6803	0,3242	0,120957	20,61769231
ZjuHsp100-94	8	GSMUA_Achr7T04540_001	7	51,6708	0,8673	0,016785	397,4676923
ZjuHsp100-94	8	GSMUA_Achr5T15500_001	5	56,2034	0,8692	0,015465	432,3338462
ZjuHsp100-95	8	GSMUA_Achr6T11080_001	6	52,6818	0,7786	0,014779	405,2446154
ZjuHsp100-95	8	GSMUA_Achr4T26800_001	4	53,9842	0,8834	0,016364	415,2630769
ZjuHsp100-95	8	GSMUA_Achr5T15500_001	5	56,3077	0,8704	0,015458	433,1361538
ZjuHsp100-95	8	GSMUA_Achr7T04540_001	7	51,6441	0,8659	0,016767	397,2623077
ZjuHsp100-96	8	GSMUA_AchrUn_randomT23050_001	scaffold	3,3805	0,1971	0,058305	26,00384615
ZjuHsp100-96	8	GSMUA_Achr1T13120_001	1	1,8728	0,2039	0,108874	14,40615385
ZjuHsp100-97	8	GSMUA_AchrUn_randomT23050_001	scaffold	3,3806	0,1971	0,058303	26,00461538
ZjuHsp100-97	8	GSMUA_Achr1T13120_001	11	1,8728	0,2039	0,108874	14,40615385
ZjuHsp100-98	8	GSMUA_Achr10T11010_001	10	2,7072	0,3529	0,130356	20,82461538
ZjuHsp100-98	8	GSMUA_Achr6T12620_001	6	3,8468	0,3552	0,092336	29,59076923
ZjuHsp100-98	8	GSMUA_Achr10T04420_001	10	2,2196	0,4039	0,18197	17,07384615
ZjuHsp100-98	8	GSMUA_Achr10T16250_001	10	2,8002	0,2847	0,101671	21,54
ZjuHsp100-99	9	GSMUA_Achr3T00740_001	3	2,2154	0,2058	0,092895	17,04153846
ZjuHsp100-99	9	GSMUA_Achr8T33760_001	8	2,3877	0,2199	0,092097	18,36692308
ZjuHsp100-99	9	GSMUA_Achr8T10090_001	8	2,2766	0,2821	0,123913	17,51230769
ZjuHsp100-99	9	GSMUA_Achr11T15820_001	11	2,1355	0,2791	0,130695	16,42692308
ZjuHsp100-99	9	GSMUA_Achr7T07310_001	7	60,2466	0,6603	0,01096	463,4353846
ZjuHsp100-99	9	GSMUA_Achr11T05650_001	11	2,3197	0,1778	0,076648	17,84384615
ZjuHsp100-99	9	GSMUA_Achr7T14270_001	7	57,0146	0,4891	0,008579	438,5738462
ZjuHsp100-99	9	GSMUA_Achr9T05420_001	9	57,1212	0,4988	0,008732	439,3938462
ZjuHsp100-99	9	GSMUA_Achr4T05220_001	4	54,5876	0,5581	0,010224	419,9046154
ZjuHsp100-99	9	GSMUA_Achr11T06710_001	11	53,8447	0,567	0,01053	414,19
ZjuHsp100-99	9	GSMUA_Achr10T07490_001	10	55,3224	0,7419	0,01341	425,5569231
ZjuHsp100-99	9	GSMUA_Achr11T20320_001	11	6,8034	0,3575	0,052547	52,33384615
ZjuHsp100-100	9	GSMUA_Achr3T00740_001	3	2,2444	0,2307	0,102789	17,26461538
ZjuHsp100-100	9	GSMUA_Achr8T33760_001	8	3,0945	0,2483	0,080239	23,80384615
ZjuHsp100-100	9	GSMUA_Achr11T15820_001	11	2,1355	0,2791	0,130695	16,42692308
ZjuHsp100-100	9	GSMUA_Achr8T10090_001	8	2,3154	0,3289	0,142049	17,81076923
ZjuHsp100-100	9	GSMUA_Achr7T07310_001	7	60,3593	0,6576	0,010895	464,3023077
ZjuHsp100-100	9	GSMUA_Achr11T05650_001	11	2,3197	0,1778	0,076648	17,84384615
ZjuHsp100-100	9	GSMUA_Achr7T14270_001	7	57,0199	0,489	0,008576	438,6146154
ZjuHsp100-100	9	GSMUA_Achr9T05420_001	9	57,1318	0,4986	0,008727	439,4753846
ZjuHsp100-100	9	GSMUA_Achr11T06710_001	11	54,1889	0,5692	0,010504	416,8376923
ZjuHsp100-100	9	GSMUA_Achr4T05220_001	4	54,4798	0,5584	0,01025	419,0753846
ZjuHsp100-100	9	GSMUA_Achr11T20320_001	11	6,805	0,3575	0,052535	52,34615385
ZjuHsp100-100	9	GSMUA_Achr10T07490_001	10	1,0567	0,156	0,147629	8,128461538
ZjuHsp100-101	9	GSMUA_Achr4T26800_001	4	53,2275	0,7794	0,014643	409,4423077
ZjuHsp100-101	9	GSMUA_Achr6T20030_001	6	1,8723	0,2807	0,140923	14,40230769
ZjuHsp100-101	9	GSMUA_Achr7T04540_001	7	51,8509	0,7976	0,015383	398,8530769
ZjuHsp100-101	9	GSMUA_Achr5T15500_001	5	55,204	0,8144	0,014753	424,6461538
ZjuHsp100-101	9	GSMUA_Achr4T03560_001	4	51,2619	0,9102	0,017756	394,3223077
ZjuHsp100-101	9	GSMUA_Achr9T23550_001	9	52,7594	0,8291	0,015715	405,8415385
ZjuHsp100-101	9	GSMUA_Achr11T18410_001	11	56,1068	0,9062	0,016151	431,5907692
ZjuHsp100-102	9	GSMUA_Achr4T05840_001	4	2,0907	0,0195	0,009327	16,08230769
ZjuHsp100-102	9	GSMUA_Achr4T05850_001	4	2,0792	0,0204	0,009811	15,99384615
ZjuHsp100-102	9	GSMUA_Achr11T10600_001	11	26,6043	0,399	0,014998	204,6484615
ZjuHsp100-102	9	GSMUA_Achr7T21960_001	7	33,8916	0,5547	0,016367	260,7046154
ZjuHsp100-102	9	GSMUA_Achr9T13230_001	9	49,791	0,5096	0,010235	383,0076923
ZjuHsp100-102	9	GSMUA_Achr6T12250_001	6	11,844	0,4065	0,034321	91,10769231
ZjuHsp100-102	9	GSMUA_Achr5T04520_001	5	41,3888	0,5097	0,012315	318,3753846
ZjuHsp100-102	9	GSMUA_Achr7T09950_001	7	50,6729	0,5162	0,010187	389,7915385
ZjuHsp100-102	9	GSMUA_Achr4T03720_001	4	52,3146	0,5586	0,010678	402,42
ZjuHsp100-102	9	GSMUA_Achr10T27140_001	10	51,1408	0,5375	0,01051	393,3907692
ZjuHsp100-102	9	GSMUA_AchrUn_randomT00180_001	scaffold	14,9742	0,5408	0,036115	115,1861538
ZjuHsp100-102	9	GSMUA_Achr3T04570_001	3	42,4958	0,567	0,013342	326,8907692
ZjuHsp100-102	9	GSMUA_AchrUn_randomT12540_001	scaffold	52,3613	0,5712	0,010909	402,7792308
ZjuHsp100-102	9	GSMUA_Achr8T16830_001	8	53,1107	0,5637	0,010614	408,5438462
ZjuHsp100-102	9	GSMUA_Achr5T15500_001	5	54,1547	0,7783	0,014372	416,5746154
ZjuHsp100-102	9	GSMUA_Achr7T17620_001	7	52,0125	0,5506	0,010586	400,0961538
ZjuHsp100-103	9	GSMUA_Achr6T27610_001	6	1,7107	0,2032	0,118782	13,15923077
ZjuHsp100-103	9	GSMUA_Achr10T07490_001	10	52,7392	0,6774	0,012844	405,6861538
ZjuHsp100-103	9	GSMUA_Achr10T21590_001	10	50,8691	0,6345	0,012473	391,3007692
ZjuHsp100-104	10	GSMUA_Achr5T10060_001	5	42,6743	0,4974	0,011656	328,2638462
ZjuHsp100-105	10	GSMUA_Achr9T24030_001	9	48,7682	0,7922	0,016244	375,14
ZjuHsp100-105	10	GSMUA_Achr3T16280_001	3	3,0351	0,1761	0,058021	23,34692308
ZjuHsp100-105	10	GSMUA_AchrUn_randomT03040_001	scaffold	51,0753	0,6221	0,01218	392,8869231
ZjuHsp100-105	10	GSMUA_Achr4T05050_001	4	47,8568	0,7404	0,015471	368,1292308
ZjuHsp100-105	10	GSMUA_Achr4T08480_001	4	51,8076	0,8265	0,015953	398,52
ZjuHsp100-105	10	GSMUA_Achr11T24090_001	11	54,1495	0,8474	0,015649	416,5346154
ZjuHsp100-105	10	GSMUA_Achr9T03360_001	9	52,5449	0,8088	0,015393	404,1915385
ZjuHsp100-105	10	GSMUA_Achr9T18420_001	9	5,4985	0,7181	0,130599	42,29615385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-105	10	GSMUA_Achr6T33650_001	6	48,246	0,7733	0,016028	371,1230769
ZjuHsp100-105	10	GSMUA_Achr7T04590_001	7	50,6605	0,7125	0,014064	389,6961538
ZjuHsp100-105	10	GSMUA_AchrUn_randomT18700_001	scaffold	51,1513	0,8435	0,01649	393,4715385
ZjuHsp100-106	10	GSMUA_Achr4T26800_001	4	52,4051	0,5976	0,011403	403,1161538
ZjuHsp100-106	10	GSMUA_Achr6T11080_001	6	2,4441	0,2552	0,104415	18,80076923
ZjuHsp100-106	10	GSMUA_Achr5T15500_001	5	55,1069	0,5918	0,010739	423,8992308
ZjuHsp100-106	10	GSMUA_Achr7T04540_001	7	50,1878	0,5947	0,011849	386,06
ZjuHsp100-106	10	GSMUA_Achr4T03560_001	4	45,2465	0,6493	0,01435	348,05
ZjuHsp100-106	10	GSMUA_Achr9T23550_001	9	51,6965	0,5944	0,011498	397,6653846
ZjuHsp100-106	10	GSMUA_Achr11T18410_001	11	56,0291	0,7336	0,013093	430,9930769
ZjuHsp100-106	10	GSMUA_Achr6T29120_001	6	39,2043	0,589	0,015024	301,5715385
ZjuHsp100-107	10	GSMUA_Achr6T11080_001	6	2,4463	0,2672	0,109226	18,81769231
ZjuHsp100-107	10	GSMUA_Achr4T26800_001	4	52,3548	0,6214	0,011869	402,7292308
ZjuHsp100-107	10	GSMUA_Achr7T04540_001	7	49,6777	0,6198	0,012476	382,1361538
ZjuHsp100-107	10	GSMUA_Achr5T15500_001	5	54,7539	0,6165	0,011259	421,1838462
ZjuHsp100-107	10	GSMUA_Achr4T03560_001	4	52,1966	0,6909	0,013236	401,5123077
ZjuHsp100-107	10	GSMUA_Achr4T00810_001	4	53,3072	0,879	0,016489	410,0553846
ZjuHsp100-108	10	GSMUA_Achr6T11080_001	6	2,3939	0,2751	0,114917	18,41461538
ZjuHsp100-108	10	GSMUA_Achr9T23550_001	9	54,1307	0,5935	0,010964	416,39
ZjuHsp100-108	10	GSMUA_Achr4T26800_001	4	51,5822	0,5995	0,011622	396,7861538
ZjuHsp100-108	10	GSMUA_Achr5T15500_001	5	54,132	0,5933	0,01096	416,4
ZjuHsp100-108	10	GSMUA_Achr4T03560_001	4	52,1508	0,64	0,012272	401,16
ZjuHsp100-108	10	GSMUA_Achr7T04540_001	7	49,7644	0,5899	0,011854	382,8030769
ZjuHsp100-108	10	GSMUA_Achr6T29120_001	6	25,1435	0,5818	0,023139	193,4115385
ZjuHsp100-108	10	GSMUA_Achr11T18410_001	11	55,0566	0,7186	0,013052	423,5123077
ZjuHsp100-109	10	GSMUA_Achr11T15820_001	11	60,5581	0,6529	0,010781	465,8315385
ZjuHsp100-109	10	GSMUA_Achr7T07310_001	7	2,4331	0,2261	0,092927	18,71615385
ZjuHsp100-109	10	GSMUA_Achr8T10090_001	8	18,1923	0,6544	0,035971	139,9407692
ZjuHsp100-109	10	GSMUA_Achr11T05650_001	11	61,2271	0,5291	0,008642	470,9776923
ZjuHsp100-109	10	GSMUA_Achr3T00740_001	3	60,985	0,6516	0,010685	469,1153846
ZjuHsp100-109	10	GSMUA_Achr8T33760_001	8	59,0356	0,6055	0,010257	454,12
ZjuHsp100-109	10	GSMUA_Achr7T14270_001	7	42,1185	0,5534	0,013139	323,9884615
ZjuHsp100-109	10	GSMUA_Achr9T05420_001	9	22,4757	0,5817	0,025881	172,89
ZjuHsp100-109	10	GSMUA_Achr4T05220_001	4	51,9397	0,6008	0,011567	399,5361538
ZjuHsp100-109	10	GSMUA_Achr11T06710_001	11	52,2213	0,58	0,011107	401,7023077
ZjuHsp100-109	10	GSMUA_Achr11T20330_001	11	36,4471	0,4194	0,011507	280,3623077
ZjuHsp100-109	10	GSMUA_Achr11T20320_001	11	14,6376	0,4174	0,028516	112,5969231
ZjuHsp100-109	10	GSMUA_Achr10T07490_001	10	31,7967	0,7562	0,023782	244,59
ZjuHsp100-110	10	GSMUA_Achr11T15820_001	11	60,0483	0,6685	0,011133	461,91
ZjuHsp100-110	10	GSMUA_Achr7T07310_001	7	2,4331	0,2261	0,092927	18,71615385
ZjuHsp100-110	10	GSMUA_Achr8T33760_001	8	58,2891	0,6353	0,010899	448,3776923
ZjuHsp100-110	10	GSMUA_Achr8T10090_001	8	16,233	0,6582	0,040547	124,8692308
ZjuHsp100-110	10	GSMUA_Achr3T00740_001	3	61,4045	0,6485	0,010561	472,3423077
ZjuHsp100-110	10	GSMUA_Achr11T05650_001	11	61,7352	0,535	0,008666	474,8861538
ZjuHsp100-110	10	GSMUA_Achr7T14270_001	7	44,7028	0,5532	0,012375	343,8676923
ZjuHsp100-110	10	GSMUA_Achr9T05420_001	9	19,4889	0,583	0,029914	149,9146154
ZjuHsp100-110	10	GSMUA_Achr4T05220_001	4	52,137	0,6002	0,011512	401,0538462
ZjuHsp100-110	10	GSMUA_Achr11T06710_001	11	52,2212	0,5799	0,011105	401,7015385
ZjuHsp100-110	10	GSMUA_Achr11T20330_001	11	35,3649	0,4195	0,011862	272,0376923
ZjuHsp100-110	10	GSMUA_Achr11T20320_001	11	14,6357	0,4174	0,028519	112,5823077
ZjuHsp100-110	10	GSMUA_Achr10T07490_001	10	54,018	0,767	0,014199	415,5230769
ZjuHsp100-111	10	GSMUA_Achr11T15820_001	11	60,0483	0,6685	0,011133	461,91
ZjuHsp100-111	10	GSMUA_Achr7T07310_001	7	2,4331	0,2261	0,092927	18,71615385
ZjuHsp100-111	10	GSMUA_Achr8T33760_001	8	58,2891	0,6353	0,010899	448,3776923
ZjuHsp100-111	10	GSMUA_Achr8T10090_001	8	61,4045	0,6582	0,010719	472,3423077
ZjuHsp100-111	10	GSMUA_Achr3T00740_001	3	61,4045	0,6485	0,010561	472,3423077
ZjuHsp100-111	10	GSMUA_Achr11T05650_001	11	61,7352	0,535	0,008666	474,8861538
ZjuHsp100-111	10	GSMUA_Achr7T14270_001	7	44,7028	0,5532	0,012375	343,8676923
ZjuHsp100-111	10	GSMUA_Achr9T05420_001	9	19,4889	0,583	0,029914	149,9146154
ZjuHsp100-111	10	GSMUA_Achr4T05220_001	4	52,137	0,6002	0,011512	401,0538462
ZjuHsp100-111	10	GSMUA_Achr11T06710_001	11	52,2212	0,5799	0,011105	401,7015385
ZjuHsp100-111	10	GSMUA_Achr11T20330_001	11	35,3649	0,4195	0,011862	272,0376923
ZjuHsp100-111	10	GSMUA_Achr11T20320_001	11	14,6357	0,4174	0,028519	112,5823077
ZjuHsp100-111	10	GSMUA_Achr10T07490_001	10	54,018	0,767	0,014199	415,5230769
ZjuHsp100-112	10	GSMUA_Achr11T15820_001	11	60,0483	0,6685	0,011133	461,91
ZjuHsp100-112	10	GSMUA_Achr7T07310_001	7	2,4331	0,2261	0,092927	18,71615385
ZjuHsp100-112	10	GSMUA_Achr8T33760_001	8	58,2891	0,6353	0,010899	448,3776923
ZjuHsp100-112	10	GSMUA_Achr8T10090_001	8	61,4045	0,6582	0,010719	472,3423077
ZjuHsp100-112	10	GSMUA_Achr3T00740_001	3	61,4045	0,6582	0,010719	472,3423077
ZjuHsp100-112	10	GSMUA_Achr11T05650_001	11	61,7352	0,535	0,008666	474,8861538
ZjuHsp100-112	10	GSMUA_Achr7T14270_001	7	44,7028	0,5532	0,012375	343,8676923
ZjuHsp100-112	10	GSMUA_Achr9T05420_001	9	19,4889	0,583	0,029914	149,9146154
ZjuHsp100-112	10	GSMUA_Achr4T05220_001	4	52,137	0,6002	0,011512	401,0538462
ZjuHsp100-112	10	GSMUA_Achr11T06710_001	11	52,2212	0,5799	0,011105	401,7015385
ZjuHsp100-112	10	GSMUA_Achr11T20330_001	11	35,3649	0,4195	0,011862	272,0376923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-112	10	GSMUA_Achr11T20320_001	11	14,6357	0,4174	0,028519	112,5823077
ZjuHsp100-112	10	GSMUA_Achr10T07490_001	10	54,018	0,767	0,014199	415,5230769
ZjuHsp100-113	10	GSMUA_Achr11T24320_001	11	36,3687	0,5179	0,01424	279,7592308
ZjuHsp100-113	10	GSMUA_Achr10T30850_001	10	2,7827	0,1501	0,05394	21,40538462
ZjuHsp100-113	10	GSMUA_Achr10T00480_001	10	56,6162	0,5544	0,009792	435,5092308
ZjuHsp100-113	10	GSMUA_Achr2T16450_001	2	54,7453	0,534	0,009754	421,1176923
ZjuHsp100-114	11	GSMUA_Achr4T26800_001	4	56,0807	0,6571	0,011717	431,39
ZjuHsp100-114	11	GSMUA_Achr4T03560_001	4	4,0963	0,38	0,092767	31,51
ZjuHsp100-114	11	GSMUA_Achr7T04540_001	7	53,9756	0,6361	0,011785	415,1969231
ZjuHsp100-114	11	GSMUA_Achr5T15500_001	5	57,6283	0,663	0,011505	443,2946154
ZjuHsp100-114	11	GSMUA_Achr6T11080_001	6	13,6667	0,7227	0,05288	105,1284615
ZjuHsp100-114	11	GSMUA_Achr9T23550_001	9	56,3079	0,6531	0,011599	433,1376923
ZjuHsp100-114	11	GSMUA_Achr6T20030_001	6	57,4853	0,8575	0,014917	442,1946154
ZjuHsp100-114	11	GSMUA_Achr11T18410_001	11	41,9903	0,7848	0,01869	323,0023077
ZjuHsp100-115	11	GSMUA_AchrUn_randomT03040_001	scaffold	51,382	0,6323	0,012306	395,2461538
ZjuHsp100-115	11	GSMUA_Achr3T31630_001	3	2,143	0,2339	0,109146	16,48461538
ZjuHsp100-115	11	GSMUA_Achr9T24030_001	9	45,9732	0,7524	0,016366	353,64
ZjuHsp100-115	11	GSMUA_Achr4T05050_001	4	46,1737	0,7837	0,016973	355,1823077
ZjuHsp100-115	11	GSMUA_Achr1T05180_001	1	6,3982	0,8064	0,126035	49,21692308
ZjuHsp100-115	11	GSMUA_Achr7T04590_001	7	50,4795	0,6875	0,013619	388,3038462
ZjuHsp100-115	11	GSMUA_Achr6T33650_001	6	49,7349	0,7761	0,015605	382,5761538
ZjuHsp100-115	11	GSMUA_Achr4T08480_001	4	26,5333	0,8398	0,031651	204,1023077
ZjuHsp100-115	11	GSMUA_Achr5T09650_001	5	51,8538	0,7891	0,015218	398,8753846
ZjuHsp100-115	11	GSMUA_Achr4T15660_001	4	11,7703	0,7849	0,066685	90,54076923
ZjuHsp100-115	11	GSMUA_Achr11T24090_001	11	53,9719	0,8911	0,01651	415,1684615
ZjuHsp100-116	11	GSMUA_Achr7T12340_001	7	52,7025	0,6847	0,012992	405,4038462
ZjuHsp100-116	11	GSMUA_Achr4T24860_001	4	2,6934	0,0654	0,024282	20,71846154
ZjuHsp100-119	11	GSMUA_Achr9T05420_001	9	1,9735	0,199	0,100836	15,18076923
ZjuHsp100-119	11	GSMUA_Achr7T14270_001	7	2,2529	0,195	0,086555	17,33
ZjuHsp100-119	11	GSMUA_Achr3T00740_001	3	8,3043	0,5331	0,064196	63,87923077
ZjuHsp100-119	11	GSMUA_Achr8T33760_001	8	9,2399	0,5499	0,059514	71,07615385
ZjuHsp100-119	11	GSMUA_Achr8T10090_001	8	12,2898	0,563	0,04581	94,53692308
ZjuHsp100-119	11	GSMUA_Achr11T15820_001	11	10,8206	0,5757	0,053204	83,23538462
ZjuHsp100-119	11	GSMUA_Achr11T20320_001	11	48,913	0,2807	0,005739	376,2538462
ZjuHsp100-119	11	GSMUA_Achr11T05650_001	11	15,98	0,5311	0,033235	122,9230769
ZjuHsp100-119	11	GSMUA_Achr7T07310_001	7	54,6577	0,619	0,011325	420,4438462
ZjuHsp100-119	11	GSMUA_Achr11T20330_001	11	3,5566	0,3356	0,09436	27,35846154
ZjuHsp100-119	11	GSMUA_Achr4T05220_001	4	52,5389	0,6382	0,012147	404,1453846
ZjuHsp100-119	11	GSMUA_Achr11T06710_001	11	40,432	0,6394	0,015814	311,0153846
ZjuHsp100-120	11	GSMUA_Achr2T03430_001	1	1,5254	0,0879	0,057624	11,73384615
ZjuHsp100-120	11	GSMUA_Achr1T07700_001	1	1,5455	0,0716	0,046328	11,88846154
ZjuHsp100-120	11	GSMUA_Achr7T05610_001	7	38,0375	0,6942	0,01825	292,5961538
ZjuHsp100-121	11	GSMUA_Achr11T24320_001	11	4,4618	0,1236	0,027702	34,32153846
ZjuHsp100-121	11	GSMUA_Achr2T16450_001	2	5,7748	0,1174	0,02033	44,42153846
ZjuHsp100-121	11	GSMUA_Achr10T30850_001	10	30,8588	0,5156	0,016708	237,3753846
ZjuHsp100-121	11	GSMUA_Achr10T00480_001	10	4,8603	0,1189	0,024464	37,38692308
ZjuHsp100-122	11	GSMUA_Achr8T16830_001	8	1,963	0,0177	0,009017	15,1
ZjuHsp100-122	11	GSMUA_AchrUn_randomT12540_001		1,5649	0,0136	0,008691	12,03769231
ZjuHsp100-122	11	GSMUA_Achr10T27140_001	10	54,3746	0,5296	0,00974	418,2661538
ZjuHsp100-122	11	GSMUA_AchrUn_randomT26560_001	scaffold	2,3552	0,0123	0,005222	18,11692308
ZjuHsp100-122	11	GSMUA_AchrUn_randomT00180_001	scaffold	55,8052	0,5182	0,009286	429,2707692
ZjuHsp100-122	11	GSMUA_Achr7T09950_001	7	54,7354	0,4941	0,009027	421,0415385
ZjuHsp100-122	11	GSMUA_Achr7T17620_001	7	55,3776	0,527	0,009516	425,9815385
ZjuHsp100-122	11	GSMUA_Achr4T03720_001	4	55,3812	0,5268	0,009512	426,0092308
ZjuHsp100-122	11	GSMUA_Achr9T13230_001	9	53,5966	0,5218	0,009736	412,2815385
ZjuHsp100-122	11	GSMUA_Achr5T04520_001	5	54,5136	0,5372	0,009854	419,3353846
ZjuHsp100-122	11	GSMUA_Achr4T05840_001	4	53,6391	0,5722	0,010668	412,6084615
ZjuHsp100-122	11	GSMUA_Achr3T04570_001	3	54,3207	0,5584	0,01028	417,8515385
ZjuHsp100-122	11	GSMUA_Achr6T12250_001	6	25,3044	0,4811	0,019013	194,6492308
ZjuHsp100-122	11	GSMUA_Achr4T05850_001	4	54,1553	0,6253	0,011546	416,5792308
ZjuHsp100-122	11	GSMUA_Achr11T10600_001	11	42,6008	0,5072	0,011906	327,6984615
ZjuHsp100-123	11	GSMUA_Achr5T15500_001	5	55,1229	0,5821	0,01056	424,0223077
ZjuHsp100-123	11	GSMUA_Achr4T03560_001	4	3,8298	0,2522	0,065852	29,46
ZjuHsp100-123	11	GSMUA_Achr7T04540_001	7	50,7837	0,6073	0,011959	390,6438462
ZjuHsp100-123	11	GSMUA_Achr4T26800_001	4	52,8339	0,5834	0,011042	406,4146154
ZjuHsp100-123	11	GSMUA_Achr6T11080_001	6	51,8179	0,6718	0,012965	398,5992308
ZjuHsp100-123	11	GSMUA_Achr9T23550_001	9	52,8217	0,5969	0,0113	406,3207692
ZjuHsp100-123	11	GSMUA_Achr11T18410_001	11	38,8161	0,8192	0,021105	298,5853846
ZjuHsp100-123	11	GSMUA_Achr6T29120_001	6	53,7587	0,5909	0,010992	413,5284615
ZjuHsp100-123	11	GSMUA_Achr6T20030_001	6	52,9295	0,8693	0,016424	407,15
ZjuHsp100-124	11	GSMUA_Achr6T12620_001	6	3,6655	0,2509	0,068449	28,19615385
ZjuHsp100-124	11	GSMUA_Achr10T16250_001	10	2,5558	0,2431	0,095117	19,66
ZjuHsp100-124	11	GSMUA_Achr10T04420_001	10	2,6802	0,3045	0,113611	20,61692308
ZjuHsp100-124	11	GSMUA_Achr10T11010_001	10	2,6777	0,2374	0,088658	20,59769231
ZjuHsp100-125	12	GSMUA_Achr10T14770_001	10	32,7342	0,1715	0,005239	251,8015385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-125	12	GSMUA_Achr6T14100_001	6	4,2017	0,1222	0,029083	32,32076923
ZjuHsp100-126	12	GSMUA_Achr4T26800_001	4	3,6154	0,0406	0,01123	27,81076923
ZjuHsp100-126	12	GSMUA_Achr5T15500_001	5	4,0266	0,0371	0,009214	30,97384615
ZjuHsp100-126	12	GSMUA_Achr9T23550_001	9	4,2364	0,0414	0,009772	32,58769231
ZjuHsp100-126	12	GSMUA_Achr7T04540_001	7	4,2713	0,0401	0,009388	32,85615385
ZjuHsp100-126	12	GSMUA_Achr4T03560_001	4	51,0651	0,5886	0,011526	392,8084615
ZjuHsp100-126	12	GSMUA_Achr3T00260_001	3	4,7855	0,1032	0,021565	36,81153846
ZjuHsp100-126	12	GSMUA_Achr6T11080_001	6	52,357	0,5902	0,011273	402,7461538
ZjuHsp100-127	12	GSMUA_Achr5T00990_001	5	2,022	0,4092	0,202374	15,55384615
ZjuHsp100-127	12	GSMUA_Achr6T35590_001	6	2,5468	0,3557	0,139665	19,59076923
ZjuHsp100-127	12	GSMUA_Achr3T05630_001	3	14,6386	0,6042	0,041274	112,6046154
ZjuHsp100-127	12	GSMUA_Achr2T20440_001	2	2,7328	0,3429	0,125476	21,02153846
ZjuHsp100-127	12	GSMUA_Achr8T30370_001	8	3,1656	0,3791	0,119756	24,35076923
ZjuHsp100-127	12	GSMUA_Achr7T15980_001	7	29,4178	0,6606	0,022456	226,2907692
ZjuHsp100-127	12	GSMUA_Achr9T13860_001	9	49,9366	0,6549	0,013115	384,1276923
ZjuHsp100-127	12	GSMUA_Achr9T08970_001	9	2,8685	0,3693	0,128743	22,06538462
ZjuHsp100-127	12	GSMUA_Achr7T05100_001	7	32,9357	0,6943	0,02108	253,3515385
ZjuHsp100-127	12	GSMUA_Achr9T13560_001	9	18,2464	0,7334	0,040194	140,3569231
ZjuHsp100-127	12	GSMUA_AchrUn_randomT18100_001	scaffold	35,6961	0,7288	0,020417	274,5853846
ZjuHsp100-127	12	GSMUA_Achr1T23360_001	1	13,9936	0,7258	0,051867	107,6430769
ZjuHsp100-127	12	GSMUA_Achr3T04960_001	3	15,4096	0,7356	0,047736	118,5353846
ZjuHsp100-127	12	GSMUA_Achr2T05020_001	2	18,8838	0,7539	0,039923	145,26
ZjuHsp100-128	12	GSMUA_Achr7T09950_001	7	1,8279	0,0333	0,018218	14,06076923
ZjuHsp100-128	12	GSMUA_Achr10T27140_001	10	1,5483	0,0393	0,025383	11,91
ZjuHsp100-128	12	GSMUA_AchrUn_randomT12540_001	scaffold	53,4169	0,4992	0,009345	410,8992308
ZjuHsp100-128	12	GSMUA_Achr8T16830_001	8	54,0779	0,4983	0,009214	415,9838462
ZjuHsp100-128	12	GSMUA_Achr4T05850_001	4	15,232	0,5226	0,034309	117,1692308
ZjuHsp100-128	12	GSMUA_Achr4T05840_001	4	15,94	0,538	0,033752	122,6153846
ZjuHsp100-128	12	GSMUA_Achr4T03720_001	4	53,6917	0,5314	0,009897	413,0130769
ZjuHsp100-128	12	GSMUA_Achr4T03720_001	4	53,6922	0,5314	0,009897	413,0169231
ZjuHsp100-128	12	GSMUA_AchrUn_randomT00180_001	scaffold	14,4202	0,5255	0,036442	110,9246154
ZjuHsp100-128	12	GSMUA_Achr9T13230_001	9	25,1115	0,5193	0,02068	193,1653846
ZjuHsp100-128	12	GSMUA_Achr7T17620_001	7	16,0091	0,5445	0,034012	123,1469231
ZjuHsp100-128	12	GSMUA_Achr6T12250_001	6	14,7444	0,4756	0,032256	113,4184615
ZjuHsp100-129	12	GSMUA_Achr1T13870_001	1	2,613	0,4118	0,157597	20,1
ZjuHsp100-130	12	GSMUA_Achr1T13870_001	1	2,613	0,4118	0,157597	20,1
ZjuHsp100-131	12	GSMUA_Achr9T25490_001	9	5,7235	14,7663	2,579942	44,02692308
ZjuHsp100-131	12	GSMUA_Achr6T14420_001	6	0,5384	15,9858	29,69131	4,141538462
ZjuHsp100-132	scaffold	GSMUA_Achr1T23360_001	1	6,7804	0,3173	0,046797	52,15692308
ZjuHsp100-132	scaffold	GSMUA_Achr7T05100_001	7	4,9185	0,2984	0,060669	37,83461538
ZjuHsp100-132	scaffold	GSMUA_Achr9T13560_001	9	3,4554	0,3614	0,10459	26,58
ZjuHsp100-132	scaffold	GSMUA_AchrUn_randomT18100_001		3,1434	0,3233	0,10285	24,18
ZjuHsp100-132	scaffold	GSMUA_Achr3T04960_001	3	3,0012	0,3937	0,131181	23,08615385
ZjuHsp100-132	scaffold	GSMUA_Achr2T05020_001	2	9,1965	0,3666	0,039863	70,74230769
ZjuHsp100-132	scaffold	GSMUA_Achr9T13860_001	9	9,1553	0,6007	0,065612	70,42538462
ZjuHsp100-132	scaffold	GSMUA_Achr3T05630_001	3	23,7513	0,5798	0,024411	182,7023077
ZjuHsp100-132	scaffold	GSMUA_Achr7T15980_001	7	20,693	0,6007	0,029029	159,1769231
ZjuHsp100-133	scaffold	GSMUA_Achr9T24030_001	9	49,3012	0,7762	0,015744	379,24
ZjuHsp100-133	scaffold	GSMUA_Achr3T16280_001	3	2,423	0,1362	0,056211	18,63846154
ZjuHsp100-133	scaffold	GSMUA_AchrUn_randomT03040_001	scaffold	51,4266	0,6233	0,01212	395,5892308
ZjuHsp100-133	scaffold	GSMUA_Achr4T05050_001	4	49,8788	0,7634	0,015305	383,6830769
ZjuHsp100-133	scaffold	GSMUA_Achr4T15660_001	4	21,3357	0,8237	0,038607	164,1207692
ZjuHsp100-133	scaffold	GSMUA_Achr4T08480_001	4	55,416	0,7983	0,014406	426,2769231
ZjuHsp100-134	scaffold	GSMUA_Achr1T07700_001	1	52,6187	0,6545	0,012439	404,7592308
ZjuHsp100-134	scaffold	GSMUA_Achr7T05610_001	7	2,1537	0,1411	0,065515	16,56692308
ZjuHsp100-134	scaffold	GSMUA_Achr2T03430_001	2	0,2873	16,0616	55,90533	2,21
ZjuHsp100-135	scaffold	GSMUA_Achr5T21820_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-135	scaffold	GSMUA_Achr5T10060_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-135	scaffold	GSMUA_Achr1T27100_001	1	54,1329	0,5526	0,010208	416,4069231
ZjuHsp100-135	scaffold	GSMUA_Achr4T17520_001	4	13,1063	0,5525	0,042155	100,8176923
ZjuHsp100-135	scaffold	GSMUA_Achr3T10890_001	3	53,4561	0,5854	0,010951	411,2007692
ZjuHsp100-135	scaffold	GSMUA_Achr5T16360_001	5	19,4729	0,5297	0,027202	149,7915385
ZjuHsp100-135	scaffold	GSMUA_Achr3T05230_001	3	62,0251	0,5451	0,008788	477,1161538
ZjuHsp100-135	scaffold	GSMUA_Achr5T21820_001	5	21,2912	0,554	0,02602	163,7784615
ZjuHsp100-136	scaffold	GSMUA_Achr5T21820_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-136	scaffold	GSMUA_Achr5T10060_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-136	scaffold	GSMUA_Achr1T27100_001	1	54,1329	0,5526	0,010208	416,4069231
ZjuHsp100-136	scaffold	GSMUA_Achr4T17520_001	4	13,1063	0,5525	0,042155	100,8176923
ZjuHsp100-136	scaffold	GSMUA_Achr3T10890_001	3	53,4561	0,5854	0,010951	411,2007692
ZjuHsp100-136	scaffold	GSMUA_Achr5T16360_001	5	19,4729	0,5297	0,027202	149,7915385
ZjuHsp100-136	scaffold	GSMUA_Achr3T05230_001	3	62,0251	0,5451	0,008788	477,1161538
ZjuHsp100-136	scaffold	GSMUA_Achr5T21820_001	5	21,2912	0,554	0,02602	163,7784615
ZjuHsp100-137	scaffold	GSMUA_Achr3T17180_001	3	1,8265	0,1704	0,093293	14,05
ZjuHsp100-138	scaffold	GSMUA_Achr6T29120_001	6	2,9468	0,288	0,097733	22,66769231
ZjuHsp100-139	scaffold	GSMUA_Achr7T12340_001	7	49,9135	0,7492	0,01501	383,95

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-139	scaffold	GSMUA_Achr3T19040_001	3	1,4832	0,0861	0,05805	11,40923077
ZjuHsp100-139	scaffold	GSMUA_Achr4T24860_001	4	52,205	0,6809	0,013043	401,5769231
ZjuHsp100-140	scaffold	GSMUA_Achr7T12340_001	7	49,9135	0,7492	0,01501	383,95
ZjuHsp100-140	scaffold	GSMUA_Achr3T19040_001	3	1,4832	0,0861	0,05805	11,40923077
ZjuHsp100-140	scaffold	GSMUA_Achr4T24860_001	4	52,205	0,6809	0,013043	401,5769231
ZjuHsp100-141	scaffold	GSMUA_Achr5T21820_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-141	scaffold	GSMUA_Achr5T10060_001	5	22,6734	0,3895	0,017179	174,4107692
ZjuHsp100-141	scaffold	GSMUA_Achr1T27100_001	1	54,1329	0,5526	0,010208	416,4069231
ZjuHsp100-141	scaffold	GSMUA_Achr4T17520_001	4	13,1063	0,5525	0,042155	100,8176923
ZjuHsp100-141	scaffold	GSMUA_Achr3T10890_001	3	53,4561	0,5854	0,010951	411,2007692
ZjuHsp100-141	scaffold	GSMUA_Achr5T16360_001	5	19,4729	0,5297	0,027202	149,7915385
ZjuHsp100-141	scaffold	GSMUA_Achr3T05230_001	3	62,0251	0,5451	0,008788	477,1161538
ZjuHsp100-141	scaffold	GSMUA_Achr5T21820_001	5	21,2912	0,554	0,02602	163,7784615
ZjuHsp100-142	scaffold	GSMUA_Achr3T17180_001	3	1,8905	0,1662	0,087913	14,54230769
ZjuHsp100-143	scaffold	GSMUA_Achr4T24320_001	4	2,3294	0,0851	0,036533	17,91846154
ZjuHsp100-143	scaffold	GSMUA_Achr2T22550_001	2	2,2584	0,0832	0,03684	17,37230769
ZjuHsp100-143	scaffold	GSMUA_Achr6T09890_001	6	1,6344	0,2562	0,156755	12,57230769
ZjuHsp100-143	scaffold	GSMUA_Achr3T01430_001	3	2,1264	0,0902	0,042419	16,35692308
ZjuHsp100-143	scaffold	GSMUA_Achr7T25300_001	7	52,1712	0,6249	0,011978	401,3169231
ZjuHsp100-143	scaffold	GSMUA_Achr10T21590_001	10	20,2029	0,6093	0,030159	155,4069231
ZjuHsp100-143	scaffold	GSMUA_Achr6T27610_001	6	0,1472	14,5732	99,00272	1,132307692
ZjuHsp100-143	scaffold	GSMUA_Achr4T00810_001	4	54,2947	0,6342	0,011681	417,6515385
ZjuHsp100-143	scaffold	GSMUA_Achr10T07490_001	10	59,221	0,6799	0,011481	455,5461538
ZjuHsp100-144	scaffold	GSMUA_Achr5T10060_001	5	10,2394	0,3647	0,035617	78,76461538
ZjuHsp100-144	scaffold	GSMUA_Achr4T17530_001	4	65,924	0,5315	0,008062	507,1076923
ZjuHsp100-144	scaffold	GSMUA_Achr3T10890_001	3	55,9481	0,5791	0,010351	430,37
ZjuHsp100-144	scaffold	GSMUA_Achr5T21820_001	5	17,6688	0,608	0,034411	135,9138462
ZjuHsp100-144	scaffold	GSMUA_Achr5T16360_001	5	15,0016	0,5821	0,038803	115,3969231
ZjuHsp100-144	scaffold	GSMUA_Achr3T05230_001	3	63,6301	0,5733	0,00901	489,4623077
ZjuHsp100-144	scaffold	GSMUA_Achr1T27100_001	1	56,939	0,523	0,009185	437,9923077
ZjuHsp100-144	scaffold	GSMUA_Achr5T10060_001	5	8,1253	0,3853	0,04742	62,50230769
ZjuHsp100-145	scaffold	GSMUA_Achr7T04590_001	7	18,5708	0,1839	0,009903	142,8523077
ZjuHsp100-145	scaffold	GSMUA_AchrUn_randomT03040_001	scaffold	22,4976	0,1281	0,005694	173,0584615
ZjuHsp100-145	scaffold	GSMUA_Achr9T24030_001	9	45,2841	0,4733	0,010452	348,3392308
ZjuHsp100-145	scaffold	GSMUA_Achr10T29710_001	10	2,2175	0,0989	0,0446	17,05769231
ZjuHsp100-145	scaffold	GSMUA_Achr4T08480_001	4	49,0417	0,5924	0,01208	377,2438462
ZjuHsp100-145	scaffold	GSMUA_Achr4T05050_001	4	46,3509	0,4682	0,010101	356,5453846
ZjuHsp100-145	scaffold	GSMUA_Achr5T09650_001	5	51,8961	0,624	0,012024	399,2007692
ZjuHsp100-145	scaffold	GSMUA_Achr11T24090_001	11	52,082	0,5852	0,011236	400,6307692
ZjuHsp100-145	scaffold	GSMUA_Achr3T16280_001	3	51,7818	0,7674	0,01482	398,3215385
ZjuHsp100-145	scaffold	GSMUA_Achr3T31630_001	3	48,412	0,7779	0,016068	372,4
ZjuHsp100-145	scaffold	GSMUA_AchrUn_randomT23050_001	scaffold	16,6746	0,7099	0,042574	128,2661538
ZjuHsp100-145	scaffold	GSMUA_Achr10T29700_001	10	1,66	0,2549	0,153554	12,76923077
ZjuHsp100-145	scaffold	GSMUA_Achr9T18420_001	9	50,4309	0,6134	0,012163	387,93
ZjuHsp100-146	scaffold	GSMUA_Achr3T18630_001	3	1,6754	0,0631	0,037663	12,88769231
ZjuHsp100-146	scaffold	GSMUA_AchrUn_randomT22440_001	scaffold	1,6492	0,0645	0,03911	12,68615385
ZjuHsp100-146	scaffold	GSMUA_Achr6T16470_001	6	1,8766	0,0823	0,043856	14,43538462
ZjuHsp100-146	scaffold	GSMUA_Achr8T09160_001	8	1,8792	0,0835	0,044434	14,45538462
ZjuHsp100-146	scaffold	GSMUA_Achr6T23780_001	6	49,3646	0,4247	0,008603	379,3276923
ZjuHsp100-146	scaffold	GSMUA_Achr6T08040_001	6	1,6514	0,0461	0,027916	12,70307692
ZjuHsp100-146	scaffold	GSMUA_Achr9T22420_001	9	53,0241	0,4444	0,008381	407,8776923
ZjuHsp100-146	scaffold	GSMUA_Achr10T12430_001	10	50,6682	0,5053	0,009973	389,7553846
ZjuHsp100-146	scaffold	GSMUA_Achr1T13710_001	1	45,8606	0,5417	0,011812	352,7738462
ZjuHsp100-146	scaffold	GSMUA_Achr6T16670_001	6	50,5028	0,5129	0,010156	388,4830769
ZjuHsp100-146	scaffold	GSMUA_Achr3T16240_001	3	45,1949	0,5486	0,012139	347,6530769
ZjuHsp100-147	scaffold	GSMUA_Achr2T03430_001	2	1,5756	0,0999	0,063404	12,12
ZjuHsp100-147	scaffold	GSMUA_Achr1T07700_001	1	1,8471	0,088	0,047642	14,20846154
ZjuHsp100-147	scaffold	GSMUA_Achr7T05610_001	7	52,6805	0,6304	0,011966	405,2346154
ZjuHsp100-148	scaffold	GSMUA_Achr3T00740_001	3	3,1128	0,2885	0,092682	23,94461538
ZjuHsp100-148	scaffold	GSMUA_Achr8T33760_001	8	3,2917	0,2778	0,084394	25,32076923
ZjuHsp100-148	scaffold	GSMUA_Achr11T15820_001	11	3,6416	0,3079	0,084551	28,01230769
ZjuHsp100-148	scaffold	GSMUA_Achr8T10090_001	8	4,2247	0,3253	0,077	32,49769231
ZjuHsp100-148	scaffold	GSMUA_Achr9T05420_001	9	56,8518	0,4893	0,008607	437,3215385
ZjuHsp100-148	scaffold	GSMUA_Achr11T05650_001	11	3,0755	0,2099	0,068249	23,65769231
ZjuHsp100-148	scaffold	GSMUA_Achr7T07310_001	7	58,4921	0,7001	0,011969	449,9392308
ZjuHsp100-148	scaffold	GSMUA_Achr7T14270_001	7	43,2036	0,4968	0,011499	332,3353846
ZjuHsp100-148	scaffold	GSMUA_Achr11T06710_001	11	53,1751	0,5844	0,01099	409,0392308
ZjuHsp100-148	scaffold	GSMUA_Achr11T20320_001	11	6,0489	0,3734	0,06173	46,53
ZjuHsp100-148	scaffold	GSMUA_Achr10T07490_001	10	53,2225	0,7615	0,014308	409,4038462
ZjuHsp100-148	scaffold	GSMUA_Achr4T05220_001	4	54,1006	0,5444	0,010063	416,1584615
ZjuHsp100-148	scaffold	GSMUA_Achr4T00810_001	4	53,4124	0,825	0,015446	410,8646154
ZjuHsp100-148	scaffold	GSMUA_Achr6T27610_001	6	57,5764	0,7721	0,01341	442,8953846
ZjuHsp100-149	scaffold	GSMUA_Achr3T00740_001	3	3,1128	0,2885	0,092682	23,94461538
ZjuHsp100-149	scaffold	GSMUA_Achr8T33760_001	8	3,2917	0,2778	0,084394	25,32076923
ZjuHsp100-149	scaffold	GSMUA_Achr11T15820_001	11	3,6416	0,3079	0,084551	28,01230769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-149	scaffold	GSMUA_Achr8T10090_001	8	4,2247	0,3253	0,077	32,49769231
ZjuHsp100-149	scaffold	GSMUA_Achr9T05420_001	9	56,8518	0,4893	0,008607	437,3215385
ZjuHsp100-149	scaffold	GSMUA_Achr11T05650_001	11	3,0755	0,2099	0,068249	23,65769231
ZjuHsp100-149	scaffold	GSMUA_Achr7T07310_001	7	58,4921	0,7001	0,011969	449,9392308
ZjuHsp100-149	scaffold	GSMUA_Achr7T14270_001	7	43,2036	0,4968	0,011499	332,3353846
ZjuHsp100-149	scaffold	GSMUA_Achr11T06710_001	11	53,1751	0,5844	0,01099	409,0392308
ZjuHsp100-149	scaffold	GSMUA_Achr11T20320_001	11	6,0489	0,3734	0,06173	46,53
ZjuHsp100-149	scaffold	GSMUA_Achr10T07490_001	10	53,2225	0,7615	0,014308	409,4038462
ZjuHsp100-149	scaffold	GSMUA_Achr4T05220_001	4	54,1006	0,5444	0,010063	416,1584615
ZjuHsp100-149	scaffold	GSMUA_Achr4T00810_001	4	53,4124	0,825	0,015446	410,8646154
ZjuHsp100-149	scaffold	GSMUA_Achr6T27610_001	6	57,5764	0,7721	0,01341	442,8953846
ZjuHsp100-150	scaffold	GSMUA_Achr1T27100_001	1	13,3051	0,375	0,028185	102,3469231
ZjuHsp100-150	scaffold	GSMUA_Achr3T10890_001	3	43,7018	0,418	0,009565	336,1676923
ZjuHsp100-150	scaffold	GSMUA_Achr4T17520_001	4	13,5032	0,3343	0,024757	103,8707692
ZjuHsp100-150	scaffold	GSMUA_Achr4T17530_001	4	60,7267	0,3366	0,005543	467,1284615
ZjuHsp100-150	scaffold	GSMUA_Achr9T27350_001	9	49,9098	0,7203	0,014432	383,9215385
ZjuHsp100-150	scaffold	GSMUA_Achr5T10060_001	5	53,7529	0,5693	0,010591	413,4838462
ZjuHsp100-150	scaffold	GSMUA_Achr3T05230_001	3	57,8995	0,5639	0,009739	445,3807692
ZjuHsp100-150	scaffold	GSMUA_Achr5T16360_001	5	59,7113	0,5655	0,009471	459,3176923
ZjuHsp100-150	scaffold	GSMUA_Achr5T21820_001	5	60,2808	0,5727	0,009501	463,6984615
ZjuHsp100-151	scaffold	GSMUA_Achr4T24320_001	4	52,6367	0,6177	0,011735	404,8976923
ZjuHsp100-151	scaffold	GSMUA_Achr4T00810_001	4	53,3886	0,7019	0,013147	410,6815385
ZjuHsp100-151	scaffold	GSMUA_Achr10T21590_001	10	3,0907	0,1707	0,05523	23,77461538
ZjuHsp100-151	scaffold	GSMUA_Achr7T25300_001	7	1,8312	0,1753	0,09573	14,08615385
ZjuHsp100-151	scaffold	GSMUA_Achr6T27610_001	6	32,081	0,6151	0,019173	246,7769231
ZjuHsp100-151	scaffold	GSMUA_Achr10T07490_001	10	53,9771	0,5918	0,010964	415,2084615
ZjuHsp100-151	scaffold	GSMUA_Achr3T01430_001	3	53,8376	0,6206	0,011527	414,1353846
ZjuHsp100-151	scaffold	GSMUA_Achr2T22550_001	2	52,8073	0,6333	0,011993	406,21
ZjuHsp100-151	scaffold	GSMUA_Achr11T05650_001	11	54,3077	0,7264	0,013376	417,7515385
ZjuHsp100-151	scaffold	GSMUA_Achr7T14270_001	7	52,7127	0,7811	0,014818	405,4823077
ZjuHsp100-151	scaffold	GSMUA_Achr9T05420_001	9	50,2642	0,6988	0,013903	386,6476923
ZjuHsp100-152	scaffold	GSMUA_Achr4T24320_001	4	52,6367	0,6177	0,011735	404,8976923
ZjuHsp100-152	scaffold	GSMUA_Achr4T00810_001	4	53,3886	0,7019	0,013147	410,6815385
ZjuHsp100-152	scaffold	GSMUA_Achr10T21590_001	10	3,0907	0,1707	0,05523	23,77461538
ZjuHsp100-152	scaffold	GSMUA_Achr7T25300_001	7	1,8312	0,1753	0,09573	14,08615385
ZjuHsp100-152	scaffold	GSMUA_Achr6T27610_001	6	32,081	0,6151	0,019173	246,7769231
ZjuHsp100-152	scaffold	GSMUA_Achr10T07490_001	10	53,9771	0,5918	0,010964	415,2084615
ZjuHsp100-152	scaffold	GSMUA_Achr3T01430_001	3	53,8376	0,6206	0,011527	414,1353846
ZjuHsp100-152	scaffold	GSMUA_Achr2T22550_001	2	52,8073	0,6333	0,011993	406,21
ZjuHsp100-152	scaffold	GSMUA_Achr11T05650_001	11	54,3077	0,7264	0,013376	417,7515385
ZjuHsp100-152	scaffold	GSMUA_Achr7T14270_001	7	52,7127	0,7811	0,014818	405,4823077
ZjuHsp100-152	scaffold	GSMUA_Achr9T05420_001	9	50,2642	0,6988	0,013903	386,6476923
ZjuHsp100-153	scaffold	GSMUA_Achr1T05180_001	1	53,3584	0,4335	0,008124	410,4492308
ZjuHsp100-153	scaffold	GSMUA_Achr5T09650_001	5	14,2025	0,4453	0,031354	109,25
ZjuHsp100-153	scaffold	GSMUA_Achr4T15660_001	4	2,5347	0,1826	0,07204	19,49769231
ZjuHsp100-153	scaffold	GSMUA_Achr4T08480_001	4	2,311	0,1528	0,066119	17,77692308
ZjuHsp100-153	scaffold	GSMUA_Achr7T04590_001	7	53,1056	0,527	0,009924	408,5046154
ZjuHsp100-153	scaffold	GSMUA_Achr9T24030_001	9	43,9941	0,6188	0,014066	338,4161538
ZjuHsp100-153	scaffold	GSMUA_Achr4T05050_001	4	47,3483	0,628	0,013263	364,2176923
ZjuHsp100-153	scaffold	GSMUA_AchrUn_randomT03040_001	scaffold	53,6872	0,4505	0,008391	412,9784615
ZjuHsp100-153	scaffold	GSMUA_Achr6T33650_001	6	52,3322	0,6325	0,012086	402,5553846
ZjuHsp100-153	scaffold	GSMUA_AchrUn_randomT18700_001	scaffold	53,5967	0,7436	0,013874	412,2823077
ZjuHsp100-153	scaffold	GSMUA_Achr9T03360_001	9	53,6196	0,6952	0,012965	412,4584615
ZjuHsp100-153	scaffold	GSMUA_Achr11T24090_001	11	54,8632	0,7028	0,01281	422,0246154
ZjuHsp100-153	scaffold	GSMUA_Achr3T16280_001	3	52,5126	0,8497	0,016181	403,9430769
ZjuHsp100-153	scaffold	GSMUA_Achr3T31630_001	3	49,8158	0,8283	0,016627	383,1984615
ZjuHsp100-153	scaffold	GSMUA_Achr10T29710_001	10	53,7122	0,5296	0,00986	413,1707692
ZjuHsp100-154	scaffold	GSMUA_Achr5T18820_001	5	42,0778	1,1584	0,02753	323,6753846
ZjuHsp100-155	scaffold	GSMUA_Achr10T14770_001	10	32,5324	0,1714	0,005269	250,2492308
ZjuHsp100-156	scaffold	GSMUA_Achr6T14100_001	6	4,2027	0,1222	0,029077	32,32846154
ZjuHsp100-156	scaffold	GSMUA_Achr1T27100_001	1	19,3349	0,3714	0,019209	148,73
ZjuHsp100-156	scaffold	GSMUA_Achr3T10890_001	3	12,4574	0,3808	0,030568	95,82615385
ZjuHsp100-156	scaffold	GSMUA_Achr4T17520_001	4	13,3965	0,3283	0,024506	103,05
ZjuHsp100-156	scaffold	GSMUA_Achr4T17530_001	4	22,571	0,3193	0,014146	173,6230769
ZjuHsp100-156	scaffold	GSMUA_Achr5T10060_001	5	3,9172	0,5882	0,150158	30,13230769
ZjuHsp100-156	scaffold	GSMUA_Achr3T05230_001	3	59,7246	0,6171	0,010332	459,42
ZjuHsp100-156	scaffold	GSMUA_Achr5T16360_001	5	31,0826	0,4983	0,016031	239,0969231
ZjuHsp100-156	scaffold	GSMUA_Achr5T21820_001	5	29,1534	0,4862	0,016677	224,2569231
ZjuHsp100-156	scaffold	GSMUA_Achr9T27350_001	9	43,2121	0,7218	0,016704	332,4007692
ZjuHsp100-157	scaffold	GSMUA_Achr6T14100_001	6	4,2027	0,1222	0,029077	32,32846154
ZjuHsp100-157	scaffold	GSMUA_Achr1T27100_001	1	19,3349	0,3714	0,019209	148,73
ZjuHsp100-157	scaffold	GSMUA_Achr3T10890_001	3	12,4574	0,3808	0,030568	95,82615385
ZjuHsp100-157	scaffold	GSMUA_Achr4T17520_001	4	13,3965	0,3283	0,024506	103,05
ZjuHsp100-157	scaffold	GSMUA_Achr4T17530_001	4	22,571	0,3193	0,014146	173,6230769
ZjuHsp100-157	scaffold	GSMUA_Achr5T10060_001	5	3,9172	0,5882	0,150158	30,13230769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-157	scaffold	GSMUA_Achr3T05230_001	3	59,7246	0,6171	0,010332	459,42
ZjuHsp100-157	scaffold	GSMUA_Achr5T16360_001	5	31,0826	0,4983	0,016031	239,0969231
ZjuHsp100-157	scaffold	GSMUA_Achr5T21820_001	5	29,1534	0,4862	0,016677	224,2569231
ZjuHsp100-157	scaffold	GSMUA_Achr9T27350_001	9	43,2121	0,7218	0,016704	332,4007692
ZjuHsp100-158	scaffold	GSMUA_Achr4T17520_001	4	45,486	0,3388	0,007448	349,8923077
ZjuHsp100-158	scaffold	GSMUA_Achr4T17530_001	4	48,92	0,3519	0,007193	376,3076923
ZjuHsp100-158	scaffold	GSMUA_Achr3T10890_001	3	55,9139	0,4118	0,007365	430,1069231
ZjuHsp100-158	scaffold	GSMUA_Achr3T05230_001	3	60,0766	0,5837	0,009716	462,1276923
ZjuHsp100-158	scaffold	GSMUA_Achr5T21820_001	5	64,0683	0,5658	0,008831	492,8330769
ZjuHsp100-158	scaffold	GSMUA_Achr5T10060_001	5	6,8078	0,5519	0,081069	52,36769231
ZjuHsp100-158	scaffold	GSMUA_Achr5T16360_001	5	61,7783	0,5554	0,00899	475,2176923
ZjuHsp100-158	scaffold	GSMUA_Achr1T27100_001	1	17,7326	0,3777	0,0213	136,4046154
ZjuHsp100-158	scaffold	GSMUA_Achr9T27350_001	9	11,901	0,6672	0,056063	91,54615385
ZjuHsp100-159	scaffold	GSMUA_Achr1T27100_001	1	17,848	0,3777	0,021162	137,2923077
ZjuHsp100-159	scaffold	GSMUA_Achr3T10890_001	3	55,9005	0,4118	0,007367	430,0038462
ZjuHsp100-159	scaffold	GSMUA_Achr4T17520_001	4	49,0975	0,3385	0,006894	377,6730769
ZjuHsp100-159	scaffold	GSMUA_Achr4T17530_001	4	48,857	0,3519	0,007203	375,8230769
ZjuHsp100-159	scaffold	GSMUA_Achr9T27350_001	9	11,9199	0,6672	0,055974	91,69153846
ZjuHsp100-159	scaffold	GSMUA_Achr3T05230_001	3	60,0777	0,5837	0,009716	462,1361538
ZjuHsp100-159	scaffold	GSMUA_Achr5T10060_001	5	6,8102	0,5519	0,08104	52,38615385
ZjuHsp100-159	scaffold	GSMUA_Achr5T16360_001	5	63,562	0,5554	0,008738	488,9384615
ZjuHsp100-159	scaffold	GSMUA_Achr5T21820_001	5	64,1052	0,5654	0,00882	493,1169231
ZjuHsp100-160	scaffold	GSMUA_Achr9T27350_001	9	51,907	0,6674	0,012858	399,2846154
ZjuHsp100-160	scaffold	GSMUA_Achr8T11820_001	8	32,3083	0,4001	0,012384	248,5253846
ZjuHsp100-160	scaffold	GSMUA_Achr1T04030_001	1	58,9269	0,4295	0,007289	453,2838462
ZjuHsp100-160	scaffold	GSMUA_Achr11T03420_001	11	27,9192	0,3339	0,01196	214,7630769
ZjuHsp100-160	scaffold	GSMUA_Achr1T27100_001	1	61,1001	0,6105	0,009992	470,0007692
ZjuHsp100-160	scaffold	GSMUA_Achr4T17530_001	4	69,472	0,6673	0,009605	534,4
ZjuHsp100-160	scaffold	GSMUA_Achr3T10890_001	3	61,8904	0,5927	0,009577	476,08
ZjuHsp100-160	scaffold	GSMUA_Achr5T16360_001	5	6,2012	0,6368	0,10269	47,70153846
ZjuHsp100-160	scaffold	GSMUA_Achr5T21820_001	5	6,4604	0,6498	0,100582	49,69538462
ZjuHsp100-161	scaffold	GSMUA_Achr7T09950_001	7	53,4385	0,5001	0,009358	411,0653846
ZjuHsp100-161	scaffold	GSMUA_Achr4T03720_001	4	2,3661	0,0392	0,016567	18,20076923
ZjuHsp100-161	scaffold	GSMUA_Achr7T17620_001	7	2,1637	0,0277	0,012802	16,64384615
ZjuHsp100-161	scaffold	GSMUA_AchrUn_randomT00180_001	scaffold	2,7394	0,0238	0,008688	21,07230769
ZjuHsp100-161	scaffold	GSMUA_Achr4T05850_001	4	16,1045	0,5687	0,035313	123,8807692
ZjuHsp100-161	scaffold	GSMUA_Achr8T16830_001	8	56,0543	0,5556	0,009912	431,1869231
ZjuHsp100-161	scaffold	GSMUA_AchrUn_randomT12540_001	scaffold	55,8175	0,5515	0,00988	429,3653846
ZjuHsp100-161	scaffold	GSMUA_Achr10T27140_001	10	18,8615	0,5279	0,027988	145,0884615
ZjuHsp100-161	scaffold	GSMUA_Achr5T04520_001	5	33,6774	0,5494	0,016314	259,0569231
ZjuHsp100-161	scaffold	GSMUA_Achr9T13230_001	9	52,9266	0,5446	0,01029	407,1276923
ZjuHsp100-161	scaffold	GSMUA_Achr7T21960_001	7	50,0719	0,5846	0,011675	385,1684615
ZjuHsp100-161	scaffold	GSMUA_Achr4T05840_001	4	42,6683	0,5559	0,013028	328,2176923
ZjuHsp100-161	scaffold	GSMUA_Achr9T23550_001	9	53,9779	0,7613	0,014104	415,2146154
ZjuHsp100-161	scaffold	GSMUA_Achr6T12250_001	6	19,8038	0,5027	0,025384	152,3369231
ZjuHsp100-161	scaffold	GSMUA_Achr11T10600_001	11	41,4978	0,5171	0,012461	319,2138462
ZjuHsp100-161	scaffold	GSMUA_Achr3T04570_001	3	41,5961	0,5718	0,013746	319,97
ZjuHsp100-161	scaffold	GSMUA_Achr4T26800_001	4	52,8477	0,809	0,015308	6,223076923
ZjuHsp100-161	scaffold	GSMUA_Achr7T04540_001	7	52,2672	0,7307	0,01398	402,0553846
ZjuHsp100-161	scaffold	GSMUA_Achr5T15500_001	5	28,2937	0,7868	0,027808	217,6438462
ZjuHsp100-162	scaffold	GSMUA_Achr3T10890_001	3	57,0839	0,4202	0,007361	439,1069231
ZjuHsp100-162	scaffold	GSMUA_Achr1T27100_001	1	8,6739	0,4213	0,048571	66,72230769
ZjuHsp100-162	scaffold	GSMUA_Achr4T17520_001	4	61,2965	0,3572	0,005827	471,5115385
ZjuHsp100-162	scaffold	GSMUA_Achr4T17530_001	4	62,3083	0,3688	0,005919	479,2946154
ZjuHsp100-162	scaffold	GSMUA_Achr3T05230_001	3	57,322	0,6199	0,010814	440,9384615
ZjuHsp100-162	scaffold	GSMUA_Achr5T10060_001	5	6,925	0,5434	0,078469	53,26923077
ZjuHsp100-162	scaffold	GSMUA_Achr5T16360_001	5	18,6794	0,5685	0,030435	143,6876923
ZjuHsp100-162	scaffold	GSMUA_Achr5T21820_001	5	63,789	0,5752	0,009017	490,6846154
ZjuHsp100-162	scaffold	GSMUA_Achr9T27350_001	9	10,9554	0,7495	0,068414	84,27230769
		Mean		34,32372	0,59049	0,4864591	263,702139

Z. jujube – P. persica

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	Prupe.1G086500.1	1	1,2868	0,1196	0,092943736	9,898461538
ZjuHsp100-01	1	Prupe.3G273800.1	3	54,6729	0,5599	0,010240905	420,5607692
ZjuHsp100-01	1	Prupe.5G183800.1	5	12,2526	0,6037	0,049271175	94,25076923
ZjuHsp100-01	1	Prupe.3G274300.1	3	55,3034	0,6003	0,010854667	425,4107692
ZjuHsp100-01	1	Prupe.3G274100.1	3	51,5136	0,6087	0,011816297	396,2584615
ZjuHsp100-01	1	Prupe.3G274200.1	3	56,7664	0,6181	0,010888483	436,6646154
ZjuHsp100-01	1	Prupe.2G002200.1	2	60,6473	0,6002	0,009896566	466,5176923
ZjuHsp100-01	1	Prupe.3G273900.1	3	54,8367	0,6246	0,011390182	421,8207692

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-01	1	Prupe.7G159000.1	7	53,2962	0,6355	0,011923927	409,9707692
ZjuHsp100-01	1	Prupe.7G165500.1	7	53,2765	0,6770	0,012707291	409,8192308
ZjuHsp100-01	1	Prupe.7G158900.1	7	53,3434	0,6211	0,011643427	410,3338462
ZjuHsp100-01	1	Prupe.8G092600.1	8	55,618	0,5769	0,010372541	427,8307692
ZjuHsp100-01	1	Prupe.1G375300.1	1	58,9888	0,5492	0,009310242	453,76
ZjuHsp100-01	1	Prupe.4G113000.1	4	52,7408	0,6676	0,012658132	405,6984615
ZjuHsp100-01	1	Prupe.4G166800.1	4	55,2817	0,5807	0,01050438	425,2438462
ZjuHsp100-01	1	Prupe.7G159500.1	7	57,693	0,6447	0,011174666	443,7923077
ZjuHsp100-01	1	Prupe.7G159600.1	7	57,0654	0,5952	0,010430138	438,9646154
ZjuHsp100-01	1	Prupe.7G160000.1	7	50,8049	0,6196	0,012195674	390,8069231
ZjuHsp100-01	1	Prupe.7G159900.1	7	51,2554	0,6217	0,012129454	394,2723077
ZjuHsp100-01	1	Prupe.7G159700.1	7	54,374	0,6149	0,011308714	418,2615385
ZjuHsp100-01	1	Prupe.7G159800.1	7	52,0618	0,6206	0,011920448	400,4753846
ZjuHsp100-01	1	Prupe.1G375300.2	1	59,9698	0,5799	0,009669867	461,3061538
ZjuHsp100-01	1	Prupe.2G315800.1	2	9,7314	0,7203	0,074018127	74,85692308
ZjuHsp100-02	1	Prupe.1G086500.1	1	1,2989	0,1081	0,083224267	9,991538462
ZjuHsp100-02	1	Prupe.3G273800.1	3	54,5045	0,5777	0,010599125	419,2653846
ZjuHsp100-02	1	Prupe.3G274300.1	3	55,7070	0,6028	0,010820902	428,5153846
ZjuHsp100-02	1	Prupe.5G183800.1	5	10,4056	0,6075	0,058382025	80,04307692
ZjuHsp100-02	1	Prupe.3G274100.1	3	53,669	0,5968	0,011120013	412,8384615
ZjuHsp100-02	1	Prupe.3G274200.1	3	55,8083	0,6025	0,010795885	429,2946154
ZjuHsp100-02	1	Prupe.3G273900.1	3	54,4482	0,6255	0,011487983	418,8323077
ZjuHsp100-02	1	Prupe.7G159000.1	7	54,5004	0,6217	0,011407256	419,2338462
ZjuHsp100-02	1	Prupe.7G165500.1	7	54,5191	0,6675	0,012243416	419,3776923
ZjuHsp100-02	1	Prupe.2G002200.1	2	62,3319	0,5527	0,008867049	479,4761538
ZjuHsp100-02	1	Prupe.7G158900.1	7	53,511	0,6154	0,011500439	411,6230769
ZjuHsp100-02	1	Prupe.8G092600.1	8	55,6402	0,5745	0,010325268	428,0015385
ZjuHsp100-02	1	Prupe.1G375300.1	1	59,334	0,5443	0,009173492	456,4153846
ZjuHsp100-02	1	Prupe.4G113000.1	4	53,3566	0,6549	0,01227402	410,4353846
ZjuHsp100-02	1	Prupe.4G166800.1	4	55,3362	0,5841	0,010555477	425,6630769
ZjuHsp100-02	1	Prupe.7G159500.1	7	56,3694	0,6488	0,011509791	433,6107692
ZjuHsp100-02	1	Prupe.7G159600.1	7	57,0415	0,5993	0,010506386	438,7807692
ZjuHsp100-02	1	Prupe.7G159900.1	7	53,0293	0,5666	0,010684659	407,9176923
ZjuHsp100-02	1	Prupe.7G160000.1	7	50,4926	0,6087	0,012055232	388,4046154
ZjuHsp100-02	1	Prupe.7G159700.1	7	54,1486	0,6329	0,011688206	416,5276923
ZjuHsp100-02	1	Prupe.7G159800.1	7	53,3589	0,6236	0,011686898	410,4530769
ZjuHsp100-02	1	Prupe.1G375300.2	1	60,3368	0,5745	0,009521552	464,1292308
ZjuHsp100-02	1	Prupe.2G315800.1	2	14,2155	0,688	0,048397876	109,35
ZjuHsp100-03	1	Prupe.1G073700.1	1	0,9494	0,1944	0,204760902	7,303076923
ZjuHsp100-03	1	Prupe.7G097400.1	7	30,096	0,7149	0,023753987	231,5076923
ZjuHsp100-04	1	Prupe.2G002200.1	2	1,6864	0,1478	0,087642315	12,97230769
ZjuHsp100-04	1	Prupe.1G086500.1	1	55,1807	0,5162	0,00935472	424,4669231
ZjuHsp100-04	1	Prupe.5G183800.1	5	55,3142	0,6001	0,010848932	425,4938462
ZjuHsp100-04	1	Prupe.3G274300.1	3	56,3582	0,6279	0,011141236	433,5246154
ZjuHsp100-04	1	Prupe.3G274200.1	3	51,6113	0,5911	0,011452918	397,01
ZjuHsp100-04	1	Prupe.3G273900.1	3	24,2012	0,6558	0,02709783	186,1630769
ZjuHsp100-04	1	Prupe.3G274100.1	3	55,5217	0,623	0,011220838	427,09
ZjuHsp100-04	1	Prupe.2G315800.1	2	58,7982	0,6097	0,010369365	452,2938462
ZjuHsp100-04	1	Prupe.3G273800.1	3	23,6392	0,611	0,025846898	181,84
ZjuHsp100-04	1	Prupe.8G092600.1	8	53,0336	0,5993	0,011300383	407,9507692
ZjuHsp100-04	1	Prupe.7G165500.1	7	54,932	0,6365	0,011587053	422,5538462
ZjuHsp100-04	1	Prupe.7G158900.1	7	39,0759	0,6618	0,01693627	300,5838462
ZjuHsp100-04	1	Prupe.7G159900.1	7	53,220	0,6032	0,011334085	409,3846154
ZjuHsp100-04	1	Prupe.1G375300.1	1	54,4359	0,5803	0,010660244	418,7376923
ZjuHsp100-04	1	Prupe.7G160000.1	7	51,7812	0,5866	0,011328436	398,3169231
ZjuHsp100-04	1	Prupe.7G159700.1	7	54,5001	0,5842	0,010719246	419,2315385
ZjuHsp100-04	1	Prupe.7G159000.1	7	21,0467	0,6633	0,03151563	161,8976923
ZjuHsp100-04	1	Prupe.7G159500.1	7	56,403	0,5492	0,009737071	433,8692308
ZjuHsp100-04	1	Prupe.2G193700.1	2	53,9453	0,5983	0,011090864	414,9638462
ZjuHsp100-04	1	Prupe.7G159800.1	7	53,118	0,6171	0,011617531	408,6
ZjuHsp100-04	1	Prupe.4G113000.1	4	54,9387	0,6662	0,012126243	422,6053846
ZjuHsp100-04	1	Prupe.7G159600.1	7	56,4615	0,5329	0,00943829	434,3192308
ZjuHsp100-04	1	Prupe.4G166800.1	4	50,7452	0,661	0,013025863	390,3476923
ZjuHsp100-05	1	Prupe.4G015000.1	4	0,8765	0,2196	0,250541928	6,742307692
ZjuHsp100-05	1	Prupe.4G014800.1	4	0,9733	0,2592	0,26631049	7,486923077
ZjuHsp100-05	1	Prupe.4G015000.2	4	0,7597	0,2256	0,296959326	5,843846154
ZjuHsp100-06	1	Prupe.4G015000.1	4	0,8618	0,1735	0,201322813	6,629230769
ZjuHsp100-06	1	Prupe.4G014800.1	4	0,8811	0,2184	0,247871978	6,777692308
ZjuHsp100-06	1	Prupe.4G015000.2	4	0,7104	0,1678	0,236204955	5,464615385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-07	1	Prupe.1G392200.1	1	0,8708	0,0441	0,050643087	6,698461538
ZjuHsp100-07	1	Prupe.3G258500.1	3	11,8352	0,1735	0,014659659	91,04
ZjuHsp100-07	1	Prupe.3G258500.3	3	9,3049	0,1686	0,018119485	71,57615385
ZjuHsp100-07	1	Prupe.3G258500.2	3	10,8626	0,1716	0,015797323	83,55846154
ZjuHsp100-07	1	Prupe.5G203700.1	5	39,5092	0,4683	0,011852936	303,9169231
ZjuHsp100-07	1	Prupe.5G143300.1	5	53,3326	0,4697	0,008806996	410,2507692
ZjuHsp100-07	1	Prupe.5G143300.2	5	53,3345	0,4695	0,008802932	410,2653846
ZjuHsp100-07	1	Prupe.5G138200.1	5	20,9418	0,5992	0,028612631	161,0907692
ZjuHsp100-08	1	Prupe.4G047600.1	4	0,7588	0,0636	0,083816552	5,836923077
ZjuHsp100-09	1	Prupe.3G030100.1	3	0,8593	0,0134	0,015594088	6,61
ZjuHsp100-09	1	Prupe.7G237100.1	7	54,8502	0,4864	0,008867789	421,9246154
ZjuHsp100-09	1	Prupe.8G090700.4	8	53,5962	0,4617	0,008614417	412,2784615
ZjuHsp100-09	1	Prupe.8G090700.1	8	53,3291	0,5449	0,010217686	410,2238462
ZjuHsp100-09	1	Prupe.8G090700.2	8	52,7272	0,5405	0,010250876	405,5938462
ZjuHsp100-09	1	Prupe.2G111300.1	2	53,3356	0,5748	0,010777042	410,2738462
ZjuHsp100-09	1	Prupe.2G111300.2	2	54,8476	0,4541	0,008279305	421,9046154
ZjuHsp100-09	1	Prupe.6G320300.1	6	53,3089	0,5401	0,010131517	410,0684615
ZjuHsp100-09	1	Prupe.8G208900.1	8	28,2371	0,576	0,020398695	217,2084615
ZjuHsp100-09	1	Prupe.6G039300.1	6	28,3887	0,5984	0,02107881	218,3746154
ZjuHsp100-09	1	Prupe.8G090700.3	8	54,1133	0,6135	0,011337324	416,2561538
ZjuHsp100-09	1	Prupe.1G355600.1	1	48,5057	0,7196	0,01483537	373,1207692
ZjuHsp100-09	1	Prupe.3G266900.1	3	51,2195	0,7383	0,014414432	393,9961538
ZjuHsp100-09	1	Prupe.6G107800.1	6	53,9001	0,8307	0,015411845	414,6161538
ZjuHsp100-09	1	Prupe.6G233700.2	6	55,0173	0,828	0,015049812	423,21
ZjuHsp100-09	1	Prupe.4G237600.1	4	52,7561	0,7553	0,014316828	405,8161538
ZjuHsp100-11	1	Prupe.4G023600.2	4	1,4043	0,5871	0,418073061	10,80230769
ZjuHsp100-11	1	Prupe.4G023600.1	4	1,4043	0,5871	0,418073061	10,80230769
ZjuHsp100-11	1	Prupe.4G023600.3	4	1,4043	0,5871	0,418073061	10,80230769
ZjuHsp100-12	1	Prupe.3G044200.5	3	0,8628	0,2305	0,267153454	6,636923077
ZjuHsp100-12	1	Prupe.3G044200.6	3	0,8632	0,2322	0,268999073	6,64
ZjuHsp100-12	1	Prupe.3G044200.1	3	0,8633	0,2309	0,267462064	6,640769231
ZjuHsp100-12	1	Prupe.3G044200.2	3	0,8629	0,2303	0,266890717	6,637692308
ZjuHsp100-12	1	Prupe.3G044200.7	3	0,866	0,2311	0,266859122	6,661538462
ZjuHsp100-12	1	Prupe.3G044200.3	3	0,8623	0,2307	0,267540299	6,633076923
ZjuHsp100-12	1	Prupe.3G044200.4	3	0,8628	0,2323	0,269239685	6,636923077
ZjuHsp100-12	1	Prupe.3G044200.8	3	0,8466	0,2197	0,259508623	6,512307692
ZjuHsp100-12	1	Prupe.3G044200.9	3	0,8472	0,222	0,26203966	6,516923077
ZjuHsp100-13	1	Prupe.3G044200.5	3	0,8629	0,2295	0,265963611	6,637692308
ZjuHsp100-13	1	Prupe.3G044200.6	3	0,8633	0,2312	0,267809568	6,640769231
ZjuHsp100-13	1	Prupe.3G044200.2	3	0,8637	0,2294	0,265601482	6,643846154
ZjuHsp100-13	1	Prupe.3G044200.7	3	0,8658	0,2300	0,265650266	6,66
ZjuHsp100-13	1	Prupe.3G044200.1	3	0,8631	0,2297	0,266133704	6,639230769
ZjuHsp100-13	1	Prupe.3G044200.3	3	0,8631	0,2298	0,266249566	6,639230769
ZjuHsp100-13	1	Prupe.3G044200.4	3	0,8636	0,2315	0,268063918	6,643076923
ZjuHsp100-13	1	Prupe.3G044200.8	3	0,8486	0,2201	0,259368371	6,527692308
ZjuHsp100-13	1	Prupe.3G044200.9	3	0,8493	0,2223	0,261744966	6,533076923
ZjuHsp100-14	1	Prupe.3G075400.1	3	0,6079	0,0591	0,097219937	4,676153846
ZjuHsp100-14	1	Prupe.3G075300.1	3	0,5242	0,0745	0,142121328	4,032307692
ZjuHsp100-14	1	Prupe.3G075300.2	3	0,5202	0,075	0,144175317	4,001538462
ZjuHsp100-14	1	Prupe.4G080800.2	4	54,4405	0,6399	0,011754117	418,7730769
ZjuHsp100-14	1	Prupe.4G080800.1	4	54,3085	0,6346	0,011685095	417,7576923
ZjuHsp100-14	1	Prupe.6G127200.1	6	49,7591	0,6461	0,01298456	382,7623077
ZjuHsp100-14	1	Prupe.2G148300.2	2	52,2492	0,7631	0,014605008	401,9169231
ZjuHsp100-14	1	Prupe.2G148300.1	2	52,2494	0,763	0,014603039	401,9184615
ZjuHsp100-14	1	Prupe.3G305500.1	3	53,677	0,823	0,015332452	412,9
ZjuHsp100-14	1	Prupe.2G148300.3	2	52,3889	0,7433	0,01418812	402,9915385
ZjuHsp100-14	1	Prupe.1G346700.2	1	15,4629	0,9318	0,060260365	118,9453846
ZjuHsp100-14	1	Prupe.1G346700.3	1	15,463	0,9318	0,060259975	118,9461538
ZjuHsp100-14	1	Prupe.1G346700.5	1	15,457	0,9318	0,060283367	118,9
ZjuHsp100-14	1	Prupe.1G346700.1	1	0,1618	13,8549	85,62978986	1,244615385
ZjuHsp100-14	1	Prupe.1G346700.6	1	12,6263	0,9200	0,072863784	97,12538462
ZjuHsp100-14	1	Prupe.1G346700.4	1	12,6292	0,9199	0,072839135	97,14769231
ZjuHsp100-14	1	Prupe.8G259000.4	8	55,7233	0,9062	0,016262497	428,6407692
ZjuHsp100-15	2	Prupe.6G127200.1	6	0,688	0,0362	0,052616279	5,292307692
ZjuHsp100-15	2	Prupe.4G080800.2	4	53,773	0,5768	0,010726573	413,6384615
ZjuHsp100-15	2	Prupe.2G148300.1	2	56,4769	0,601	0,010641519	434,4376923
ZjuHsp100-15	2	Prupe.2G148300.3	2	57,0769	0,5756	0,01008464	439,0530769
ZjuHsp100-15	2	Prupe.3G305500.1	3	53,647	0,6814	0,012701549	412,6692308
ZjuHsp100-15	2	Prupe.4G080800.1	4	54,2411	0,5859	0,010801772	417,2392308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-15	2	Prupe.3G075400.1	3	51,4588	0,6353	0,012345799	395,8369231
ZjuHsp100-15	2	Prupe.2G148300.2	2	56,4769	0,6012	0,01064506	434,4376923
ZjuHsp100-16	2	Prupe.6G127200.1	6	0,688	0,0362	0,052616279	5,292307692
ZjuHsp100-16	2	Prupe.4G080800.2	4	53,7786	0,5767	0,010723596	413,6815385
ZjuHsp100-16	2	Prupe.4G080800.1	4	54,239	0,5861	0,010805878	417,2230769
ZjuHsp100-16	2	Prupe.3G075400.1	3	51,4577	0,6354	0,012348006	395,8284615
ZjuHsp100-16	2	Prupe.2G148300.2	2	56,4732	0,6012	0,010645758	434,4092308
ZjuHsp100-16	2	Prupe.2G148300.1	2	56,477	0,6012	0,010645041	434,4384615
ZjuHsp100-16	2	Prupe.2G148300.3	2	57,0759	0,5757	0,010086569	439,0453846
ZjuHsp100-16	2	Prupe.3G305500.1	3	53,4119	0,6815	0,012759329	410,8607692
ZjuHsp100-17	2	Prupe.8G068000.2	8	0,7138	0,1259	0,176379938	5,490769231
ZjuHsp100-17	2	Prupe.8G068000.1	8	0,7298	0,1313	0,179912305	5,613846154
ZjuHsp100-18	2	Prupe.8G068000.2	8	0,7138	0,1259	0,176379938	5,490769231
ZjuHsp100-18	2	Prupe.8G068000.1	8	0,7307	0,1307	0,178869577	5,620769231
ZjuHsp100-19	2	Prupe.6G056400.1	6	0,7993	0,2349	0,293882147	6,148461538
ZjuHsp100-19	2	Prupe.2G250700.1	2	1,3402	0,4851	0,361960901	10,30923077
ZjuHsp100-19	2	Prupe.2G250700.2	2	1,3402	0,4851	0,361960901	10,30923077
ZjuHsp100-20	2	Prupe.6G060800.2	6	0,6922	0,0787	0,113695464	5,324615385
ZjuHsp100-20	2	Prupe.6G060800.1	6	0,6922	0,0787	0,113695464	5,324615385
ZjuHsp100-20	2	Prupe.6G060800.3	6	0,6884	0,0801	0,116356769	5,295384615
ZjuHsp100-20	2	Prupe.1G355600.1	1	46,3578	0,6603	0,014243558	356,5984615
ZjuHsp100-20	2	Prupe.1G355600.2	1	42,4654	0,6643	0,015643324	326,6569231
ZjuHsp100-20	2	Prupe.3G112700.1	3	51,0755	0,6302	0,012338597	392,8884615
ZjuHsp100-20	2	Prupe.3G112700.2	3	51,1359	0,6178	0,012081532	393,3530769
ZjuHsp100-20	2	Prupe.3G266900.1	3	50,3745	0,6645	0,013191198	387,4961538
ZjuHsp100-20	2	Prupe.6G072600.1	6	54,2423	0,7681	0,014160535	417,2484615
ZjuHsp100-20	2	Prupe.6G257400.1	6	53,8607	0,7466	0,013861684	414,3130769
ZjuHsp100-20	2	Prupe.6G257400.2	6	53,8614	0,7466	0,013861504	414,3184615
ZjuHsp100-20	2	Prupe.1G410800.1	1	51,7389	0,6878	0,013293673	397,9915385
ZjuHsp100-20	2	Prupe.5G026500.1	5	53,6107	0,7587	0,014152026	412,39
ZjuHsp100-20	2	Prupe.5G122500.1	5	51,9443	0,8483	0,016330955	399,5715385
ZjuHsp100-20	2	Prupe.3G243600.2	3	48,2005	0,679	0,014086991	370,7730769
ZjuHsp100-20	2	Prupe.3G243600.1	3	47,8798	0,6791	0,014183434	368,3061538
ZjuHsp100-20	2	Prupe.3G061400.1	3	52,7652	0,8899	0,016865282	405,8861538
ZjuHsp100-21	2	Prupe.6G060800.2	6	0,6922	0,0787	0,113695464	5,324615385
ZjuHsp100-21	2	Prupe.6G060800.1	6	0,6922	0,0787	0,113695464	5,324615385
ZjuHsp100-21	2	Prupe.6G060800.3	6	0,6884	0,0801	0,116356769	5,295384615
ZjuHsp100-21	2	Prupe.1G355600.1	1	46,2404	0,658	0,014229981	355,6953846
ZjuHsp100-21	2	Prupe.1G355600.2	1	42,0569	0,6621	0,015742958	323,5146154
ZjuHsp100-21	2	Prupe.3G112700.2	3	51,0373	0,615	0,01205001	392,5946154
ZjuHsp100-21	2	Prupe.3G112700.1	3	50,978	0,6275	0,012309231	392,1384615
ZjuHsp100-21	2	Prupe.3G266900.1	3	50,3757	0,6644	0,013188899	387,5053846
ZjuHsp100-21	2	Prupe.6G072600.1	6	54,2416	0,7681	0,014160718	417,2430769
ZjuHsp100-21	2	Prupe.6G257400.1	6	53,9007	0,7435	0,013793884	414,6207692
ZjuHsp100-21	2	Prupe.6G257400.2	6	53,8639	0,7466	0,01386086	414,3376923
ZjuHsp100-21	2	Prupe.1G410800.1	1	51,7097	0,6919	0,013380468	397,7669231
ZjuHsp100-21	2	Prupe.5G026500.1	5	53,6309	0,7586	0,014144831	412,5453846
ZjuHsp100-21	2	Prupe.5G122500.1	5	51,9166	0,8477	0,016328111	399,3584615
ZjuHsp100-21	2	Prupe.3G243600.2	3	55,8149	0,6934	0,012423206	429,3453846
ZjuHsp100-21	2	Prupe.3G243600.1	3	57,2218	0,6932	0,012114264	440,1676923
ZjuHsp100-21	2	Prupe.3G061400.1	3	52,3797	0,9025	0,017229957	402,9207692
ZjuHsp100-22	2	Prupe.2G238800.1	2	0,9481	0,0797	0,084062863	7,293076923
ZjuHsp100-22	2	Prupe.6G070800.1	6	0,6049	0,0697	0,115225657	4,653076923
ZjuHsp100-22	2	Prupe.6G260200.1	6	1,1588	0,0815	0,070331377	8,913846154
ZjuHsp100-22	2	Prupe.2G238800.2	2	1,0153	0,077	0,075839653	7,81
ZjuHsp100-22	2	Prupe.2G238800.3	2	1,0153	0,077	0,075839653	7,81
ZjuHsp100-22	2	Prupe.6G260200.2	6	1,2156	0,0802	0,06597565	9,350769231
ZjuHsp100-22	2	Prupe.6G070800.2	6	0,6142	0,0722	0,117551286	4,724615385
ZjuHsp100-22	2	Prupe.6G070800.3	6	0,6142	0,0781	0,127157278	4,724615385
ZjuHsp100-22	2	Prupe.3G107000.2	3	51,672	0,5345	0,010344094	397,4769231
ZjuHsp100-22	2	Prupe.3G107000.1	3	51,7011	0,5326	0,010301522	397,7007692
ZjuHsp100-23	2	Prupe.6G072600.1	6	0,7942	0,0745	0,093805087	6,109230769
ZjuHsp100-23	2	Prupe.6G257400.1	6	1,6571	0,1437	0,08671776	12,74692308
ZjuHsp100-23	2	Prupe.6G257400.2	6	1,6571	0,1437	0,08671776	12,74692308
ZjuHsp100-23	2	Prupe.1G355600.1	1	27,8925	0,5934	0,021274536	214,5576923
ZjuHsp100-23	2	Prupe.1G355600.2	1	31,0842	0,5988	0,019263806	239,1092308
ZjuHsp100-23	2	Prupe.3G266900.1	3	52,8249	0,6087	0,011522975	406,3453846
ZjuHsp100-23	2	Prupe.3G112700.2	3	34,9684	0,6369	0,018213587	268,9876923
ZjuHsp100-23	2	Prupe.3G112700.1	3	51,5079	0,6524	0,012666018	396,2146154

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-23	2	Prupe.1G410800.1	1	52,708	0,7539	0,014303332	405,4461538
ZjuHsp100-23	2	Prupe.5G026500.1	5	54,8736	0,7245	0,01320307	422,1046154
ZjuHsp100-23	2	Prupe.6G060800.2	6	53,9482	0,7883	0,014612165	414,9861538
ZjuHsp100-23	2	Prupe.6G060800.1	6	53,958	0,7882	0,014607658	415,0615385
ZjuHsp100-23	2	Prupe.6G060800.3	6	53,8531	0,7949	0,014760524	414,2546154
ZjuHsp100-23	2	Prupe.3G243600.2	3	56,8778	0,6817	0,011985344	437,5215385
ZjuHsp100-23	2	Prupe.3G243600.1	3	52,8595	0,6819	0,012900236	406,6115385
ZjuHsp100-23	2	Prupe.5G122500.1	5	52,7947	0,8527	0,016151242	406,1130769
ZjuHsp100-23	2	Prupe.3G061400.1	3	54,7599	0,797	0,014554446	421,23
ZjuHsp100-24	2	Prupe.8G068000.1	8	0,787	0,3452	0,4386277	6,053846154
ZjuHsp100-24	2	Prupe.8G068000.2	8	0,787	0,3452	0,4386277	6,053846154
ZjuHsp100-25	2	Prupe.8G068000.2	8	1,3292	0,4578	0,344417695	10,22461538
ZjuHsp100-25	2	Prupe.8G068000.1	8	1,3292	0,4578	0,344417695	10,22461538
ZjuHsp100-26	2	Prupe.6G107800.1	6	0,9381	0,0739	0,07877625	7,216153846
ZjuHsp100-26	2	Prupe.6G233700.1	6	2,6983	0,0818	0,030315384	20,75615385
ZjuHsp100-26	2	Prupe.4G237600.1	4	2,8663	0,0878	0,030631825	22,04846154
ZjuHsp100-26	2	Prupe.6G233700.2	6	2,0446	0,0394	0,019270273	15,72769231
ZjuHsp100-26	2	Prupe.5G169800.1	5	7,1857	0,1277	0,017771407	55,27461538
ZjuHsp100-26	2	Prupe.4G275000.1	4	54,1059	0,6141	0,011349964	416,1992308
ZjuHsp100-26	2	Prupe.3G135900.3	3	54,5414	0,6493	0,011904718	419,5492308
ZjuHsp100-26	2	Prupe.3G135900.1	3	54,5407	0,6494	0,011906705	419,5438462
ZjuHsp100-26	2	Prupe.3G135900.2	3	54,5409	0,6493	0,011904827	419,5453846
ZjuHsp100-26	2	Prupe.3G062600.1	3	46,4987	0,7074	0,015213329	357,6823077
ZjuHsp100-26	2	Prupe.3G062600.2	3	48,5217	0,7073	0,014576983	373,2438462
ZjuHsp100-26	2	Prupe.3G062600.3	3	46,4085	0,7073	0,015240743	356,9884615
ZjuHsp100-26	2	Prupe.3G062600.5	3	46,036	0,7074	0,015366235	354,1230769
ZjuHsp100-26	2	Prupe.3G062600.4	3	47,3153	0,7073	0,014948653	363,9638462
ZjuHsp100-26	2	Prupe.1G288400.1	1	52,8162	0,5757	0,010900065	406,2784615
ZjuHsp100-26	2	Prupe.1G288400.2	1	53,1654	0,5337	0,010038484	408,9646154
ZjuHsp100-26	2	Prupe.8G255300.2	8	53,0518	0,8337	0,01571483	408,0907692
ZjuHsp100-26	2	Prupe.8G255300.1	8	53,0508	0,8338	0,015717011	408,0830769
ZjuHsp100-26	2	Prupe.4G112300.1	4	55,3976	0,8623	0,015565656	426,1353846
ZjuHsp100-26	2	Prupe.1G191800.4	1	55,7546	0,8177	0,014666054	428,8815385
ZjuHsp100-26	2	Prupe.1G191800.2	1	55,7548	0,8175	0,014662415	428,8830769
ZjuHsp100-26	2	Prupe.1G191800.3	1	35,768	0,805	0,022506151	275,1384615
ZjuHsp100-26	2	Prupe.1G191800.1	1	37,4906	0,8047	0,021464047	288,3892308
ZjuHsp100-27	2	Prupe.6G039300.1	6	0,8157	0,0218	0,026725512	6,274615385
ZjuHsp100-27	2	Prupe.8G208900.1	8	52,9848	0,5282	0,009968897	407,5753846
ZjuHsp100-27	2	Prupe.3G030100.1	3	52,1405	0,6367	0,012211237	401,0807692
ZjuHsp100-27	2	Prupe.7G237100.1	7	51,6157	0,5794	0,011225267	397,0438462
ZjuHsp100-27	2	Prupe.6G320300.1	6	51,9157	0,586	0,01128753	399,3515385
ZjuHsp100-27	2	Prupe.8G090700.1	8	51,092	0,5921	0,011588898	393,0153846
ZjuHsp100-27	2	Prupe.8G090700.2	8	50,3995	0,5768	0,011444558	387,6884615
ZjuHsp100-27	2	Prupe.2G111300.2	2	44,7197	0,4939	0,01104435	343,9976923
ZjuHsp100-27	2	Prupe.2G111300.1	2	47,431	0,6214	0,013101136	364,8538462
ZjuHsp100-27	2	Prupe.8G090700.4	8	36,9885	0,5191	0,014034092	284,5269231
ZjuHsp100-27	2	Prupe.8G090700.3	8	51,8271	0,6096	0,011762186	398,67
ZjuHsp100-27	2	Prupe.6G233700.2	6	54,0928	0,7755	0,014336474	416,0984615
ZjuHsp100-28	2	Prupe.6G039300.1	6	2,256	0,2827	0,125310284	17,35384615
ZjuHsp100-28	2	Prupe.6G039200.2	6	9,4511	0,515	0,054491012	72,70076923
ZjuHsp100-28	2	Prupe.6G039200.1	6	54,3527	0,5076	0,009339002	418,0976923
ZjuHsp100-29	2	Prupe.2G038600.1	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.8	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.2	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.9	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.7	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.6	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.10	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.2G038600.5	2	0,8518	0,1446	0,169758159	6,552307692
ZjuHsp100-29	2	Prupe.6G313300.1	6	0,9425	0,1377	0,146100796	7,25
ZjuHsp100-29	2	Prupe.2G038600.4	2	0,9453	0,1377	0,145668042	7,271538462
ZjuHsp100-29	2	Prupe.2G038600.3	2	0,9453	0,1377	0,145668042	7,271538462
ZjuHsp100-30	2	Prupe.6G320300.1	6	0,6714	0,0108	0,016085791	5,164615385
ZjuHsp100-30	2	Prupe.8G208900.1	8	51,6357	0,5162	0,009996959	397,1976923
ZjuHsp100-30	2	Prupe.7G237100.1	7	28,8909	0,5412	0,018732542	222,2376923
ZjuHsp100-30	2	Prupe.3G030100.1	3	52,156	0,5327	0,01021359	401,2
ZjuHsp100-30	2	Prupe.6G039300.1	6	51,5781	0,6027	0,011685192	396,7546154
ZjuHsp100-30	2	Prupe.2G111300.2	2	48,1934	0,4603	0,0095511	370,7184615
ZjuHsp100-30	2	Prupe.2G111300.1	2	41,6218	0,5688	0,013665915	320,1676923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-30	2	Prupe.8G090700.4	8	21,7434	0,483	0,022213637	167,2569231
ZjuHsp100-30	2	Prupe.8G090700.1	8	17,8022	0,5643	0,031698329	136,94
ZjuHsp100-30	2	Prupe.8G090700.2	8	18,4352	0,5678	0,030799774	141,8092308
ZjuHsp100-30	2	Prupe.1G355600.1	1	12,2521	0,7456	0,060854874	94,24692308
ZjuHsp100-31	2	Prupe.6G352000.1	6	0,7057	0,1443	0,204477823	5,428461538
ZjuHsp100-32	2	Prupe.4G246200.1	4	0,7307	0,1288	0,176269331	5,620769231
ZjuHsp100-32	2	Prupe.5G048200.1	5	0,7885	0,1366	0,17324033	6,065384615
ZjuHsp100-32	2	Prupe.5G048200.2	5	0,5934	0,0900	0,151668352	4,564615385
ZjuHsp100-33	2	Prupe.5G143300.1	5	0,6286	0,0799	0,127107859	4,835384615
ZjuHsp100-33	2	Prupe.5G143300.2	5	0,6286	0,0799	0,127107859	4,835384615
ZjuHsp100-35	3	Prupe.6G127200.1	6	1,9407	0,082	0,042252795	14,92846154
ZjuHsp100-35	3	Prupe.3G075400.1	3	18,4872	0,6103	0,03301203	142,2092308
ZjuHsp100-35	3	Prupe.4G080800.2	4	33,7631	0,5728	0,016965267	259,7161538
ZjuHsp100-35	3	Prupe.4G080800.1	4	53,1846	0,5832	0,01096558	409,1123077
ZjuHsp100-35	3	Prupe.2G148300.2	2	57,5602	0,6322	0,010983284	442,7707692
ZjuHsp100-35	3	Prupe.2G148300.1	2	57,5571	0,6322	0,010983875	442,7469231
ZjuHsp100-35	3	Prupe.3G305500.1	3	42,077	0,6316	0,015010576	323,6692308
ZjuHsp100-35	3	Prupe.2G148300.3	2	57,7251	0,5933	0,010278025	444,0392308
ZjuHsp100-36	3	Prupe.2G071700.1	2	1,3032	0,269	0,206414979	10,02461538
ZjuHsp100-36	3	Prupe.7G097400.1	7	1,6865	0,4023	0,238541358	12,97307692
ZjuHsp100-36	3	Prupe.1G095200.2	1	51,3931	0,7235	0,014077765	395,3315385
ZjuHsp100-36	3	Prupe.1G095200.1	1	51,3968	0,7236	0,014078698	395,36
ZjuHsp100-36	3	Prupe.1G073700.1	1	55,6476	0,6758	0,012144279	428,0584615
ZjuHsp100-37	3	Prupe.6G127200.1	6	1,9504	0,0819	0,041991386	15,00307692
ZjuHsp100-37	3	Prupe.3G075400.1	3	18,5226	0,6100	0,032932742	142,4815385
ZjuHsp100-37	3	Prupe.4G080800.2	4	34,9688	0,5725	0,016371737	268,9907692
ZjuHsp100-37	3	Prupe.4G080800.1	4	53,2583	0,5825	0,010937262	409,6792308
ZjuHsp100-37	3	Prupe.2G148300.2	2	57,6262	0,632	0,010967234	443,2784615
ZjuHsp100-37	3	Prupe.2G148300.1	2	57,6255	0,6321	0,010969102	443,2730769
ZjuHsp100-37	3	Prupe.3G305500.1	3	43,0759	0,6314	0,014657848	331,3530769
ZjuHsp100-37	3	Prupe.2G148300.3	2	57,8107	0,5931	0,010259346	444,6976923
ZjuHsp100-38	3	Prupe.2G238800.1	2	0,8423	0,0589	0,069927579	6,479230769
ZjuHsp100-38	3	Prupe.6G260200.1	6	1,5473	0,0995	0,064305565	11,90230769
ZjuHsp100-38	3	Prupe.6G070800.1	6	1,7496	0,1053	0,060185185	13,45846154
ZjuHsp100-38	3	Prupe.2G238800.2	2	0,9207	0,0592	0,064298903	7,082307692
ZjuHsp100-38	3	Prupe.2G238800.3	2	0,9207	0,0592	0,064298903	7,082307692
ZjuHsp100-38	3	Prupe.6G260200.2	6	1,6500	0,0978	0,059272727	12,69230769
ZjuHsp100-38	3	Prupe.6G070800.3	6	1,852	0,1084	0,058531317	14,24615385
ZjuHsp100-38	3	Prupe.6G070800.2	6	1,8773	0,1025	0,054599691	14,44076923
ZjuHsp100-38	3	Prupe.3G107000.2	3	45,1366	0,5977	0,013242025	347,2046154
ZjuHsp100-38	3	Prupe.3G107000.1	3	44,9076	0,6037	0,013443159	345,4430769
ZjuHsp100-39	3	Prupe.2G238800.2	2	0,9031	0,0627	0,069427527	6,946923077
ZjuHsp100-39	3	Prupe.2G238800.3	2	0,9031	0,0627	0,069427527	6,946923077
ZjuHsp100-39	3	Prupe.2G238800.1	2	0,9149	0,0627	0,06853208	7,037692308
ZjuHsp100-39	3	Prupe.6G260200.2	6	1,6097	0,1002	0,062247624	12,38230769
ZjuHsp100-39	3	Prupe.6G260200.1	6	1,6373	0,1001	0,061137238	12,59461538
ZjuHsp100-39	3	Prupe.6G070800.2	6	1,8343	0,1025	0,055879627	14,11
ZjuHsp100-39	3	Prupe.6G070800.3	6	1,8637	0,1025	0,054998122	14,33615385
ZjuHsp100-39	3	Prupe.6G070800.1	6	1,8637	0,1025	0,054998122	14,33615385
ZjuHsp100-39	3	Prupe.3G107000.2	3	38,208	0,6059	0,015857936	293,9076923
ZjuHsp100-39	3	Prupe.3G107000.1	3	38,7248	0,6119	0,015801244	297,8830769
ZjuHsp100-40	3	Prupe.2G250700.1	2	0,8449	0,2024	0,239554977	6,499230769
ZjuHsp100-40	3	Prupe.2G250700.2	2	0,8449	0,2024	0,239554977	6,499230769
ZjuHsp100-40	3	Prupe.6G056400.1	6	2,5376	0,3468	0,136664565	19,52
ZjuHsp100-41	3	Prupe.2G002100.1	2	0,7089	0,1437	0,202708421	5,453076923
ZjuHsp100-41	3	Prupe.5G082000.1	5	2,084	0,3144	0,150863724	16,03076923
ZjuHsp100-42	3	Prupe.2G303900.1	2	0,5459	0,0915	0,167613116	4,199230769
ZjuHsp100-42	3	Prupe.2G303900.2	2	0,5685	0,092	0,161829376	4,373076923
ZjuHsp100-42	3	Prupe.5G110200.1	5	1,6326	0,1705	0,104434644	12,55846154
ZjuHsp100-42	3	Prupe.8G259000.4	8	55,6266	0,5428	0,009757922	427,8969231
ZjuHsp100-42	3	Prupe.8G259000.3	8	55,6277	0,5429	0,009759526	427,9053846
ZjuHsp100-42	3	Prupe.8G259000.2	8	55,626	0,5428	0,009758027	427,8923077
ZjuHsp100-42	3	Prupe.8G259000.1	8	56,2155	0,5432	0,009662815	432,4269231
ZjuHsp100-42	3	Prupe.5G152500.1	5	54,3206	0,5502	0,010128754	417,8507692
ZjuHsp100-42	3	Prupe.5G152500.2	5	54,2504	0,5549	0,010228496	417,3107692
ZjuHsp100-42	3	Prupe.1G346700.1	1	9,5986	0,6405	0,066728481	73,83538462
ZjuHsp100-42	3	Prupe.1G346700.6	1	9,5979	0,6405	0,066733348	73,83
ZjuHsp100-42	3	Prupe.1G346700.4	1	9,5997	0,6405	0,066720835	73,84384615
ZjuHsp100-42	3	Prupe.1G346700.2	1	11,2459	0,6533	0,058092283	86,50692308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-42	3	Prupe.1G346700.3	1	11,2454	0,6532	0,058085973	86,50307692
ZjuHsp100-42	3	Prupe.1G346700.5	1	11,2656	0,6532	0,057981821	86,65846154
ZjuHsp100-42	3	Prupe.2G315900.1	2	7,9169	0,6169	0,077921914	60,89923077
ZjuHsp100-42	3	Prupe.2G148300.2	2	7,7701	0,7645	0,098389982	59,77
ZjuHsp100-42	3	Prupe.2G148300.1	2	7,771	0,7645	0,098378587	59,77692308
ZjuHsp100-42	3	Prupe.3G305500.1	3	56,1178	0,8228	0,014662015	431,6753846
ZjuHsp100-42	3	Prupe.3G075400.1	3	27,3009	0,8106	0,029691329	210,0069231
ZjuHsp100-43	3	Prupe.2G310000.1	2	0,7414	0,0885	0,119368762	5,703076923
ZjuHsp100-43	3	Prupe.8G000600.1	8	7,2313	0,2627	0,036328184	55,62538462
ZjuHsp100-43	3	Prupe.1G585800.1	1	3,3000	0,354	0,107272727	25,38461538
ZjuHsp100-43	3	Prupe.1G585800.4	1	3,4996	0,3453	0,098668419	26,92
ZjuHsp100-43	3	Prupe.1G585800.11	1	3,5028	0,3379	0,096465685	26,94461538
ZjuHsp100-43	3	Prupe.1G585800.8	1	3,5028	0,3379	0,096465685	26,94461538
ZjuHsp100-43	3	Prupe.1G585800.5	1	3,1042	0,3652	0,117647059	23,87846154
ZjuHsp100-43	3	Prupe.1G585800.6	1	3,4092	0,3688	0,108177872	26,22461538
ZjuHsp100-43	3	Prupe.1G585800.3	1	3,277	0,3562	0,108696979	25,20769231
ZjuHsp100-43	3	Prupe.1G585800.10	1	3,2768	0,3491	0,106536865	25,20615385
ZjuHsp100-43	3	Prupe.1G585800.2	1	2,7782	0,3100	0,111583039	21,37076923
ZjuHsp100-43	3	Prupe.1G585800.7	1	2,6416	0,3208	0,121441551	20,32
ZjuHsp100-43	3	Prupe.1G585800.9	1	3,2511	0,3995	0,122881486	25,00846154
ZjuHsp100-44	3	Prupe.2G326200.1	2	0,7122	0,0929	0,130440887	5,478461538
ZjuHsp100-44	3	Prupe.7G156000.1	7	8,3016	0,2393	0,028825769	63,85846154
ZjuHsp100-44	3	Prupe.7G156000.2	7	8,0477	0,1788	0,012426866	61,90538462
ZjuHsp100-45	3	Prupe.2G315800.1	2	1,4772	0,1411	0,095518549	11,36307692
ZjuHsp100-45	3	Prupe.2G193700.1	2	2,3489	0,3065	0,130486611	18,06846154
ZjuHsp100-45	3	Prupe.2G002200.1	2	60,7023	0,5732	0,009442805	466,9407692
ZjuHsp100-45	3	Prupe.1G086500.1	1	54,865	0,6818	0,012426866	422,0384615
ZjuHsp100-45	3	Prupe.8G092600.1	8	51,4967	0,7039	0,013668837	396,1284615
ZjuHsp100-45	3	Prupe.7G158900.1	7	53,5311	0,7666	0,014320647	411,7776923
ZjuHsp100-45	3	Prupe.1G375300.1	1	35,7094	0,7263	0,020339182	274,6876923
ZjuHsp100-45	3	Prupe.7G159800.1	7	51,1197	0,7042	0,013775511	393,2284615
ZjuHsp100-45	3	Prupe.7G160000.1	7	55,1161	0,7036	0,01276578	423,97
ZjuHsp100-45	3	Prupe.7G159700.1	7	52,0756	0,7317	0,014050726	400,5815385
ZjuHsp100-45	3	Prupe.7G159000.1	7	50,4338	0,7757	0,015380558	387,9523077
ZjuHsp100-45	3	Prupe.5G183800.1	5	55,9539	0,7629	0,013634438	430,4146154
ZjuHsp100-45	3	Prupe.7G165500.1	7	52,6363	0,7139	0,013562883	404,8946154
ZjuHsp100-45	3	Prupe.7G159900.1	7	52,9764	0,7722	0,014576302	407,5107692
ZjuHsp100-45	3	Prupe.7G159500.1	7	54,2467	0,7327	0,013506812	417,2823077
ZjuHsp100-45	3	Prupe.4G113000.1	4	16,6359	0,7359	0,044235659	127,9684615
ZjuHsp100-45	3	Prupe.3G274200.1	3	56,0864	0,7272	0,01296571	431,4338462
ZjuHsp100-45	3	Prupe.3G273800.1	3	56,2735	0,716	0,012723573	432,8730769
ZjuHsp100-45	3	Prupe.3G274100.1	3	55,7407	0,7127	0,012785989	428,7746154
ZjuHsp100-45	3	Prupe.3G274300.1	3	57,2014	0,7236	0,01265004	440,0107692
ZjuHsp100-45	3	Prupe.7G159600.1	7	53,4485	0,7019	0,013132268	411,1423077
ZjuHsp100-45	3	Prupe.3G273900.1	3	55,529	0,7300	0,013146284	427,1461538
ZjuHsp100-46	3	Prupe.2G315900.1	2	0,7141	0,1069	0,149698922	5,493076923
ZjuHsp100-46	3	Prupe.8G259000.4	8	54,4212	0,5671	0,010420571	418,6246154
ZjuHsp100-46	3	Prupe.8G259000.3	8	54,2716	0,5646	0,010403231	417,4738462
ZjuHsp100-46	3	Prupe.8G259000.2	8	54,2721	0,5647	0,010404978	417,4776923
ZjuHsp100-46	3	Prupe.8G259000.1	8	54,2682	0,5648	0,010407568	417,4476923
ZjuHsp100-46	3	Prupe.5G110200.1	5	11,134	0,6242	0,056062511	85,64615385
ZjuHsp100-46	3	Prupe.1G346700.2	1	53,2782	0,6135	0,011515029	409,8323077
ZjuHsp100-46	3	Prupe.1G346700.3	1	53,2779	0,6133	0,01151134	409,83
ZjuHsp100-46	3	Prupe.1G346700.5	1	53,2754	0,6135	0,011515634	409,8107692
ZjuHsp100-46	3	Prupe.1G346700.1	1	53,2762	0,6135	0,011515461	409,8169231
ZjuHsp100-46	3	Prupe.1G346700.6	1	53,2789	0,6134	0,011513	409,8376923
ZjuHsp100-46	3	Prupe.1G346700.4	1	53,2795	0,6133	0,011510994	409,8423077
ZjuHsp100-46	3	Prupe.2G303900.1	2	53,6052	0,6258	0,011674241	412,3476923
ZjuHsp100-46	3	Prupe.2G303900.2	2	52,8574	0,634	0,011994536	406,5953846
ZjuHsp100-46	3	Prupe.5G152500.2	5	46,6175	0,5952	0,012767737	358,5961538
ZjuHsp100-46	3	Prupe.5G152500.1	5	46,5528	0,5952	0,012785482	358,0984615
ZjuHsp100-46	3	Prupe.2G148300.2	2	54,1716	0,6531	0,012056133	416,7046154
ZjuHsp100-46	3	Prupe.2G148300.1	2	54,1707	0,653	0,012054487	416,6976923
ZjuHsp100-47	3	Prupe.2G315900.1	2	0,6783	0,0564	0,083149049	5,217692308
ZjuHsp100-47	3	Prupe.8G259000.4	8	54,7661	0,5714	0,010433462	421,2776923
ZjuHsp100-47	3	Prupe.8G259000.3	8	54,6045	0,5689	0,010418555	420,0346154
ZjuHsp100-47	3	Prupe.8G259000.2	8	54,6046	0,5688	0,010416705	420,0353846
ZjuHsp100-47	3	Prupe.8G259000.1	8	54,6055	0,5688	0,010416533	420,0423077
ZjuHsp100-47	3	Prupe.5G152500.1	5	53,2074	0,5336	0,01002868	409,2876923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-47	3	Prupe.5G152500.2	5	53,2076	0,5335	0,010026763	409,2892308
ZjuHsp100-47	3	Prupe.1G346700.2	1	51,3535	0,6145	0,011966078	395,0269231
ZjuHsp100-47	3	Prupe.1G346700.3	1	51,3553	0,6145	0,011965659	395,0407692
ZjuHsp100-47	3	Prupe.1G346700.5	1	51,3555	0,6144	0,011963665	395,0423077
ZjuHsp100-47	3	Prupe.1G346700.1	1	51,3569	0,6144	0,011963339	395,0530769
ZjuHsp100-47	3	Prupe.1G346700.6	1	51,3565	0,6144	0,011963432	395,05
ZjuHsp100-47	3	Prupe.1G346700.4	1	51,3538	0,6144	0,011964061	395,0292308
ZjuHsp100-47	3	Prupe.5G110200.1	5	9,1952	0,6748	0,073386114	70,73230769
ZjuHsp100-47	3	Prupe.2G303900.1	2	52,0671	0,6145	0,011802078	400,5161538
ZjuHsp100-47	3	Prupe.2G303900.2	2	51,7306	0,6203	0,011990969	397,9276923
ZjuHsp100-47	3	Prupe.2G148300.2	2	53,9937	0,6455	0,011955098	415,3361538
ZjuHsp100-47	3	Prupe.2G148300.1	2	53,9922	0,6457	0,011959135	415,3246154
ZjuHsp100-48	3	Prupe.2G315900.1	2	0,6783	0,0564	0,083149049	5,217692308
ZjuHsp100-48	3	Prupe.8G259000.4	8	54,7625	0,5714	0,010434147	421,25
ZjuHsp100-48	3	Prupe.8G259000.3	8	54,6009	0,569	0,010421074	420,0069231
ZjuHsp100-48	3	Prupe.8G259000.2	8	54,5996	0,5689	0,01041949	419,9969231
ZjuHsp100-48	3	Prupe.8G259000.1	8	54,6044	0,5688	0,010416743	420,0338462
ZjuHsp100-48	3	Prupe.5G152500.1	5	53,2056	0,5335	0,01002714	409,2738462
ZjuHsp100-48	3	Prupe.5G152500.2	5	53,2024	0,5336	0,010029623	409,2492308
ZjuHsp100-48	3	Prupe.1G346700.2	1	51,3566	0,6144	0,011963409	395,0507692
ZjuHsp100-48	3	Prupe.1G346700.3	1	51,3569	0,6144	0,011963339	395,0530769
ZjuHsp100-48	3	Prupe.1G346700.5	1	51,3533	0,6145	0,011966125	395,0253846
ZjuHsp100-48	3	Prupe.1G346700.1	1	51,3566	0,6144	0,011963409	395,0507692
ZjuHsp100-48	3	Prupe.1G346700.6	1	51,3567	0,6145	0,011965333	395,0515385
ZjuHsp100-48	3	Prupe.1G346700.4	1	51,3666	0,6137	0,011947452	395,1276923
ZjuHsp100-48	3	Prupe.5G110200.1	5	9,1945	0,6748	0,073391702	70,72692308
ZjuHsp100-48	3	Prupe.2G303900.1	2	52,0653	0,6147	0,011806328	400,5023077
ZjuHsp100-48	3	Prupe.2G303900.2	2	51,7318	0,6205	0,011994557	397,9369231
ZjuHsp100-48	3	Prupe.2G148300.2	2	53,9928	0,6457	0,011959002	415,3292308
ZjuHsp100-48	3	Prupe.2G148300.1	2	53,9913	0,6457	0,011959334	415,3176923
ZjuHsp100-49	4	Prupe.3G274100.1	3	1,5292	0,1961	0,128236987	11,76307692
ZjuHsp100-49	4	Prupe.3G273900.1	3	1,682	0,2044	0,121521998	12,93846154
ZjuHsp100-49	4	Prupe.3G274200.1	3	1,4896	0,2139	0,143595596	11,45846154
ZjuHsp100-49	4	Prupe.3G274300.1	3	1,6401	0,2063	0,125785013	12,61615385
ZjuHsp100-49	4	Prupe.3G273800.1	3	2,3612	0,2519	0,106683043	18,16307692
ZjuHsp100-49	4	Prupe.5G183800.1	5	12,2946	0,316	0,025702341	94,57384615
ZjuHsp100-49	4	Prupe.7G159000.1	7	53,2028	0,6002	0,011281361	409,2523077
ZjuHsp100-49	4	Prupe.7G165500.1	7	19,6097	0,6144	0,031331433	150,8438462
ZjuHsp100-49	4	Prupe.1G086500.1	1	7,061	0,6216	0,088032857	54,31538462
ZjuHsp100-49	4	Prupe.7G158900.1	7	51,7493	0,5567	0,010757633	398,0715385
ZjuHsp100-49	4	Prupe.1G375300.1	1	10,0908	0,5758	0,057061878	77,62153846
ZjuHsp100-49	4	Prupe.8G092600.1	8	52,004	0,611	0,011749096	400,0307692
ZjuHsp100-49	4	Prupe.7G159500.1	7	51,3913	0,6279	0,012218021	395,3176923
ZjuHsp100-49	4	Prupe.7G159600.1	7	54,402	0,5559	0,010218374	418,4769231
ZjuHsp100-49	4	Prupe.4G166800.1	4	27,1254	0,5888	0,021706592	208,6569231
ZjuHsp100-49	4	Prupe.7G159700.1	7	18,1694	0,5899	0,032466675	139,7646154
ZjuHsp100-49	4	Prupe.7G159800.1	7	50,1338	0,6265	0,012496559	385,6446154
ZjuHsp100-49	4	Prupe.2G002200.1	2	58,3943	0,6734	0,011531947	449,1869231
ZjuHsp100-49	4	Prupe.4G113000.1	4	53,0024	0,6352	0,011984363	407,7107692
ZjuHsp100-49	4	Prupe.7G160000.1	7	50,4654	0,5981	0,011851685	388,1953846
ZjuHsp100-49	4	Prupe.7G159900.1	7	39,701	0,6056	0,015254024	305,3923077
ZjuHsp100-49	4	Prupe.1G375300.2	1	10,7674	0,603	0,056002378	82,82615385
ZjuHsp100-49	4	Prupe.7G159400.1	7	53,082	0,5666	0,010674051	408,3230769
ZjuHsp100-49	4	Prupe.3G274000.1	3	1,4352	0,2116	0,147435897	11,04
ZjuHsp100-49	4	Prupe.2G315800.1	2	8,7199	0,778	0,089221207	67,07615385
ZjuHsp100-49	4	Prupe.7G158900.2	7	51,7477	0,6571	0,012698149	398,0592308
ZjuHsp100-49	4	Prupe.1G229600.1	1	48,0829	0,5654	0,011758858	369,8684615
ZjuHsp100-49	4	Prupe.2G193700.1	2	51,4181	0,794	0,015442033	395,5238462
ZjuHsp100-50	4	Prupe.3G274100.1	3	1,8846	0,2337	0,124005094	14,49692308
ZjuHsp100-50	4	Prupe.3G274200.1	3	1,3914	0,2085	0,149849073	10,70307692
ZjuHsp100-50	4	Prupe.3G273900.1	3	1,9131	0,2361	0,123412263	14,71615385
ZjuHsp100-50	4	Prupe.3G274300.1	3	1,4645	0,2127	0,145237282	11,26538462
ZjuHsp100-50	4	Prupe.3G273800.1	3	2,2775	0,2492	0,109418222	17,51923077
ZjuHsp100-50	4	Prupe.5G183800.1	5	9,3641	0,2983	0,031855704	72,03153846
ZjuHsp100-50	4	Prupe.7G159000.1	7	52,9834	0,5889	0,011114802	407,5646154
ZjuHsp100-50	4	Prupe.7G165500.1	7	27,9321	0,6023	0,021563005	214,8623077
ZjuHsp100-50	4	Prupe.1G086500.1	1	53,9825	0,6076	0,011255499	415,25
ZjuHsp100-50	4	Prupe.7G158900.1	7	26,9259	0,6041	0,022435647	207,1223077
ZjuHsp100-50	4	Prupe.1G375300.1	1	14,2022	0,5859	0,041254172	109,2476923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-50	4	Prupe.4G166800.1	4	51,6362	0,6081	0,011776622	397,2015385
ZjuHsp100-50	4	Prupe.8G092600.1	8	49,898	0,6169	0,012363221	383,8307692
ZjuHsp100-50	4	Prupe.7G159500.1	7	51,5688	0,6318	0,012251594	396,6830769
ZjuHsp100-50	4	Prupe.7G159600.1	7	52,3652	0,5884	0,01123647	402,8092308
ZjuHsp100-50	4	Prupe.7G159700.1	7	23,8293	0,5847	0,02453702	183,3023077
ZjuHsp100-50	4	Prupe.4G113000.1	4	17,044	0,6846	0,040166628	131,1076923
ZjuHsp100-50	4	Prupe.7G159800.1	7	50,7445	0,6383	0,012578703	390,3423077
ZjuHsp100-50	4	Prupe.2G002200.1	2	57,4705	0,6763	0,011767777	442,0807692
ZjuHsp100-50	4	Prupe.7G160000.1	7	51,265	0,5963	0,011631718	394,3461538
ZjuHsp100-50	4	Prupe.7G159900.1	7	49,3535	0,6236	0,012635375	379,6423077
ZjuHsp100-50	4	Prupe.1G375300.2	1	7,0714	0,619	0,087535707	54,39538462
ZjuHsp100-50	4	Prupe.7G159400.1	7	33,7968	0,5796	0,017149553	259,9753846
ZjuHsp100-50	4	Prupe.2G315800.1	2	46,9818	0,7541	0,016050896	361,3984615
ZjuHsp100-50	4	Prupe.3G274000.1	3	2,3936	0,2018	0,084308155	18,41230769
ZjuHsp100-50	4	Prupe.7G158900.2	7	5,9433	0,7044	0,118520014	45,71769231
ZjuHsp100-50	4	Prupe.1G229600.1	1	48,5108	0,5726	0,011803557	373,16
ZjuHsp100-51	4	Prupe.3G266900.1	3	0,7241	0,0741	0,102333932	5,57
ZjuHsp100-51	4	Prupe.3G112700.2	3	48,0874	0,2366	0,004920208	369,9030769
ZjuHsp100-51	4	Prupe.3G112700.1	3	48,0168	0,2437	0,005075307	369,36
ZjuHsp100-51	4	Prupe.1G355600.1	1	46,7815	0,4916	0,010508427	359,8576923
ZjuHsp100-51	4	Prupe.1G355600.2	1	46,7149	0,4928	0,010549097	359,3453846
ZjuHsp100-51	4	Prupe.1G410800.1	1	50,4131	0,6498	0,012889507	387,7930769
ZjuHsp100-51	4	Prupe.5G026500.1	5	51,4614	0,609	0,011834113	395,8569231
ZjuHsp100-51	4	Prupe.6G072600.1	6	50,9441	0,6046	0,01186791	391,8776923
ZjuHsp100-51	4	Prupe.6G060800.2	6	48,708	0,6612	0,013574772	374,6769231
ZjuHsp100-51	4	Prupe.6G060800.1	6	48,7084	0,6613	0,013576714	374,68
ZjuHsp100-51	4	Prupe.6G257400.1	6	52,0212	0,6061	0,011651019	400,1630769
ZjuHsp100-51	4	Prupe.6G257400.2	6	52,0214	0,6063	0,011654819	400,1646154
ZjuHsp100-51	4	Prupe.6G060800.3	6	48,762	0,663	0,013596653	375,0923077
ZjuHsp100-51	4	Prupe.5G122500.1	5	49,5008	0,7342	0,014832084	380,7753846
ZjuHsp100-51	4	Prupe.3G243600.2	3	53,505	0,5741	0,010729838	411,5769231
ZjuHsp100-51	4	Prupe.3G243600.1	3	53,5024	0,5742	0,010732229	411,5569231
ZjuHsp100-51	4	Prupe.3G061400.1	3	51,9882	0,7603	0,014624472	399,9092308
ZjuHsp100-51	4	Prupe.2G008800.1	2	52,6568	0,7173	0,013622172	405,0523077
ZjuHsp100-51	4	Prupe.3G065400.1	3	51,9039	0,7796	0,015020066	399,2607692
ZjuHsp100-51	4	Prupe.4G132700.1	4	22,0334	0,8122	0,036862218	169,4876923
ZjuHsp100-52	4	Prupe.3G273800.1	3	0,9988	0,1645	0,164697637	7,683076923
ZjuHsp100-52	4	Prupe.5G183800.1	5	3,0799	0,2937	0,095360239	23,69153846
ZjuHsp100-52	4	Prupe.3G274200.1	3	1,9546	0,2946	0,150721375	15,03538462
ZjuHsp100-52	4	Prupe.3G274100.1	3	2,7942	0,2863	0,102462243	21,49384615
ZjuHsp100-52	4	Prupe.3G273900.1	3	4,2435	0,2849	0,067137976	32,64230769
ZjuHsp100-52	4	Prupe.3G274300.1	3	2,7126	0,2845	0,104880926	20,86615385
ZjuHsp100-52	4	Prupe.7G165500.1	7	9,5000	0,593	0,062421053	73,07692308
ZjuHsp100-52	4	Prupe.7G159000.1	7	16,1652	0,5773	0,035712518	124,3476923
ZjuHsp100-52	4	Prupe.1G086500.1	1	19,9694	0,5899	0,029540197	153,6107692
ZjuHsp100-52	4	Prupe.7G158900.1	7	3,8156	0,5749	0,15067093	29,35076923
ZjuHsp100-52	4	Prupe.1G375300.1	1	7,744	0,5546	0,071616736	59,56923077
ZjuHsp100-52	4	Prupe.4G166800.1	4	12,0775	0,5728	0,047427034	92,90384615
ZjuHsp100-52	4	Prupe.7G159500.1	7	51,2302	0,6204	0,012110044	394,0784615
ZjuHsp100-52	4	Prupe.8G092600.1	8	17,4853	0,6069	0,034709156	134,5023077
ZjuHsp100-52	4	Prupe.7G159600.1	7	51,5367	0,5759	0,011174561	396,4361538
ZjuHsp100-52	4	Prupe.2G002200.1	2	10,2012	0,5863	0,057473631	78,47076923
ZjuHsp100-52	4	Prupe.4G113000.1	4	7,5216	0,6578	0,087454797	57,85846154
ZjuHsp100-52	4	Prupe.7G159700.1	7	10,0294	0,6081	0,060631743	77,14923077
ZjuHsp100-52	4	Prupe.7G159800.1	7	14,5189	0,6299	0,043384829	111,6838462
ZjuHsp100-52	4	Prupe.1G375300.2	1	7,1199	0,5812	0,08163036	54,76846154
ZjuHsp100-52	4	Prupe.7G159400.1	7	17,1153	0,5700	0,033303535	131,6561538
ZjuHsp100-52	4	Prupe.7G160000.1	7	50,326	0,6616	0,013146286	387,1230769
ZjuHsp100-52	4	Prupe.7G159900.1	7	50,0648	0,6237	0,012457855	385,1138462
ZjuHsp100-53	4	Prupe.3G273800.1	3	1,1344	0,1851	0,163169958	8,726153846
ZjuHsp100-53	4	Prupe.3G274200.1	3	2,9274	0,2984	0,101933456	22,51846154
ZjuHsp100-53	4	Prupe.3G274100.1	3	14,8748	0,2909	0,019556565	114,4215385
ZjuHsp100-53	4	Prupe.3G274300.1	3	5,4736	0,2999	0,054790266	42,10461538
ZjuHsp100-53	4	Prupe.3G273900.1	3	9,3129	0,2971	0,031901985	71,63769231
ZjuHsp100-53	4	Prupe.7G165500.1	7	52,541	0,5779	0,010999029	404,1615385
ZjuHsp100-53	4	Prupe.7G159000.1	7	10,785	0,5519	0,051172925	82,96153846
ZjuHsp100-53	4	Prupe.8G092600.1	8	21,4022	0,5639	0,026347759	164,6323077
ZjuHsp100-53	4	Prupe.7G158900.1	7	8,7239	0,5693	0,065257511	67,10692308
ZjuHsp100-53	4	Prupe.1G375300.1	1	13,9139	0,5767	0,041447761	107,03

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-53	4	Prupe.1G086500.1	1	54,9381	0,5878	0,010699314	422,6007692
ZjuHsp100-53	4	Prupe.4G166800.	4	19,8579	0,5605	0,028225542	152,7530769
ZjuHsp100-53	4	Prupe.2G002200.1	2	55,0839	0,5746	0,01043136	423,7223077
ZjuHsp100-53	4	Prupe.7G159500.1	7	51,5392	0,5955	0,011554312	396,4553846
ZjuHsp100-53	4	Prupe.7G159600.1	7	50,9889	0,5879	0,01152996	392,2223077
ZjuHsp100-53	4	Prupe.4G113000.1	4	3,4831	0,6266	0,179897218	26,79307692
ZjuHsp100-53	4	Prupe.7G159700.1	7	10,9458	0,6318	0,05772077	84,19846154
ZjuHsp100-53	4	Prupe.1G375300.2	1	50,9333	0,6022	0,011823306	391,7946154
ZjuHsp100-53	4	Prupe.7G159800.1	7	16,641	0,6088	0,03658434	128,0076923
ZjuHsp100-53	4	Prupe.7G159400.1	7	52,3868	0,5746	0,010968412	402,9753846
ZjuHsp100-53	4	Prupe.7G159900.1	7	50,602	0,6434	0,012714912	389,2461538
ZjuHsp100-53	4	Prupe.7G160000.1	7	50,9358	0,6278	0,012325319	391,8138462
ZjuHsp100-53	4	Prupe.3G274000.1	3	5,7812	0,2936	0,050785304	44,47076923
ZjuHsp100-54	4	Prupe.5G183800.1	5	2,0873	0,3597	0,172327888	16,05615385
ZjuHsp100-54	4	Prupe.3G273800.1	3	2,6664	0,3395	0,127325233	20,51076923
ZjuHsp100-54	4	Prupe.3G273900.1	3	2,7687	0,3712	0,134070141	21,29769231
ZjuHsp100-54	4	Prupe.3G274100.1	3	2,7284	0,3586	0,131432341	20,98769231
ZjuHsp100-54	4	Prupe.3G274200.1	3	2,200	0,3808	0,173090909	16,92307692
ZjuHsp100-54	4	Prupe.3G274300.1	3	2,5399	0,3742	0,147328635	19,53769231
ZjuHsp100-54	4	Prupe.1G086500.1	1	23,0712	0,5959	0,025828739	177,4707692
ZjuHsp100-54	4	Prupe.7G165500.1	7	8,9164	0,6456	0,072405904	68,58769231
ZjuHsp100-54	4	Prupe.7G159000.1	7	8,2964	0,6153	0,074164698	63,81846154
ZjuHsp100-54	4	Prupe.4G166800.1	4	15,2697	0,5968	0,039083937	117,4592308
ZjuHsp100-54	4	Prupe.7G158900.1	7	12,0322	0,6309	0,052434301	92,55538462
ZjuHsp100-54	4	Prupe.8G092600.1	8	50,7315	0,6459	0,012731735	390,2423077
ZjuHsp100-54	4	Prupe.1G375300.1	1	4,9783	0,6386	0,128276721	38,29461538
ZjuHsp100-54	4	Prupe.7G159500.1	7	51,4236	0,6258	0,01216951	39,5661538
ZjuHsp100-54	4	Prupe.4G113000.1	4	11,2655	0,6574	0,058355155	86,65769231
ZjuHsp100-54	4	Prupe.2G002200.1	2	55,4549	0,6371	0,011488615	426,5761538
ZjuHsp100-54	4	Prupe.7G159600.1	7	26,7107	0,6213	0,023260341	205,4669231
ZjuHsp100-54	4	Prupe.7G159400.1	7	8,8684	0,6045	0,068163367	68,21846154
ZjuHsp100-54	4	Prupe.7G160000.1	7	16,1953	0,6203	0,038301236	124,5792308
ZjuHsp100-54	4	Prupe.7G159700.1	7	11,252	0,6636	0,058976182	86,55384615
ZjuHsp100-54	4	Prupe.7G159900.1	7	43,603	0,6349	0,014560925	335,4076923
ZjuHsp100-54	4	Prupe.7G159800.1	7	16,3901	0,6789	0,041421346	126,0776923
ZjuHsp100-54	4	Prupe.1G375300.2	1	3,7342	0,6782	0,181618553	68,72461538
ZjuHsp100-54	4	Prupe.3G274000.1	3	53,3752	0,2827	0,005296467	410,5784615
ZjuHsp100-55	4	Prupe.3G274200.1	3	1,7728	0,2521	0,142204422	13,63692308
ZjuHsp100-55	4	Prupe.3G274300.1	3	2,1232	0,2404	0,11322532	16,33230769
ZjuHsp100-55	4	Prupe.3G274100.1	3	1,7019	0,258	0,151595276	13,09153846
ZjuHsp100-55	4	Prupe.3G273900.1	3	1,9251	0,2702	0,140356345	14,80846154
ZjuHsp100-55	4	Prupe.5G183800.1	5	5,5946	0,3478	0,06216709	43,03538462
ZjuHsp100-55	4	Prupe.3G273800.1	3	2,4814	0,2915	0,117474007	19,08769231
ZjuHsp100-55	4	Prupe.7G165500.1	7	50,0182	0,6278	0,012551431	384,7553846
ZjuHsp100-55	4	Prupe.7G159000.1	7	49,7942	0,615	0,012350836	383,0323077
ZjuHsp100-55	4	Prupe.7G158900.1	7	50,0886	0,599	0,011958809	385,2969231
ZjuHsp100-55	4	Prupe.1G086500.1	1	52,2546	0,5896	0,011283217	401,9584615
ZjuHsp100-55	4	Prupe.1G086500.1	1	8,4783	0,6328	0,074637604	65,21769231
ZjuHsp100-55	4	Prupe.1G375300.1	1	15,3668	0,5972	0,038863003	118,2061538
ZjuHsp100-55	4	Prupe.4G166800.1	4	22,453	0,5834	0,025983165	172,7153846
ZjuHsp100-55	4	Prupe.7G159500.1	7	41,5716	0,6379	0,01534461	319,7815385
ZjuHsp100-55	4	Prupe.4G113000.1	4	53,2778	0,6454	0,012113864	409,8292308
ZjuHsp100-55	4	Prupe.7G159600.1	7	51,929	0,5707	0,010990006	399,4538462
ZjuHsp100-55	4	Prupe.2G002200.1	2	58,2776	0,6357	0,010908136	448,2892308
ZjuHsp100-55	4	Prupe.7G159700.1	7	24,7929	0,6206	0,02503136	190,7146154
ZjuHsp100-55	4	Prupe.7G159800.1	7	49,5497	0,6459	0,013035397	381,1515385
ZjuHsp100-55	4	Prupe.7G160000.1	7	48,5903	0,6092	0,012537482	373,7715385
ZjuHsp100-55	4	Prupe.7G159900.1	7	48,5533	0,5979	0,012314302	373,4869231
ZjuHsp100-55	4	Prupe.7G159400.1	7	37,4697	0,5706	0,015228304	288,2284615
ZjuHsp100-55	4	Prupe.1G375300.2	1	16,7694	0,632	0,037687693	128,9953846
ZjuHsp100-55	4	Prupe.3G274000.1	3	1,7965	0,2362	0,131477874	13,81923077
ZjuHsp100-56	4	Prupe.3G274200.1	3	1,4859	0,2774	0,186688202	11,43
ZjuHsp100-56	4	Prupe.3G274300.1	3	1,9324	0,2556	0,132270751	14,86461538
ZjuHsp100-56	4	Prupe.3G274100.1	3	1,5424	0,2618	0,169735477	11,86461538
ZjuHsp100-56	4	Prupe.3G273900.1	3	1,6851	0,2663	0,158032164	12,96230769
ZjuHsp100-56	4	Prupe.3G273800.1	3	3,0837	0,306	0,099231443	23,72076923
ZjuHsp100-56	4	Prupe.5G183800.1	5	8,0545	0,3421	0,042473152	61,95769231
ZjuHsp100-56	4	Prupe.7G159000.1	7	21,8605	0,6179	0,028265593	168,1576923
ZjuHsp100-56	4	Prupe.1G375300.1	1	9,607	0,5847	0,060861872	73,9

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-56	4	Prupe.7G165500.1	7	17,4212	0,659	0,037827475	134,0092308
ZjuHsp100-56	4	Prupe.1G086500.1	1	7,0246	0,6566	0,093471514	54,03538462
ZjuHsp100-56	4	Prupe.7G158900.1	7	50,7427	0,6073	0,011968224	390,3284615
ZjuHsp100-56	4	Prupe.4G166800.1	4	12,1182	0,6077	0,050147712	93,21692308
ZjuHsp100-56	4	Prupe.8G092600.1	8	36,9208	0,6293	0,017044593	284,0061538
ZjuHsp100-56	4	Prupe.7G159500.1	7	31,1653	0,6474	0,020773103	239,7330769
ZjuHsp100-56	4	Prupe.7G159600.1	7	28,3334	0,6042	0,021324656	217,9492308
ZjuHsp100-56	4	Prupe.7G159700.1	7	16,7239	0,6365	0,038059304	128,6453846
ZjuHsp100-56	4	Prupe.2G002200.1	2	55,4363	0,6812	0,012287977	426,4330769
ZjuHsp100-56	4	Prupe.4G113000.1	4	32,3086	0,6349	0,019651115	248,5276923
ZjuHsp100-56	4	Prupe.7G159800.1	7	41,8247	0,6056	0,014479482	321,7284615
ZjuHsp100-56	4	Prupe.7G160000.1	7	49,3245	0,5878	0,011916999	379,4192308
ZjuHsp100-56	4	Prupe.7G159900.1	7	48,1928	0,6161	0,012784067	370,7138462
ZjuHsp100-56	4	Prupe.1G375300.2	1	10,5297	0,6205	0,058928554	80,99769231
ZjuHsp100-56	4	Prupe.7G159400.1	7	18,9896	0,6015	0,031675233	146,0738462
ZjuHsp100-56	4	Prupe.3G274000.1	3	1,5394	0,2481	0,161166688	11,84153846
ZjuHsp100-57	4	Prupe.3G258500.1	3	0,7031	0,0567	0,080642867	5,408461538
ZjuHsp100-57	4	Prupe.3G258500.3	3	0,6778	0,0369	0,054440838	5,213846154
ZjuHsp100-57	4	Prupe.1G392200.1	1	17,597	0,2104	0,011956584	135,3615385
ZjuHsp100-57	4	Prupe.3G258500.2	3	0,7454	0,0634	0,085055004	5,733846154
ZjuHsp100-57	4	Prupe.5G203700.1	5	38,467	0,436	0,011334391	295,9
ZjuHsp100-57	4	Prupe.5G143300.1	5	54,5991	0,5155	0,009441548	419,9930769
ZjuHsp100-57	4	Prupe.5G143300.2	5	54,5951	0,5155	0,009442239	419,9623077
ZjuHsp100-57	4	Prupe.5G138200.1	5	54,289	0,5817	0,010714878	417,6076923
ZjuHsp100-59	4	Prupe.3G243600.2	3	0,6755	0,1666	0,246632124	5,196153846
ZjuHsp100-59	4	Prupe.3G243600.1	3	0,6755	0,1666	0,246632124	5,196153846
ZjuHsp100-59	4	Prupe.3G243600.5	3	0,6652	0,2006	0,30156344	5,116923077
ZjuHsp100-59	4	Prupe.3G243600.4	3	1,0086	0,4055	0,402042435	7,758461538
ZjuHsp100-59	4	Prupe.3G243600.3	3	0,8478	0,3104	0,366124086	6,521538462
ZjuHsp100-59	4	Prupe.3G266900.1	3	45,4285	0,6184	0,0136126	349,45
ZjuHsp100-59	4	Prupe.1G355600.1	1	11,8156	0,7100	0,06009005	90,88923077
ZjuHsp100-59	4	Prupe.6G060800.2	6	29,2207	0,702	0,024024065	224,7746154
ZjuHsp100-59	4	Prupe.6G060800.1	6	28,7198	0,7021	0,024446549	220,9215385
ZjuHsp100-59	4	Prupe.3G112700.2	3	52,878	0,6066	0,01147169	406,7538462
ZjuHsp100-59	4	Prupe.3G112700.1	3	52,8466	0,6012	0,011376323	406,5123077
ZjuHsp100-59	4	Prupe.6G060800.3	6	24,6645	0,7031	0,020506558	189,7269231
ZjuHsp100-59	4	Prupe.1G355600.2	1	13,0179	0,7262	0,055784727	100,1376923
ZjuHsp100-59	4	Prupe.6G072600.1	6	53,8557	0,7506	0,013937243	414,2746154
ZjuHsp100-59	4	Prupe.6G257400.1	6	38,981	0,7712	0,019783997	299,8538462
ZjuHsp100-59	4	Prupe.6G257400.2	6	38,6898	0,7713	0,019935487	297,6138462
ZjuHsp100-59	4	Prupe.1G410800.1	1	53,5795	0,6900	0,01287806	412,15
ZjuHsp100-59	4	Prupe.5G026500.1	5	15,9141	0,8001	0,05027617	122,4161538
ZjuHsp100-59	4	Prupe.3G061400.1	3	5,7907	0,8575	0,14808227	44,54384615
ZjuHsp100-59	4	Prupe.2G008800.1	2	10,7056	0,7681	0,071747497	82,35076923
ZjuHsp100-59	4	Prupe.5G122500.1	5	53,3874	0,8378	0,015692841	410,6723077
ZjuHsp100-60	4	Prupe.3G112700.2	3	0,6499	0,041	0,063086629	4,999230769
ZjuHsp100-60	4	Prupe.3G112700.1	3	0,6499	0,041	0,063086629	4,999230769
ZjuHsp100-60	4	Prupe.3G266900.1	3	49,4771	0,2237	0,004521284	380,5930769
ZjuHsp100-60	4	Prupe.1G355600.1	1	7,4206	0,4777	0,064374848	57,08153846
ZjuHsp100-60	4	Prupe.1G355600.2	1	7,6562	0,4798	0,062668164	58,89384615
ZjuHsp100-60	4	Prupe.1G410800.1	1	50,0699	0,6083	0,012149016	385,1530769
ZjuHsp100-60	4	Prupe.5G026500.1	5	52,7674	0,6038	0,011442671	405,9030769
ZjuHsp100-60	4	Prupe.6G072600.1	6	50,9075	0,6244	0,012265383	391,5961538
ZjuHsp100-60	4	Prupe.6G257400.1	6	51,0598	0,6451	0,012634205	392,7676923
ZjuHsp100-60	4	Prupe.6G257400.2	6	51,0617	0,6449	0,012629818	392,7823077
ZjuHsp100-60	4	Prupe.6G060800.2	6	48,6885	0,6431	0,013208458	374,5269231
ZjuHsp100-60	4	Prupe.6G060800.1	6	48,6892	0,6430	0,013206214	374,5323077
ZjuHsp100-60	4	Prupe.6G060800.3	6	48,7741	0,6446	0,013216031	375,1853846
ZjuHsp100-60	4	Prupe.5G122500.1	5	36,2822	0,7244	0,019965713	279,0938462
ZjuHsp100-60	4	Prupe.3G061400.1	3	52,649	0,7313	0,013890102	404,9923077
ZjuHsp100-60	4	Prupe.3G243600.2	3	54,4775	0,5982	0,01098068	419,0576923
ZjuHsp100-60	4	Prupe.3G243600.1	3	54,4786	0,5982	0,010980458	419,0661538
ZjuHsp100-61	5	Prupe.5G152500.2	5	0,774	0,0581	0,075064599	5,953846154
ZjuHsp100-61	5	Prupe.5G152500.1	5	0,774	0,0581	0,075064599	5,953846154
ZjuHsp100-61	5	Prupe.8G259000.4	8	6,5405	0,1625	0,024845195	50,31153846
ZjuHsp100-61	5	Prupe.8G259000.3	8	6,5431	0,1625	0,024835323	50,33153846
ZjuHsp100-61	5	Prupe.8G259000.2	8	6,5417	0,1625	0,024840638	50,32076923
ZjuHsp100-61	5	Prupe.8G259000.1	8	6,5432	0,1625	0,024834943	50,33230769
ZjuHsp100-61	5	Prupe.2G303900.2	2	50,2338	0,4917	0,00978823	386,4138462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-62	5	Prupe.4G132700.1	4	0,5918	0,0717	0,121155796	4,552307692
ZjuHsp100-62	5	Prupe.1G355600.2	1	7,4429	0,8193	0,110078061	57,25307692
ZjuHsp100-62	5	Prupe.3G266900.1	3	51,8887	0,8154	0,015714404	399,1438462
ZjuHsp100-62	5	Prupe.3G112700.2	3	16,2976	0,8915	0,054701306	125,3661538
ZjuHsp100-62	5	Prupe.3G112700.1	3	21,3327	0,8701	0,040787148	164,0976923
ZjuHsp100-63	5	Prupe.5G165300.1	5	0,5487	0,0665	0,121195553	4,220769231
ZjuHsp100-64	5	Prupe.5G183800.1	5	1,1205	0,1111	0,099152164	8,619230769
ZjuHsp100-64	5	Prupe.3G273900.1	3	5,6587	0,2705	0,047802499	43,52846154
ZjuHsp100-64	5	Prupe.3G274100.1	3	4,4095	0,2746	0,062274634	33,91923077
ZjuHsp100-64	5	Prupe.3G274200.1	3	55,6439	0,2753	0,004947532	428,03
ZjuHsp100-64	5	Prupe.3G274300.1	3	7,548	0,2584	0,034234234	58,06153846
ZjuHsp100-64	5	Prupe.3G273800.1	3	2,5029	0,2642	0,105557553	19,25307692
ZjuHsp100-64	5	Prupe.7G165500.1	7	18,3296	0,5421	0,029575113	140,9969231
ZjuHsp100-64	5	Prupe.7G159000.1	7	14,6984	0,5322	0,036208023	113,0646154
ZjuHsp100-64	5	Prupe.1G375300.1	1	46,0355	0,4919	0,010685232	354,1192308
ZjuHsp100-64	5	Prupe.8G092600.1	8	54,3675	0,5384	0,009902975	418,2115385
ZjuHsp100-64	5	Prupe.2G002200.1	2	55,4362	0,5636	0,010166642	426,4323077
ZjuHsp100-64	5	Prupe.1G086500.1	1	58,726	0,5254	0,008946634	451,7384615
ZjuHsp100-64	5	Prupe.7G158900.1	7	13,8655	0,5213	0,037596913	106,6576923
ZjuHsp100-64	5	Prupe.4G113000.1	4	8,9899	0,5379	0,059833814	69,15307692
ZjuHsp100-64	5	Prupe.7G159600.1	7	55,4512	0,4457	0,008037698	426,5476923
ZjuHsp100-64	5	Prupe.4G166800.1	4	16,8493	0,5233	0,03105767	129,61
ZjuHsp100-64	5	Prupe.7G159500.1	7	51,0064	0,6046	0,011853414	392,3569231
ZjuHsp100-64	5	Prupe.7G159700.1	7	25,752	0,5521	0,021439112	198,0923077
ZjuHsp100-64	5	Prupe.1G375300.2	1	50,0231	0,5142	0,010279251	384,7930769
ZjuHsp100-64	5	Prupe.7G159800.1	7	38,7299	0,5462	0,014102799	297,9223077
ZjuHsp100-64	5	Prupe.7G160000.1	7	38,4208	0,5583	0,014531191	295,5446154
ZjuHsp100-64	5	Prupe.7G159900.1	7	48,2362	0,5464	0,011327592	371,0476923
ZjuHsp100-64	5	Prupe.3G274000.1	3	11,1346	0,2225	0,019982756	85,65076923
ZjuHsp100-64	5	Prupe.7G159400.1	7	16,3685	0,4666	0,028505972	125,9115385
ZjuHsp100-65	5	Prupe.5G183800.1	5	1,7785	0,2303	0,129491144	13,68076923
ZjuHsp100-65	5	Prupe.3G273800.1	3	3,775	0,2936	0,077774834	29,03846154
ZjuHsp100-65	5	Prupe.3G274100.1	3	4,5475	0,3436	0,075557999	34,98076923
ZjuHsp100-65	5	Prupe.3G273900.1	3	5,0574	0,338	0,06683276	38,90307692
ZjuHsp100-65	5	Prupe.3G274200.1	3	5,3087	0,3337	0,06285908	40,83615385
ZjuHsp100-65	5	Prupe.3G274300.1	3	6,7774	0,3247	0,047909228	52,13384615
ZjuHsp100-65	5	Prupe.7G165500.1	7	52,8288	0,6363	0,012044567	406,3753846
ZjuHsp100-65	5	Prupe.1G086500.1	1	53,8869	0,6006	0,011145566	414,5146154
ZjuHsp100-65	5	Prupe.1G375300.1	1	32,8603	0,5821	0,017714385	252,7715385
ZjuHsp100-65	5	Prupe.7G158900.1	7	8,8106	0,5782	0,065625497	67,77384615
ZjuHsp100-65	5	Prupe.4G166800.1	4	16,1946	0,5589	0,034511504	124,5738462
ZjuHsp100-65	5	Prupe.7G159000.1	7	7,8308	0,611	0,078025234	60,23692308
ZjuHsp100-65	5	Prupe.8G092600.1	8	20,3932	0,6016	0,029500029	156,8707692
ZjuHsp100-65	5	Prupe.2G002200.1	2	58,3831	0,6108	0,010461932	449,1007692
ZjuHsp100-65	5	Prupe.7G159500.1	7	53,3653	0,6223	0,011661136	410,5023077
ZjuHsp100-65	5	Prupe.4G113000.1	4	18,3567	0,5881	0,032037349	141,2053846
ZjuHsp100-65	5	Prupe.7G159600.1	7	52,1401	0,5984	0,011476771	401,0776923
ZjuHsp100-65	5	Prupe.1G375300.2	1	29,4733	0,6047	0,020516875	226,7176923
ZjuHsp100-65	5	Prupe.7G159700.1	7	8,5208	0,6705	0,078689794	65,54461538
ZjuHsp100-65	5	Prupe.7G159400.1	7	52,7209	0,5955	0,011295331	405,5453846
ZjuHsp100-65	5	Prupe.7G159800.1	7	8,0242	0,6895	0,085927569	61,72461538
ZjuHsp100-65	5	Prupe.7G159900.1	7	51,13	0,6341	0,012401721	393,3076923
ZjuHsp100-65	5	Prupe.7G160000.1	7	53,2099	0,6509	0,012232686	409,3069231
ZjuHsp100-65	5	Prupe.3G274000.1	3	6,4111	0,2371	0,036982733	49,31615385
ZjuHsp100-66	5	Prupe.5G183800.1	5	1,8389	0,2258	0,122790799	14,14538462
ZjuHsp100-66	5	Prupe.3G273800.1	3	3,6253	0,2989	0,082448349	27,88692308
ZjuHsp100-66	5	Prupe.3G274100.1	3	4,5141	0,346	0,076648723	34,72384615
ZjuHsp100-66	5	Prupe.3G273900.1	3	5,1283	0,3428	0,066844763	39,44846154
ZjuHsp100-66	5	Prupe.3G274200.1	3	4,6923	0,3438	0,073268973	36,09461538
ZjuHsp100-66	5	Prupe.3G274300.1	3	6,7878	0,3228	0,047555909	52,21384615
ZjuHsp100-66	5	Prupe.7G165500.1	7	52,8222	0,6400	0,012116118	406,3246154
ZjuHsp100-66	5	Prupe.1G086500.1	1	53,8895	0,6026	0,011182141	414,5346154
ZjuHsp100-66	5	Prupe.1G375300.1	1	32,1251	0,5821	0,018119788	247,1161538
ZjuHsp100-66	5	Prupe.7G158900.1	7	9,0485	0,5863	0,06479527	69,60384615
ZjuHsp100-66	5	Prupe.4G166800.1	4	16,1383	0,5589	0,034631901	124,1407692
ZjuHsp100-66	5	Prupe.7G159000.1	7	8,7247	0,6083	0,069721595	67,11307692
ZjuHsp100-66	5	Prupe.8G092600.1	8	20,5708	0,6016	0,029245338	158,2369231
ZjuHsp100-66	5	Prupe.7G159500.1	7	53,2171	0,6289	0,01181763	409,3623077
ZjuHsp100-66	5	Prupe.2G002200.1	2	59,3321	0,6141	0,010350215	456,4007692

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-66	5	Prupe.4G113000.1	4	18,3916	0,5881	0,031976555	141,4738462
ZjuHsp100-66	5	Prupe.7G159600.1	7	52,1389	0,5985	0,011478953	401,0684615
ZjuHsp100-66	5	Prupe.1G375300.2	1	30,1865	0,6074	0,020121578	232,2038462
ZjuHsp100-66	5	Prupe.7G159700.1	7	8,5221	0,6705	0,078677791	65,55461538
ZjuHsp100-66	5	Prupe.7G159400.1	7	52,7184	0,5956	0,011297763	405,5261538
ZjuHsp100-66	5	Prupe.7G159900.1	7	51,1554	0,6286	0,012288048	393,5030769
ZjuHsp100-66	5	Prupe.7G159800.1	7	8,0224	0,6895	0,085946849	61,71076923
ZjuHsp100-66	5	Prupe.7G160000.1	7	53,2122	0,6508	0,012230278	409,3246154
ZjuHsp100-66	5	Prupe.3G274000.1	3	6,4109	0,2371	0,036983887	49,31461538
ZjuHsp100-66	5	Prupe.5G183800.1	5	1,9055	0,2372	0,124481763	14,65769231
ZjuHsp100-67	5	Prupe.3G273900.1	3	6,9594	0,286	0,041095497	53,53384615
ZjuHsp100-67	5	Prupe.3G274100.1	3	6,2102	0,2939	0,047325368	47,77076923
ZjuHsp100-67	5	Prupe.3G274200.1	3	13,0809	0,2879	0,022009189	100,6223077
ZjuHsp100-67	5	Prupe.3G273800.1	3	3,3225	0,2632	0,079217457	25,55769231
ZjuHsp100-67	5	Prupe.3G274300.1	3	14,7451	0,2669	0,018100928	113,4238462
ZjuHsp100-67	5	Prupe.8G092600.1	8	53,4097	0,4859	0,009097598	410,8438462
ZjuHsp100-67	5	Prupe.7G158900.1	7	5,7429	0,4657	0,081091435	44,17615385
ZjuHsp100-67	5	Prupe.7G165500.1	7	56,1505	0,5314	0,009463852	431,9269231
ZjuHsp100-67	5	Prupe.1G086500.1	1	18,8797	0,4665	0,024709079	145,2284615
ZjuHsp100-67	5	Prupe.7G159000.1	7	3,4976	0,4634	0,132490851	26,90461538
ZjuHsp100-67	5	Prupe.1G375300.1	1	3,4975	0,4634	0,132494639	26,90384615
ZjuHsp100-67	5	Prupe.4G113000.1	4	10,209	0,5022	0,04919189	78,53076923
ZjuHsp100-67	5	Prupe.2G002200.1	4	57,1034	0,5985	0,010480987	439,2569231
ZjuHsp100-67	5	Prupe.4G166800.1	4	55,3439	0,4516	0,008159888	425,7223077
ZjuHsp100-67	5	Prupe.7G159600.1	7	55,3341	0,4518	0,008164947	425,6469231
ZjuHsp100-67	5	Prupe.7G159500.1	7	56,3623	0,5517	0,009788458	433,5561538
ZjuHsp100-67	5	Prupe.7G159700.1	7	20,6192	0,5048	0,024482036	158,6092308
ZjuHsp100-67	5	Prupe.7G159800.1	7	27,0838	0,5232	0,019317821	208,3369231
ZjuHsp100-67	5	Prupe.7G160000.1	7	53,2691	0,5087	0,009549626	409,7623077
ZjuHsp100-67	5	Prupe.7G159900.1	7	52,8177	0,5153	0,009756199	406,29
ZjuHsp100-67	5	Prupe.1G375300.2	1	2,9522	0,4864	0,164758485	22,70923077
ZjuHsp100-67	5	Prupe.7G159400.1	7	55,4808	0,4937	0,008898574	426,7753846
ZjuHsp100-67	5	Prupe.3G274000.1	3	36,7223	0,2369	0,006451121	282,4792308
ZjuHsp100-68	5	Prupe.5G183800.1	5	1,5106	0,2123	0,140540183	11,62
ZjuHsp100-68	5	Prupe.3G273800.1	3	3,0466	0,3109	0,102048185	23,43538462
ZjuHsp100-68	5	Prupe.3G274100.1	3	4,6887	0,3367	0,07181095	36,06692308
ZjuHsp100-68	5	Prupe.3G274200.1	3	6,867	0,3499	0,050953837	52,82307692
ZjuHsp100-68	5	Prupe.3G274300.1	3	6,1627	0,3453	0,056030636	47,40538462
ZjuHsp100-68	5	Prupe.3G273900.1	3	7,0307	0,3407	0,048458902	54,08230769
ZjuHsp100-68	5	Prupe.7G159000.1	7	14,5301	0,5847	0,040240604	111,77
ZjuHsp100-68	5	Prupe.7G158900.1	7	3,7414	0,5717	0,152803763	28,78
ZjuHsp100-68	5	Prupe.7G165500.1	7	53,6649	0,5932	0,01105378	412,8069231
ZjuHsp100-68	5	Prupe.8G092600.1	8	36,7836	0,5717	0,015542253	282,9507692
ZjuHsp100-68	5	Prupe.1G375300.1	1	32,1982	0,570	0,017702853	247,6784615
ZjuHsp100-68	5	Prupe.1G086500.1	1	54,5254	0,6298	0,01155058	419,4261538
ZjuHsp100-68	5	Prupe.4G166800.1	4	35,0855	0,5616	0,016006612	269,8884615
ZjuHsp100-68	5	Prupe.7G159500.1	7	52,4543	0,6141	0,011707334	403,4946154
ZjuHsp100-68	5	Prupe.4G113000.1	4	41,6197	0,6559	0,015759364	320,1515385
ZjuHsp100-68	5	Prupe.7G159700.1	7	51,4606	0,5801	0,011272702	395,8507692
ZjuHsp100-68	5	Prupe.7G159800.1	7	36,0892	0,6214	0,017218448	277,6092308
ZjuHsp100-68	5	Prupe.2G002200.1	2	56,9268	0,6598	0,011590323	437,8984615
ZjuHsp100-68	5	Prupe.7G159600.1	7	53,1141	0,5751	0,010827633	408,57
ZjuHsp100-68	5	Prupe.1G375300.2	1	32,9277	0,593	0,018009153	253,29
ZjuHsp100-68	5	Prupe.7G159900.1	7	50,6562	0,6314	0,012464417	389,6630769
ZjuHsp100-68	5	Prupe.7G160000.1	7	52,1533	0,5875	0,011264867	401,1792308
ZjuHsp100-68	5	Prupe.7G159400.1	7	24,4135	0,589	0,024125996	187,7961538
ZjuHsp100-70	5	Prupe.5G203700.1	5	1,0568	0,0542	0,051286904	8,129230769
ZjuHsp100-70	5	Prupe.3G258500.1	3	33,2187	0,4629	0,013934922	255,5284615
ZjuHsp100-70	5	Prupe.3G258500.3	3	22,0045	0,4193	0,019055193	169,2653846
ZjuHsp100-70	5	Prupe.3G258500.2	3	20,7235	0,4049	0,019538205	159,4115385
ZjuHsp100-70	5	Prupe.1G392200.1	1	16,2517	0,4856	0,029879951	125,0130769
ZjuHsp100-70	5	Prupe.5G143300.1	5	43,2163	0,5231	0,012104229	332,4330769
ZjuHsp100-70	5	Prupe.5G143300.2	5	44,9842	0,523	0,011626304	346,0323077
ZjuHsp100-70	5	Prupe.5G138200.1	5	0,2019	16,3455	80,95839525	1,553076923
ZjuHsp100-70	5	Prupe.4G023600.1	4	5,336	0,7134	0,133695652	41,04615385
ZjuHsp100-70	5	Prupe.4G023600.3	4	5,336	0,7134	0,133695652	41,04615385
ZjuHsp100-71	5	Prupe.5G203700.1	5	1,0568	0,0542	0,051286904	8,129230769
ZjuHsp100-71	5	Prupe.3G258500.1	3	33,1944	0,4629	0,013945123	255,3415385
ZjuHsp100-71	5	Prupe.3G258500.3	3	22,0067	0,4192	0,019048744	169,2823077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-71	5	Prupe.3G258500.2	3	20,5347	0,405	0,019722713	157,9592308
ZjuHsp100-71	5	Prupe.1G392200.1	1	16,3224	0,4855	0,0297444	125,5569231
ZjuHsp100-71	5	Prupe.5G143300.1	5	41,8464	0,5232	0,012502868	321,8953846
ZjuHsp100-71	5	Prupe.5G143300.2	5	42,5365	0,523	0,012295323	327,2038462
ZjuHsp100-71	5	Prupe.5G138200.1	5	49,6439	0,6016	0,012118307	381,8761538
ZjuHsp100-71	5	Prupe.4G023600.1	4	5,3358	0,7134	0,133700663	41,04461538
ZjuHsp100-71	5	Prupe.4G023600.3	4	5,3359	0,7134	0,133698158	41,04538462
ZjuHsp100-72	6	Prupe.1G355600.1	1	0,8500	0,0483	0,056823529	6,538461538
ZjuHsp100-72	6	Prupe.1G355600.2	1	0,859	0,0512	0,059604191	6,607692308
ZjuHsp100-72	6	Prupe.3G112700.2	3	35,972	0,4854	0,013493829	276,7076923
ZjuHsp100-72	6	Prupe.3G112700.1	3	36,4200	0,4855	0,013330588	280,1538462
ZjuHsp100-72	6	Prupe.3G266900.1	3	47,8067	0,472	0,009873093	367,7438462
ZjuHsp100-72	6	Prupe.1G410800.1	1	48,4392	0,6657	0,013743002	372,6092308
ZjuHsp100-72	6	Prupe.6G072600.1	6	44,3423	0,604	0,013621305	341,0946154
ZjuHsp100-72	6	Prupe.6G257400.1	6	49,9506	0,6364	0,012740588	384,2353846
ZjuHsp100-72	6	Prupe.6G257400.2	6	49,9529	0,6364	0,012740001	384,2530769
ZjuHsp100-72	6	Prupe.5G026500.1	5	49,4129	0,6283	0,012715303	380,0992308
ZjuHsp100-72	6	Prupe.6G060800.2	6	45,6862	0,6154	0,013470151	351,4323077
ZjuHsp100-72	6	Prupe.6G060800.1	6	45,6875	0,6154	0,013469767	351,4423077
ZjuHsp100-72	6	Prupe.6G060800.3	6	45,6887	0,6207	0,013585416	351,4515385
ZjuHsp100-72	6	Prupe.5G122500.1	5	48,8009	0,737	0,01510218	375,3915385
ZjuHsp100-72	6	Prupe.3G061400.1	3	49,1324	0,7655	0,01558035	377,9415385
ZjuHsp100-72	6	Prupe.3G243600.2	3	14,0033	0,691	0,049345511	107,7176923
ZjuHsp100-72	6	Prupe.3G243600.1	3	14,0055	0,691	0,04933776	107,7346154
ZjuHsp100-73	6	Prupe.1G355600.1	1	1,6517	0,2524	0,152812254	12,70538462
ZjuHsp100-73	6	Prupe.1G355600.2	1	1,687	0,2586	0,153289864	12,97692308
ZjuHsp100-73	6	Prupe.8G174600.1	8	1,3324	0,1682	0,126238367	10,24923077
ZjuHsp100-73	6	Prupe.3G266900.1	3	48,5975	0,6294	0,012951284	373,8269231
ZjuHsp100-73	6	Prupe.6G236000.1	6	4,4732	0,2425	0,05421175	34,40923077
ZjuHsp100-73	6	Prupe.7G097700.1	7	2,7621	0,2484	0,089931574	21,24692308
ZjuHsp100-73	6	Prupe.3G112700.2	3	47,4906	0,6586	0,013868008	365,3123077
ZjuHsp100-73	6	Prupe.3G112700.1	3	47,4457	0,6618	0,013948577	364,9669231
ZjuHsp100-73	6	Prupe.6G103900.1	6	50,8094	0,2746	0,005404512	390,8415385
ZjuHsp100-73	6	Prupe.1G367500.1	1	4,4144	0,2516	0,056995288	33,95692308
ZjuHsp100-73	6	Prupe.1G409400.2	1	8,2657	0,3377	0,040855584	63,58230769
ZjuHsp100-73	6	Prupe.1G409400.5	1	8,2629	0,3377	0,040869428	63,56076923
ZjuHsp100-73	6	Prupe.1G409400.3	1	8,2675	0,3377	0,040846689	63,59615385
ZjuHsp100-73	6	Prupe.1G409400.4	1	29,6317	0,3348	0,011298711	227,9361538
ZjuHsp100-73	6	Prupe.1G409400.1	1	29,6879	0,3347	0,011273953	228,3684615
ZjuHsp100-73	6	Prupe.1G409400.6	1	8,2907	0,3392	0,040913313	63,77461538
ZjuHsp100-73	6	Prupe.6G005100.1	6	4,385	0,2927	0,066750285	33,73076923
ZjuHsp100-73	6	Prupe.6G236000.2	6	8,4758	0,2762	0,032586894	65,19846154
ZjuHsp100-73	6	Prupe.1G410800.1	1	50,4619	0,7847	0,015550346	388,1684615
ZjuHsp100-74	6	Prupe.1G410800.1	1	0,8312	0,0729	0,087704524	6,393846154
ZjuHsp100-74	6	Prupe.5G026500.1	5	53,7066	0,4523	0,008421684	413,1276923
ZjuHsp100-74	6	Prupe.3G266900.1	3	52,0445	0,641	0,012316383	400,3423077
ZjuHsp100-74	6	Prupe.1G355600.1	1	48,2299	0,6908	0,014323065	370,9992308
ZjuHsp100-74	6	Prupe.1G355600.2	1	48,2851	0,6818	0,014120298	371,4238462
ZjuHsp100-74	6	Prupe.3G112700.2	3	50,639	0,643	0,012697723	389,5307692
ZjuHsp100-74	6	Prupe.3G112700.1	3	50,7614	0,6482	0,012769545	390,4723077
ZjuHsp100-74	6	Prupe.6G072600.1	6	52,6502	0,6927	0,013156645	405,0015385
ZjuHsp100-74	6	Prupe.6G257400.1	6	53,8742	0,7131	0,013236391	414,4169231
ZjuHsp100-74	6	Prupe.6G257400.2	6	53,8728	0,7131	0,013236735	414,4061538
ZjuHsp100-74	6	Prupe.6G060800.2	6	50,2693	0,7292	0,014505871	386,6869231
ZjuHsp100-74	6	Prupe.6G060800.1	6	50,2691	0,7291	0,01450394	386,6853846
ZjuHsp100-74	6	Prupe.6G060800.1	6	50,2709	0,7291	0,01450342	386,6992308
ZjuHsp100-74	6	Prupe.6G060800.3	6	50,3203	0,7333	0,014572648	387,0792308
ZjuHsp100-74	6	Prupe.5G122500.1	5	16,1353	0,819	0,050758275	124,1176923
ZjuHsp100-74	6	Prupe.3G061400.1	3	53,738	0,7772	0,014462764	413,3692308
ZjuHsp100-75	6	Prupe.1G410800.1	1	0,8312	0,0729	0,087704524	6,393846154
ZjuHsp100-75	6	Prupe.5G026500.1	5	53,7043	0,4523	0,008422044	413,11
ZjuHsp100-75	6	Prupe.3G266900.1	3	52,0437	0,6411	0,012318494	400,3361538
ZjuHsp100-75	6	Prupe.1G355600.1	1	48,2306	0,6908	0,014322857	371,0046154
ZjuHsp100-75	6	Prupe.1G355600.2	1	48,2848	0,6818	0,014120386	371,4215385
ZjuHsp100-75	6	Prupe.3G112700.2	3	50,6407	0,643	0,012697297	389,5438462
ZjuHsp100-75	6	Prupe.3G112700.1	3	0,1877	16,5722	88,29088972	1,443846154
ZjuHsp100-75	6	Prupe.6G072600.1	6	52,6506	0,6926	0,013154646	405,0046154
ZjuHsp100-75	6	Prupe.6G257400.1	6	53,8724	0,7131	0,013236834	414,4030769
ZjuHsp100-75	6	Prupe.6G257400.2	6	53,8699	0,7131	0,013237448	414,3838462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-75	6	Prupe.6G060800.2	6	50,2691	0,7292	0,014505929	386,6853846
ZjuHsp100-75	6	Prupe.6G060800.1	6	50,2685	0,7292	0,014506102	386,6807692
ZjuHsp100-75	6	Prupe.6G060800.3	6	50,3209	0,7333	0,014572474	387,0838462
ZjuHsp100-75	6	Prupe.5G122500.1	5	16,1209	0,819	0,050803615	124,0069231
ZjuHsp100-75	6	Prupe.3G061400.1	3	53,7952	0,779	0,014480846	413,8092308
ZjuHsp100-76	6	Prupe.1G392200.1	1	0,8804	0,0712	0,080872331	6,772307692
ZjuHsp100-76	6	Prupe.3G258500.1	3	15,0812	0,1855	0,012300082	116,0092308
ZjuHsp100-76	6	Prupe.3G258500.3	3	11,1025	0,127	0,011438865	85,40384615
ZjuHsp100-76	6	Prupe.3G258500.2	3	15,5472	0,1272	0,008181538	119,5938462
ZjuHsp100-76	6	Prupe.5G203700.1	5	31,6916	0,4189	0,013218014	243,7815385
ZjuHsp100-76	6	Prupe.5G143300.1	5	54,4195	0,4666	0,008574132	418,6115385
ZjuHsp100-76	6	Prupe.5G143300.2	5	54,4192	0,4666	0,00857418	418,6092308
ZjuHsp100-76	6	Prupe.5G138200.1	5	54,953	0,5889	0,01071643	422,7153846
ZjuHsp100-77	6	Prupe.8G090700.1	8	2,3846	0,0186	0,00780005	18,34307692
ZjuHsp100-77	6	Prupe.8G090700.2	8	2,3323	0,028	0,012005317	17,94076923
ZjuHsp100-77	6	Prupe.8G090700.4	8	3,4961	0,0118	0,003375189	26,89307692
ZjuHsp100-77	6	Prupe.8G090700.3	8	2,5119	0,0531	0,021139377	19,32230769
ZjuHsp100-77	6	Prupe.7G237100.1	7	54,9458	0,5231	0,009520291	422,66
ZjuHsp100-77	6	Prupe.3G030100.1	3	57,1565	0,5471	0,009571965	439,6653846
ZjuHsp100-77	6	Prupe.8G208900.1	8	3,4628	0,5696	0,164491163	26,63692308
ZjuHsp100-77	6	Prupe.6G039300.1	6	53,0853	0,5692	0,010722366	408,3484615
ZjuHsp100-77	6	Prupe.2G111300.1	2	47,864	0,5631	0,011764583	368,1846154
ZjuHsp100-77	6	Prupe.2G111300.2	2	45,0100	0,4934	0,010962008	346,2307692
ZjuHsp100-77	6	Prupe.6G320300.1	6	54,9337	0,5452	0,009924691	422,5669231
ZjuHsp100-77	6	Prupe.6G233700.2	6	54,9267	0,7852	0,014295416	422,5130769
ZjuHsp100-77	6	Prupe.6G233700.1	6	54,9273	0,7853	0,01429708	422,5176923
ZjuHsp100-78	6	Prupe.1G492200.1	1	0,4576	0,0608	0,132867133	3,52
ZjuHsp100-78	6	Prupe.1G492200.2	1	0,4576	0,0608	0,132867133	3,52
ZjuHsp100-78	6	Prupe.1G492200.3	1	0,5724	0,1045	0,18256464	4,403076923
ZjuHsp100-78	6	Prupe.1G493300.3	1	51,1855	0,5838	0,011405574	393,7346154
ZjuHsp100-78	6	Prupe.1G493300.1	1	50,3406	0,6865	0,013637104	387,2353846
ZjuHsp100-78	6	Prupe.1G493300.2	1	50,6092	0,6759	0,013355279	389,3015385
ZjuHsp100-78	6	Prupe.8G039600.1	8	55,0233	0,6784	0,012329322	423,2561538
ZjuHsp100-79	6	Prupe.1G492200.1	1	0,4768	0,0683	0,143246644	3,667692308
ZjuHsp100-79	6	Prupe.1G492200.2	1	0,5471	0,0982	0,179491866	4,208461538
ZjuHsp100-79	6	Prupe.1G492200.3	1	0,5724	0,1045	0,18256464	4,403076923
ZjuHsp100-79	6	Prupe.1G493300.3	1	51,1854	0,5839	0,01140755	393,7338462
ZjuHsp100-79	6	Prupe.1G493300.1	1	49,9554	0,7292	0,014597021	384,2723077
ZjuHsp100-79	6	Prupe.8G039600.1	8	54,2707	0,6817	0,012561106	417,4669231
ZjuHsp100-79	6	Prupe.1G493300.2	1	0,105	10,3979	99,02761905	40,807692308
ZjuHsp100-80	7	Prupe.3G062600.1	3	0,7406	0,2233	0,301512287	5,696923077
ZjuHsp100-80	7	Prupe.3G062600.2	3	0,7406	0,2233	0,301512287	5,696923077
ZjuHsp100-80	7	Prupe.3G062600.3	3	0,7406	0,2233	0,301512287	5,696923077
ZjuHsp100-80	7	Prupe.3G062600.4	3	0,7406	0,2233	0,301512287	5,696923077
ZjuHsp100-80	7	Prupe.6G107800.1	6	53,0188	0,6595	0,012438984	407,8369231
ZjuHsp100-80	7	Prupe.4G237600.1	4	52,2861	0,6921	0,013236788	402,2007692
ZjuHsp100-80	7	Prupe.6G233700.1	6	57,5796	0,6615	0,011488444	442,92
ZjuHsp100-80	7	Prupe.3G135900.3	3	57,7475	0,7042	0,012194467	444,2115385
ZjuHsp100-80	7	Prupe.3G135900.1	3	57,7491	0,7042	0,012194129	444,2238462
ZjuHsp100-80	7	Prupe.3G135900.2	3	57,7492	0,7043	0,01219584	444,2246154
ZjuHsp100-80	7	Prupe.4G275000.1	4	56,9400	0,6805	0,011951177	438
ZjuHsp100-80	7	Prupe.6G233700.2	6	10,7048	0,6118	0,057151932	82,34461538
ZjuHsp100-80	7	Prupe.6G233700.2	6	0,1999	16,4388	82,23511756	1,537692308
ZjuHsp100-80	7	Prupe.1G288400.1	1	53,9462	0,6379	0,011824744	414,9707692
ZjuHsp100-80	7	Prupe.5G169800.1	5	7,5692	0,6635	0,087657877	58,22461538
ZjuHsp100-81	7	Prupe.1G191800.1	1	0,835	0,1142	0,1367665	6,4230769
ZjuHsp100-81	7	Prupe.1G191800.3	1	0,9025	0,1219	0,1350693	6,9423077
ZjuHsp100-81	7	Prupe.1G191800.4	1	0,8201	0,0961	0,1171808	6,3084615
ZjuHsp100-81	7	Prupe.1G191800.2	1	0,8201	0,0961	0,1171808	6,3084615
ZjuHsp100-81	7	Prupe.4G173800.6	4	18,6229	0,8033	0,0431351	143,25308
ZjuHsp100-81	7	Prupe.4G173800.5	4	13,1267	0,8395	0,0639536	100,97462
ZjuHsp100-81	7	Prupe.4G173800.2	4	13,1267	0,8395	0,0639536	100,97462
ZjuHsp100-81	7	Prupe.4G173800.4	4	20,441	0,8753	0,0428208	157,23846
ZjuHsp100-81	7	Prupe.4G173800.3	4	14,5062	0,8852	0,0610222	111,58615
ZjuHsp100-81	7	Prupe.4G173800.1	4	14,5124	0,8852	0,0609961	111,63385
ZjuHsp100-81	7	Prupe.6G233700.2	6	19,3659	0,8096	0,0418054	148,96846
ZjuHsp100-81	7	Prupe.6G107800.1	6	12,2857	0,8694	0,0707652	94,505385
ZjuHsp100-81	7	Prupe.6G233700.1	6	13,2038	0,8804	0,0666778	101,56769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-81	7	Prupe.4G237600.1	4	12,8688	0,8455	0,0657015	98,990769
ZjuHsp100-82	7	Prupe.1G191800.1	1	0,8453	0,1136	0,1343902	6,5023077
ZjuHsp100-82	7	Prupe.1G191800.3	1	0,9146	0,1213	0,1326263	7,0353846
ZjuHsp100-82	7	Prupe.1G191800.4	1	0,8324	0,0955	0,1147285	6,4030769
ZjuHsp100-82	7	Prupe.1G191800.2	1	0,8324	0,0955	0,1147285	6,4030769
ZjuHsp100-82	7	Prupe.4G173800.6	4	20,7868	0,8022	0,0385918	159,89846
ZjuHsp100-82	7	Prupe.4G173800.5	4	0,8627	17,1712	19,904022	6,6361538
ZjuHsp100-82	7	Prupe.4G173800.2	4	13,9304	0,8194	0,058821	107,15692
ZjuHsp100-82	7	Prupe.4G173800.4	4	19,215	0,8786	0,0457247	147,80769
ZjuHsp100-82	7	Prupe.4G173800.3	4	13,9056	0,8887	0,0639095	106,96615
ZjuHsp100-82	7	Prupe.4G173800.1	4	13,916	0,8887	0,0638617	107,04615
ZjuHsp100-82	7	Prupe.6G233700.2	6	16,2593	0,8063	0,0495901	125,07154
ZjuHsp100-82	7	Prupe.6G107800.1	6	12,5037	0,8674	0,0693715	96,182308
ZjuHsp100-82	7	Prupe.6G233700.1	6	12,1062	0,8774	0,0724753	93,124615
ZjuHsp100-82	7	Prupe.4G237600.1	4	12,1465	0,8456	0,0696168	93,434615
ZjuHsp100-83	7	Prupe.3G316000.9	3	0,6501	0,2037	0,3133364	5,0007692
ZjuHsp100-83	7	Prupe.3G316000.1	3	0,6501	0,2037	0,3133364	5,0007692
ZjuHsp100-83	7	Prupe.3G316000.22	3	0,6682	0,2153	0,3222089	5,14
ZjuHsp100-83	7	Prupe.3G316000.12	3	0,6709	0,2156	0,3213594	5,1607692
ZjuHsp100-83	7	Prupe.3G316000.18	3	0,6709	0,2156	0,3213594	5,1607692
ZjuHsp100-83	7	Prupe.3G316000.13	3	0,6709	0,2156	0,3213594	5,1607692
ZjuHsp100-83	7	Prupe.3G316000.7	3	0,6439	0,2004	0,3112285	4,9530769
ZjuHsp100-83	7	Prupe.3G316000.5	3	0,6912	0,2355	0,3407118	5,3169231
ZjuHsp100-83	7	Prupe.3G316000.2	3	0,6655	0,2159	0,3244177	5,1192308
ZjuHsp100-83	7	Prupe.3G316000.15	3	0,6655	0,2159	0,3244177	5,1192308
ZjuHsp100-83	7	Prupe.3G316000.21	3	0,6655	0,2159	0,3244177	5,1192308
ZjuHsp100-83	7	Prupe.3G316000.26	3	0,6666	0,2178	0,3267327	5,1276923
ZjuHsp100-83	7	Prupe.3G316000.8	3	0,6439	0,2004	0,3112285	4,9530769
ZjuHsp100-83	7	Prupe.3G316000.6	3	0,6912	0,2355	0,3407118	5,3169231
ZjuHsp100-83	7	Prupe.3G316000.27	3	0,6666	0,2178	0,3267327	5,1276923
ZjuHsp100-83	7	Prupe.3G316000.11	3	0,6652	0,213	0,3202044	5,1169231
ZjuHsp100-83	7	Prupe.3G316000.10	3	0,6652	0,213	0,3202044	5,1169231
ZjuHsp100-83	7	Prupe.3G316000.19	3	0,6652	0,213	0,3202044	5,1169231
ZjuHsp100-83	7	Prupe.3G316000.17	3	0,6731	0,1942	0,2885158	5,1776923
ZjuHsp100-83	7	Prupe.3G316000.23	3	0,6731	0,1942	0,2885158	5,1776923
ZjuHsp100-83	7	Prupe.3G316000.16	3	0,6731	0,1942	0,2885158	5,1776923
ZjuHsp100-83	7	Prupe.3G316000.3	3	0,6863	0,2339	0,3408131	5,2792308
ZjuHsp100-83	7	Prupe.3G316000.14	3	0,6597	0,2132	0,3231772	5,0746154
ZjuHsp100-83	7	Prupe.3G316000.20	3	0,6597	0,2132	0,3231772	5,0746154
ZjuHsp100-83	7	Prupe.3G316000.24	3	0,6607	0,2152	0,3257152	5,0823077
ZjuHsp100-83	7	Prupe.3G316000.4	3	0,6863	0,2339	0,3408131	5,2792308
ZjuHsp100-83	7	Prupe.3G316000.25	3	0,6607	0,2152	0,3257152	5,0823077
ZjuHsp100-83	7	Prupe.3G316000.28	3	0,6887	0,2016	0,2927254	5,2976923
ZjuHsp100-83	7	Prupe.3G316000.29	3	0,6818	0,1973	0,2893811	5,2446154
ZjuHsp100-84	7	Prupe.3G316000.9	3	10,3214	1,2829	0,1242952	79,395385
ZjuHsp100-84	7	Prupe.3G316000.1	3	10,8117	1,2483	0,1154583	83,166923
ZjuHsp100-84	7	Prupe.3G316000.22	3	54,8929	1,2406	0,0226004	422,25308
ZjuHsp100-84	7	Prupe.3G316000.12	3	9,6895	1,2982	0,1339801	74,534615
ZjuHsp100-84	7	Prupe.3G316000.18	3	48,8962	1,2611	0,0257914	376,12462
ZjuHsp100-84	7	Prupe.3G316000.13	3	9,6906	1,2982	0,1339649	74,543077
ZjuHsp100-84	7	Prupe.3G316000.18	3	9,6893	1,2982	0,1339828	74,533077
ZjuHsp100-84	7	Prupe.3G316000.13	3	9,6903	1,2982	0,133969	74,540769
ZjuHsp100-84	7	Prupe.3G316000.7	3	7,6928	1,248	0,1622296	59,175385
ZjuHsp100-84	7	Prupe.3G316000.5	3	8,8378	1,2875	0,1456811	67,983077
ZjuHsp100-84	7	Prupe.3G316000.2	3	6,0407	1,2904	0,2136176	46,466923
ZjuHsp100-84	7	Prupe.3G316000.15	3	6,0408	1,2904	0,2136141	46,467692
ZjuHsp100-84	7	Prupe.3G316000.21	3	6,0407	1,2904	0,2136176	46,466923
ZjuHsp100-84	7	Prupe.3G316000.8	3	8,4586	1,2226	0,1445393	65,066154
ZjuHsp100-84	7	Prupe.3G316000.26	3	10,0098	1,2846	0,1283342	76,998462
ZjuHsp100-84	7	Prupe.3G316000.6	3	9,372	1,2477	0,1331306	72,092308
ZjuHsp100-84	7	Prupe.3G316000.27	3	10,8091	1,2635	0,1168922	83,146923
ZjuHsp100-84	7	Prupe.3G316000.11	3	7,1436	1,2351	0,172896	54,950769
ZjuHsp100-84	7	Prupe.3G316000.10	3	7,1437	1,2351	0,1728936	54,951538
ZjuHsp100-84	7	Prupe.3G316000.19	3	7,1425	1,2351	0,1729226	54,942308
ZjuHsp100-84	7	Prupe.3G316000.17	3	51,7728	1,1418	0,0220541	398,25231
ZjuHsp100-84	7	Prupe.3G316000.23	3	51,7721	1,1419	0,0220563	398,24692
ZjuHsp100-84	7	Prupe.3G316000.16	3	51,774	1,1418	0,0220535	398,26154
ZjuHsp100-84	7	Prupe.3G316000.3	3	6,1226	1,2397	0,2024793	47,096923
ZjuHsp100-84	7	Prupe.3G316000.14	3	1,4658	17,1065	11,670419	11,275385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-84	7	Prupe.3G316000.20	3	1,4658	17,1065	11,670419	11,275385
ZjuHsp100-84	7	Prupe.3G316000.24	3	1,2236	17,1321	14,001389	9,4123077
ZjuHsp100-84	7	Prupe.3G316000.4	3	8,4183	1,2183	0,1447204	64,756154
ZjuHsp100-84	7	Prupe.3G316000.25	3	9,9281	1,2118	0,1220576	76,37
ZjuHsp100-84	7	Prupe.3G316000.28	3	31,2575	1,1625	0,0371911	240,44231
ZjuHsp100-84	7	Prupe.3G316000.29	3	51,0476	1,107	0,0216856	392,67385
ZjuHsp100-85	7	Prupe.5G138200.1	5	0,828	0,1776	0,2144928	6,3692308
ZjuHsp100-85	7	Prupe.5G143300.1	5	53,0602	0,503	0,0094798	408,15538
ZjuHsp100-85	7	Prupe.5G143300.2	5	53,0601	0,503	0,0094798	408,15462
ZjuHsp100-85	7	Prupe.3G258500.1	3	52,8647	0,6001	0,0113516	406,65154
ZjuHsp100-85	7	Prupe.3G258500.3	3	53,417	0,5433	0,010171	410,89615
ZjuHsp100-85	7	Prupe.3G258500.2	3	54,3523	0,4945	0,0090981	418,09462
ZjuHsp100-85	7	Prupe.5G203700.1	5	44,5314	0,5965	0,013395	342,54923
ZjuHsp100-85	7	Prupe.1G392200.1	1	41,4508	0,6279	0,0151481	318,85231
ZjuHsp100-85	7	Prupe.4G023600.2	4	51,4167	0,9188	0,0178697	395,51308
ZjuHsp100-86	8	Prupe.2G148300.2	2	0,6854	0,1266	0,1847097	5,2723077
ZjuHsp100-86	8	Prupe.2G148300.1	2	0,6854	0,1266	0,1847097	5,2723077
ZjuHsp100-86	8	Prupe.2G148300.3	2	0,7355	0,1534	0,2085656	5,6576923
ZjuHsp100-86	8	Prupe.3G305500.1	3	55,876	0,7336	0,0131291	429,81538
ZjuHsp100-86	8	Prupe.4G080800.2	4	53,5543	0,6532	0,012197	411,95615
ZjuHsp100-86	8	Prupe.4G080800.1	4	53,4736	0,6632	0,0124024	411,33538
ZjuHsp100-86	8	Prupe.6G127200.1	6	53,848	0,6202	0,0115176	414,21538
ZjuHsp100-86	8	Prupe.3G075400.1	3	53,8623	0,7782	0,014448	414,32538
ZjuHsp100-86	8	Prupe.1G346700.2	1	55,4448	0,7582	0,0136749	426,49846
ZjuHsp100-86	8	Prupe.1G346700.3	1	55,4463	0,7581	0,0136727	426,51
ZjuHsp100-86	8	Prupe.1G346700.5	1	55,4439	0,7582	0,0136751	426,49154
ZjuHsp100-86	8	Prupe.1G346700.1	1	55,444	0,7582	0,0136751	426,49231
ZjuHsp100-86	8	Prupe.1G346700.6	1	55,4649	0,7566	0,0136411	426,65308
ZjuHsp100-86	8	Prupe.1G346700.4	1	55,4424	0,7584	0,0136791	426,48
ZjuHsp100-86	8	Prupe.8G259000.4	8	56,8802	0,7793	0,0137007	437,54
ZjuHsp100-86	8	Prupe.8G259000.3	8	56,9514	0,784	0,0137661	438,08769
ZjuHsp100-86	8	Prupe.8G259000.2	8	56,9975	0,7842	0,0137585	438,44231
ZjuHsp100-86	8	Prupe.8G259000.1	8	56,9492	0,784	0,0137667	438,07077
ZjuHsp100-86	8	Prupe.5G110200.1	5	52,9078	0,7531	0,0142342	406,98308
ZjuHsp100-86	8	Prupe.2G303900.2	2	52,7722	0,7855	0,0148847	405,94
ZjuHsp100-86	8	Prupe.2G303900.1	2	7,894	0,7803	0,0988472	60,723077
ZjuHsp100-86	8	Prupe.2G315900.1	2	53,3704	0,7177	0,0134475	410,54154
ZjuHsp100-87	8	Prupe.8G000600.1	8	0,838	0,1118	0,1334129	6,4461538
ZjuHsp100-87	8	Prupe.1G585800.4	1	1,4265	0,3002	0,2104451	10,973077
ZjuHsp100-87	8	Prupe.1G585800.1	1	1,4096	0,308	0,2185017	10,843077
ZjuHsp100-87	8	Prupe.2G310000.1	2	52,7492	0,2898	0,0054939	405,76308
ZjuHsp100-87	8	Prupe.1G585800.5	1	1,3928	0,3181	0,2283889	10,713846
ZjuHsp100-87	8	Prupe.1G585800.3	1	1,4017	0,3093	0,2206606	10,782308
ZjuHsp100-87	8	Prupe.1G585800.11	1	1,4929	0,3204	0,2146158	11,483846
ZjuHsp100-87	8	Prupe.1G585800.6	1	1,4686	0,3187	0,2170094	11,296923
ZjuHsp100-87	8	Prupe.1G585800.8	1	1,4929	0,3204	0,2146158	11,483846
ZjuHsp100-87	8	Prupe.1G585800.2	1	1,627	0,2593	0,1593731	12,515385
ZjuHsp100-87	8	Prupe.1G585800.10	1	1,4663	0,3314	0,226011	11,279231
ZjuHsp100-87	8	Prupe.1G585800.7	1	1,5983	0,2689	0,1682413	12,294615
ZjuHsp100-87	8	Prupe.1G585800.9	1	1,3969	0,3384	0,2422507	10,745385
ZjuHsp100-88	8	Prupe.8G001000.1	8	0,7379	0,2013	0,2728012	5,6761538
ZjuHsp100-88	8	Prupe.8G001000.5	8	0,7516	0,2065	0,2747472	5,7815385
ZjuHsp100-88	8	Prupe.8G001000.2	8	0,7205	0,2101	0,2916031	5,5423077
ZjuHsp100-88	8	Prupe.8G001000.3	8	0,5562	0,106	0,1905789	4,2784615
ZjuHsp100-88	8	Prupe.8G001000.4	8	0,7336	0,2161	0,2945747	5,6430769
ZjuHsp100-88	8	Prupe.4G171000.2	4	10,7915	0,5111	0,0473613	83,011538
ZjuHsp100-88	8	Prupe.2G206900.1	2	54,7426	0,5034	0,0091958	421,09692
ZjuHsp100-88	8	Prupe.4G171000.1	4	10,7738	0,5111	0,0474392	82,875385
ZjuHsp100-88	8	Prupe.4G171000.3	4	10,7878	0,5111	0,0473776	82,983077
ZjuHsp100-89	8	Prupe.7G156000.1	7	0,693	0,103	0,1486291	5,3307692
ZjuHsp100-89	8	Prupe.7G156000.2	7	0,6726	0,0742	0,1103182	5,1738462
ZjuHsp100-89	8	Prupe.2G326200.1	2	7,7618	0,2663	0,0343091	59,706154
ZjuHsp100-90	8	Prupe.7G158900.1	7	1,514	0,1516	0,1001321	11,646154
ZjuHsp100-90	8	Prupe.7G158900.2	7	1,5257	0,1484	0,0972668	11,736154
ZjuHsp100-90	8	Prupe.8G092600.1	8	52,6197	0,3321	0,0063113	404,76692
ZjuHsp100-90	8	Prupe.4G166800.1	4	52,2441	0,3637	0,0069616	401,87769
ZjuHsp100-90	8	Prupe.1G375300.1	1	3,6208	0,3334	0,0920791	27,852308
ZjuHsp100-90	8	Prupe.7G159000.1	7	51,3729	0,4013	0,0078115	395,17615
ZjuHsp100-90	8	Prupe.7G165500.1	7	8,6986	0,4396	0,0505369	66,912308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-90	8	Prupe.7G159500.1	7	11,8063	0,4563	0,0386489	90,817692
ZjuHsp100-90	8	Prupe.7G159600.1	7	13,6497	0,4022	0,0294658	104,99769
ZjuHsp100-90	8	Prupe.1G375300.2	1	3,76	0,3493	0,0928989	28,923077
ZjuHsp100-90	8	Prupe.4G113000.1	7	7,9476	0,4891	0,0615406	61,135385
ZjuHsp100-90	8	Prupe.7G159400.1	7	7,9344	0,3653	0,04604	61,033846
ZjuHsp100-90	8	Prupe.7G159700.1	7	10,5614	0,4258	0,0403166	81,241538
ZjuHsp100-90	8	Prupe.7G159800.1	7	8,7108	0,4613	0,0529572	67,006154
ZjuHsp100-90	8	Prupe.7G160000.1	7	51,9014	0,4395	0,008468	399,24154
ZjuHsp100-90	8	Prupe.7G159900.1	7	9,7112	0,4384	0,0451438	74,701538
ZjuHsp100-90	8	Prupe.7G159900.1	7	9,709	0,4384	0,045154	74,684615
ZjuHsp100-90	8	Prupe.3G273900.1	3	49,5025	0,5792	0,0117004	380,78846
ZjuHsp100-90	8	Prupe.3G274100.1	3	50,4319	0,559	0,0110843	387,93769
ZjuHsp100-90	8	Prupe.3G274300.1	3	49,8888	0,5771	0,0115677	383,76
ZjuHsp100-90	8	Prupe.5G183800.1	5	32,3613	0,6102	0,0188559	248,93308
ZjuHsp100-90	8	Prupe.3G274200.1	3	49,3382	0,577	0,0116948	379,52462
ZjuHsp100-90	8	Prupe.3G273800.1	3	50,2651	0,563	0,0112006	386,65462
ZjuHsp100-90	8	Prupe.1G086500.1	1	37,3093	0,6137	0,016449	286,99462
ZjuHsp100-90	8	Prupe.1G229600.1	1	28,3657	0,4031	0,0142108	218,19769
ZjuHsp100-90	8	Prupe.2G002200.1	2	20,7143	0,6483	0,0312972	159,34077
ZjuHsp100-91	8	Prupe.7G159000.1	7	1,4042	0,146	0,1039738	10,801538
ZjuHsp100-91	8	Prupe.7G165500.1	7	2,3444	0,3325	0,1418273	18,033846
ZjuHsp100-91	8	Prupe.7G159500.1	7	10,9565	0,3656	0,0333683	84,280769
ZjuHsp100-91	8	Prupe.7G159600.1	7	18,5238	0,2882	0,0155584	142,49077
ZjuHsp100-91	8	Prupe.7G158900.1	7	3,833	0,3914	0,1021132	29,484615
ZjuHsp100-91	8	Prupe.8G092600.1	8	31,318	0,3952	0,0126189	240,90769
ZjuHsp100-91	8	Prupe.1G375300.1	1	4,0708	0,3788	0,093053	31,313846
ZjuHsp100-91	8	Prupe.4G113000.1	4	3,5077	0,4067	0,1159449	26,982308
ZjuHsp100-91	8	Prupe.7G159400.1	7	5,1185	0,3105	0,0606623	39,373077
ZjuHsp100-91	8	Prupe.4G166800.1	4	11,0871	0,4025	0,0363035	85,285385
ZjuHsp100-91	8	Prupe.7G159700.1	7	15,5167	0,3784	0,0243866	119,35923
ZjuHsp100-91	8	Prupe.7G159800.1	7	53,1354	0,3601	0,006777	408,73385
ZjuHsp100-91	8	Prupe.1G375300.2	1	3,9119	0,3935	0,1005905	30,091538
ZjuHsp100-91	8	Prupe.7G160000.1	7	21,5028	0,4016	0,0186766	165,40615
ZjuHsp100-91	8	Prupe.7G159900.1	7	33,2556	0,4412	0,0132669	255,81231
ZjuHsp100-91	8	Prupe.5G183800.1	5	53,2935	0,6468	0,0121366	409,95
ZjuHsp100-91	8	Prupe.5G183800.1	5	53,2955	0,6466	0,0121324	409,96538
ZjuHsp100-91	8	Prupe.3G274300.1	3	13,6181	0,6072	0,0445877	104,75462
ZjuHsp100-91	8	Prupe.3G273900.1	3	8,6161	0,6361	0,0738269	66,277692
ZjuHsp100-91	8	Prupe.3G274200.1	3	53,3767	0,6162	0,0115444	410,59
ZjuHsp100-91	8	Prupe.3G273800.1	3	53,0388	0,6221	0,0117291	407,99077
ZjuHsp100-91	8	Prupe.1G229600.1	1	13,3032	0,3676	0,0276324	102,33231
ZjuHsp100-91	8	Prupe.1G086500.1	1	55,9473	0,6346	0,0113428	430,36385
ZjuHsp100-91	8	Prupe.7G158900.2	7	3,7008	0,4296	0,116083	28,467692
ZjuHsp100-91	8	Prupe.2G002200.1	2	58,8325	0,6276	0,0106676	452,55769
ZjuHsp100-91	8	Prupe.7G165500.1	7	1,5687	0,2192	0,1397335	12,066923
ZjuHsp100-91	8	Prupe.7G159600.1	7	1,5059	0,2186	0,1451624	11,583846
ZjuHsp100-92	8	Prupe.7G159500.1	7	1,6132	0,2614	0,1620382	12,409231
ZjuHsp100-92	8	Prupe.7G159000.1	7	7,0873	0,2906	0,0410029	54,517692
ZjuHsp100-92	8	Prupe.7G159400.1	7	1,8551	0,2335	0,1258692	14,27
ZjuHsp100-92	8	Prupe.7G158900.1	7	14,6023	0,4164	0,0285161	112,32538
ZjuHsp100-92	8	Prupe.1G375300.1	1	3,0406	0,3734	0,1228047	23,389231
ZjuHsp100-92	8	Prupe.8G092600.1	8	21,1068	0,3888	0,0184206	162,36
ZjuHsp100-92	8	Prupe.4G166800.1	4	25,2635	0,4149	0,0164229	194,33462
ZjuHsp100-92	8	Prupe.7G159700.1	7	2,272	0,3257	0,1433539	17,476923
ZjuHsp100-92	8	Prupe.7G160000.1	7	1,6841	0,3461	0,2055104	12,954615
ZjuHsp100-92	8	Prupe.7G159800.1	7	1,6002	0,3278	0,2048494	12,309231
ZjuHsp100-92	8	Prupe.4G113000.1	4	3,3419	0,4389	0,1313325	25,706923
ZjuHsp100-92	8	Prupe.7G159900.1	7	3,1867	0,3975	0,1247372	24,513077
ZjuHsp100-92	8	Prupe.1G375300.2	1	2,9571	0,3875	0,1310405	22,746923
ZjuHsp100-92	8	Prupe.3G274200.1	3	54,2011	0,5637	0,0104002	416,93154
ZjuHsp100-92	8	Prupe.5G183800.1	5	30,8493	0,6374	0,0206617	237,30231
ZjuHsp100-92	8	Prupe.3G274300.1	3	53,8875	0,5625	0,0104384	414,51923
ZjuHsp100-92	8	Prupe.3G274100.1	3	49,8733	0,6045	0,0121207	383,64077
ZjuHsp100-92	8	Prupe.3G273900.1	3	34,449	0,6147	0,0178438	264,99231
ZjuHsp100-92	8	Prupe.3G273800.1	3	52,2443	0,5982	0,0114501	401,87923
ZjuHsp100-92	8	Prupe.1G229600.1	1	27,489	0,3622	0,0131762	211,45385
ZjuHsp100-92	8	Prupe.1G086500.1	1	56,1825	0,6059	0,0107845	432,17308
ZjuHsp100-92	8	Prupe.7G158900.2	7	13,4873	0,4584	0,0339875	103,74846
ZjuHsp100-93	8	Prupe.7G165500.1	7	1,8378	0,2561	0,1393514	14,136923

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-93	8	Prupe.7G159500.1	7	2,1354	0,2964	0,138803	16,426154
ZjuHsp100-93	8	Prupe.7G159600.1	7	1,7671	0,295	0,1669402	13,593077
ZjuHsp100-93	8	Prupe.7G159400.1	7	2,6683	0,3205	0,1201139	20,525385
ZjuHsp100-93	8	Prupe.7G159000.1	7	6,0263	0,3131	0,0519556	46,356154
ZjuHsp100-93	8	Prupe.7G158900.1	7	18,5221	0,4538	0,0245005	142,47769
ZjuHsp100-93	8	Prupe.7G158900.2	7	20,0624	0,4518	0,0225197	154,32615
ZjuHsp100-93	8	Prupe.8G092600.1	8	57,0639	0,4417	0,0077404	438,95308
ZjuHsp100-93	8	Prupe.1G375300.1	1	4,4046	0,4551	0,1033238	33,881538
ZjuHsp100-93	8	Prupe.4G166800.1	4	22,9303	0,4721	0,0205885	176,38692
ZjuHsp100-93	8	Prupe.7G159700.1	7	3,1402	0,3803	0,1211069	24,155385
ZjuHsp100-93	8	Prupe.7G159800.1	7	2,2106	0,3962	0,1792274	17,004615
ZjuHsp100-93	8	Prupe.7G160000.1	7	2,3217	0,4263	0,1836155	17,859231
ZjuHsp100-93	8	Prupe.7G159900.1	7	5,9983	0,4367	0,072804	46,140769
ZjuHsp100-93	8	Prupe.4G113000.1	4	13,6254	0,5002	0,0367108	104,81077
ZjuHsp100-93	8	Prupe.8G092600.1	8	57,063	0,4415	0,0077371	438,94615
ZjuHsp100-93	8	Prupe.7G159700.1	7	3,1402	0,3803	0,1211069	24,155385
ZjuHsp100-93	8	Prupe.7G160000.1	7	2,3217	0,4263	0,1836155	17,859231
ZjuHsp100-93	8	Prupe.4G166800.1	4	22,917	0,4721	0,0206004	176,28462
ZjuHsp100-93	8	Prupe.4G113000.1	4	13,6589	0,5002	0,0366208	105,06846
ZjuHsp100-93	8	Prupe.7G159800.1	7	2,2106	0,3962	0,1792274	17,004615
ZjuHsp100-93	8	Prupe.1G375300.2	1	5,9754	0,4802	0,0803628	45,964615
ZjuHsp100-93	8	Prupe.7G159900.1	7	5,9984	0,4367	0,0728027	46,141538
ZjuHsp100-93	8	Prupe.5G183800.1	5	3,5876	0,6725	0,1874512	27,596923
ZjuHsp100-93	8	Prupe.3G274100.1	3	11,0418	0,6254	0,0566393	84,936923
ZjuHsp100-93	8	Prupe.3G273900.1	3	15,9543	0,6285	0,0393938	122,72538
ZjuHsp100-93	8	Prupe.1G086500.1	1	61,9314	0,6155	0,0099384	476,39538
ZjuHsp100-93	8	Prupe.3G274200.1	3	19,7682	0,6334	0,0320414	152,06308
ZjuHsp100-94	8	Prupe.7G159300.1	7	12,1727	0,5287	0,0434333	93,636154
ZjuHsp100-94	8	Prupe.3G273800.1	3	6,492	0,6447	0,0993068	49,938462
ZjuHsp100-94	8	Prupe.3G274300.1	3	14,5651	0,6448	0,0442702	112,03923
ZjuHsp100-94	8	Prupe.6G107800.1	6	53,5647	0,8857	0,0165351	412,03615
ZjuHsp100-94	8	Prupe.4G112300.1	4	0,6887	0,1624	0,2358066	5,2976923
ZjuHsp100-94	8	Prupe.6G233700.1	6	54,1127	0,8926	0,0164952	416,25154
ZjuHsp100-94	8	Prupe.6G233700.2	6	54,6422	0,8217	0,0150378	420,32462
ZjuHsp100-94	8	Prupe.4G237600.1	4	53,2987	0,9015	0,0169141	409,99
ZjuHsp100-95	8	Prupe.6G233700.2	6	54,6583	0,8213	0,0150261	420,44846
ZjuHsp100-95	8	Prupe.6G107800.1	6	53,3591	0,8685	0,0162765	410,45462
ZjuHsp100-95	8	Prupe.4G237600.1	4	53,3299	0,9012	0,0168986	410,23
ZjuHsp100-95	8	Prupe.6G233700.1	6	54,1117	0,8927	0,0164974	416,24385
ZjuHsp100-96	8	Prupe.2G008800.1	2	0,6935	0,0405	0,0583994	5,3346154
ZjuHsp100-96	8	Prupe.1G190200.1	1	0,8218	0,0669	0,0814067	6,3215385
ZjuHsp100-97	8	Prupe.1G190200.1	1	0,8218	0,0669	0,0814067	6,3215385
ZjuHsp100-97	8	Prupe.2G008800.1	2	0,6935	0,0405	0,0583994	5,3346154
ZjuHsp100-97	8	Prupe.1G585800.5	1	0,8104	0,2414	0,2978776	6,2338462
ZjuHsp100-98	8	Prupe.1G585800.3	1	0,7937	0,2248	0,2832304	6,1053846
ZjuHsp100-98	8	Prupe.1G585800.1	1	0,8405	0,243	0,2891136	6,4653846
ZjuHsp100-98	8	Prupe.1G585800.6	1	0,8495	0,2535	0,2984108	6,5346154
ZjuHsp100-98	8	Prupe.1G585800.4	1	0,824	0,2264	0,2747573	6,3384615
ZjuHsp100-98	8	Prupe.1G585800.11	1	0,9494	0,2576	0,2713293	7,3030769
ZjuHsp100-98	8	Prupe.1G585800.10	1	0,9089	0,256	0,2816591	6,9915385
ZjuHsp100-98	8	Prupe.8G000600.1	8	2,6561	0,3351	0,1261624	20,431538
ZjuHsp100-98	8	Prupe.1G585800.8	1	0,9494	0,2576	0,2713293	7,3030769
ZjuHsp100-98	8	Prupe.2G310000.1	2	33,9087	0,3797	0,0111977	260,83615
ZjuHsp100-98	8	Prupe.1G585800.9	1	0,8383	0,2759	0,3291185	6,4484615
ZjuHsp100-98	8	Prupe.1G585800.2	1	0,8688	0,3158	0,3634899	6,6830769
ZjuHsp100-98	8	Prupe.1G585800.7	1	0,8304	0,3133	0,3772881	6,3876923
ZjuHsp100-99	9	Prupe.8G259000.1	8	0,974	0,1315	0,1350103	7,4923077
ZjuHsp100-99	9	Prupe.8G259000.2	8	0,974	0,1315	0,1350103	7,4923077
ZjuHsp100-99	9	Prupe.8G259000.4	8	0,9992	0,0966	0,0966773	7,6861538
ZjuHsp100-99	9	Prupe.8G259000.3	8	1,0153	0,1306	0,1286319	7,81
ZjuHsp100-99	9	Prupe.5G152500.2	5	6,7171	0,3437	0,0511679	51,67
ZjuHsp100-99	9	Prupe.5G152500.1	5	6,7911	0,3472	0,0511257	52,239231
ZjuHsp100-99	9	Prupe.2G303900.1	2	52,6621	0,5379	0,0102142	405,09308
ZjuHsp100-99	9	Prupe.2G303900.2	2	52,7066	0,5379	0,0102056	405,43538
ZjuHsp100-99	9	Prupe.1G346700.2	1	62,5886	0,6534	0,0104396	481,45077
ZjuHsp100-99	9	Prupe.5G110200.1	5	41,7294	0,5378	0,0128878	320,99538
ZjuHsp100-99	9	Prupe.1G346700.3	1	62,5844	0,6534	0,0104403	481,41846
ZjuHsp100-99	9	Prupe.1G346700.5	1	62,586	0,6535	0,0104416	481,43077
ZjuHsp100-99	9	Prupe.1G346700.1	1	62,2415	0,652	0,0104753	478,78077

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-99	9	Prupe.1G346700.6	1	62,2581	0,6521	0,0104741	478,90846
ZjuHsp100-99	9	Prupe.2G315900.1	2	54,9779	0,5734	0,0104296	422,90692
ZjuHsp100-99	9	Prupe.1G346700.4	1	62,2579	0,6521	0,0104742	478,90692
ZjuHsp100-99	9	Prupe.2G148300.2	2	56,8481	0,7718	0,0135765	437,29308
ZjuHsp100-99	9	Prupe.2G148300.1	2	56,8499	0,7719	0,0135779	437,30692
ZjuHsp100-99	9	Prupe.3G305500.1	3	56,8183	0,8449	0,0148702	437,06385
ZjuHsp100-100	9	Prupe.8G259000.2	8	0,9896	0,1241	0,1254042	7,6123077
ZjuHsp100-100	9	Prupe.8G259000.3	8	0,9972	0,1241	0,1244485	7,6707692
ZjuHsp100-100	9	Prupe.8G259000.4	8	0,9992	0,0966	0,0966773	7,6861538
ZjuHsp100-100	9	Prupe.8G259000.1	8	0,9896	0,1241	0,1254042	7,6123077
ZjuHsp100-100	9	Prupe.5G152500.1	5	6,789	0,3416	0,0503167	52,223077
ZjuHsp100-100	9	Prupe.8G259000.4	8	0,9992	0,0966	0,0966773	7,6861538
ZjuHsp100-100	9	Prupe.2G303900.2	2	52,706	0,5379	0,0102057	405,43077
ZjuHsp100-100	9	Prupe.5G152500.2	5	7,0282	0,3382	0,0481204	54,063077
ZjuHsp100-100	9	Prupe.5G110200.1	5	40,8596	0,5377	0,0131597	314,30462
ZjuHsp100-100	9	Prupe.1G346700.2	1	62,2835	0,6456	0,0103655	479,10385
ZjuHsp100-100	9	Prupe.1G346700.5	1	62,2829	0,6455	0,010364	479,09923
ZjuHsp100-100	9	Prupe.1G346700.3	1	62,2825	0,6455	0,0103641	479,09615
ZjuHsp100-100	9	Prupe.1G346700.6	1	61,9525	0,6442	0,0103983	476,55769
ZjuHsp100-100	9	Prupe.1G346700.1	1	61,9478	0,6443	0,0104007	476,52154
ZjuHsp100-100	9	Prupe.1G346700.1	1	61,9482	0,6442	0,010399	476,52462
ZjuHsp100-100	9	Prupe.2G315900.1	2	54,9786	0,5736	0,0104332	422,91231
ZjuHsp100-100	9	Prupe.1G346700.4	1	61,9464	0,6444	0,0104025	476,51077
ZjuHsp100-100	9	Prupe.2G148300.1	2	56,8485	0,7719	0,0135782	437,29615
ZjuHsp100-100	9	Prupe.2G148300.2	1	0,177	15,8916	89,783051	1,3615385
ZjuHsp100-100	9	Prupe.3G305500.1	3	56,7802	0,8474	0,0149242	436,77077
ZjuHsp100-101	9	Prupe.8G255300.2	8	0,6773	0,1266	0,1869186	5,21
ZjuHsp100-101	9	Prupe.8G255300.3	8	0,6839	0,1381	0,2019301	5,2607692
ZjuHsp100-101	9	Prupe.8G255300.1	8	0,6773	0,1266	0,1869186	5,21
ZjuHsp100-101	9	Prupe.6G233700.1	6	54,1006	0,815	0,0150645	416,15846
ZjuHsp100-101	9	Prupe.6G233700.2	6	55,6936	0,7564	0,0135815	428,41231
ZjuHsp100-101	9	Prupe.6G107800.1	6	53,9679	0,8186	0,0151683	415,13769
ZjuHsp100-101	9	Prupe.4G237600.1	4	52,7913	0,8128	0,0153965	406,08692
ZjuHsp100-101	9	Prupe.3G062600.2	3	54,262	0,9127	0,0168202	417,4
ZjuHsp100-101	9	Prupe.3G062600.1	3	54,2596	0,9127	0,016821	417,38154
ZjuHsp100-101	9	Prupe.3G062600.3	3	54,2611	0,9128	0,0168224	417,39308
ZjuHsp100-101	9	Prupe.3G062600.5	3	54,2599	0,9128	0,0168227	417,38385
ZjuHsp100-101	9	Prupe.3G062600.4	3	54,2614	0,9126	0,0168186	417,39538
ZjuHsp100-101	9	Prupe.4G275000.1	4	55,503	0,9006	0,0162261	426,94615
ZjuHsp100-101	9	Prupe.3G135900.1	3	54,4652	0,9629	0,0176792	418,96308
ZjuHsp100-101	9	Prupe.3G135900.3	3	54,4653	0,9628	0,0176773	418,96385
ZjuHsp100-101	9	Prupe.3G135900.2	3	54,4662	0,9627	0,0176752	418,97077
ZjuHsp100-102	9	Prupe.8G208900.1	8	0,9488	0,006	0,0063238	7,2984615
ZjuHsp100-102	9	Prupe.7G237100.1	7	50,7151	0,5306	0,0104624	390,11615
ZjuHsp100-102	9	Prupe.6G039300.1	6	53,0282	0,5057	0,0095364	407,90923
ZjuHsp100-102	9	Prupe.8G090700.2	8	50,8284	0,5461	0,010744	390,98769
ZjuHsp100-102	9	Prupe.6G320300.1	6	51,2469	0,5268	0,0102796	394,20692
ZjuHsp100-102	9	Prupe.3G030100.1	3	21,2405	0,5671	0,026699	163,38846
ZjuHsp100-102	9	Prupe.8G090700.1	8	49,2404	0,555	0,0112712	378,77231
ZjuHsp100-102	9	Prupe.2G111300.1	2	52,2663	0,5253	0,0100505	402,04846
ZjuHsp100-102	9	Prupe.8G090700.4	8	7,7242	0,4608	0,0596567	59,416923
ZjuHsp100-102	9	Prupe.8G090700.3	8	49,8622	0,6183	0,0124002	383,55538
ZjuHsp100-102	9	Prupe.4G237600.1	4	52,695	0,7356	0,0139596	405,34615
ZjuHsp100-102	9	Prupe.6G233700.2	6	55,7416	0,5798	0,0104016	428,78154
ZjuHsp100-102	9	Prupe.6G233700.1	6	52,0913	0,7701	0,0147837	400,70231
ZjuHsp100-103	9	Prupe.2G148300.2	2	55,5322	0,6644	0,0119642	427,17077
ZjuHsp100-103	9	Prupe.3G305500.1	3	0,6434	0,1253	0,1947467	4,9492308
ZjuHsp100-103	9	Prupe.3G075400.1	3	52,0462	0,7046	0,013538	400,35538
ZjuHsp100-103	9	Prupe.2G148300.1	2	55,5335	0,6644	0,0119639	427,18077
ZjuHsp100-103	9	Prupe.2G148300.3	2	54,9901	0,6847	0,0124513	423,00077
ZjuHsp100-104	10	Prupe.1G375300.2	1	2,91	0,4527	0,155567	22,384615
ZjuHsp100-104	10	Prupe.4G166800.1	4	1,8952	0,3794	0,20019	14,578462
ZjuHsp100-104	10	Prupe.7G158900.1	7	1,9794	0,4728	0,2388603	15,226154
ZjuHsp100-104	10	Prupe.1G375300.1	1	2,91	0,4527	0,155567	22,384615
ZjuHsp100-104	10	Prupe.7G159000.1	7	5,0252	0,4901	0,0975285	38,655385
ZjuHsp100-104	10	Prupe.8G092600.1	8	2,9054	0,5096	0,1753975	22,349231
ZjuHsp100-104	10	Prupe.7G159500.1	7	34,5057	0,5772	0,0167277	265,42846
ZjuHsp100-104	10	Prupe.7G165500.1	7	20,863	0,5932	0,0284331	160,48462
ZjuHsp100-104	10	Prupe.7G159600.1	7	27,7196	0,5777	0,0208408	213,22769

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-104	10	Prupe.7G159400.1	7	13,9459	0,5708	0,0409296	107,27615
ZjuHsp100-104	10	Prupe.7G159300.1	7	44,3595	2,1626	0,0487517	341,22692
ZjuHsp100-105	10	Prupe.3G065400.1	3	0,8665	0,1044	0,1204847	6,6653846
ZjuHsp100-105	10	Prupe.3G061400.1	3	0,8461	0,0932	0,1101525	6,5084615
ZjuHsp100-105	10	Prupe.1G355600.2	1	48,6492	0,764	0,0157043	374,22462
ZjuHsp100-105	10	Prupe.1G355600.1	1	48,646	0,7592	0,0156066	374,2
ZjuHsp100-105	10	Prupe.3G112700.2	3	51,8757	0,7901	0,0152306	399,04385
ZjuHsp100-105	10	Prupe.3G266900.1	3	51,9247	0,7417	0,0142841	399,42077
ZjuHsp100-105	10	Prupe.5G026500.1	5	54,0554	0,8639	0,0159818	415,81077
ZjuHsp100-105	10	Prupe.3G112700.1	3	51,5419	0,7859	0,0152478	396,47615
ZjuHsp100-105	10	Prupe.6G060800.2	6	36,9683	0,9116	0,024659	284,37154
ZjuHsp100-105	10	Prupe.6G060800.1	6	36,9288	0,9116	0,0246853	284,06769
ZjuHsp100-105	10	Prupe.6G060800.3	6	52,2769	0,9121	0,0174475	402,13
ZjuHsp100-105	10	Prupe.1G410800.1	1	52,279	0,912	0,0174449	402,14615
ZjuHsp100-105	10	Prupe.6G257400.2	6	54,0492	0,8195	0,0151621	415,76308
ZjuHsp100-105	10	Prupe.6G257400.1	6	54,05	0,8195	0,0151619	415,76923
ZjuHsp100-105	10	Prupe.5G122500.1	5	35,0591	0,8813	0,0251376	269,68538
ZjuHsp100-105	10	Prupe.6G072600.1	6	54,5318	0,8519	0,0156221	419,47538
ZjuHsp100-105	10	Prupe.3G243600.2	3	12,8852	0,7711	0,0598439	99,116923
ZjuHsp100-105	10	Prupe.3G243600.1	3	12,9014	0,7711	0,0597687	99,241538
ZjuHsp100-106	10	Prupe.1G288400.2	1	0,7047	0,135	0,1915709	5,4207692
ZjuHsp100-106	10	Prupe.1G288400.1	1	0,7124	0,15	0,2105559	5,48
ZjuHsp100-106	10	Prupe.6G233700.1	6	54,8397	0,5835	0,0106401	421,84385
ZjuHsp100-106	10	Prupe.6G233700.2	6	54,8676	0,5809	0,0105873	422,05846
ZjuHsp100-106	10	Prupe.4G237600.1	4	52,643	0,5959	0,0113196	404,94615
ZjuHsp100-106	10	Prupe.6G107800.1	6	53,5434	0,5938	0,0110901	411,87231
ZjuHsp100-106	10	Prupe.3G062600.2	3	16,198	0,6714	0,0414496	124,6
ZjuHsp100-106	10	Prupe.3G062600.1	3	16,2037	0,6714	0,041435	124,64385
ZjuHsp100-106	10	Prupe.3G062600.5	3	16,1975	0,6714	0,0414508	124,59615
ZjuHsp100-106	10	Prupe.3G062600.3	3	16,2059	0,6714	0,0414294	124,66077
ZjuHsp100-106	10	Prupe.3G135900.3	3	23,3279	0,6206	0,0266033	179,44538
ZjuHsp100-106	10	Prupe.3G062600.4	3	16,2137	0,6714	0,0414094	124,72077
ZjuHsp100-106	10	Prupe.3G135900.2	3	23,3477	0,6206	0,0265808	179,59769
ZjuHsp100-106	10	Prupe.3G135900.1	3	23,4585	0,6205	0,026451	180,45
ZjuHsp100-106	10	Prupe.4G112300.1	4	25,0291	0,7663	0,0306164	192,53154
ZjuHsp100-106	10	Prupe.4G275000.1	4	21,4968	0,6312	0,0293625	165,36
ZjuHsp100-107	10	Prupe.1G288400.2	1	0,702	0,1416	0,2017094	5,4
ZjuHsp100-107	10	Prupe.1G288400.1	1	0,7113	0,1572	0,2210038	5,4715385
ZjuHsp100-107	10	Prupe.6G233700.1	6	54,7076	0,604	0,0110405	420,82769
ZjuHsp100-107	10	Prupe.6G233700.2	6	54,734	0,6012	0,010984	421,03077
ZjuHsp100-107	10	Prupe.4G237600.1	4	52,2561	0,6187	0,0118398	401,97
ZjuHsp100-107	10	Prupe.6G107800.1	6	53,2574	0,6192	0,0116266	409,67231
ZjuHsp100-107	10	Prupe.3G062600.2	3	15,4603	0,6735	0,0435632	118,92538
ZjuHsp100-107	10	Prupe.3G062600.1	3	15,4515	0,6735	0,043588	118,85769
ZjuHsp100-107	10	Prupe.3G062600.5	3	15,4359	0,6735	0,0436321	118,73769
ZjuHsp100-107	10	Prupe.3G062600.3	3	15,4369	0,6735	0,0436292	118,74538
ZjuHsp100-107	10	Prupe.3G135900.3	3	23,8254	0,6517	0,0273532	183,27231
ZjuHsp100-107	10	Prupe.3G062600.4	3	15,4297	0,6735	0,0436496	118,69
ZjuHsp100-107	10	Prupe.3G135900.2	3	23,6929	0,6517	0,0275061	182,25308
ZjuHsp100-107	10	Prupe.3G135900.1	3	23,7288	0,6517	0,0274645	182,52923
ZjuHsp100-108	10	Prupe.1G288400.2	1	0,7315	0,1426	0,1949419	5,6269231
ZjuHsp100-108	10	Prupe.1G288400.1	1	0,7368	0,1584	0,2149837	5,6676923
ZjuHsp100-108	10	Prupe.6G107800.1	6	53,0979	0,5893	0,0110984	408,44538
ZjuHsp100-108	10	Prupe.6G233700.2	6	54,2541	0,5807	0,0107033	417,33923
ZjuHsp100-108	10	Prupe.4G237600.1	4	52,5298	0,5944	0,0113155	404,07538
ZjuHsp100-108	10	Prupe.6G233700.1	6	54,2339	0,5813	0,0107184	417,18385
ZjuHsp100-108	10	Prupe.3G062600.2	3	29,4144	0,6704	0,0227916	226,26462
ZjuHsp100-108	10	Prupe.3G062600.1	3	29,4042	0,6704	0,0227995	226,18615
ZjuHsp100-108	10	Prupe.3G062600.5	3	29,1969	0,6705	0,0229648	224,59154
ZjuHsp100-108	10	Prupe.3G062600.3	3	29,5121	0,6704	0,0227161	227,01615
ZjuHsp100-108	10	Prupe.3G135900.3	3	30,8555	0,6196	0,0200807	237,35
ZjuHsp100-108	10	Prupe.3G062600.4	3	29,3255	0,6704	0,0228607	225,58077
ZjuHsp100-108	10	Prupe.3G135900.1	3	31,2318	0,6196	0,0198388	240,24462
ZjuHsp100-108	10	Prupe.3G135900.2	3	30,9004	0,6197	0,0200548	237,69538
ZjuHsp100-108	10	Prupe.4G275000.1	4	24,5184	0,6336	0,0258418	188,60308
ZjuHsp100-109	10	Prupe.1G346700.6	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-109	10	Prupe.1G346700.1	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-109	10	Prupe.1G346700.2	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-109	10	Prupe.1G346700.4	1	0,7295	0,1179	0,1616175	5,6115385

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-109	10	Prupe.1G346700.5	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-109	10	Prupe.1G346700.3	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-109	10	Prupe.5G152500.1	5	36,2741	0,6416	0,0176876	279,03154
ZjuHsp100-109	10	Prupe.5G152500.2	5	19,9318	0,6478	0,0325008	153,32154
ZjuHsp100-109	10	Prupe.8G259000.3	8	17,4737	0,67	0,0383433	134,41308
ZjuHsp100-109	10	Prupe.8G259000.4	8	20,2796	0,6506	0,0320815	155,99692
ZjuHsp100-109	10	Prupe.8G259000.1	8	15,3684	0,6825	0,0444093	118,21846
ZjuHsp100-109	10	Prupe.8G259000.2	8	17,8669	0,6637	0,0371469	137,43769
ZjuHsp100-109	10	Prupe.2G303900.2	2	55,0262	0,6416	0,0116599	423,27846
ZjuHsp100-109	10	Prupe.2G303900.1	2	55,2441	0,6424	0,0116284	424,95462
ZjuHsp100-109	10	Prupe.2G315900.1	2	43,615	0,6119	0,0140296	335,5
ZjuHsp100-109	10	Prupe.5G110200.1	5	19,1624	0,6143	0,0320576	147,40308
ZjuHsp100-109	10	Prupe.2G148300.1	2	53,016	0,7208	0,0135959	407,81538
ZjuHsp100-109	10	Prupe.2G148300.2	2	53,0144	0,7208	0,0135963	407,80308
ZjuHsp100-110	10	Prupe.1G346700.1	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-110	10	Prupe.1G346700.6	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-110	10	Prupe.1G346700.2	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-110	10	Prupe.1G346700.4	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-110	10	Prupe.1G346700.3	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-110	10	Prupe.1G346700.5	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-110	10	Prupe.5G152500.1	5	36,2741	0,6416	0,0176876	279,03154
ZjuHsp100-110	10	Prupe.5G152500.2	5	19,9318	0,6478	0,0325008	153,32154
ZjuHsp100-110	10	Prupe.8G259000.3	8	17,4737	0,67	0,0383433	134,41308
ZjuHsp100-110	10	Prupe.8G259000.4	8	20,2796	0,6506	0,0320815	155,99692
ZjuHsp100-110	10	Prupe.8G259000.1	8	15,3684	0,6825	0,0444093	118,21846
ZjuHsp100-110	10	Prupe.8G259000.2	8	17,8669	0,6637	0,0371469	137,43769
ZjuHsp100-110	10	Prupe.2G303900.2	2	55,0262	0,6416	0,0116599	423,27846
ZjuHsp100-110	10	Prupe.2G303900.1	2	55,2441	0,6424	0,0116284	424,95462
ZjuHsp100-110	10	Prupe.2G315900.1	2	43,615	0,6119	0,0140296	335,5
ZjuHsp100-110	10	Prupe.5G110200.1	5	19,1624	0,6143	0,0320576	147,40308
ZjuHsp100-110	10	Prupe.2G148300.1	2	53,016	0,7208	0,0135959	407,81538
ZjuHsp100-110	10	Prupe.2G148300.2	2	53,0144	0,7208	0,0135963	407,80308
ZjuHsp100-111	10	Prupe.1G346700.3	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-111	10	Prupe.1G346700.2	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-111	10	Prupe.1G346700.1	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-111	10	Prupe.1G346700.5	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-111	10	Prupe.1G346700.4	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-111	10	Prupe.1G346700.6	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-111	10	Prupe.5G152500.1	5	36,2741	0,6416	0,0176876	279,03154
ZjuHsp100-111	10	Prupe.5G152500.2	5	19,9318	0,6478	0,0325008	153,32154
ZjuHsp100-111	10	Prupe.8G259000.3	8	17,4737	0,67	0,0383433	134,41308
ZjuHsp100-111	10	Prupe.8G259000.4	8	20,2796	0,6506	0,0320815	155,99692
ZjuHsp100-111	10	Prupe.8G259000.1	8	15,3684	0,6825	0,0444093	118,21846
ZjuHsp100-111	10	Prupe.8G259000.2	8	17,8669	0,6637	0,0371469	137,43769
ZjuHsp100-111	10	Prupe.2G303900.2	2	55,0262	0,6416	0,0116599	423,27846
ZjuHsp100-111	10	Prupe.2G303900.1	2	55,2441	0,6424	0,0116284	424,95462
ZjuHsp100-111	10	Prupe.2G315900.1	2	43,615	0,6119	0,0140296	335,5
ZjuHsp100-111	10	Prupe.5G110200.1	5	19,1624	0,6143	0,0320576	147,40308
ZjuHsp100-111	10	Prupe.2G148300.1	2	53,016	0,7208	0,0135959	407,81538
ZjuHsp100-111	10	Prupe.2G148300.2	2	53,0144	0,7208	0,0135963	407,80308
ZjuHsp100-112	10	Prupe.1G346700.3	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-112	10	Prupe.1G346700.2	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-112	10	Prupe.1G346700.1	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-112	10	Prupe.1G346700.5	1	0,7512	0,1181	0,1572151	5,7784615
ZjuHsp100-112	10	Prupe.1G346700.4	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-112	10	Prupe.1G346700.6	1	0,7295	0,1179	0,1616175	5,6115385
ZjuHsp100-112	10	Prupe.5G152500.1	5	36,2741	0,6416	0,0176876	279,03154
ZjuHsp100-112	10	Prupe.5G152500.2	8	19,9318	0,6478	0,0325008	153,32154
ZjuHsp100-112	10	Prupe.8G259000.3	8	17,4737	0,67	0,0383433	134,41308
ZjuHsp100-112	10	Prupe.8G259000.4	8	20,2796	0,6506	0,0320815	155,99692
ZjuHsp100-112	10	Prupe.8G259000.1	8	15,3684	0,6825	0,0444093	118,21846
ZjuHsp100-112	10	Prupe.8G259000.2	8	17,8669	0,6637	0,0371469	137,43769
ZjuHsp100-112	10	Prupe.2G303900.1	2	55,0262	0,6416	0,0116599	423,27846
ZjuHsp100-112	10	Prupe.2G315900.1	2	43,615	0,6119	0,0140296	335,5
ZjuHsp100-112	10	Prupe.5G110200.1	5	19,1624	0,6143	0,0320576	147,40308
ZjuHsp100-112	10	Prupe.2G148300.1	2	53,016	0,7208	0,0135959	407,81538
ZjuHsp100-112	10	Prupe.2G148300.2	2	53,0144	0,7208	0,0135963	407,80308
ZjuHsp100-113	10	Prupe.3G107000.1	3	1,0351	0,103	0,0995073	7,9623077
ZjuHsp100-113	10	Prupe.3G107000.2	3	1,0054	0,1086	0,1080167	7,7338462

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-113	10	Prupe.6G260200.1	6	37,1071	0,5064	0,013647	285,43923
ZjuHsp100-113	10	Prupe.6G260200.2	6	32,8267	0,5041	0,0153564	252,51308
ZjuHsp100-113	10	Prupe.6G070800.3	6	54,4439	0,5484	0,0100728	418,79923
ZjuHsp100-113	10	Prupe.6G070800.2	6	54,4353	0,5485	0,0100762	418,73308
ZjuHsp100-113	10	Prupe.2G238800.2	2	30,9409	0,5418	0,0175108	238,00692
ZjuHsp100-113	10	Prupe.6G070800.1	6	54,4374	0,5485	0,0100758	418,74923
ZjuHsp100-113	10	Prupe.2G238800.1	2	30,7095	0,5418	0,0176427	236,22692
ZjuHsp100-113	10	Prupe.2G238800.3	2	31,2222	0,5417	0,0173498	240,17077
ZjuHsp100-114	11	Prupe.3G135900.3	3	1,512	0,3491	0,2308862	11,630769
ZjuHsp100-114	11	Prupe.4G275000.1	4	1,3914	0,3379	0,2428489	10,703077
ZjuHsp100-114	11	Prupe.3G135900.2	3	1,512	0,3491	0,2308862	11,630769
ZjuHsp100-114	11	Prupe.3G135900.1	3	1,512	0,3491	0,2308862	11,630769
ZjuHsp100-114	11	Prupe.4G237600.1	4	55,5027	0,6747	0,0121562	426,94385
ZjuHsp100-114	11	Prupe.6G233700.2	6	57,0674	0,6748	0,0118246	438,98
ZjuHsp100-114	11	Prupe.6G233700.1	6	57,0711	0,6746	0,0118203	439,00846
ZjuHsp100-114	11	Prupe.6G107800.1	6	57,3642	0,654	0,0114008	441,26308
ZjuHsp100-115	11	Prupe.3G266900.1	3	15,5719	0,7474	0,0479967	119,78385
ZjuHsp100-115	11	Prupe.5G122500.1	5	0,5714	0,101	0,1767588	4,3953846
ZjuHsp100-115	11	Prupe.3G112700.1	3	50,7183	0,7517	0,0148211	390,14077
ZjuHsp100-115	11	Prupe.3G112700.2	3	50,3236	0,7341	0,0145876	387,10462
ZjuHsp100-115	11	Prupe.1G355600.2	1	13,1876	0,7928	0,0601171	101,44308
ZjuHsp100-115	11	Prupe.1G355600.1	1	12,4455	0,7965	0,063999	95,734615
ZjuHsp100-115	11	Prupe.5G026500.1	5	16,4612	0,831	0,0504823	126,62462
ZjuHsp100-115	11	Prupe.1G410800.1	1	23,0262	0,8313	0,0361024	177,12462
ZjuHsp100-115	11	Prupe.6G060800.1	6	23,5567	0,915	0,0388425	181,20538
ZjuHsp100-115	11	Prupe.6G060800.2	6	23,6055	0,915	0,0387622	181,58077
ZjuHsp100-115	11	Prupe.6G060800.3	6	19,5669	0,8941	0,0456945	150,51462
ZjuHsp100-116	11	Prupe.8G039600.1	8	0,5748	0,0495	0,0861169	4,4215385
ZjuHsp100-119	11	Prupe.2G303900.2	2	1,5205	0,1575	0,1035843	11,696154
ZjuHsp100-119	11	Prupe.5G110200.1	5	0,6641	0,1126	0,1695528	5,1084615
ZjuHsp100-119	11	Prupe.8G259000.4	8	11,5164	0,5422	0,0470807	88,587692
ZjuHsp100-119	11	Prupe.2G303900.1	2	1,5268	0,1637	0,1072177	11,744615
ZjuHsp100-119	11	Prupe.8G259000.2	2	11,4328	0,5452	0,0476874	87,944615
ZjuHsp100-119	11	Prupe.8G259000.3	8	11,4313	0,5452	0,0476936	87,933077
ZjuHsp100-119	11	Prupe.5G152500.1	5	51,8635	0,534	0,0102963	398,95
ZjuHsp100-119	11	Prupe.8G259000.1	8	10,1492	0,5413	0,0533343	78,070769
ZjuHsp100-119	11	Prupe.1G346700.2	1	33,9089	0,6403	0,0188829	260,83769
ZjuHsp100-119	11	Prupe.5G152500.2	5	51,94	0,5314	0,010231	399,53846
ZjuHsp100-119	11	Prupe.1G346700.5	1	34,1598	0,6403	0,0187443	262,76769
ZjuHsp100-119	11	Prupe.1G346700.3	1	34,0442	0,6403	0,0188079	261,87846
ZjuHsp100-119	11	Prupe.1G346700.1	1	20,1843	0,6432	0,0318664	155,26385
ZjuHsp100-119	11	Prupe.2G315900.1	2	20,0365	0,6432	0,0321014	154,12692
ZjuHsp100-119	11	Prupe.1G346700.4	1	20,0365	0,6432	0,0321014	154,12692
ZjuHsp100-120	11	Prupe.5G050100.2	5	0,4419	0,0334	0,0755827	3,3992308
ZjuHsp100-120	11	Prupe.5G050100.1	5	0,4454	0,039	0,0875617	3,4261538
ZjuHsp100-120	11	Prupe.2G038600.4	2	57,4316	0,6688	0,0116452	441,78154
ZjuHsp100-120	11	Prupe.2G038600.3	2	57,4304	0,6687	0,0116437	441,77231
ZjuHsp100-120	11	Prupe.2G038600.10	2	55,5903	0,6938	0,0124806	427,61769
ZjuHsp100-120	11	Prupe.2G038600.5	2	55,5858	0,6938	0,0124816	427,58308
ZjuHsp100-120	11	Prupe.2G038600.9	2	55,5866	0,6938	0,0124814	427,58923
ZjuHsp100-120	11	Prupe.2G038600.7	2	55,5873	0,6939	0,0124831	427,59462
ZjuHsp100-120	11	Prupe.2G038600.8	2	55,5908	0,6938	0,0124805	427,62154
ZjuHsp100-120	11	Prupe.2G038600.6	2	55,59	0,6938	0,0124807	427,61538
ZjuHsp100-120	11	Prupe.2G038600.2	2	55,5851	0,6937	0,01248	427,57769
ZjuHsp100-120	11	Prupe.6G313300.1	6	35,0355	0,6823	0,0194745	269,50385
ZjuHsp100-120	11	Prupe.2G038600.1	2	55,5905	0,6938	0,0124805	427,61923
ZjuHsp100-121	11	Prupe.6G260200.1	6	1,0583	0,1152	0,1088538	8,1407692
ZjuHsp100-121	11	Prupe.6G260200.2	6	1,0583	0,1152	0,1088538	8,1407692
ZjuHsp100-121	11	Prupe.2G238800.3	2	1,2644	0,1176	0,0930085	9,7261538
ZjuHsp100-121	11	Prupe.2G238800.2	2	1,2644	0,1176	0,0930085	9,7261538
ZjuHsp100-121	11	Prupe.6G070800.3	6	1,6237	0,1313	0,0808647	12,49
ZjuHsp100-121	11	Prupe.2G238800.1	2	1,2644	0,1176	0,0930085	9,7261538
ZjuHsp100-121	11	Prupe.6G070800.1	6	1,6237	0,1313	0,0808647	12,49
ZjuHsp100-121	11	Prupe.6G070800.2	6	1,6237	0,1313	0,0808647	12,49
ZjuHsp100-121	11	Prupe.3G107000.1	3	23,7997	0,5196	0,0218322	183,07462
ZjuHsp100-121	11	Prupe.3G107000.2	3	22,488	0,5198	0,0231145	172,98462
ZjuHsp100-122	11	Prupe.7G237100.1	7	55,9557	0,4789	0,0085586	430,42846
ZjuHsp100-122	11	Prupe.3G030100.1	3	0,7727	0,0114	0,0147535	5,9438462
ZjuHsp100-122	11	Prupe.8G090700.1	8	54,681	0,5425	0,0099212	420,62308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-122	11	Prupe.8G090700.4	8	55,6479	0,4515	0,0081135	428,06077
ZjuHsp100-122	11	Prupe.2G111300.2	2	56,9496	0,4453	0,0078192	438,07385
ZjuHsp100-122	11	Prupe.8G090700.2	8	53,9062	0,538	0,0099803	414,66308
ZjuHsp100-122	11	Prupe.6G320300.1	6	54,6867	0,5148	0,0094136	420,66692
ZjuHsp100-122	11	Prupe.2G111300.1	2	47,1537	0,552	0,0117064	362,72077
ZjuHsp100-122	11	Prupe.6G039300.1	6	44,2239	0,5928	0,0134045	340,18385
ZjuHsp100-122	11	Prupe.8G208900.1	8	18,3747	0,5597	0,0304604	141,34385
ZjuHsp100-123	11	Prupe.3G135900.3	3	0,9626	0,1892	0,196551	7,4046154
ZjuHsp100-123	11	Prupe.4G275000.1	4	0,9813	0,1933	0,1969836	7,5484615
ZjuHsp100-123	11	Prupe.3G135900.2	3	0,9626	0,1892	0,196551	7,4046154
ZjuHsp100-123	11	Prupe.3G135900.1	3	0,9626	0,1892	0,196551	7,4046154
ZjuHsp100-123	11	Prupe.6G233700.1	6	52,8293	0,6088	0,0115239	406,37923
ZjuHsp100-123	11	Prupe.6G233700.2	6	55,2771	0,5309	0,0096043	425,20846
ZjuHsp100-123	11	Prupe.4G237600.1	4	52,0299	0,6354	0,0122122	400,23
ZjuHsp100-123	11	Prupe.6G107800.1	6	53,0323	0,6052	0,0114119	407,94077
ZjuHsp100-123	11	Prupe.3G062600.2	3	56,5856	0,7219	0,0127577	435,27385
ZjuHsp100-123	11	Prupe.3G062600.1	3	56,5852	0,7219	0,0127578	435,27077
ZjuHsp100-123	11	Prupe.3G062600.5	3	56,5886	0,7218	0,0127552	435,29692
ZjuHsp100-123	11	Prupe.3G062600.3	3	56,5888	0,7218	0,0127552	435,29846
ZjuHsp100-123	11	Prupe.3G062600.4	3	56,5849	0,722	0,0127596	435,26846
ZjuHsp100-124	11	Prupe.1G585800.4	1	0,6921	0,156	0,225401	5,3238462
ZjuHsp100-124	11	Prupe.1G585800.1	1	0,7161	0,1741	0,2431225	5,5084615
ZjuHsp100-124	11	Prupe.1G585800.6	1	0,724	0,1811	0,2501381	5,5692308
ZjuHsp100-124	11	Prupe.1G585800.5	1	0,724	0,1811	0,2501381	5,5692308
ZjuHsp100-124	11	Prupe.1G585800.11	1	0,7063	0,1791	0,253575	5,4330769
ZjuHsp100-124	11	Prupe.1G585800.3	1	0,801	0,1811	0,2260924	6,1615385
ZjuHsp100-124	11	Prupe.8G000600.1	8	3,1162	0,2302	0,073872	23,970769
ZjuHsp100-124	11	Prupe.1G585800.8	1	0,801	0,1811	0,2260924	6,1615385
ZjuHsp100-124	11	Prupe.2G310000.1	2	21,4356	0,308	0,0143686	164,88923
ZjuHsp100-124	11	Prupe.1G585800.10	1	0,794	0,187	0,2355164	6,1076923
ZjuHsp100-124	11	Prupe.1G585800.9	1	0,7043	0,1966	0,2791424	5,4176923
ZjuHsp100-124	11	Prupe.1G585800.2	1	0,7736	0,2514	0,3249741	5,9507692
ZjuHsp100-124	11	Prupe.1G585800.7	1	0,763	0,2614	0,342595	5,8692308
ZjuHsp100-125	12	Prupe.7G232000.2	7	0,66	0,0705	0,1068182	5,0769231
ZjuHsp100-125	12	Prupe.7G232000.1	7	0,6375	0,0742	0,1163922	4,9038462
ZjuHsp100-126	12	Prupe.6G107800.1	6	1,9517	0,0379	0,019419	15,013077
ZjuHsp100-126	12	Prupe.6G233700.1	6	0,7487	0,0269	0,0359289	5,7592308
ZjuHsp100-126	12	Prupe.6G233700.2	6	0,808	0,0252	0,0311881	6,2153846
ZjuHsp100-126	12	Prupe.4G237600.1	4	0,842	0,0555	0,0659145	6,4769231
ZjuHsp100-126	12	Prupe.4G275000.1	4	53,2871	0,619	0,0116163	409,90077
ZjuHsp100-126	12	Prupe.5G169800.1	5	7,0325	0,1242	0,0176609	54,096154
ZjuHsp100-126	12	Prupe.3G135900.1	3	53,7362	0,6241	0,0116141	413,35538
ZjuHsp100-126	12	Prupe.3G135900.3	3	53,7335	0,624	0,0116129	413,33462
ZjuHsp100-126	12	Prupe.3G062600.1	3	21,4926	0,663	0,0308478	165,32769
ZjuHsp100-126	12	Prupe.3G135900.2	3	53,7351	0,6241	0,0116144	413,34692
ZjuHsp100-126	12	Prupe.3G062600.3	3	21,46	0,663	0,0308947	165,07692
ZjuHsp100-126	12	Prupe.3G062600.2	3	21,6083	0,663	0,0306827	166,21769
ZjuHsp100-126	12	Prupe.3G062600.4	3	21,6468	0,6629	0,0306235	166,51385
ZjuHsp100-126	12	Prupe.3G062600.5	3	21,7053	0,6629	0,0305409	166,96385
ZjuHsp100-126	12	Prupe.1G288400.2	1	52,4488	0,5282	0,0100708	403,45231
ZjuHsp100-126	12	Prupe.1G288400.1	1	52,2743	0,5708	0,0109193	402,11
ZjuHsp100-127	12	Prupe.2G071700.1	2	1,8799	0,3589	0,1909144	14,460769
ZjuHsp100-127	12	Prupe.7G097400.1	7	1,0283	0,1494	0,1452883	7,91
ZjuHsp100-127	12	Prupe.1G095200.2	1	10,11	0,7181	0,0710287	77,769231
ZjuHsp100-127	12	Prupe.1G073700.1	1	9,2052	0,6512	0,0707426	70,809231
ZjuHsp100-127	12	Prupe.1G095200.1	1	10,1124	0,7181	0,0710118	77,787692
ZjuHsp100-128	12	Prupe.2G111300.1	2	0,7115	0,1912	0,268728	5,4730769
ZjuHsp100-128	12	Prupe.7G237100.1	7	0,6422	0,013	0,0202429	4,94
ZjuHsp100-128	12	Prupe.3G030100.1	3	55,9305	0,4923	0,008802	430,23462
ZjuHsp100-128	12	Prupe.2G111300.2	2	0,6978	0,1446	0,2072227	5,3676923
ZjuHsp100-128	12	Prupe.8G090700.1	8	23,4754	0,5318	0,0226535	180,58
ZjuHsp100-128	12	Prupe.8G208900.1	8	8,2303	0,5273	0,0640681	63,31
ZjuHsp100-128	12	Prupe.6G320300.1	6	24,5783	0,5247	0,0213481	189,06385
ZjuHsp100-128	12	Prupe.8G090700.2	8	18,7479	0,5286	0,0281952	144,21462
ZjuHsp100-129	12	Prupe.4G173800.3	4	0,7345	0,218	0,2968005	5,65
ZjuHsp100-129	12	Prupe.4G173800.1	4	0,7117	0,2058	0,2891668	5,4746154
ZjuHsp100-129	12	Prupe.4G173800.5	4	0,6937	0,1845	0,2659651	5,3361538
ZjuHsp100-129	12	Prupe.4G173800.4	4	0,7252	0,2117	0,2919195	5,5784615
ZjuHsp100-129	12	Prupe.4G173800.6	4	0,7021	0,1747	0,248825	5,4007692

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-129	12	Prupe.4G173800.2	4	0,6937	0,1845	0,2659651	5,3361538
ZjuHsp100-129	12	Prupe.1G191800.2	1	56,9874	0,8634	0,0151507	438,36462
ZjuHsp100-129	12	Prupe.1G191800.4	1	50,5663	0,8641	0,0170885	388,97154
ZjuHsp100-129	12	Prupe.1G191800.1	1	58,5588	0,8876	0,0151574	450,45231
ZjuHsp100-129	12	Prupe.1G191800.3	1	56,9885	0,8914	0,0156418	438,37308
ZjuHsp100-130	12	Prupe.4G173800.3	4	0,7345	0,218	0,2968005	5,65
ZjuHsp100-130	12	Prupe.4G173800.1	4	0,7117	0,2058	0,2891668	5,4746154
ZjuHsp100-130	12	Prupe.4G173800.5	4	0,6937	0,1845	0,2659651	5,3361538
ZjuHsp100-130	12	Prupe.4G173800.4	4	0,7252	0,2117	0,2919195	5,5784615
ZjuHsp100-130	12	Prupe.4G173800.6	4	0,7021	0,1747	0,248825	5,4007692
ZjuHsp100-130	12	Prupe.4G173800.2	4	0,6937	0,1845	0,2659651	5,3361538
ZjuHsp100-130	12	Prupe.1G191800.2	1	56,9874	0,8634	0,0151507	438,36462
ZjuHsp100-130	12	Prupe.1G191800.4	1	50,5663	0,8641	0,0170885	388,97154
ZjuHsp100-130	12	Prupe.1G191800.1	1	58,5588	0,8876	0,0151574	450,45231
ZjuHsp100-130	12	Prupe.1G191800.3	1	56,9885	0,8914	0,0156418	438,37308
ZjuHsp100-131	12	Prupe.4G171000.3	4	46,6796	3,3915	0,0726549	359,07385
ZjuHsp100-131	12	Prupe.4G171000.1	4	46,3903	3,3766	0,0727868	356,84846
ZjuHsp100-131	12	Prupe.2G206900.1	2	7,4829	3,1215	0,4171511	57,560769
ZjuHsp100-131	12	Prupe.4G171000.2	4	51,1846	3,0012	0,0586348	393,72769
ZjuHsp100-131	12	Prupe.8G001000.5	8	33,8387	5,2758	0,1559102	260,29769
ZjuHsp100-131	12	Prupe.8G001000.1	8	20,833	3,8246	0,1835837	160,25385
ZjuHsp100-131	12	Prupe.8G001000.2	8	14,8823	3,8167	0,256459	114,47923
ZjuHsp100-131	12	Prupe.8G001000.3	8	3,2983	16,3371	4,953188	25,371538
ZjuHsp100-131	12	Prupe.8G001000.4	8	36,7606	4,4553	0,1211977	282,77385
ZjuHsp100-132	scaffold	Prupe.1G095200.1	1	0,9946	0,0874	0,0878745	7,6507692
ZjuHsp100-132	scaffold	Prupe.1G095200.2	1	0,9946	0,0874	0,0878745	7,6507692
ZjuHsp100-132	scaffold	Prupe.2G071700.1	2	7,2999	0,6916	0,094741	56,153077
ZjuHsp100-132	scaffold	Prupe.7G097400.1	7	8,2442	0,6062	0,0735305	63,416923
ZjuHsp100-132	scaffold	Prupe.1G073700.1	1	47,4746	0,6068	0,0127816	365,18923
ZjuHsp100-133	scaffold	Prupe.3G065400.1	3	0,8143	0,077	0,0945597	6,2638462
ZjuHsp100-133	scaffold	Prupe.3G061400.1	3	0,7748	0,0633	0,0816985	5,96
ZjuHsp100-133	scaffold	Prupe.1G355600.2	1	50,6993	0,7739	0,0152645	389,99462
ZjuHsp100-133	scaffold	Prupe.1G355600.1	1	50,6941	0,7669	0,015128	389,95462
ZjuHsp100-133	scaffold	Prupe.3G112700.2	3	53,1217	0,7512	0,0141411	408,62846
ZjuHsp100-133	scaffold	Prupe.3G266900.1	3	21,6209	0,7537	0,0348598	166,31462
ZjuHsp100-133	scaffold	Prupe.5G026500.1	5	55,5555	0,8297	0,0149346	427,35
ZjuHsp100-133	scaffold	Prupe.3G112700.1	3	53,058	0,7546	0,0142222	408,13846
ZjuHsp100-134	scaffold	Prupe.2G038600.2	2	0,6463	0,0748	0,1157357	4,9715385
ZjuHsp100-134	scaffold	Prupe.6G313300.1	6	0,5949	0,0763	0,1282568	4,5761538
ZjuHsp100-134	scaffold	Prupe.2G038600.10	2	0,6451	0,073	0,1131608	4,9623077
ZjuHsp100-134	scaffold	Prupe.2G038600.1	2	0,6504	0,0767	0,1179274	5,0030769
ZjuHsp100-134	scaffold	Prupe.2G038600.5	2	0,66	0,0829	0,1256061	5,0769231
ZjuHsp100-134	scaffold	Prupe.2G038600.7	2	0,6458	0,075	0,116135	4,9676923
ZjuHsp100-134	scaffold	Prupe.2G038600.9	2	0,6501	0,0771	0,1185971	5,0007692
ZjuHsp100-134	scaffold	Prupe.2G038600.9	2	0,6495	0,0751	0,1156274	4,9961538
ZjuHsp100-134	scaffold	Prupe.2G038600.5	2	0,66	0,0829	0,1256061	5,0769231
ZjuHsp100-134	scaffold	Prupe.2G038600.6	2	0,6643	0,085	0,1279542	5,11
ZjuHsp100-134	scaffold	Prupe.2G038600.8	2	0,6501	0,0771	0,1185971	5,0007692
ZjuHsp100-134	scaffold	Prupe.2G038600.3	2	0,6371	0,0664	0,1042223	4,9007692
ZjuHsp100-134	scaffold	Prupe.2G038600.4	2	0,6323	0,0642	0,1015341	4,8638462
ZjuHsp100-134	scaffold	Prupe.5G050100.1	5	53,2591	0,654	0,0122796	409,68538
ZjuHsp100-134	scaffold	Prupe.5G050100.2	5	54,3871	0,5969	0,010975	418,36231
ZjuHsp100-135	scaffold	Prupe.7G158900.1	7	20,3833	0,3689	0,0180981	156,79462
ZjuHsp100-135	scaffold	Prupe.4G166800.1	4	2,1907	0,2952	0,1347514	16,851538
ZjuHsp100-135	scaffold	Prupe.7G159000.1	7	23,0024	0,4314	0,0187546	176,94154
ZjuHsp100-135	scaffold	Prupe.1G375300.1	1	8,4057	0,3735	0,0444341	64,659231
ZjuHsp100-135	scaffold	Prupe.7G165500.1	7	49,416	0,488	0,0098753	380,12308
ZjuHsp100-135	scaffold	Prupe.8G092600.1	8	50,2921	0,4528	0,0090034	386,86231
ZjuHsp100-135	scaffold	Prupe.1G375300.2	1	8,1982	0,3911	0,0477056	63,063077
ZjuHsp100-135	scaffold	Prupe.7G165500.1	7	49,4218	0,4879	0,0098722	380,16769
ZjuHsp100-135	scaffold	Prupe.7G159600.1	7	46,8702	0,4272	0,0091145	360,54
ZjuHsp100-135	scaffold	Prupe.7G159500.1	7	39,296	0,4744	0,0120725	302,27692
ZjuHsp100-135	scaffold	Prupe.7G159700.1	7	14,5201	0,4889	0,0336706	111,69308
ZjuHsp100-135	scaffold	Prupe.4G113000.1	4	34,3778	0,5059	0,0147159	264,44462
ZjuHsp100-136	scaffold	Prupe.7G158900.1	7	20,3833	0,3689	0,0180981	156,79462
ZjuHsp100-136	scaffold	Prupe.4G166800.1	4	2,1907	0,2952	0,1347514	16,851538
ZjuHsp100-136	scaffold	Prupe.7G159000.1	7	23,0024	0,4314	0,0187546	176,94154
ZjuHsp100-136	scaffold	Prupe.1G375300.1	1	8,4057	0,3735	0,0444341	64,659231
ZjuHsp100-136	scaffold	Prupe.7G165500.1	7	49,416	0,488	0,0098753	380,12308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-136	scaffold	Prupe.8G092600.1	8	50,2921	0,4528	0,0090034	386,86231
ZjuHsp100-136	scaffold	Prupe.1G375300.2	1	8,1982	0,3911	0,0477056	63,063077
ZjuHsp100-136	scaffold	Prupe.7G165500.1	7	49,4218	0,4879	0,0098722	380,16769
ZjuHsp100-136	scaffold	Prupe.7G159600.1	7	46,8702	0,4272	0,0091145	360,54
ZjuHsp100-136	scaffold	Prupe.7G159500.1	7	39,296	0,4744	0,0120725	302,27692
ZjuHsp100-136	scaffold	Prupe.7G159700.1	7	14,5201	0,4889	0,0336706	111,69308
ZjuHsp100-136	scaffold	Prupe.4G113000.1	4	34,3778	0,5059	0,0147159	264,44462
ZjuHsp100-137	scaffold	Prupe.5G165300.1	5	0,5842	0,0941	0,161075	4,4938462
ZjuHsp100-138	scaffold	Prupe.3G062600.2	3	0,769	0,1779	0,2313394	5,9153846
ZjuHsp100-138	scaffold	Prupe.3G062600.1	3	0,769	0,1779	0,2313394	5,9153846
ZjuHsp100-138	scaffold	Prupe.3G062600.5	3	0,769	0,1779	0,2313394	5,9153846
ZjuHsp100-138	scaffold	Prupe.3G062600.3	3	0,769	0,1779	0,2313394	5,9153846
ZjuHsp100-138	scaffold	Prupe.3G062600.4	3	0,769	0,1779	0,2313394	5,9153846
ZjuHsp100-139	scaffold	Prupe.1G492200.2	1	0,5455	0,0998	0,1829514	4,1961538
ZjuHsp100-139	scaffold	Prupe.1G492200.1	1	0,4737	0,0669	0,1412286	3,6438462
ZjuHsp100-139	scaffold	Prupe.1G493300.3	1	51,0518	0,5843	0,0114452	392,70615
ZjuHsp100-139	scaffold	Prupe.1G492200.3	1	0,5802	0,1047	0,180455	4,4630769
ZjuHsp100-139	scaffold	Prupe.1G493300.2	1	50,282	0,7146	0,0142118	386,78462
ZjuHsp100-139	scaffold	Prupe.1G493300.1	1	50,0432	0,7245	0,0144775	384,94769
ZjuHsp100-139	scaffold	Prupe.8G039600.1	8	54,3575	0,6777	0,0124675	418,13462
ZjuHsp100-140	scaffold	Prupe.1G492200.2	1	0,5455	0,0998	0,1829514	4,1961538
ZjuHsp100-140	scaffold	Prupe.1G492200.1	1	0,4737	0,0669	0,1412286	3,6438462
ZjuHsp100-140	scaffold	Prupe.1G493300.3	1	51,0518	0,5843	0,0114452	392,70615
ZjuHsp100-140	scaffold	Prupe.1G492200.3	1	0,5802	0,1047	0,180455	4,4630769
ZjuHsp100-140	scaffold	Prupe.1G493300.2	1	50,282	0,7146	0,0142118	386,78462
ZjuHsp100-140	scaffold	Prupe.1G493300.1	1	50,0432	0,7245	0,0144775	384,94769
ZjuHsp100-140	scaffold	Prupe.8G039600.1	8	54,3575	0,6777	0,0124675	418,13462
ZjuHsp100-141	scaffold	Prupe.7G158900.1	7	20,3833	0,3689	0,0180981	156,79462
ZjuHsp100-141	scaffold	Prupe.4G166800.1	4	2,1907	0,2952	0,1347514	16,851538
ZjuHsp100-141	scaffold	Prupe.7G159000.1	7	23,0024	0,4314	0,0187546	176,94154
ZjuHsp100-141	scaffold	Prupe.1G375300.1	1	8,4057	0,3735	0,0444341	64,659231
ZjuHsp100-141	scaffold	Prupe.7G165500.1	7	49,416	0,488	0,0098753	380,12308
ZjuHsp100-141	scaffold	Prupe.8G092600.1	8	50,2921	0,4528	0,0090034	386,86231
ZjuHsp100-141	scaffold	Prupe.1G375300.2	1	8,1982	0,3911	0,0477056	63,063077
ZjuHsp100-141	scaffold	Prupe.7G165500.1	7	49,4218	0,4879	0,0098722	380,16769
ZjuHsp100-141	scaffold	Prupe.7G159600.1	7	46,8702	0,4272	0,0091145	360,54
ZjuHsp100-141	scaffold	Prupe.7G159500.1	7	39,296	0,4744	0,0120725	302,27692
ZjuHsp100-141	scaffold	Prupe.7G159700.1	7	14,5201	0,4889	0,0336706	111,69308
ZjuHsp100-141	scaffold	Prupe.4G113000.1	4	34,3778	0,5059	0,0147159	264,44462
ZjuHsp100-142	scaffold	Prupe.5G165300.1	5	0,5804	0,0918	0,1581668	4,4646154
ZjuHsp100-143	scaffold	Prupe.3G075400.1	3	18,6905	0,6099	0,0326316	143,77308
ZjuHsp100-143	scaffold	Prupe.6G127200.1	6	1,9216	0,082	0,0426728	14,781538
ZjuHsp100-143	scaffold	Prupe.4G080800.1	4	35,8324	0,5723	0,0159716	275,63385
ZjuHsp100-143	scaffold	Prupe.4G080800.2	4	35,7253	0,5723	0,0160195	274,81
ZjuHsp100-143	scaffold	Prupe.2G148300.1	2	57,6786	0,632	0,0109573	443,68154
ZjuHsp100-143	scaffold	Prupe.2G148300.2	2	57,6783	0,6319	0,0109556	443,67923
ZjuHsp100-143	scaffold	Prupe.2G148300.3	2	44,6557	0,6312	0,0141348	343,50538
ZjuHsp100-143	scaffold	Prupe.3G305500.1	3	45,6557	0,6312	0,0138252	351,19769
ZjuHsp100-144	scaffold	Prupe.7G158900.1	7	1,514	0,1516	0,1001321	11,646154
ZjuHsp100-144	scaffold	Prupe.7G158900.2	7	1,5257	0,1484	0,0972668	11,736154
ZjuHsp100-144	scaffold	Prupe.8G092600.1	8	52,6197	0,3321	0,0063113	404,76692
ZjuHsp100-144	scaffold	Prupe.4G166800.1	4	52,2441	0,3637	0,0069616	401,87769
ZjuHsp100-144	scaffold	Prupe.1G375300.1	1	3,6208	0,3334	0,0092791	27,852308
ZjuHsp100-144	scaffold	Prupe.7G159000.1	7	51,3729	0,4013	0,0078115	395,17615
ZjuHsp100-144	scaffold	Prupe.7G165500.1	7	8,6986	0,4396	0,0505369	66,912308
ZjuHsp100-144	scaffold	Prupe.7G159500.1	7	11,8063	0,4563	0,0386489	90,817692
ZjuHsp100-144	scaffold	Prupe.7G159600.1	7	13,6497	0,4022	0,0294658	104,99769
ZjuHsp100-144	scaffold	Prupe.1G375300.2	1	3,76	0,3493	0,0928989	28,923077
ZjuHsp100-144	scaffold	Prupe.4G113000.1	7	7,9476	0,4891	0,0615406	61,135385
ZjuHsp100-144	scaffold	Prupe.7G159400.1	7	7,9344	0,3653	0,04604	61,033846
ZjuHsp100-144	scaffold	Prupe.7G159700.1	7	10,5614	0,4258	0,0403166	81,241538
ZjuHsp100-144	scaffold	Prupe.7G159800.1	7	8,7108	0,4613	0,0529572	67,006154
ZjuHsp100-144	scaffold	Prupe.7G160000.1	7	51,9014	0,4395	0,008468	399,24154
ZjuHsp100-144	scaffold	Prupe.7G159900.1	7	9,7112	0,4384	0,0451438	74,701538
ZjuHsp100-144	scaffold	Prupe.7G159900.1	7	9,709	0,4384	0,045154	74,684615
ZjuHsp100-144	scaffold	Prupe.3G273900.1	3	49,5025	0,5792	0,0117004	380,78846
ZjuHsp100-144	scaffold	Prupe.3G274100.1	3	50,4319	0,559	0,0110843	387,93769
ZjuHsp100-144	scaffold	Prupe.3G274300.1	3	49,8888	0,5771	0,0115677	383,76
ZjuHsp100-144	scaffold	Prupe.5G183800.1	5	32,3613	0,6102	0,0188559	248,93308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-144	scaffold	Prupe.3G274200.1	3	49,3382	0,577	0,0116948	379,52462
ZjuHsp100-144	scaffold	Prupe.3G273800.1	3	50,2651	0,563	0,0112006	386,65462
ZjuHsp100-144	scaffold	Prupe.1G086500.1	1	37,3093	0,6137	0,016449	286,99462
ZjuHsp100-144	scaffold	Prupe.1G229600.1	1	28,3657	0,4031	0,0142108	218,19769
ZjuHsp100-144	scaffold	Prupe.2G002200.1	2	20,7143	0,6483	0,0312972	159,34077
ZjuHsp100-145	scaffold	Prupe.3G112700.2	3	48,187	0,2364	0,0049059	370,66923
ZjuHsp100-145	scaffold	Prupe.3G266900.1	3	0,7166	0,0748	0,1043818	5,5123077
ZjuHsp100-145	scaffold	Prupe.1G410800.1	1	50,678	0,6538	0,0129011	389,83077
ZjuHsp100-145	scaffold	Prupe.3G112700.1	3	48,1247	0,2435	0,0050598	370,19
ZjuHsp100-145	scaffold	Prupe.6G072600.1	6	51,0262	0,6025	0,0118077	392,50923
ZjuHsp100-145	scaffold	Prupe.5G026500.1	5	51,512	0,6179	0,0119953	396,24615
ZjuHsp100-145	scaffold	Prupe.5G122500.1	5	49,5433	0,739	0,0149162	381,10231
ZjuHsp100-145	scaffold	Prupe.6G257400.2	6	51,9656	0,6109	0,0117559	399,73538
ZjuHsp100-145	scaffold	Prupe.3G061400.1	3	51,328	0,7597	0,0148009	394,83077
ZjuHsp100-145	scaffold	Prupe.3G243600.1	3	52,9606	0,5687	0,0107382	407,38923
ZjuHsp100-145	scaffold	Prupe.2G008800.1	2	52,7817	0,7224	0,0136866	406,01308
ZjuHsp100-146	scaffold	Prupe.5G143300.1	5	0,701	0,0281	0,0400856	5,3923077
ZjuHsp100-146	scaffold	Prupe.5G143300.2	5	0,701	0,0281	0,0400856	5,3923077
ZjuHsp100-146	scaffold	Prupe.3G258500.2	3	51,1817	0,3817	0,0074577	393,70538
ZjuHsp100-146	scaffold	Prupe.5G138200.1	5	51,5739	0,4491	0,0087079	396,72231
ZjuHsp100-146	scaffold	Prupe.1G392200.1	1	18,8164	0,4966	0,0263919	144,74154
ZjuHsp100-146	scaffold	Prupe.3G258500.3	3	50,41	0,4235	0,0084011	387,76923
ZjuHsp100-146	scaffold	Prupe.5G203700.1	5	49,2454	0,4885	0,0099197	378,81077
ZjuHsp100-146	scaffold	Prupe.3G258500.1	3	50,6978	0,5146	0,0101503	389,98308
ZjuHsp100-147	scaffold	Prupe.5G050100.2	5	47,7233	0,6048	0,0126731	367,10231
ZjuHsp100-147	scaffold	Prupe.5G050100.1	5	0,5146	0,5146	1	3,9584615
ZjuHsp100-147	scaffold	Prupe.2G038600.3	2	7,1859	4,8334	0,6726228	55,276154
ZjuHsp100-147	scaffold	Prupe.2G038600.4	2	53,5891	0,6228	0,0116218	412,22385
ZjuHsp100-147	scaffold	Prupe.2G038600.8	2	53,8356	0,6183	0,011485	414,12
ZjuHsp100-147	scaffold	Prupe.2G038600.9	2	53,9573	0,6135	0,0113701	415,05615
ZjuHsp100-147	scaffold	Prupe.2G038600.6	2	53,6637	0,6299	0,0117379	412,79769
ZjuHsp100-147	scaffold	Prupe.2G038600.5	2	53,7317	0,6286	0,0116989	413,32077
ZjuHsp100-147	scaffold	Prupe.2G038600.7	2	53,752	0,6158	0,0114563	413,47692
ZjuHsp100-147	scaffold	Prupe.2G038600.10	2	53,9862	0,6155	0,0114011	415,27846
ZjuHsp100-147	scaffold	Prupe.2G038600.1	2	53,6828	0,6249	0,0116406	412,94462
ZjuHsp100-147	scaffold	Prupe.2G038600.2	2	53,5879	0,6227	0,0116202	412,21462
ZjuHsp100-147	scaffold	Prupe.6G313300.1	6	52,9412	0,6263	0,0118301	407,24
ZjuHsp100-148	scaffold	Prupe.5G152500.2	5	52,6009	0,7408	0,0140834	404,62231
ZjuHsp100-148	scaffold	Prupe.5G152500.1	5	0,7374	0,1071	0,14524	5,6723077
ZjuHsp100-148	scaffold	Prupe.8G259000.1	8	4,5789	0,3185	0,0695582	35,222308
ZjuHsp100-148	scaffold	Prupe.8G259000.2	8	4,6481	0,31	0,0666939	35,754615
ZjuHsp100-148	scaffold	Prupe.8G259000.4	8	3,858	0,2589	0,0671073	29,676923
ZjuHsp100-148	scaffold	Prupe.8G259000.3	8	4,9772	0,3173	0,0637507	38,286154
ZjuHsp100-148	scaffold	Prupe.2G303900.1	2	52,5814	0,5463	0,0103896	404,47231
ZjuHsp100-148	scaffold	Prupe.2G303900.2	2	52,4017	0,5457	0,0104138	403,09
ZjuHsp100-148	scaffold	Prupe.1G346700.1	1	8,6607	0,6406	0,0739663	66,620769
ZjuHsp100-148	scaffold	Prupe.1G346700.5	1	9,0899	0,6563	0,0722201	69,922308
ZjuHsp100-148	scaffold	Prupe.1G346700.3	1	9,0905	0,6563	0,0721962	69,926923
ZjuHsp100-148	scaffold	Prupe.1G346700.2	1	9,0925	0,6563	0,0721804	69,942308
ZjuHsp100-148	scaffold	Prupe.1G346700.4	1	8,6614	0,6406	0,0739603	66,626154
ZjuHsp100-148	scaffold	Prupe.1G346700.6	1	8,6615	0,6406	0,0739595	66,626923
ZjuHsp100-148	scaffold	Prupe.2G315900.1	2	53,5249	0,5844	0,0109183	411,73
ZjuHsp100-148	scaffold	Prupe.5G110200.1	5	20,0068	0,5505	0,0275156	153,89846
ZjuHsp100-148	scaffold	Prupe.3G075400.1	3	19,5168	0,7881	0,0403806	150,12923
ZjuHsp100-148	scaffold	Prupe.3G305500.1	3	56,1684	0,8228	0,0146488	432,06462
ZjuHsp100-148	scaffold	Prupe.2G148300.1	2	53,2711	0,7548	0,014169	409,77769
ZjuHsp100-148	scaffold	Prupe.2G148300.2	2	53,2707	0,754	0,0141541	409,77462
ZjuHsp100-149	scaffold	Prupe.5G152500.2	5	52,6009	0,7408	0,0140834	404,62231
ZjuHsp100-149	scaffold	Prupe.5G152500.1	5	0,7374	0,1071	0,14524	5,6723077
ZjuHsp100-149	scaffold	Prupe.8G259000.1	8	4,5789	0,3185	0,0695582	35,222308
ZjuHsp100-149	scaffold	Prupe.8G259000.2	8	4,6481	0,31	0,0666939	35,754615
ZjuHsp100-149	scaffold	Prupe.8G259000.4	8	3,858	0,2589	0,0671073	29,676923
ZjuHsp100-149	scaffold	Prupe.8G259000.3	8	4,9772	0,3173	0,0637507	38,286154
ZjuHsp100-149	scaffold	Prupe.2G303900.1	2	52,5814	0,5463	0,0103896	404,47231
ZjuHsp100-149	scaffold	Prupe.2G303900.2	2	52,4017	0,5457	0,0104138	403,09
ZjuHsp100-149	scaffold	Prupe.1G346700.1	1	8,6607	0,6406	0,0739663	66,620769
ZjuHsp100-149	scaffold	Prupe.1G346700.5	1	9,0899	0,6563	0,0722201	69,922308
ZjuHsp100-149	scaffold	Prupe.1G346700.3	1	9,0905	0,6563	0,0721962	69,926923
ZjuHsp100-149	scaffold	Prupe.1G346700.2	1	9,0925	0,6563	0,0721804	69,942308

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-149	scaffold	Prupe.1G346700.4	1	8,6614	0,6406	0,0739603	66,626154
ZjuHsp100-149	scaffold	Prupe.1G346700.6	1	8,6615	0,6406	0,0739595	66,626923
ZjuHsp100-149	scaffold	Prupe.2G315900.1	2	53,5249	0,5844	0,0109183	411,73
ZjuHsp100-149	scaffold	Prupe.5G110200.1	5	20,0068	0,5505	0,0275156	153,89846
ZjuHsp100-149	scaffold	Prupe.3G075400.1	3	19,5168	0,7881	0,0403806	150,12923
ZjuHsp100-149	scaffold	Prupe.3G305500.1	3	56,1684	0,8228	0,0146488	432,06462
ZjuHsp100-149	scaffold	Prupe.2G148300.1	2	53,2711	0,7548	0,014169	409,77769
ZjuHsp100-149	scaffold	Prupe.2G148300.2	2	53,2707	0,754	0,0141541	409,77462
ZjuHsp100-150	scaffold	Prupe.3G274100.1	3	4,6255	0,3455	0,0746946	35,580769
ZjuHsp100-150	scaffold	Prupe.3G273800.1	3	3,9143	0,2928	0,0748026	30,11
ZjuHsp100-150	scaffold	Prupe.5G183800.1	5	1,8316	0,2283	0,1246451	14,089231
ZjuHsp100-150	scaffold	Prupe.1G086500.1	1	53,2536	0,6431	0,0120762	409,64308
ZjuHsp100-150	scaffold	Prupe.7G165500.1	7	53,2537	0,6431	0,0120762	409,64385
ZjuHsp100-150	scaffold	Prupe.3G274300.1	3	7,2206	0,3273	0,0453286	55,543077
ZjuHsp100-150	scaffold	Prupe.3G274200.1	3	7,0998	0,3442	0,0484802	54,613846
ZjuHsp100-150	scaffold	Prupe.7G159000.1	7	8,3208	0,6063	0,0728656	64,006154
ZjuHsp100-150	scaffold	Prupe.4G166800.1	4	15,885	0,562	0,0353793	122,19231
ZjuHsp100-150	scaffold	Prupe.7G158900.1	7	6,0513	0,5826	0,0962768	46,548462
ZjuHsp100-150	scaffold	Prupe.1G375300.1	1	35,5525	0,5702	0,0160383	273,48077
ZjuHsp100-150	scaffold	Prupe.4G113000.1	4	18,7108	0,591	0,031586	143,92923
ZjuHsp100-150	scaffold	Prupe.2G002200.1	2	59,8095	0,6019	0,0100636	460,07308
ZjuHsp100-150	scaffold	Prupe.7G159500.1	7	53,1952	0,6153	0,0115668	409,19385
ZjuHsp100-150	scaffold	Prupe.8G092600.1	8	21,0396	0,6001	0,0285224	161,84308
ZjuHsp100-150	scaffold	Prupe.7G159700.1	7	9,5634	0,6703	0,0700901	73,564615
ZjuHsp100-150	scaffold	Prupe.7G159400.1	7	52,5898	0,5964	0,0113406	404,53692
ZjuHsp100-150	scaffold	Prupe.1G375300.2	1	32,9655	0,5947	0,0180401	253,58077
ZjuHsp100-150	scaffold	Prupe.7G159600.1	7	52,0096	0,5992	0,0115209	400,07385
ZjuHsp100-150	scaffold	Prupe.3G274000.1	3	6,2058	0,2404	0,038738	47,736923
ZjuHsp100-150	scaffold	Prupe.7G160000.1	7	53,3473	0,6535	0,0122499	410,36385
ZjuHsp100-150	scaffold	Prupe.7G159800.1	7	7,1895	0,7035	0,097851	55,303846
ZjuHsp100-150	scaffold	Prupe.7G159900.1	7	51,1417	0,6658	0,0130187	393,39769
ZjuHsp100-151	scaffold	Prupe.6G127200.1	6	51,035	0,6122	0,0119957	392,57692
ZjuHsp100-151	scaffold	Prupe.3G075400.1	3	55,1619	0,635	0,0115116	424,32231
ZjuHsp100-151	scaffold	Prupe.4G080800.2	4	0,572	0,0824	0,1440559	4,4
ZjuHsp100-151	scaffold	Prupe.4G080800.1	4	0,5851	0,0813	0,1389506	4,5007692
ZjuHsp100-151	scaffold	Prupe.2G303900.1	2	50,1262	0,7245	0,0144535	385,58615
ZjuHsp100-151	scaffold	Prupe.3G305500.1	3	33,4461	0,6326	0,018914	257,27769
ZjuHsp100-151	scaffold	Prupe.2G148300.1	2	52,9286	0,6404	0,0120993	407,14308
ZjuHsp100-151	scaffold	Prupe.2G148300.2	2	52,9267	0,6404	0,0120998	407,12846
ZjuHsp100-151	scaffold	Prupe.1G346700.6	1	53,9574	0,7379	0,0136756	415,05692
ZjuHsp100-151	scaffold	Prupe.1G346700.1	1	53,953	0,7379	0,0136767	415,02308
ZjuHsp100-151	scaffold	Prupe.2G148300.3	2	51,6305	0,6357	0,0123125	397,15769
ZjuHsp100-151	scaffold	Prupe.2G303900.2	2	49,1044	0,7178	0,0146178	377,72615
ZjuHsp100-151	scaffold	Prupe.8G259000.4	8	53,0116	0,7805	0,0147232	407,78154
ZjuHsp100-151	scaffold	Prupe.1G346700.5	1	53,9558	0,7378	0,0136742	415,04462
ZjuHsp100-151	scaffold	Prupe.1G346700.3	1	53,9556	0,7378	0,0136742	415,04308
ZjuHsp100-151	scaffold	Prupe.1G346700.2	1	53,9559	0,7379	0,013676	415,04538
ZjuHsp100-151	scaffold	Prupe.1G346700.4	1	53,9533	0,7379	0,0136766	415,02538
ZjuHsp100-152	scaffold	Prupe.6G127200.1	6	51,035	0,6122	0,0119957	392,57692
ZjuHsp100-152	scaffold	Prupe.3G075400.1	3	55,1619	0,635	0,0115116	424,32231
ZjuHsp100-152	scaffold	Prupe.4G080800.2	4	0,572	0,0824	0,1440559	4,4
ZjuHsp100-152	scaffold	Prupe.4G080800.1	4	0,5851	0,0813	0,1389506	4,5007692
ZjuHsp100-152	scaffold	Prupe.2G303900.1	2	50,1262	0,7245	0,0144535	385,58615
ZjuHsp100-152	scaffold	Prupe.3G305500.1	3	33,4461	0,6326	0,018914	257,27769
ZjuHsp100-152	scaffold	Prupe.2G148300.1	2	52,9286	0,6404	0,0120993	407,14308
ZjuHsp100-152	scaffold	Prupe.2G148300.2	2	52,9267	0,6404	0,0120998	407,12846
ZjuHsp100-152	scaffold	Prupe.1G346700.6	1	53,9574	0,7379	0,0136756	415,05692
ZjuHsp100-152	scaffold	Prupe.1G346700.1	1	53,953	0,7379	0,0136767	415,02308
ZjuHsp100-152	scaffold	Prupe.2G148300.3	2	51,6305	0,6357	0,0123125	397,15769
ZjuHsp100-152	scaffold	Prupe.2G303900.2	2	49,1044	0,7178	0,0146178	377,72615
ZjuHsp100-152	scaffold	Prupe.8G259000.4	8	53,0116	0,7805	0,0147232	407,78154
ZjuHsp100-152	scaffold	Prupe.1G346700.5	1	53,9558	0,7378	0,0136742	415,04462
ZjuHsp100-152	scaffold	Prupe.1G346700.3	1	53,9556	0,7378	0,0136742	415,04308
ZjuHsp100-152	scaffold	Prupe.1G346700.2	1	53,9559	0,7379	0,013676	415,04538
ZjuHsp100-152	scaffold	Prupe.1G346700.4	1	53,9533	0,7379	0,0136766	415,02538
ZjuHsp100-153	scaffold	Prupe.3G112700.2	3	52,1903	0,5951	0,0114025	401,46385
ZjuHsp100-153	scaffold	Prupe.1G355600.1	1	48,3633	0,606	0,0125302	372,02538
ZjuHsp100-153	scaffold	Prupe.1G410800.1	1	46,2414	0,4325	0,0093531	355,70308
ZjuHsp100-153	scaffold	Prupe.5G026500.1	5	0,6756	0,0921	0,1363233	5,1969231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-153	scaffold	Prupe.6G257400.1	6	0,238	15,8775	66,712185	1,8307692
ZjuHsp100-153	scaffold	Prupe.1G355600.2	1	48,543	0,6041	0,0124446	373,40769
ZjuHsp100-153	scaffold	Prupe.3G266900.1	3	48,1983	0,574	0,0119091	370,75615
ZjuHsp100-153	scaffold	Prupe.3G112700.1	3	30,3068	0,617	0,0203585	233,12923
ZjuHsp100-153	scaffold	Prupe.6G060800.1	6	51,73	0,7965	0,0153973	397,92308
ZjuHsp100-153	scaffold	Prupe.6G060800.2	6	51,7317	0,7965	0,0153967	397,93615
ZjuHsp100-153	scaffold	Prupe.6G072600.1	6	55,5586	0,6701	0,0120611	427,37385
ZjuHsp100-153	scaffold	Prupe.6G257400.2	6	56,3669	0,7278	0,0129118	433,59154
ZjuHsp100-153	scaffold	Prupe.3G243600.1	3	56,9236	0,7834	0,0137623	437,87385
ZjuHsp100-153	scaffold	Prupe.3G243600.2	3	56,9229	0,7834	0,0137625	437,86846
ZjuHsp100-153	scaffold	Prupe.3G061400.1	3	55,35	0,8494	0,015346	425,76923
ZjuHsp100-153	scaffold	Prupe.5G122500.1	5	52,8902	0,7774	0,0146984	406,84769
ZjuHsp100-153	scaffold	Prupe.6G060800.3	6	51,5756	0,7979	0,0154705	396,73538
ZjuHsp100-154	scaffold	Prupe.5G082000.2	5	5,2928	1,1716	0,2213573	40,713846
ZjuHsp100-154	scaffold	Prupe.2G002100.1	2	53,7512	1,1148	0,02074	413,47077
ZjuHsp100-154	scaffold	Prupe.5G082000.1	5	8,5608	1,2145	0,1418676	65,852308
ZjuHsp100-155	scaffold	Prupe.7G232000.2	7	0,66	0,0705	0,1068182	5,0769231
ZjuHsp100-155	scaffold	Prupe.7G232000.1	7	0,6375	0,0742	0,1163922	4,9038462
ZjuHsp100-156	scaffold	Prupe.3G274100.1	3	2,8092	0,2831	0,100776	21,609231
ZjuHsp100-156	scaffold	Prupe.3G274200.1	3	1,9901	0,2953	0,1483845	15,308462
ZjuHsp100-156	scaffold	Prupe.5G183800.1	5	3,0128	0,2967	0,0984798	23,175385
ZjuHsp100-156	scaffold	Prupe.3G273800.1	3	0,9964	0,1658	0,166399	7,6646154
ZjuHsp100-156	scaffold	Prupe.7G159000.1	7	18,5492	0,5707	0,0307668	142,68615
ZjuHsp100-156	scaffold	Prupe.7G165500.1	7	9,516	0,5906	0,0620639	73,2
ZjuHsp100-156	scaffold	Prupe.3G274300.1	3	2,6802	0,2844	0,1061115	20,616923
ZjuHsp100-156	scaffold	Prupe.3G273900.1	3	4,2688	0,2849	0,0667401	32,836923
ZjuHsp100-156	scaffold	Prupe.4G166800.1	4	12,0655	0,5728	0,0474742	92,811538
ZjuHsp100-156	scaffold	Prupe.1G375300.1	1	7,7878	0,5539	0,0711241	59,906154
ZjuHsp100-156	scaffold	Prupe.7G158900.1	7	4,0377	0,5726	0,1418134	31,059231
ZjuHsp100-156	scaffold	Prupe.1G086500.1	1	21,6829	0,5762	0,0265739	166,79154
ZjuHsp100-156	scaffold	Prupe.2G002200.1	2	13,8279	0,587	0,0424504	106,36846
ZjuHsp100-156	scaffold	Prupe.7G159600.1	7	51,5359	0,5759	0,0111747	396,43
ZjuHsp100-156	scaffold	Prupe.8G092600.1	8	17,3164	0,6041	0,034886	133,20308
ZjuHsp100-156	scaffold	Prupe.7G159500.1	7	51,2986	0,6142	0,011973	394,60462
ZjuHsp100-156	scaffold	Prupe.7G159800.1	7	14,65	0,6331	0,043215	112,69231
ZjuHsp100-156	scaffold	Prupe.1G375300.2	1	7,1638	0,5804	0,0810185	55,106154
ZjuHsp100-156	scaffold	Prupe.7G159700.1	7	10,1538	0,6079	0,0598692	78,106154
ZjuHsp100-156	scaffold	Prupe.4G113000.1	4	6,5048	0,6721	0,1033237	50,036923
ZjuHsp100-156	scaffold	Prupe.7G160000.1	7	49,5	0,6566	0,0132646	380,76923
ZjuHsp100-156	scaffold	Prupe.7G159400.1	7	17,1327	0,57	0,0332697	131,79
ZjuHsp100-157	scaffold	Prupe.3G274100.1	3	2,8092	0,2831	0,100776	21,609231
ZjuHsp100-157	scaffold	Prupe.3G274200.1	3	1,9901	0,2953	0,1483845	15,308462
ZjuHsp100-157	scaffold	Prupe.5G183800.1	5	3,0128	0,2967	0,0984798	23,175385
ZjuHsp100-157	scaffold	Prupe.3G273800.1	3	0,9964	0,1658	0,166399	7,6646154
ZjuHsp100-157	scaffold	Prupe.7G159000.1	7	18,5492	0,5707	0,0307668	142,68615
ZjuHsp100-157	scaffold	Prupe.7G165500.1	7	9,516	0,5906	0,0620639	73,2
ZjuHsp100-157	scaffold	Prupe.3G274300.1	3	2,6802	0,2844	0,1061115	20,616923
ZjuHsp100-157	scaffold	Prupe.3G273900.1	3	4,2688	0,2849	0,0667401	32,836923
ZjuHsp100-157	scaffold	Prupe.4G166800.1	4	12,0655	0,5728	0,0474742	92,811538
ZjuHsp100-157	scaffold	Prupe.1G375300.1	1	7,7878	0,5539	0,0711241	59,906154
ZjuHsp100-157	scaffold	Prupe.7G158900.1	7	4,0377	0,5726	0,1418134	31,059231
ZjuHsp100-157	scaffold	Prupe.1G086500.1	1	21,6829	0,5762	0,0265739	166,79154
ZjuHsp100-157	scaffold	Prupe.2G002200.1	2	13,8279	0,587	0,0424504	106,36846
ZjuHsp100-157	scaffold	Prupe.7G159600.1	7	51,5359	0,5759	0,0111747	396,43
ZjuHsp100-157	scaffold	Prupe.8G092600.1	8	17,3164	0,6041	0,034886	133,20308
ZjuHsp100-157	scaffold	Prupe.7G159500.1	7	51,2986	0,6142	0,011973	394,60462
ZjuHsp100-157	scaffold	Prupe.7G159800.1	7	14,65	0,6331	0,043215	112,69231
ZjuHsp100-157	scaffold	Prupe.1G375300.2	1	7,1638	0,5804	0,0810185	55,106154
ZjuHsp100-157	scaffold	Prupe.7G159700.1	7	10,1538	0,6079	0,0598692	78,106154
ZjuHsp100-157	scaffold	Prupe.4G113000.1	4	6,5048	0,6721	0,1033237	50,036923
ZjuHsp100-157	scaffold	Prupe.7G160000.1	7	49,5	0,6566	0,0132646	380,76923
ZjuHsp100-157	scaffold	Prupe.7G159400.1	7	17,1327	0,57	0,0332697	131,79
ZjuHsp100-158	scaffold	Prupe.3G273900.1	3	1,9147	0,2716	0,1418499	14,728462
ZjuHsp100-158	scaffold	Prupe.3G274300.1	3	2,126	0,2418	0,1137347	16,353846
ZjuHsp100-158	scaffold	Prupe.3G274100.1	3	1,6947	0,2594	0,1530654	13,036154
ZjuHsp100-158	scaffold	Prupe.3G274200.1	3	1,7744	0,2534	0,1428088	13,649231
ZjuHsp100-158	scaffold	Prupe.7G159000.1	7	49,5161	0,6205	0,0125313	380,89308
ZjuHsp100-158	scaffold	Prupe.7G165500.1	7	51,5037	0,6335	0,0123001	396,18231
ZjuHsp100-158	scaffold	Prupe.3G273800.1	3	2,5043	0,2928	0,1169189	19,263846

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-158	scaffold	Prupe.5G183800.1	5	5,6204	0,3495	0,0621842	43,233846
ZjuHsp100-158	scaffold	Prupe.1G375300.1	1	14,549	0,5977	0,0410819	111,91538
ZjuHsp100-158	scaffold	Prupe.8G092600.1	8	52,1675	0,5905	0,0113193	401,28846
ZjuHsp100-158	scaffold	Prupe.1G086500.1	1	8,4882	0,6328	0,0745506	65,293846
ZjuHsp100-158	scaffold	Prupe.7G158900.1	7	50,0947	0,6026	0,0120292	385,34385
ZjuHsp100-158	scaffold	Prupe.7G159600.1	7	51,9697	0,5694	0,0109564	399,76692
ZjuHsp100-158	scaffold	Prupe.4G113000.1	4	47,4827	0,6378	0,0134323	365,25154
ZjuHsp100-158	scaffold	Prupe.7G159500.1	7	41,3075	0,6362	0,0154016	317,75
ZjuHsp100-158	scaffold	Prupe.4G166800.1	4	21,5339	0,5853	0,0271804	165,64538
ZjuHsp100-158	scaffold	Prupe.7G159800.1	7	49,5338	0,6462	0,0130456	381,02923
ZjuHsp100-158	scaffold	Prupe.7G160000.1	7	48,451	0,6379	0,0131659	372,7
ZjuHsp100-158	scaffold	Prupe.7G159700.1	7	24,9406	0,6206	0,0248831	191,85077
ZjuHsp100-158	scaffold	Prupe.2G002200.1	2	58,2758	0,6357	0,0109085	448,27538
ZjuHsp100-158	scaffold	Prupe.3G274000.1	3	1,7965	0,2362	0,1314779	13,819231
ZjuHsp100-158	scaffold	Prupe.1G375300.2	1	15,7136	0,6325	0,0402518	120,87385
ZjuHsp100-158	scaffold	Prupe.7G159400.1	7	36,0335	0,5688	0,0157853	277,18077
ZjuHsp100-158	scaffold	Prupe.7G159900.1	7	48,54	0,5985	0,01233	373,38462
ZjuHsp100-159	scaffold	Prupe.3G273900.1	3	1,9255	0,269	0,139704	14,811538
ZjuHsp100-159	scaffold	Prupe.3G274300.1	3	2,1426	0,2402	0,1121068	16,481538
ZjuHsp100-159	scaffold	Prupe.3G274100.1	3	1,7045	0,2568	0,15066	13,111538
ZjuHsp100-159	scaffold	Prupe.3G274200.1	3	1,7841	0,2519	0,1411916	13,723846
ZjuHsp100-159	scaffold	Prupe.7G159000.1	7	50,4608	0,6222	0,0123304	388,16
ZjuHsp100-159	scaffold	Prupe.7G165500.1	7	51,0227	0,6355	0,0124552	392,48231
ZjuHsp100-159	scaffold	Prupe.3G273800.1	3	2,5142	0,29	0,1153448	19,34
ZjuHsp100-159	scaffold	Prupe.5G183800.1	5	5,7669	0,3479	0,060327	44,360769
ZjuHsp100-159	scaffold	Prupe.1G375300.1	1	14,4571	0,6004	0,0415298	111,20846
ZjuHsp100-159	scaffold	Prupe.1G086500.1	1	8,1695	0,6372	0,0779974	62,842308
ZjuHsp100-159	scaffold	Prupe.8G092600.1	8	52,1004	0,5931	0,0113838	400,77231
ZjuHsp100-159	scaffold	Prupe.7G158900.1	7	50,0207	0,6055	0,012105	384,77462
ZjuHsp100-159	scaffold	Prupe.2G002200.1	2	58,1183	0,6367	0,0109552	447,06385
ZjuHsp100-159	scaffold	Prupe.4G113000.1	4	44,0535	0,6409	0,0145482	338,87308
ZjuHsp100-159	scaffold	Prupe.7G159500.1	7	41,3154	0,6445	0,0155995	317,81077
ZjuHsp100-159	scaffold	Prupe.4G166800.1	4	21,642	0,5856	0,0270585	166,47692
ZjuHsp100-159	scaffold	Prupe.7G160000.1	7	48,3101	0,6565	0,0135893	371,61615
ZjuHsp100-159	scaffold	Prupe.7G159800.1	7	49,4823	0,6493	0,0131219	380,63308
ZjuHsp100-159	scaffold	Prupe.7G159700.1	7	24,4598	0,625	0,0255521	188,15231
ZjuHsp100-159	scaffold	Prupe.7G159600.1	7	51,9173	0,5725	0,0110272	399,36385
ZjuHsp100-159	scaffold	Prupe.3G274000.1	3	1,809	0,2352	0,1300166	13,915385
ZjuHsp100-159	scaffold	Prupe.1G375300.2	1	15,7028	0,6355	0,0404705	120,79077
ZjuHsp100-159	scaffold	Prupe.7G159400.1	7	36,8941	0,5719	0,0155011	283,80077
ZjuHsp100-159	scaffold	Prupe.7G159900.1	7	48,4651	0,6015	0,012411	372,80846
ZjuHsp100-160	scaffold	Prupe.1G086500.1	1	54,8615	0,6818	0,0124277	422,01154
ZjuHsp100-160	scaffold	Prupe.2G002200.1	2	60,7126	0,5732	0,0094412	467,02
ZjuHsp100-160	scaffold	Prupe.2G193700.1	2	2,3489	0,3065	0,1304866	18,068462
ZjuHsp100-160	scaffold	Prupe.2G315800.1	2	1,4772	0,1411	0,0955185	11,363077
ZjuHsp100-160	scaffold	Prupe.7G159800.1	7	51,1229	0,7042	0,0137746	393,25308
ZjuHsp100-160	scaffold	Prupe.1G375300.1	1	36,0512	0,7262	0,0201436	277,31692
ZjuHsp100-160	scaffold	Prupe.7G158900.1	7	53,5304	0,7664	0,0143171	411,77231
ZjuHsp100-160	scaffold	Prupe.8G092600.1	8	51,4981	0,7039	0,0136685	396,13923
ZjuHsp100-160	scaffold	Prupe.5G183800.1	5	55,9457	0,763	0,0136382	430,35154
ZjuHsp100-160	scaffold	Prupe.7G159000.1	7	50,4321	0,7757	0,0153811	387,93923
ZjuHsp100-160	scaffold	Prupe.7G159700.1	7	52,0713	0,7318	0,0140538	400,54846
ZjuHsp100-160	scaffold	Prupe.7G160000.1	7	55,1153	0,7036	0,012766	423,96385
ZjuHsp100-160	scaffold	Prupe.4G113000.1	4	16,6782	0,7358	0,0441175	128,29385
ZjuHsp100-160	scaffold	Prupe.7G159500.1	7	54,2461	0,7326	0,0135051	417,27769
ZjuHsp100-160	scaffold	Prupe.7G159900.1	7	52,9812	0,772	0,0145712	407,54769
ZjuHsp100-160	scaffold	Prupe.7G165500.1	7	52,6378	0,7139	0,0135625	404,90615
ZjuHsp100-160	scaffold	Prupe.3G273900.1	3	55,5361	0,7299	0,0131428	427,20077
ZjuHsp100-160	scaffold	Prupe.7G159600.1	7	53,4549	0,7017	0,013127	411,19154
ZjuHsp100-160	scaffold	Prupe.3G274300.1	3	57,2774	0,7229	0,012621	440,59538
ZjuHsp100-160	scaffold	Prupe.3G274100.1	3	55,733	0,7128	0,0127896	428,71538
ZjuHsp100-160	scaffold	Prupe.3G273800.1	3	56,2685	0,7161	0,0127265	432,83462
ZjuHsp100-160	scaffold	Prupe.3G274200.1	3	56,0847	0,7272	0,0129661	431,42077
ZjuHsp100-161	scaffold	Prupe.8G090700.2	8	2,3581	0,0281	0,0119164	18,139231
ZjuHsp100-161	scaffold	Prupe.8G090700.1	8	2,4044	0,0187	0,0077774	18,495385
ZjuHsp100-161	scaffold	Prupe.6G039300.1	6	52,9655	0,5695	0,0107523	407,42692
ZjuHsp100-161	scaffold	Prupe.8G208900.1	8	3,5129	0,5699	0,1622306	27,022308
ZjuHsp100-161	scaffold	Prupe.3G030100.1	3	57,002	0,5476	0,0096067	438,47692
ZjuHsp100-161	scaffold	Prupe.7G237100.1	7	54,8187	0,5236	0,0095515	421,68231

Table S3.6 Continued

ID	Chromosome	Gene IDs	Chromosome	Ks	Ka	Ka/Ks	Mya
ZjuHsp100-161	scaffold	Prupe.6G233700.1	6	54,756	0,786	0,0143546	421,2
ZjuHsp100-161	scaffold	Prupe.6G233700.2	6	54,757	0,786	0,0143543	421,20769
ZjuHsp100-161	scaffold	Prupe.6G320300.1	6	54,7804	0,5456	0,0099598	421,38769
ZjuHsp100-161	scaffold	Prupe.2G111300.2	2	45,1338	0,4937	0,0109386	347,18308
ZjuHsp100-161	scaffold	Prupe.2G111300.1	2	48,9077	0,5634	0,0115197	376,21308
ZjuHsp100-162	scaffold	Prupe.3G274300.1	3	1,9401	0,254	0,1309211	14,923846
ZjuHsp100-162	scaffold	Prupe.3G274200.1	3	1,4791	0,2757	0,1863971	11,377692
ZjuHsp100-162	scaffold	Prupe.5G183800.1	5	7,7982	0,3416	0,043805	59,986154
ZjuHsp100-162	scaffold	Prupe.3G273800.1	3	2,9499	0,3044	0,1031899	22,691538
ZjuHsp100-162	scaffold	Prupe.3G273900.1	3	1,6728	0,2648	0,1582975	12,867692
ZjuHsp100-162	scaffold	Prupe.3G274100.1	3	1,5263	0,2603	0,1705431	11,740769
ZjuHsp100-162	scaffold	Prupe.1G086500.1	1	6,8747	0,659	0,0958587	52,882308
ZjuHsp100-162	scaffold	Prupe.7G165500.1	7	17,7326	0,658	0,0371068	136,40462
ZjuHsp100-162	scaffold	Prupe.1G375300.1	1	9,8295	0,5835	0,0593621	75,611538
ZjuHsp100-162	scaffold	Prupe.7G159000.1	7	18,9941	0,6176	0,0325154	146,10846
ZjuHsp100-162	scaffold	Prupe.7G159500.1	7	31,645	0,6461	0,0204171	243,42308
ZjuHsp100-162	scaffold	Prupe.8G092600.1	8	39,1531	0,6259	0,015986	301,17769
ZjuHsp100-162	scaffold	Prupe.4G166800.1	4	11,9384	0,6107	0,0511543	91,833846
ZjuHsp100-162	scaffold	Prupe.7G158900.1	7	50,9119	0,6082	0,0119461	391,63
ZjuHsp100-162	scaffold	Prupe.2G002200.1	2	55,8375	0,679	0,0121603	429,51923
ZjuHsp100-162	scaffold	Prupe.4G113000.1	4	33,8528	0,6273	0,0185302	260,40615
ZjuHsp100-162	scaffold	Prupe.7G159700.1	7	17,1625	0,6314	0,0367895	132,01923
ZjuHsp100-162	scaffold	Prupe.7G159600.1	7	28,6937	0,6025	0,0209976	220,72077
ZjuHsp100-162	scaffold	Prupe.7G159900.1	7	48,3386	0,6115	0,0126503	371,83538
ZjuHsp100-162	scaffold	Prupe.7G160000.1	7	49,4007	0,5882	0,0119067	380,00538
ZjuHsp100-162	scaffold	Prupe.7G159800.1	7	43,2948	0,6029	0,0139255	333,03692
ZjuHsp100-162	scaffold	Prupe.3G274000.1	3	1,5616	0,2443	0,1564421	12,012308
ZjuHsp100-162	scaffold	Prupe.7G159400.1	7	19,0166	0,5996	0,0315303	146,28154
		Mean		28,1595	0,61416	0,38545425	216,6117742