

*EVALUATION OF THE FINDS RECOVERED FROM THE UNDERWATER RESCUE  
EXCAVATION OF THE KEKOVA ISLAND SHALLOW REEF EASTERN WRECK*

*KEKOVA ADASI SIĞ RESİF DOĞU BATIĞI SUALTI KURTARMA KAZISINDA ELE GEÇEN  
BULUNTULARIN DEĞERLENDİRİLMESİ*

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**Abstract:** Kekova Island is near Üçağız village within the borders of the Demre District of Antalya Province. Since 2012, researches have been carried out both on the island and underwater. In the underwater surveys conducted in 2016, a new wreck area was identified. The wreck area is located very near the Basket-handled Amphora Wreck, which is off the Tersane Bay and dates from the Archaic Period. Due to its location, despite the region's intense sea traffic, some of the terracotta vessels in the cargo of this shipwreck have survived intact to today. Since the discovery and protection of these cultural assets is of great importance, a rescue excavation was performed in this priority area, which awaits urgent intervention. To determine the exact types of pottery vessels intact in the area it was investigated with scientific-systematic methods and they were brought to the surface employing suitable methods and techniques. They were then placed in desalination tanks installed in the museum environment.

Within the scope of this underwater rescue excavation, amphorae, terracotta kitchen vessels, objects for ship use, some vessel forms of undetermined origins, bronze vessels and metal objects were identified. The finds were studied to determine their origin, function and date. The pottery vessels and objects obtained as a result of this rescue work were examined in detail and are introduced to the world of science.

**Keywords:** Kekova Island • Shallow Reef Eastern Wreck • Underwater Rescue Excavation • Amphorae • Vessels and Objects for Ship Use

**Öz:** Kekova Adası, Antalya İli Demre İlçesi sınırları içerisinde Üçağız Köyü yakınlarında yer almaktadır. 2012 yılından itibaren hem ada üzerinde hem de sualtında araştırmalar gerçekleştirilmiştir. 2016 yılında yapılan sualtı araştırmalarında ise yeni bir batık alanı tespit edilmiştir. Batık alanı; Tersane Koyu açıklarında bulunan ve Arkaik Dönem'e tarihlenen Sepet Kulplu Amphora Batığı'na çok yakın bir konumda yer almaktadır. Bulunduğu konum itibari ile bölgenin yoğun deniz trafiğine rağmen batığın kargosunda yer alan pişmiş toprak kapların bazıları şans eseri günümüze kadar sağlam olarak koruna gelmiştir. Söz konusu kültür varlıklarının tespiti kadar korunması da büyük önem arz etmesinden dolayı acil müdahale bekleyen öncelikli bu alan için kurtarma kazısı gerçekleştirilmiştir. Alanda sağlam durumda bulunan pişmiş toprak kapların bilimsel-sistemik yöntemlerle tam niteliklerinin araştırılması için uygun yöntem ve tekniklerle su üstüne çıkartılmıştır. Sonrasında müze ortamında kurulan tuzdan arındırma tanklarına yerleştirilmiştir.

Sualtı kurtarma kazısı kapsamında batık alanında; amphoralar, pişmiş toprak mutfak kapları, gemi kullanımına ait objeler, kökeni tespit edilemeyen bazı kap formları ile bronz kaplar ve metal objeler tespit edilmiştir. Tespit edilen buluntular; köken, işlev ve tarih olarak ele alınmıştır. Tüm yapılan çalışmalar neticesinde ele geçen pişmiş toprak kap ve objeler detaylı olarak incelenmiş ve bilim dünyasına tanıtılmaya çalışılmıştır.

**Anahtar Kelimeler:** Kekova Adası • Topuk Doğu Batığı • Sualtı Kurtarma Kazısı • Amphoralar • Gemi Kullanımına ait Kap ve Objeler

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## Introduction

Kekova Island is in an important position due both to its proximity to the cities of Lycia and because of its location on the east-west transit route for mariners. The island forms a natural embankment with its length of 8 km and creates scarce natural harbour areas for sailors in the region in the space between the island and the mainland (Fig. 1). Kekova Island and its surroundings in the Lycia Region, which are understood to have been the scene of intense sea traffic throughout ages, continues to be a safe harbour where seafarers take refuge even today. Surveys were carried out both on the island and underwater between 2012-2019 in order to identify any ships that had sunk off the shores of Kekova Island and the underwater cultural assets of the island's coastal settlements. Within the scope of these studies, it was understood that there was another shipwreck in the same area during the studies conducted around the Archaic Period Basket-handled Amphora Shipwreck, which had been found previously, located off the settlement area called Tersane Bay and which is thought to have sunk by hitting the underwater mountain (Siğ Resif). The newly detected wreck area starts from 10 m deep on the eastern slope of the underwater mountain and spreads down to a depth of 22 m (Fig. 2). The region where the wreck is located is in an area where strong bottom currents are experienced from east to west, especially during the spring and autumn months. Therefore, it was observed that some cultural assets in the area where the wreck is located, which have survived to the present day became exposed due to periodic bottom currents and that some had even been dragged by these currents. An underwater rescue excavation headed by the Lycian Civilizations Museum Directorate was carried out in 2018 aimed at the documentation and protection of the cultural assets that were exposed through these bottom currents<sup>1</sup>.

The underwater rescue excavations and the stages of the finds after they were removed from the underwater were carried out with systematic monitoring<sup>2</sup>. The conservation and restoration pro-

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<sup>1</sup> The Excavations undertaken for these studies were financially supported by the Ministry of Culture and Tourism, General Directorate of Cultural Heritage and Museums, and Survey Explorations were financially supported by Koç University Suna & İnan Kırac Mediterranean Civilizations Research Institute (AKMED) (Project No: KU AKMED 2018 / P.1015).

<sup>2</sup> Rescue excavation consisted of more than one working phase. The first stage of excavations focused on detailed documentation consists of photo mosaic, that is, the orthophoto of the area to be studied. The fact that the area to be studied was underwater on a slope led to a very difficult process for orthophoto. However, despite these difficulties, the orthophoto could be formed from plastic plates measuring 15 x20 cm with reference symbols on them. The second stage was the preparation of a grid system in the Shallow Reef East area. This grid system consists of 36 squares measuring 4 m x 4 m, with 36 m an east - west direction and 16 m in a north - south direction. Within the framework of our studies, the grid system was actually installed underwater and eighteen trenches were created in the first stage. These trenches are in two parallel lines starting from A4 and extending to A12 and starting from B4 and extending to B12 in the grid system. In the later stage of the study, new areas were created parallel to the A and B grid system with the letter "C" and "D" towards the north. As it was with other trenches, works were carried out in new trenches C8 and D8, consisting of 36 trenches measuring 4 m x 4 m (Fig. 3). The final stage in the area documented in detail with both orthophoto and grid co-ordinates consisted of the removal of the surface finds. Each square in the grid system created in the area was examined from the surface in detail, then the surface finds were photographed, numbered and labelled. Within the square frames, various finds were recovered in the studies carried out in trenches A7, B7, B6, B10, C8 and D8. The surface finds, labelled by numbering, were brought to the water surface with the help of a lifting balloon and were moved to the water tanks in the museum for desalination.

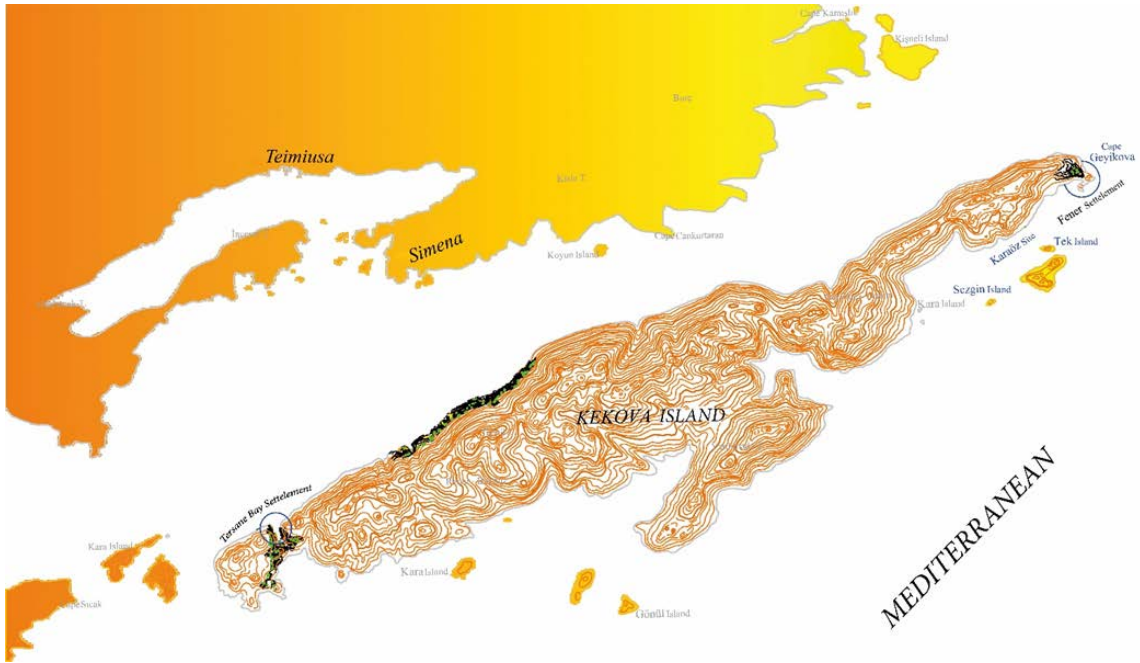


Fig. 1. Kekova Island and Localization

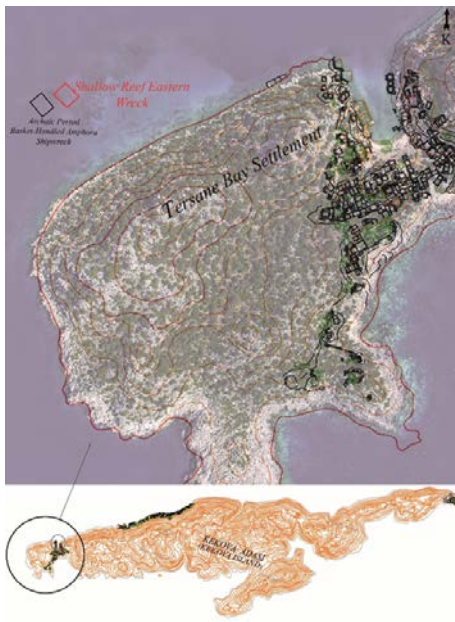


Fig. 2. Kekova Island Shallow Reef Eastern Wreck Map

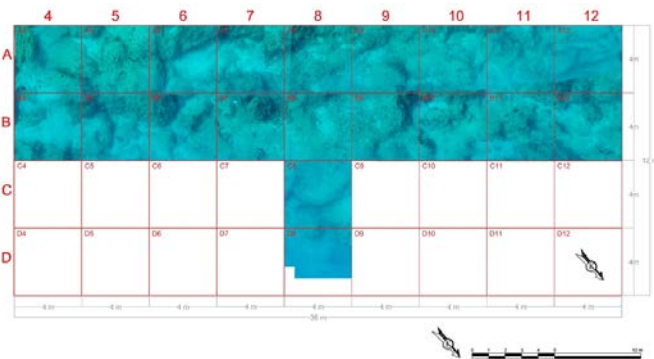


Fig. 3. Orthophoto and Grid of the Area

cesses of the finds extracted from the area are still being in progress by experts from the Ministry of Culture and Tourism, Antalya Restoration and Conservation Regional Laboratory Directorate under the roof of the Lycian Civilizations Museum Directorate.

Among the finds from the underwater rescue excavation are various objects such as commercial amphorae, daily use vessels (pitchers, pans, pieces of various vessels and objects), terracotta bricks, knife sharpening stones (tableware), bronze vessels, metal sword grips, an axe and examples of amorphous metal slag. As a matter of fact, when the vessels for ship use are studied, undoubtedly the most remarkable group is formed by wide bodied, long necked vessels whose origin and form cannot be established. These vessels of four different forms in total, are divided into two main groups. Even though these vessels, which are evaluated by being grouped separately according to their similarities and differences, are not forms that have been encountered to date and no studies regarding their origin, functions and dates have been found to date. In this context, in our study, the forms whose origin and date can be determined starting from the amphorae and then the forms whose origin and date cannot be determined are introduced. In addition, those vessels and objects from the area that are thought to belong to the kitchen part of the ship were examined under separate headings. By making detailed definitions of the investigated finds, dating suggestions were made through their counterparts. As a result of all the work done, the attempt to establish the origin and history of the Kekova Island *Shallow Reef* Eastern Wreck was undertaken based upon the recovered finds.

## AMPHORAE

### LR 1 B Amphorae

Such amphorae, also known as Kuzmanov XIII, Carthage LR 1, Ballana 6, Scorpan 8B, Benghazi LR 1, Keay LIII, represent a group of Cilician origin<sup>3</sup>. LR 1 forms, which were not limited to the production made in the Cilicia Region, were also produced in different regions<sup>4</sup>. LR 1 amphorae were spread widely in the Black Sea, Aegean and especially in the Mediterranean<sup>5</sup>. Although there are many opinions about the reason for this spread,<sup>6</sup> considering the analyses made on the amphorae and the modern amphorae produced in similar periods, it is thought to have been predominantly

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<sup>3</sup> Regarding the production areas on a regional basis (Tarsus, Soli, Corycus Elaiussa Sebaste, Magarsus *et al.*) see Empereur – Picon 1989, 239, Fig. 18; Opait 2004, 295, Fig. 4; Burragato *et al.* 2007, 690-691; Autret *et al.* 2010, 203-207.

<sup>4</sup> For other regions (Aigai, Antiocheia, Seleucia, Zygi-Petrini, Paphus, Amathous, Courium, Rhodus and İçmeler (Marmaris), Cos, Parus *et al.*) see Empereur – Picon 1989, 239, Fig. 18; Michaelides 1996, 149; Manning *et al.* 2000, 255; Jacobsen 2004, 145; Diamanti 2010, 1; 2016, 691. Also for the recent works conducted, see Şenol – Alkaç 2017, 831-842.

<sup>5</sup> Şenol 2008, 114-116.

<sup>6</sup> For suggestions that LR 1 amphorae were produced in more than one city, see Durukan 2015, 241-257.

spread by the trade in olive oil<sup>7</sup> and wine<sup>8</sup>. Consequently, on this basis, it can be said that both wine and olive oil were traded in LR 1 amphorae<sup>9</sup>. Olive oil and wine, the most important export products of the period were spread as far as Tunisia, Spain, Italy, Wales and southwest England in the Western Mediterranean<sup>10</sup>, foremost being the important centres of LR 1 in Eastern Mediterranean<sup>11</sup>. It is observed that this type spread up to the Black Sea Region, foremost in Anatolia, being İstanbul<sup>12</sup>.

Two LR 1 B amphorae were found in this study<sup>13</sup>. A part of the mouth, handle, neck, and body of these amphorae, which are covered with shipworms in places, survived. These types of amphorae have a slightly pulled-out rounded rim, a wide neck, oval-shaped handles starting from the bottom of the lip and unite on the shoulder, an ovoid body structure, rather frequent grooves on the body and a rounded bottom. On the other hand, the likes of LR 1 B amphorae were dated at the first half of the V<sup>th</sup> century A.D. in the Marmaris Museum<sup>14</sup>, the period between the V<sup>th</sup> and VI<sup>th</sup> centuries in the Taşucu Museum (AETAM)<sup>15</sup> the VI<sup>th</sup> century in the excavations made in Alexandria<sup>16</sup> and Marseilles<sup>17</sup> and between the VI<sup>th</sup> and VII<sup>th</sup> centuries at Elaiussa Sebaste<sup>18</sup>, in Chersonesus<sup>19</sup>, at Beirut<sup>20</sup> at the Silifke Museum<sup>21</sup>, at the Graeco-Roman Museum<sup>22</sup> in Phaselis underwater research<sup>23</sup>, at Kekova Island Karaöz Location<sup>24</sup>, and again in front of the North Settlement of Kekova Island<sup>25</sup>. Based upon the similarities of the LR 1 B amphorae found in the study, the end of the V<sup>th</sup> century A.D. is sug-

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- <sup>7</sup> The olive beans found in the LR 1 amphorae recovered in the Yassıada Shipwreck indicate that an olive-related trade was carried out. See Bass – Doorninck 1982, 164-165.
- <sup>8</sup> Again, the emergence of grape seeds in another group of LR 1 amphorae recovered in Yassı Ada Shipwreck reveal that the amphorae in question were also used in wine trade in the VII<sup>th</sup> century Bass – Doorninck 1971, 27-37; Liebeschuetz 1972, 68.
- <sup>9</sup> It is believed that wine and olive oil production was made due to the seals on the handles of the LR1 1 amphorae recovered in Corycus, a seaport in Cilicia and that these products were accordingly transported. See Alkaç 2012, 323-235.
- <sup>10</sup> Some important consumption centres such as Egypt and Carthage.
- <sup>11</sup> In addition, these types of amphorae were transported to the hinterland of Europe along the Danube River. See Alkaç 2012, 326.
- <sup>12</sup> Peacock – Williams 1986, 186.
- <sup>13</sup> For all forms, see Pieri 1998, 97-99, Fig. 2.
- <sup>14</sup> Şenol 2003, 88, Cat. 30.
- <sup>15</sup> Şenol 2009, 231-238, Cat. No. 57, 59-67.
- <sup>16</sup> Şenol 2007, 6, Fig. 1.
- <sup>17</sup> Bonifay – Pieri 1995, 108.
- <sup>18</sup> Kızırlıslanoğlu 2016, 361-366, Cat. No. 64-69.
- <sup>19</sup> Sazanov 2000, 124-126, Fig. 2.
- <sup>20</sup> Pieri 2007, 3, Fig. 4, No. 2.
- <sup>21</sup> Alkaç 2013, 114-115, Cat. 7, Fig. 9.
- <sup>22</sup> Şenol 2018, 516-520, No. 436-443, Fig. 436-443.
- <sup>23</sup> Orhan 2017, 146.
- <sup>24</sup> Aslan 2015, 354, Cat. 18.
- <sup>25</sup> Orhan 2018, 42, Fig. 29, Cat. No. 21.

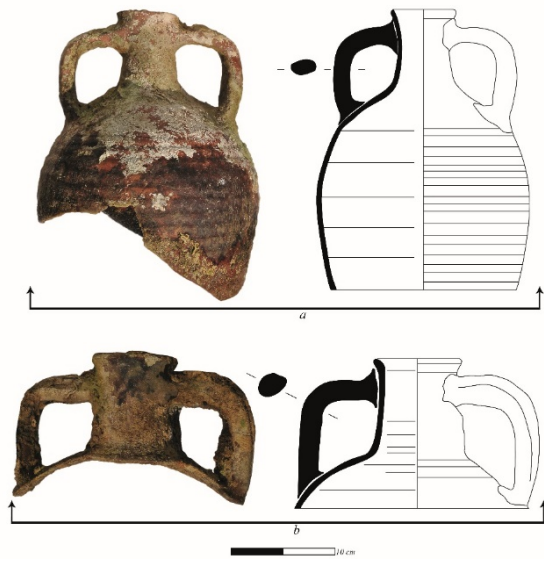


Fig. 4. *a, b-LR 1 B Amphorae* (Cat. No. 1-2)

gested for the first form<sup>26</sup>, and the VI<sup>th</sup> and VII<sup>th</sup> centuries are suggested for the second form<sup>27</sup> (Cat. No. 1, Cat. No. 2 - Fig. 4a, 4b).

### AE 5-6 Amphora

These types of amphorae, also known as Late Roman 5-6 (LR 5-6)<sup>28</sup> were produced in the Levant Region and in Egypt. Regarding AE 5-6 amphorae, produced between the V<sup>th</sup> and XII<sup>th</sup> centuries, it was found that amphorae with similar shapes were produced in the workshops on the shore of Lake Mareotis, south of Alexandria<sup>29</sup> and in the excavations carried out outside Mareotis at Abou Mena<sup>30</sup> and in<sup>31</sup> Kellia<sup>32</sup>. Many AE 5-6 amphorae in Egypt are thought to have been used for the transportation of wine, which was the city's most important export

product<sup>33</sup>. Despite the fact that this type of amphora, which spreads over a very wide area was mostly found in centres in the Eastern Mediterranean, it was also found in most of the centres in North Africa, the Western Mediterranean, mainland Greece and on the Anatolian coasts<sup>34</sup>.

Some parts of the mouth, handle and body of the AE 5-6 type amphora, which we obtained in our study were in places covered in shipworm remains. As a form, it has an extended pull-out elongated rim, conical shaped shoulders that expand towards the body, grooved, rounded vertical handles on the shoulder, a pouch-shaped body with thin grooves on it, and a rounded bottom. The likes of the amphora of this form are found at the Alexandria Museum, dated to between the V<sup>th</sup> and VI<sup>th</sup> centuries<sup>35</sup>, during excavations at Elaiussa Sebaste dated to the first half of the VI<sup>th</sup> century<sup>36</sup>, at

<sup>26</sup> For similar examples, see Swan 2004, 372, Fig. 1; Şenol 2009, 231, No. 57.

<sup>27</sup> Alkaç 2015, 151, Fig. 2-11. Also for dating suggestions, see Alkaç 2012, 328- 332.

<sup>28</sup> Other known names; Carthage LR 5-6, Peacock – Williams 46, Riley LR 4, Egloff 187.

<sup>29</sup> In the analysis, it was understood regarding this type, which has two types of clay, the ones in the first group with abundant calcareous, well baked, made with Mareotis Lake clay and the samples separated as Abou Mena production had a similar clay structure. See Ballet 1993, 16. The second group produced in Central Egypt was found to be produced from dark red coloured alluvial clay, see Şenol 2009, 273-274, Env. No. T007.

<sup>30</sup> Şenol 2009, 273.

<sup>31</sup> The production of Abou Mena AE 5-6 amphorae, recovered densely in Egypt, Kellia is known as Egloff 186 with the name of the person who carried out the excavation. See Egloff 1977, 117-119.

<sup>32</sup> Ballet 1995, 59, Fig. 16.

<sup>33</sup> That there are wine presses dated to the VI<sup>th</sup> century in Ain El-Jedi and to the VII<sup>th</sup> and VIII<sup>th</sup> centuries in El-Kursi also reveals the role of wine in the city's export and supports the view that the AE 5-6 amphorae carried wine. See Zemer 1977, 69-70; Şenol 2018, 139.

<sup>34</sup> Riley 1979, 224-225; Peacock – Williams 1986, 191; Alkaç 2013, 116-117.

<sup>35</sup> Empereur – Picon 1999, 78, Fig. 5,

<sup>36</sup> Ferrazzoli – Ricci 2007, 679.

Taşucu<sup>37</sup>, Marmaris<sup>38</sup>, and Bodrum Museums<sup>39</sup>, and in front of the Kekova Island Northern Settlement<sup>40</sup> Area<sup>41</sup>. AE 5-6 amphora found at Phaselis South Harbour pier was dated to the VI<sup>th</sup> and VII<sup>th</sup> centuries<sup>42</sup>, and a similar type of AE 5-6 amphora found in the Graeco-Roman Museum was dated between the middle of VII<sup>th</sup> century and the beginning of VIII<sup>th</sup> century<sup>43</sup>. For the similar type of AE 5-6 amphora obtained from the Kekova underwater rescue excavation, a date in the VII<sup>th</sup>-VIII<sup>th</sup> century range is suggested<sup>44</sup> (Cat. No. 3 - Fig. 5).



Fig. 5. AE 5-6 Amphora (Cat. No. 3)

### AE 7 Amphora<sup>45</sup>

The AE 7 type, which is one of the amphorae with the lowest capacity, specific to Egyptian origin amphorae, was produced in many workshops in central Egypt<sup>46</sup>. Around the Nile delta, especially in the regions of Oxyrhyncus, Antinooupolis, Hermoupolis and Lac Mariout<sup>47</sup> while production workshops of these types of amphorae have been identified<sup>48</sup>. AE 7 amphorae commonly used in the wine trade are spread to different regions<sup>49</sup>, mainly Egypt and its surroundings<sup>50</sup>, to the centres

<sup>37</sup> Şenol 2009, 272-274.

<sup>38</sup> Şenol 2003, 125-127.

<sup>39</sup> Alpözen *et al.* 1995, 65.

<sup>40</sup> Aslan 2015, 359.

<sup>41</sup> The AE 5-6 amphora included in the study constitutes the latest example of all the AE 5-6 amphorae detected in the Kekova underwater surveys. For another one detected, see Orhan 2018, Cat. No. 29, Fig. 37.

<sup>42</sup> Orhan 2017, 144, Fig. 3-4.

<sup>43</sup> Şenol 2018, 157, No. 98.

<sup>44</sup> Also see, Empereur – Picon 1992, 150-152, Fig. 8-9.

<sup>45</sup> Other names, Egloff 173-177, Peacock – Williams Class 52 and LR 7 and also the AE 7 amphora in question took part in a different study within the scope of the Kekova underwater surveys. For this amphora detected in underwater research, see Orhan 2018, Fig. 138, Cat. No. 30.

<sup>46</sup> Riley 1979; Peacock – Williams 1986, 204; Sciallano – Sibella 1991, 105; Şenol 2009, 171.

<sup>47</sup> For the map of the production workshops of the AE 7 amphorae, see Pieri 2005, 132, Fig. 87.

<sup>48</sup> Ballet – Picon 1987, 36-38; Empereur – Picon 1989, 244-245, Fig. 28; Şenol 2009, 172; Hill 2016, 23-24.

<sup>49</sup> The presence of resin traces in some AE 7 amphorae found in different centres reinforces the idea that wine was exported. See Şenol 2000, 260; Also for different workshops and forms of this type of amphora carrying wine, see Pierrat 1996, 193-195, Fig. 34-36; For the products transported, see Peacock – Williams 1986, 204; Sciallano – Sibella 1991, 105.

<sup>50</sup> For its counterparts recovered in Kom el-Dikka in Alexandria, see Majcherek – El-Shennawi 1992, 123-136.



Fig. 6. AE 7 Amphora (Cat. No. 4)

in the Eastern Mediterranean<sup>51</sup> and to Carthage<sup>52</sup>, as also to centres in the Western Mediterranean<sup>53</sup> and Britain<sup>54</sup>. The AE 7 amphora obtained in our study draw attention having an ovoid bulging body and dense-thick grooves. The mouth, handles and bottom of the amphora in question, in part covered by a layer of shipworm remains, has survived in fractured form. When the AE 7 amphorae are considered as forms, it is seen that they have a rounded rim, cylindrical oval neck, oval-shaped handles starting below the mouth and uniting over the shoulders, wide ovoid, grooved body and a base that tapers by narrowing towards the bottom<sup>55</sup>.

Amphorae of this type are stated to have been produced between the IV<sup>th</sup> and VI<sup>th</sup> centuries<sup>56</sup> were dated between IV<sup>th</sup> and VI<sup>th</sup> and VII<sup>th</sup> centuries in Egypt, Kellia<sup>57</sup>, between the end of VI<sup>th</sup> century and VII<sup>th</sup> century in the Greco-Roman Museum<sup>58</sup> during between the end of V<sup>th</sup> century and VII<sup>th</sup> century in the excavations made in Arles and Marseilles<sup>59</sup> and to the middle of the VII<sup>th</sup> century in Baramus<sup>60</sup>. Regarding the AE 7 amphora in our study, the VII<sup>th</sup> century is suggested based upon its resemblance in<sup>61</sup> the Greco-Roman Museum<sup>62</sup> (Cat. No. 4 - Fig. 6).

### AE 8 Amphora

AE 8 amphorae are considered as imitations of LR 1 amphorae or similar produced amphorae<sup>63</sup>.

<sup>51</sup> For similar recovered in Paphos in Cyprus, see Ballet 1993, 17.

<sup>52</sup> Peacock – Williams 1986, 204; Hill 2016, 23.

<sup>53</sup> For the distribution to the centres in the Western Mediterranean during the V<sup>th</sup> century and later, see Bonifay 1986, 292; Pieri 1998, 104; for AE 7 amphorae found in underwater surveys conducted in Santa Severa, near Rome, see Tomber – Williams 2000, 45-46; Şenol 2000, 259-260.

<sup>54</sup> For the complete distribution, see also Tomber – Williams 2000, 47-48, Fig. 3.

<sup>55</sup> When these forms are examined in general, it can be seen that the body narrows in some periods and widens in some others. These changes are said to differ according to the period and the place of production. See Peacock – Williams 1986, 204, Fig. 122; Pieri 1998, 103-104 Fig. 7; Konstantinidou 2010, 959, Fig. 7.24-27; Hill 2016, 23-24. In addition, the constant change of this type throughout the years of its production made it difficult to create a certain chronology and typology. See Pieri 1998, 103.

<sup>56</sup> Şenol 2009, 171-172.

<sup>57</sup> Peacock – Williams 1986, 204, Fig. 122.B; Sciallano – Sibella 1991, 105, Kellia.

<sup>58</sup> Şenol 2018, 168-174, No. 139-145, Fig. 139-145.

<sup>59</sup> Pieri 1998, 104.

<sup>60</sup> Konstantinidou 2010, 952, Fig. 6-7, 22-27.

<sup>61</sup> Şenol 2018, No. 145, Fig. 145.

<sup>62</sup> For similar, see also Pieri 2005, 132, Fig. 86.

<sup>63</sup> Within the AE 8 amphorae, LR 1 group, especially the LR 1 amphorae are considered to be Egyptian imitations or local production amphorae; for the Kellia production of this type, see Ballet – Picon 1987, 19-24, Fig. 2.1; for Bawit (Egypt) see Marchand – Dixneuf 2007, 334, Fig. 21-23; see also Şenol 2018, 190.



Again, such amphorae were identified as a result of the studies conducted in two production centres in Saqqâra in Sinai and Musa in Ouyoun<sup>64</sup>. In addition, these amphorae were recovered in the Wadi Natrun in Egypt<sup>65</sup>. The presence of resin residues in the AE 8 amphorae that we encounter locally in terms of distribution suggests that olive oil and wine were transported in this type of amphora<sup>66</sup>.

The AE 8 amphora type obtained was described as the late series of Egyptian amphorae and this form was classified into two main groups. The first form in two main groups is AE 8.1 type with spherical body<sup>67</sup>, and the second form is AE 8.2 type, reminiscent of the LR 1 B form<sup>68</sup>. The first subgroup, AE 8.1, also shows three different forms in itself and is classified into A, B and C sub-types<sup>69</sup>.

The AE 8 amphora found in the study has been recovered in a relatively good condition, except for minor deformations in the mouth, neck and body. As an amphora form, which is covered with shipworm remains in places, it has a pulled-out rim, a wide cylindrical neck, oval-shaped handles that begin at the middle of the mouth neck and join at the shoulder, an ovoid body and a round base. In addition, on the outer surface of the amphora, there are grooves starting from the bottom of the lip and extending to the base.

The likes of this type were dated VI<sup>th</sup>-VII<sup>th</sup> centuries at AETAM<sup>70</sup>, to the VII<sup>th</sup>-VIII<sup>th</sup> centuries in the Greco-Roman Museum<sup>71</sup>, to the end of the VII<sup>th</sup> century and the beginning of the VIII<sup>th</sup> century in Kellia<sup>72</sup>, and its like in Baouit were dated to between the VII<sup>th</sup> and VIII<sup>th</sup> centuries<sup>73</sup>. Regarding the AE 8 form detected in our study, a date in the VII<sup>th</sup>-VIII<sup>th</sup> century is suggested<sup>74</sup> (Cat. No. 5 - Fig. 7).

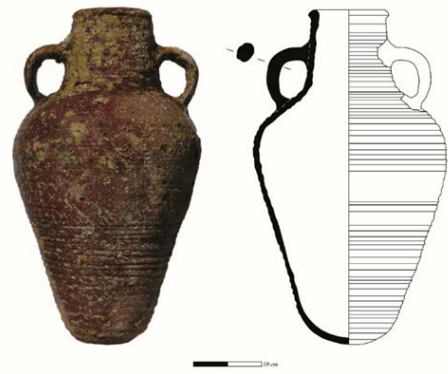


Fig. 7. AE 8 Amphora (Cat. No. 5)

<sup>64</sup> Dixneuf 2011, 179.

<sup>65</sup> Konstantinidou 2010, 952.

<sup>66</sup> Starting from the middle of the IV<sup>th</sup> century to the middle of the VII<sup>th</sup> century, olive oil and wine were transported in R 1 amphorae imported to Egypt. As a matter of fact, it can be interpreted that the products in question were carried in the AE 8 amphorae, which we find as imitation or local production of LR 1 amphorae. See Dixneuf 2011, 179.

<sup>67</sup> Ballet – Dixneuf 2004, 69, Fig. 9; Majcherek 2004, 237, Fig. 7.8; Dixneuf 2011, 174-179, Fig. 177-178; Gayraud – Treglia 2014, 366, 372, Fig. 3. 1-2.

<sup>68</sup> Konstantinidou 2010, 952, 960-961, Fig. 8.31-32, Fig. 9:33; Dixneuf 2011, 174-179, Fig. 177-180.

<sup>69</sup> Dixneuf 2011, 177-178.

<sup>70</sup> In terms of being similar only formally, see Şenol 2009, 312, no. 166.

<sup>71</sup> Şenol 2018, 191-192, no. 161-162.

<sup>72</sup> Dixneuf 2011, 179, fn. 791.

<sup>73</sup> Marchand – Dixneuf 2007, 334, fig. 23.

<sup>74</sup> Konstantinidou 2010, 952, 960, fig. 8.31; Dixneuf 2011, 179, fig. 179-180.

## VESSEL FORMS OF UNDETERMINED FORM AND ORIGIN

**Kekova Type IA - Type IB and Type IIA - Type IIB**

These forms, about whose origin and form we cannot obtain exact results, appear as sub-types of each other among themselves. These forms were named for the first time because they were not previously defined and were referred to by the name Kekova, which is their find place. The forms are divided into two subgroups within themselves, and each subgroup is divided into two subgroups and were named as Kekova Type IA, Kekova Type IB and Kekova Type IIA and Kekova Type IIB.

These ceramic vessels, reminiscent in form to unguentarium are also very similar to large-bodied bottles<sup>75</sup>. It is believed that these vessels, the likes of which have not been encountered previously, functioned like a pitcher. These forms, which were produced on the wheel with spouts in the mouth of some and with their bodies without a handle, with a narrow neck and wide body have a grooved and ring base. It is seen that these forms without a handle were designed to be gripped by hand from the ring on their necks. These vessel forms, which appear as different versions of the same type in a general framework, have several different features among themselves.

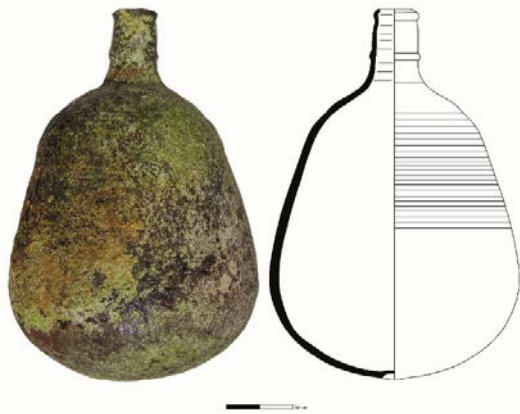


Fig. 8. *Kekova Type IA* (Cat. No. 6)

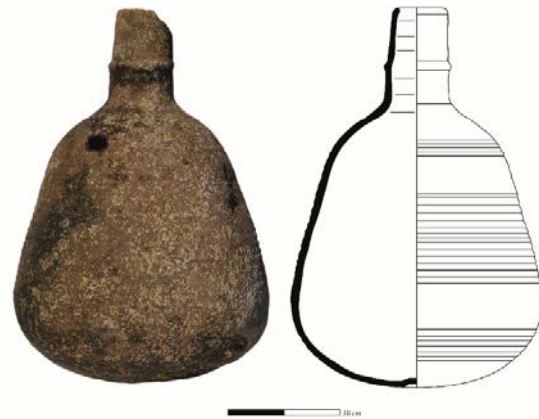


Fig. 9. *Kekova Type IB* (Cat. No. 7)

The vessel termed *Kekova Type IA*, is covered in shipworm remains in some places and has survived to this day despite some small deformations and fractures. As a form, this type has a pull-out rounded rim, a short narrow neck, a knuckle in the middle of the neck, a wide body, and a ring base with frequent grooves starting from the bottom of the neck and ending in the middle of the body. In addition, it is seen that the neck is slightly slanted when the vessel is placed on a flat surface (Cat. No. 6 - Fig. 8). The form that appears as a smaller version of Type IA was termed *Kekova Type IB*. This form, which has a partially fractured mouth, body and base has a raised rim, a short-narrow neck, a node under the mouth and in the middle of the neck, and a wide body covered with grooves in places. Although its base is broken, it probably has a ring base like its other counterparts. In addition, the oblique neck seen in *Kekova Type IA* is also the case for *Kekova Type IB* (Cat. No. 7 - Fig. 9).

Another form is termed *Kekova Type IIA*. The biggest difference that distinguishes this form from *Kekova Type IA* is its long neck and the spout in its mouth. Another important difference is the base. When considering Type IA and Type IB, the base of *Kekova Type IIA* was formed by pulling outside in a way that will be beyond the body end. In addition, the difference in capacity and

<sup>75</sup> For examples recovered from Serçe Limanı Excavation, see Lledo 2009, 335-348, 29.1-29.5.

dimension with the grooves that start from the end of the neck and extend to the base is also another feature that distinguishes this type from the others. When Kekova Type IIA is considered as a form, it is found to have a pulled out mouth with a spout, a long-narrow neck, a wide body that is grooved up to the base and a protruding pedestal. It also has a node on the neck as in Type I and an oblique neck in the original (Cat. No. 8 - Fig. 10). Another vessel, of the form of Kekova Type IIA, but which is of smaller dimensions was considered a sub-form and termed Kekova Type IIB. The reason for the evaluation of this form as Type IIB is a protruding pedestal with a long neck and grooves that start from the bottom of the neck and go down to the pedestal. Type IIB, which has survived, preserving its form despite the fractures on the mouth and body, has a long narrow neck, a wide spherical body, frequent grooves that start from the bottom of the neck and extend to the base and a protruding pedestal. In addition, although its mouth is fractured, it is thought to have a spouted structure, probably as in Type IIA. Again, as in all forms, there is a node and an oblique angle to the neck (Cat. No. 9 - Fig. 11).



Fig. 10. *Kekova Type IIA* (Cat. No. 8)



Fig. 11. *Kekova Type IIB* (Cat. No. 9)

As mentioned above, the likes of these types classified within themselves have not been found to date and are thought to have been used to preserve liquid products (water or wine). As a matter of fact, in parallel with this view, it is thought that the neck node, which is a common feature in all the forms described above, was made for holding, i.e. grasping. In addition, the spout in the mouth of Type IIA serves to support this view. Another common feature seen in these forms is the oblique angle to the neck. It is believed that this inclination was not a production defect, on the contrary, it was functional, designed for easier lifting and pouring.

It is thought that these forms, similar examples and production areas cannot be determined<sup>76</sup>, probably originated in the Eastern Mediterranean, in particular, in and around Egypt. As a matter of fact, due to the situation of the finds and from the similarity of forms, they are very similar to the terracotta vessels produced in Egypt. In addition, the processing and style of depiction of the grooves on them are seen as further data suggesting that they may be of Eastern Mediterranean origin. As a result of the above, considering the finds and contexts of these forms, the date range of between the VI<sup>th</sup>- VIII<sup>th</sup> centuries is proposed.

<sup>76</sup> For unguentarium's that look like Kekova Types, having a wide and grooved body and oblique neck, see Hayes 2008, 132, Pl. 88-89, 1758, 1759, 1765, 1770.

## FORMS AND OBJECTS OF SHIPBOARD USE

Some tools and equipment thought to belong to the kitchen section of the ship belonging to the Shallow Reef Eastern Wreck were also recovered in this study. They include: pan, spouted jug, necked pitcher, double handled decorated vessel, amphora of undetermined origin, storage vessel without handles, bricks and whetstones.

One of these finds is the pan with a circular fracture in the tondo part. In terms of form, this pan has a body with a flat bottom, rising outwards, a wide mouth structure and a handle. The length of the handle is 4.8 cm and it extends at an angle to the outside and upwards<sup>77</sup>. The stem part has a circular cross section. Similar examples were recovered in Western Space/Date Grove Bathhouse dated to the V<sup>th</sup> century<sup>78</sup> and similar pans recovered from the Date Grove Bathhouse were dated to the V<sup>th</sup>-VI<sup>th</sup> centuries<sup>79</sup> (Fig. 12a). Another group of finds are jugs and pitchers. The jug in question, which was recovered with a partially broken spout and broken handle has a rounded flat bottom with an ovoid body with a single handle starting from the bottom of the mouth and ending on the shoulder, and with a spout where the handle and the body are connected. This type of spouted vessel with thin grooves in places<sup>80</sup> are dated to within the V<sup>th</sup>-VII<sup>th</sup> centuries<sup>81</sup> (Fig. 12b). When the necked pitcher, of which only the parts of the mouth, neck and handles have survived, is compared to similar examples, a date can be suggested between the V<sup>th</sup>-VII<sup>th</sup> centuries<sup>82</sup> (Fig. 12c). Some vessel groups made for storage were also recovered from the Shallow Reef Eastern Shipwreck. One of these is the double handled, spouted and decorated vessel. It has a spout in its mouth, flat and "S" shaped lines on its handles and spiral rings on its body. Examples similar to this vessel, the mouth, neck and handles of which were preserved intact, were not found. It is thought that it was employed within the kitchen part of the ship (Fig. 13a).

In the studies conducted, a storage vessel with a narrow mouth, no handle, bulging body and a flat bottom, a part of which has been preserved intact, except for the small fracture observable on the surface and located in the mouth, was recovered<sup>83</sup>. This type of vessel form, which was recovered intact except from minor deformations and fractures is also the vessel considered as probably belonging to the kitchen of the wrecked ship (Fig. 13b)<sup>84</sup>. Terracotta bricks and whetstones form another group of finds recovered with these introduced vessels<sup>85</sup>. The dimensions of all the bricks identified are almost identical. Most of the bricks in question, which underwent high deformation were recovered in melted form, combined with the melted adjacent metal material. These bricks, some of which were found together and some are scattered, are thought to have been used to form cookers

<sup>77</sup> For a similar pan example, see Williams 1989, 71, No. 416, Fig. 38.

<sup>78</sup> Özdemir 2009, 156, Cat. No. 234.

<sup>79</sup> Korkut 2007, 8-9, Abb. 3, No. 19, 20; for similar pan examples, see also Riley 1979, 266-267, Fig. 105, No. 529; Hayes 1992, 179, Fig. 59.13.

<sup>80</sup> For similar, see Bonifay 2004, 285-286, Fig. 159a, Commune Type 53.

<sup>81</sup> Koçak-Yaldır 2002, 130, Cat. No. 40, Draw. 40, Res. 40.

<sup>82</sup> For similar, see Bonifay 2004, 283-285, Fig. 157, Commune Type 48.

<sup>83</sup> For storage vessels, see Laffi – Şahin 2015, 99-107.

<sup>84</sup> A similar example, which is only alike in terms of its form was dated to the end of III<sup>rd</sup> century and the beginning of IV<sup>th</sup> century. See Robinson 1959, 102, Pl. 26, M199.

<sup>85</sup> For the whetstones found, see Bass 2004, 280-281, Fig. 16-5.



Fig.12. a-Pan, b-Spouted Jug c-Necked Pitcher



Fig.13. a-Double Handled Decorative Vessel b-Storage Vessel



Fig.14. a-Bricks b-Whetstones

and for barbecues in the kitchen section of the ship<sup>86</sup> (Fig. 14a). The whetstones form the other group of finds from the kitchen area. Three whetstones, which were recovered scattered in different trenches have been preserved intact. Whereas there are suspension holes on two of the gray-coloured rectangular whetstones, there was no hole in the other grindstone (Fig. 14b). It is understood that these grindstones were used for sharpening cutting tools such as knives, swords and axe heads, which are amongst the other finds in the area. Similar grindstones were found in the Serçe Limanı Wreck dated to the 11<sup>th</sup> century,<sup>87</sup> and from Chios<sup>88</sup>, Delos<sup>89</sup> and Rhodes<sup>90</sup> excavations.

## METAL FINDS

An important group amongst the finds from the Kekova Island Shallow Reef Eastern Wreck are the metal vessels and objects. When these vessels and objects with metal components recovered in the study were examined, spouted bronze vessels, bronze plates, hilts, axe heads, sheath and metal slag were found. These finds include two bronze spouted vessels. These vessels have spouts that allow their easy emptying and they have deepening body structures while there are differences in form between them. (Fig.15a, 15b). Another find is a low ring based plate. Plates are generally categorized as shallow plates and deep plates. When shallow plates are considered in terms of form, these were found to have a flipped lip, a flaring body profile and a variable base. As a matter of fact, the bronze plate found in our study has a lip that is flipped through being pulled out, a body that opens outwards at a slight angle and a ring base. The details of the bronze plate in question, which is in the shallow plate sub-category among the plate groups, cannot be determined due to its intense deformation (Fig.15c).

Apart from the metal vessels, which mostly had kitchen related functions, some weapon finds were also made. These included a group of swords basically consisting of two parts and it was seen that their first part is sharp on both sides, thick at the beginning and tapering towards the end<sup>91</sup>. The second part is the grip, that is, the hilt<sup>92</sup>. Four hilts were recovered. The sharp areas of these hilts of four different forms could not be preserved (Fig.15d-Fig.15g). Details on them cannot be determined due to degree of corrosion<sup>93</sup>. In addition to the hilts, the axe, which was used as a weapon or a tool was also among the metal finds recovered<sup>94</sup> (Fig.15h). In the studies conducted, the parts thought to have formed a sword sheath or extension were identified in both pieces (Fig.15-Fig. 15j). In addition to the vessels and tools recovered, dozens of amorphous metal forms were also identified (Fig.15k).

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<sup>86</sup> Maltese are generally used in ships. However, in excavations and research, it was found in oven made of bricks. For ship-type maltese fire bricks, also see Aslan 2018, 12-19, Fig. 1-8; Doksanaltı – Aslan 2018, 656-665, Fig. 1-4.

<sup>87</sup> Bass 2004, 281, Fig.16-5.

<sup>88</sup> Balance *et al.* 1989, 133, Fig. 53.96.

<sup>89</sup> Deonna 1938, 212, Fig. 244

<sup>90</sup> Blinkenberg 1931, 99, Pl. 10.189.

<sup>91</sup> For weapons in general, see Schwarzer 2004, 363-397, Fig. 21.2-21.18

<sup>92</sup> See sections for swords see Schwarzer 2004, 366, Fig. 21.4a-21.4b.

<sup>93</sup> Weapons and Cutters, see also Schwarzer 2004, 363-397; Demirer 2013, 51-56, Draw. VIII-XI.

<sup>94</sup> For the axe and other tools used, see Hocker 2004, 297-319, Fig. 18.3-18.10; Božić 2005, 313-314, Abb. 22, 337-341, Abb. 44, 47.



Fig.15. *a, b-Spouted Bronze Vessels c-Plate d, e, f, g- Hilts h-Axe Head, i, j-Sheath k-Metal Slag*

### Assessment

The Shallow Reef Eastern Wreck, which was discovered during the underwater surveys conducted in 2016 and the rescue excavation undertaken in 2018, is situated on a slope starting from 10 m and deepening down to 22 m. The vast majority of the finds were uncovered on the terraces forming this slope.

As detailed above, in the study, amphorae, forms the origin of which cannot be identified, vessels for ship use, weapons and metal slag was found. All the material examined here were evaluated in terms of its origin, function and date. The amphorae, which were recovered from the wreck area and offer more clear information, have an important place in the study. The amphora of Cilicia origin, dated to between the VI<sup>th</sup> and VII<sup>th</sup> centuries was individually recovered. Except the LR 1 B, the AE 5-6, AE 7 and AE 8 amphorae of Egyptian origin were dated to the VII<sup>th</sup>-VIII<sup>th</sup> centuries are the other forms recovered. When these amphorae with Eastern Mediterranean origin are examined, especially the Egyptian series attracts attention. The recovery of these types of amphorae from the wreck, produced in almost the same centuries, offers us important information about the wreck. Apart from the amphorae, the other group that provides us with data are the vessels and objects for ship use. This group of finds thought to be related to the on board kitchen are dated to the V<sup>th</sup>-VII<sup>th</sup> centuries.

Undoubtedly, the group that we classify as the Kekova Types whose origins cannot be determined form the most interesting amongst the finds from the Shallow Reef Eastern Wreck. The

Kekova Types draw attention with their wide spherical bodies, oblique necks and nodes for gripping on their necks. Among these vessels, which exhibit a certain form among their similarities and differences, four intact ones were brought to the surface and protected. Many of these vessel forms and other vessels for daily use recovered from the wreck area should be vessels in which consumer supplies to meet the requirements of the ship's company were stored, rather than serving any commercial purposes.

Other groups recovered in the excavation are metal finds. Four metal hilts, two sword sheaths or extensions and a large number of metal amorphous shapes that could be spearheads and sharpening-grindstones were recovered. Similar finds were also made from the Serçe Limanı Shipwreck and were explained by the wreck's investigators as due to the arming of the crew to defend themselves against acts of piracy<sup>95</sup>. The weapons recovered in this area must have been carried on board for similar reasons. That swords are more expensive and were used by people who had been trained, distinct from weapons such as spear and javelin which were both cheap and easy to use, which indicates the ship also had several guards on-board to defend against pirates or other threats. Considering the increased piracy in the region between the 6<sup>th</sup> and 8<sup>th</sup> centuries, which we think the ship dates from, due to the political uncertainties, warfare and uncertainties in the region, it is understandable that trade ships took certain measures to protect themselves against such threats.

When the material recovered in the region is examined in general, it is seen that some finds belong to different time periods than the find of the wreckage we call the Shallow Reef Eastern Wreck. As a matter of fact, shipwrecks around the Shallow Reef in question and nearly five hundred coins belonging to the Philipp von Heinberg period date from 1167-1191, recovered in previous studies, serve to explain this<sup>96</sup>. Regarding the reason for this, it is quite probable that ships belonging to the same area in different periods hit the Shallow Reef and sank due to bad weather conditions, or because this maritime hazard went unnoticed by sailors who did not recognize the reefs in the region. The Basket-handled Amphora Shipwreck dates from the Archaic Period and the Gaza (Egyptian originated AE 5-6 amphora) Shipwreck dating from Late Antiquity also support this view.

In the excavations and research carried out in this area, there are at least three shipwrecks that are thought to be due to the ship hitting the Shallow Reef and sinking. However, within the scope of the studies conducted in the Shallow Reef Eastern underwater rescue excavations, it is thought that there is no single wreck in this area, but more than one wreck in a row. However, because the area was open to waves, to the bottom currents and exposed to sea traffic, the materials in the area became mixed together. It can be stated, based upon the finds recovered from the Shallow Reef Eastern underwater rescue excavation, that this shipwreck was a vessel of Eastern Mediterranean origin dating from the VI<sup>th</sup>-VIII<sup>th</sup> centuries.

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<sup>95</sup> Schwarzer 2004, 387, 396.

<sup>96</sup> Özdaş *et al.* 2012, 274, Res. 7.



**CATALOGUE**<sup>97</sup>

<b>Cat. No.</b>	<b>: 1 (Fig. 4a)</b>
Excavation Find No	: K18.TD.A7-4
Findspot	: TD A7 Trench
Find Depth	: 10.5 m
Type	: LR 1 B
Date	: Late V <sup>th</sup> century A.D.
Origin	: Cilicia
Distribution	: Eastern Mediterranean, Western Mediterranean and Black Sea
Contained	: Wine and Olive Oil
Description	: It has a slightly pulled out rounded rim, a wide neck, oval-shaped handles that begin at the bottom of the lip and join at the shoulder.
Similar	: Swan 2004, 372, Fig.1; Şenol 2009, 231, No. 57.

<b>Cat. No.</b>	<b>: 2 (Fig. 4b)</b>
Excavation Find No	: K18.TD.B7-3
Findspot	: TD B7 Trench
Find Depth	: 11.70 m
Type	: LR 1 B
Date	: VI <sup>th</sup> -VII <sup>th</sup> centuries A.D.
Origin	: Cilicia
Distribution	: Eastern Mediterranean, Western Mediterranean and Black Sea
Contained	: Wine and olive oil
Description	: It has a slightly pulled out rounded rim, a wide neck, oval-shaped handles that begin at the bottom of the lip and join at the shoulder.
Similar	: Bonifay – Pieri 1995, 108; Sazanov 2000, 124-126, Fig. 2; Şenol 2003, 88, Cat. 30; Şenol 2007, 67; Fig. 1; Pieri 2007, 3, Fig. 4, No. 2; Şenol 2009, 231-238, Cat. No. 57, 59-67; Alkaç 2013, 114-115, Cat. 7, Fig. 9; Alkaç 2015, 151, Fig. 2-11; Aslan 2015, 354, Cat. 18; Kızırlarlanoğlu 2016, 361-366, Cat. No. 64-69; Orhan 2017, 146; Şenol 2018, 516-520, No. 436-443, Fig. 436-443; Orhan 2018, 42, Fig. 29, Cat. No. 21.

<b>Cat. No.</b>	<b>: 3 (Fig. 5)</b>
Excavation Find No	: K18.TD.B6-4
Findspot	: TD B6 Trench
Find Depth	: 12.5 m
Type	: AE 5-6 Amphora
Date	: VII <sup>th</sup> -VIII <sup>th</sup> centuries A.D.
Origin	: Egypt
Distribution	: Eastern Mediterranean, Western Mediterranean, Aegean and Black Sea
Contained	: Wine

<sup>97</sup> In the catalogue, Kekova 2018 was abbreviated as K18 and the Shallow Reef East was abbreviated as TD (Topuk Doğu).

- Description** : It has an extended pull-out elongated rim, conical shaped shoulders that expand towards the body, grooved, rounded vertical handles on the shoulder, a pouch-shaped body with thin grooves on it, and a rounded bottom.
- Similar** : Alpözen *et al.* 1995, 65; Empereur – Picon 1999, 78, Fig. 6; Şenol 2003, 125-127; Ferrazzoli – Ricci 2007, 679; Aslan 2011, 112-113; Şenol 2009, 272-274; Aslan 2015, 359; Orhan 2017, 144, Fig. 3-4; Şenol 2018, 157, No. 98; Orhan 2018, Cat. No. 29, Fig. 37.
- Cat. No.** : **4 (Fig. 6)**
- Excavation Find No** : K18.TD.C8-11
- Findspot** : TD C8 Trench
- Find Depth** : 14 m
- Type** : AE 7 Amphora
- Date** : VII<sup>th</sup> centuries A.D.
- Origin** : Egypt
- Distribution** : Eastern Mediterranean, Western Mediterranean and some centers in the Black Sea
- Contained** : Wine
- Description** : Has a rounded rim, cylindrical oval neck, oval-shaped handles starting below the mouth and uniting over the shoulders, wide ovoid, grooved body and a base that tapers by narrowing towards the bottom.
- Similar** : Peacock – Williams 1986, 204, Fig. 122.B; Sciallano – Sibella 1991, 105, Kellia; Pieri 1998, 104; Pieri 2005, 128-132, Fig. 86; Şenol 2009, 171-172; Konstantinidou 2010, 952, Fig. 6-7, 22-27; Hill 2016, 24; Şenol 2018, No. 139-145, Fig. 139-145; Orhan 2018, Fig. 138, Cat. No. 30.
- Cat. No.** : **5 (Fig. 7)**
- Excavation Find No** : K18.TD.A7-5
- Findspot** : TD A7 Trench
- Find Depth** : 12 m
- Type** : AE 8 Amphora
- Date** : VII<sup>th</sup>-VIII<sup>th</sup> centuries A.D.
- Origin** : Egypt
- Distribution** : Eastern Mediterranean
- Contained** : Probably wine and olive oil
- Description** : It has a pulled-out rim, a wide cylindrical neck, oval-shaped handles that begin at the middle of the mouth neck and join at the shoulder, an ovoid body and a round base.
- Similar** : Ballet – Dixneuf 2004, 69, Fig. 9; Majcherek 2004, 237, Fig. 7.8; Marchand – Dixneuf 2007, 316, 334, Fig. 23; Konstantinidou 2010, 952, 960, Fig. 8.31; Dixneuf 2011, 179, Fig. 179-180; Dixneuf 2011, 179, dp. 791; Şenol 2009, 312, No. 166; Gayraud – Treglia 2014, 366, 372, Fig. 3. 1-2; Şenol 2018, 191-192, No. 161-162.

**Cat. No.** : **6 (Fig. 8)**  
Excavation Find No : K18.TD.B6-2  
Findspot : TD B6 Trench  
Find Depth : 12.50 m  
Type : Kekova Type IA  
Date : VI<sup>th</sup>-VIII<sup>th</sup> centuries A.D.  
Origin : Probably Eastern Mediterranean  
Distribution : ?  
Contained : Liquid products  
Dimensions : H.: 55 cm / Body D.: 43 cm / Max. Rim D.: 4.6 cm / Neck H.: 11. cm  
Description : Has a pull-out rounded rim, a short narrow neck, a knuckle in the middle of the neck, a wide body and a ring base with frequent grooves starting from the bottom of the neck and ending in the middle of the body.  
Similar : ?

**Cat. No.** : **7 (Fig. 9)**  
Excavation Find No : K18.TD.B7-1  
Findspot : TD B7 Trench  
Find Depth : 12.2 m  
Type : Kekova Type IB  
Date : VI<sup>th</sup>-VIII<sup>th</sup> centuries A.D.  
Origin : Probably Eastern Mediterranean  
Distribution : ?  
Contained : Liquid products  
Dimensions : H.: 33 cm / Body D.: 23 cm / Max. Rim D.: 4.1 cm / Neck H.: 9 cm  
Description : Has a raised rim, a short-narrow neck, a node under the mouth and in the middle of the neck and a wide body covered in places with grooves.  
Similar : ?

**Cat. No.** : **8 (Fig. 10)**  
Excavation Find No : K18.TD.B6-6  
Findspot : TD B6 Trench  
Find Depth : 12.50 m  
Type : Kekova Type IIA  
Date : VI<sup>th</sup>- VIII<sup>th</sup> centuries A.D.  
Origin : Probably Eastern Mediterranean  
Distribution : ?  
Contained : Liquid products  
Dimensions : H.: 47 cm / Body D.: 34 cm / Max. Rim D.: 3.2 cm / Neck H.: 15.5 cm  
Description : It is found to have a pulled out mouth with a spout, a long-narrow neck, a wide body that is grooved up to the base and a protruding pedestal.  
Similar : ?

<b>Cat. No.</b>	<b>: 9 (Fig. 11)</b>
Excavation Find No	: K18.TD.B6-3
Findspot	: TD B6 Trench
Find Depth	: 12.50 m
Type	: Kekova Type IIB
Date	: VI <sup>th</sup> - VIII <sup>th</sup> centuries A.D.
Origin	: Probably Eastern Mediterranean
Distribution	: ?
Contained	: Liquid products
Dimensions	: H.: 36 cm / Body D.: 40 cm / Max. Rim D.: - / Guarded Neck H.: 11 cm
Description	: Has a long narrow neck, a wide spherical body, frequent grooves that start from the bottom of the neck and extend to the base and a protruding pedestal.
Similar	: ?

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