

Original article (Original araştırma)

Aphid (Hemiptera: Aphididae) species on the herbaceous host plants in the Tekirdağ Province (Türkiye)¹

Tekirdağ ilindeki (Türkiye) otsu konukçu bitkilerde görülen yaprak biti (Hemiptera: Aphididae) türleri

Esra TAYAT^{2*}

Nihal ÖZDER²

Abstract

This research was conducted between 2018 and 2020 in Tekirdağ province and its districts in Türkiye, aiming to identify species of aphids belonging to the Aphididae family on the herbaceous plants in non-agricultural and agricultural fields, urban parks, gardens, and roadsides. The morphological diagnoses of aphids were performed, and based on that, the species from the subfamilies of the Aphididae family belonging to the Hemiptera order, namely Aphidinae, Eriosomatinae, Lachninae, and Chaitophorinae, were identified. *Echinophora tenuifolia* (L.) and *Cachyrs* sp. (L.) (Apiaceae) for *Anuraphis cachyros* (Barbagallo & Stroyan, 1982), *Malva neglecta* (Wallr.) (Malvaceae) for *Aphis* (*Aphis*) *nasturtii* (Kaltenbach, 1843), *Cichorium intybus* (L.) (Asteraceae) for *Hyperomyzus* (*Hyperomyzus*) *lactucae* (L., 1758) *Achillea* sp. (L.) (Asteraceae) for *Macrosiphoniella* (*Macrosiphoniella*) *tanacetaria* (Kaltenbach, 1843), *Amaranthus retroflexus* (L.) (Amaranthaceae) for *Macrosiphum* (*Macrosiphum*) *euphorbiae* (Thomas, 1878) and *Slybum marianum* (L.) (Asteraceae) for *Uroleucon* (*Uromelan*) *aeneum* (Hille Ris Lambers, 1939) have been identified as new host plants in Türkiye.

Keywords: Aphid fauna, Aphidoidea, new host records, Tekirdağ

Öz

Bu araştırma, Türkiye'nin Tekirdağ ili ve ilçelerinde 2018-2020 yılları arasında tarım dışı alanlar, tarım alanları, kentsel bölgelerdeki parklar, bahçeler ve yol kenarlarındaki tek yıllık kültür bitkiler üzerinde Aphididae familyasına ait yaprakbiti türlerini belirlemek amacıyla yürütülmüştür. Yaprakbitlerinin morfolojik olarak teşhisleri yapılmış ve buna göre Hemiptera takımına bağlı Aphididae familyasının altfamilyaları olan Aphidinae, Eriosomatinae, Lachninae ve Chaitophorinae tespit edilmiştir. *Echinophora tenuifolia* (L.) ve *Cachyrs* sp. (L.) (Apiaceae) *Anuraphis cachyros* (Barbagallo & Stroyan, 1982) için; *Malva neglecta* (Wallr.) (Malvaceae), *Aphis* (*Aphis*) *nasturtii* (Kaltenbach, 1843) için; *Cichorium intybus* (L.) (Asterales: Asteraceae), *Hyperomyzus* (*Hyperomyzus*) *lactucae* (L., 1758) için; *Achillea* sp. (L.) (Asteraceae) *Macrosiphoniella* (*Macrosiphoniella*) *tanacetaria* (Kaltenbach, 1843) için; *Amaranthus retroflexus* (L.) (Amaranthaceae), *Macrosiphum* (*Macrosiphum*) *euphorbiae* (Thomas, 1878) için ve *Slybum marianum* (L.) (Asteraceae), *Uroleucon* (*Uromelan*) *aeneum* (Hille Ris Lambers, 1939) için Türkiye'de yeni konukçu kayıtları olarak belirlenmiştir.

Anahtar sözcükler: Yaprakbiti faunası, Aphidoidea, yeni konukçu kayıtları, Tekirdağ

¹ This research is a part of PhD thesis of the first author. This study was supported by Tekirdağ Namık Kemal University, Scientific NKÜBAP Research Unit NKUBAP.03.GA.19.208

² Tekirdağ Namık Kemal University, Faculty of Agriculture, Department of Plant Protection, 59030, Süleymanpaşa, Tekirdağ, Türkiye

* Corresponding author (Sorumlu yazar) e-mail: esratayat@gmail.com

Received (Alınış): 18.04.2023

Accepted (Kabul edilmiş): 22.12.2023

Published Online (Çevrimiçi Yayın Tarihi): 05.01.2024

Introduction

The geographical region and localization of Türkiye create an important area in terms of invasive species. Therefore, studies aimed at identifying the aphid fauna in Türkiye are of importance in terms of biodiversity, ecological, and applied sciences. Due to its unique features, such as being the homeland of many plants owing to the advantages offered by its biogeographic characteristics, the abundance of endemic plant species, the presence of different climate types, and intercontinental transitions, Türkiye constitutes an important area in terms of distribution and diversity of aphids. The biogeographic location and characteristics, diverse climatic features, microclimatic variations, acting as a transition zone between continents, richness in terms of flora, and diversity of agricultural products make aphid studies in Türkiye highly significant. The global aphid fauna currently comprises 5942 valid taxa including subspecies distributed across 538 genera and classified into 25 subfamilies (Favret, 2023).

As of now, Türkiye's aphid fauna has been documented to include 631 aphid species belonging to 169 genera (Görür et al., 2023). The first studies on the aphid fauna in Türkiye were conducted by foreign researchers such as Trotter (1903), Houard (1922), and Fahringer (1922). Researchers such as Görür et al. (2009, 2014, 2018), Kök & Özdemir (2021), Patlar et al. (2021) and Şenol et al. (2021), among others, have conducted comprehensive studies. Due to the increasing significance of agricultural production in Türkiye and the adverse effects of global climate change, determining the current status of Türkiye's aphid fauna is of significant importance. Therefore, this study aimed to reveal the aphid fauna of Tekirdağ province.

Materials and Methods

Field outings were conducted weekly between March and June to collect aphids, and during the summer and autumn months when aphids were less abundant, the collection was carried out every 15 days in July and November. During sampling, attempts were made to collect as many winged and wingless adult individuals as possible. A code number has been assigned to each sample. Furthermore, information such as the color prior to preservation in alcohol, date, host plant, and collection location were recorded in the field notebook. The generated code numbers were placed as labels, written with a pencil, inside the cryo tubes containing the aphid samples. Plants that were found to be infested with aphids as a result of inspections on parts such as roots, stems, shoots, and leaves were first wrapped in newspaper to prevent moisture and then placed in polyethylene bags. They were subsequently transported to the laboratory in an icebox.

Aphids were collected from their host plant in the field using a small soft brush and placed in a tube containing 96 % ethyl alcohol. The collecting and preservation techniques used were based mainly on the method of Hille Ris Lambers (1950). Specimens were examined with a LEICA DM LB2 compound light microscope, and morphological features were measured using LAS version 4.1 software. The measurements of morphological characteristics were made according to Hille Ris Lambers (1945, 1947 a, b, 1949, 1969, 1973), Börner (1952), Cottier (1953), Bodenheimer & Swirski (1957), Börner & Heinze (1957), Stroyan (1957, 1961, 1963, 1977, 1984), Shaposhnikov (1964), Bissel (1978) and Blackman & Eastop (1984, 1994, 2000, 2020). All collected aphid species permanent slides have been stored at Department of Plant Protection within the Faculty of Agriculture at Tekirdağ Namık Kemal University and Plant Protection Central Research Institute in Ankara.

Results and Discussion

The identification of the aphids was based on their morphological characteristics, and as a result in Tekirdağ, the subfamilies Aphidinae, Chaitophorinae, Eriosomatinae, and Lachninae, which are part of the Aphididae family, were identified along with their respective host plants. A total of 83 taxa including 1 subspecies of aphids have been diagnosed, and their descriptions are provided in more detail below.

Family Aphididae**Subfamily, Aphidinae*****Acyrtosiphon (Acyrtosiphon) lactucae* (Passerini, 1860)**

Material examined. Tekirdağ, Çorlu, Yenice, 28.V.2019, apt. 3♀♀, alt. ♀, *Lactuca serriola* L. (Asteraceae); Tekirdağ, Kapaklı, Karlı, (41°22'09.9"N, 27°51'53.0"E), 01.VI.2019, apt. 4♀♀, alt. 2♀♀ *Euphorbia* sp. (Jussieu) (Euphorbiaceae).

General distribution. North America, Argentina and Chile (Blackman & Eastop, 2023).

***Acyrtosiphon (Acyrtosiphon) pisum* (Harris, 1776)**

Material examined. Tekirdağ, Malkara, Doğanköy, (41°04'32.6"N, 26°50'1620.4"E), 14.V.2019, apt. ♀, alt. ♀, *M. neglecta*, Süleymanpaşa, Hürriyet, (40°58'54.8"N, 27°32'41.7"E), 29.V.2018, apt. 3♀♀, alt. 2♀♀, *Vicia faba* L. (Fabaceae); (2) Şarköy, Kocaali, (40°36'32.7"N, 27°00'00.3"E), 24.VI.2018, apt. 2♀♀, alt. 2♀♀ *M. neglecta*.

General distribution. It has an almost world-wide distribution (Blackman & Eastop, 2023).

***Ammiaphis sii* (Koch, 1855)**

Material examined. Tekirdağ, Malkara, Güneşli, (41°01'26.1"N, 26°54'34.5"E) 22.VI.2019, apt. 3♀♀, *F. vulgaris* (Bernh.) (Apiaceae); Marmaraereğlisi, Sultanköy, (41°00'55.3"N, 27°58'31.7"E), 18.VIII.2018, apt. 2♀♀, *Falcaria* sp. (Fabr.) (Apiaceae).

General distribution. South-west and central Asia, central and eastern Europe (Blackman & Eastop, 2023).

***Anuraphis cachryos* (Barbagallo & Stroyan, 1982)**

Material examined. Tekirdağ, Malkara, Hasköy, (40°56'00.6"N, 26°49'19.4"E), 26.VIII.2018, apt. 2♀♀, alt. ♀, *E. tenuifolia* (Apiaceae); Saray, Pazarcık, (41° 26' 55.38 4"N, 26° 49'18.06"E), 05.IX.2018, apt. 3♀♀, *Cachrys* sp. (Apiaceae); Süleymanpaşa Hürriyet, (40°58'54.8"N, 27°32'41.7"E), 04.X.2019, apt. ♀, *E. tenuifolia*.

General distribution. In southern Italy and recorded from Iran and Türkiye (Blackman & Eastop, 2023).

***Anuraphis subterranea* (Walker, 1852)**

Material examined. Tekirdağ, Muratlı, İnanlı, (41°12'09.0"N, 27°28'21.4"E), 07.V II.2019, apt. 2♀♀, alt. 2♀♀, *Heracleum* sp. L. (Apiaceae); Şarköy, Bulgur, (40°44'34.4"N, 27°08'23.6"E), 05.VII.2018, apt. 3♀♀, *Heracleum* sp.

General distribution. Western Siberia and Kazakhstan, throughout Europe, North Africa, Iran, (Blackman & Eastop, 2023).

***Aphis (Aphis) affinis* (Del Guercio, 1911)**

Material examined. Tekirdağ, Malkara, Halıç, (40°52'01.0"N, 26°47'15.7"E), 06.VIII.2018, apt. ♀, alt. ♀, *Mentha* sp. L. (Lamiaceae); Muratlı, Aydıncöy, (41°07'39.9"N, 27°26'20.6"E), 08.VI.2018, apt. 2♀♀, alt. ♀, *Salvia* sp. Sellow ex Nees (Lamiaceae); Saray, Küçükyoncalı, (41°24'29.0"N, 27°58'15.9"E), 13.V.2019, apt. ♀, alt. ♀, *Euphorbia* sp. (Euphorbiaceae).

General distribution. Middle East, Central Asia, India, Pakistan, in Europe and southern Russia, (Blackman & Eastop, 2023).

***Aphis (Aphis) brotericola* (Mier Durante, 1978)**

Material examined. Tekirdağ, Muratlı, Aydıncık, 08.VI.2018, apt. 2♀♀, alt. ♀, *Euphorbia* sp. (Euphorbiaceae); Saray, Kavacık, (41°29'03.6"N, 27°54'03.7"E), 21.V.2019, apt. ♀, alt. ♀, *Convolvulus arvensis* L. (Convolvulaceae); Süleymanpaşa, Hürriyet, 29.VI.2020, apt. ♀, alt. ♀, *C. arvensis*.

General distribution. In Spain, Italy, France, Greece, Türkiye, Iran and Morocco (Blackman & Eastop, 2023).

***Aphis (Aphis) craccivora* (Koch, 1854)**

Material examined. Tekirdağ, Çorlu, Yenice, (41°00'22.3"N, 27°42'12.2"E), 26.VII.2018, apt. ♀, alt. ♀, *Onopordum acanthium* L. (Asteraceae); Hayrabolu, Yörükler, (41°07'21.8"N, 27°14'31.0"E) 14.V.2018, apt. 2♀♀, alt. ♀, *Crepis* sp. L. (Asteraceae); Kapaklı, Karlı, (41°22'09.9"N, 27°51'53.0"E) 01.VI.2019, apt. 2♀♀, alt. 4♀♀, *Verbascum* sp. L. (Scrophulariaceae); Malkara, Doğanlık, 14.V.2019, apt. 2♀♀, *Eryngium* sp. L. (Apiaceae); Malkara, Güneşli, 06.VIII.2018, apt. 2♀♀, alt. 4♀♀, *M. neglecta* (Malvaceae); Malkara, Gazibey, 20.V.2019, apt. 3♀♀, alt. 2♀♀, *Malva* sp. L. (Malvaceae); Malkara, Haliç, 06.VIII.2018, apt. 2♀♀, *Chenopodium* sp.; Muratlı, Kepenekli, 41°06'30.9"N, 27°32'45.6"E), 08.VIII.2018, apt. ♀, alt. ♀, *Capsicum annum* L. (Solanaceae) and apt. 2♀♀, alt. ♀, *Urtica urens* L. (Urticaceae); Saray, Demirler, 28.VIII.2018, apt. 3♀♀, *Chenopodium album* L. (Amaranthaceae); Süleymanpaşa, Naip, (40°52'33.0"N, 27°25'14.2"E) 10.VI.2019, apt. 3♀♀, alt. 2♀♀, *Phaseolus vulgaris* L. (Fabaceae); Süleymanpaşa, Hürriyet 08.VIII.2018, apt. 4 ♀♀, *Solanum lycopersicum* L. (Solanaceae); Süleymanpaşa, Hürriyet, 10.V.2019, apt. 2♀♀, alt. ♀, *Trigonella* sp. L. (Fabaceae); Şarköy, Kocaali, (40°36'32.7"N, 27°00'00.3"E), 14.V.2018, apt. 3♀♀, alt. 2♀♀, *Chenopodium* sp. L. (Amaranthaceae).

General distribution. Worldwide, but particularly common in warm temperate and tropical regions (Blackman & Eastop, 2023).

***Aphis (Aphis) euphorbiae* (Kaltenbach, 1843)**

Material examined. Tekirdağ, Ergene, Esenler, 08.V.2018, apt. 4♀♀, alt. 2♀♀, *Euphorbia* sp. (Euphorbiaceae); Süleymanpaşa, Naip, 06.VI.2018, apt. 3♀♀, alt. 2♀♀, *Euphorbia* sp.; Süleymanpaşa, Hürriyet, 15.VI.2020, apt. 4♀♀, alt. ♀, *Euphorbia* sp. and Şarköy, Mürefte, 12.V.2019, apt. 3♀♀, alt. ♀, *Euphorbia* sp.

General distribution. South-west and central Asia, in Europe, western Siberia, and introduced to USA (Blackman & Eastop, 2023).

***Aphis (Aphis) fabae* (Scopoli, 1763)**

Material examined. Tekirdağ, Çorlu, Yenice, 01.VIII.2018, apt. ♀, alt. ♀, *Helianthus annuus* L. (Asteraceae); Ergene, Esenler, (41°13'25.8"N, 27°38'49.1"E), 08.V.2018, apt. 2♀♀, alt. 2♀♀ *Papaver rhoeas* L. (Papaveraceae); Kapaklı, Mimar Sinan, (41°17'11.5"N, 27°57'04.5"E), 02.VI.2018, apt. ♀, alt. ♀, *Heracleum austriacum* L. (Apiaceae); Malkara, Doğanlık, 15.VIII.2018, *Amaranthus retroflexus* L. (Amaranthaceae); Malkara, Haliç, 06.VIII.2018, apt. 3♀♀, *Mentha piperita* L. (Lamiaceae); Marmaraeğlisi, Bahçelievler, 09.X.2019, apt. ♀, alt. ♀, *C. album* (Amaranthaceae); Marmaraeğlisi, Sultanköy, 18.VIII.2018, apt. 2♀♀, alt. ♀, *Cirsium arvense* L. (Asteraceae); Muratlı, İnanlı, 09.V.2019, apt. 3♀♀, *Anthemis arvensis* L. (Asteraceae); Süleymanpaşa, Değirmenaltı, (40°55'13.1"N, 27°34'54.7"E), 11.VIII.2018, apt. ♀, alt. ♀, *O. acanthium* (Asteraceae); Süleymanpaşa, Hürriyet, 15.IV.2019, apt. 2♀♀, alt. ♀, *Rumex* sp. (Polygonaceae); Süleymanpaşa, Hürriyet, 04.VI.2020, apt. ♀, alt. ♀, *Galium* sp. (Rubiaceae); Süleymanpaşa, Hürriyet, 06.V.2019, apt. 2♀♀, alt. ♀, *Salvia* sp. (Lamiaceae) and *M. neglecta* (Malvaceae); Süleymanpaşa, Hürriyet, 06.V.2019, apt. ♀, alt. ♀; Şarköy, Çengelliköy, (40°40'47.0"N, 27°09'23.6"E), 23.V.2019, apt. 2♀♀, alt. ♀, *Cynara cardunculus* L. (Asteraceae) and apt. ♀, alt. ♀, *S. marianum* (Asteraceae); Şarköy, Eriklice, (40°38'15.0"N, 27°10'55.5"E), 06.V.2019, apt. 2♀♀, alt. 2♀♀, *Carduus* sp. L. (Asteraceae); Şarköy, Uçmakedere, (40°47'59.0"N, 27°21'48.2"E), 03.VIII.2018, apt. 2♀♀, *S. marianum* (Asteraceae) and apt. 4♀♀, alt. 2♀♀, *Rumex* sp. L. (Polygonaceae).

General distribution. They are found all over the world, including Africa, Asia, Europe, India, Canada, Korea and North America (Blackman & Eastop, 2023).

Aphis (Aphis) fabae cirsiacanthoidis (Scopoli, 1763)

Material examined. Tekirdağ, Malkara, Gazibey, 20.V.2019, apt. 4♀♀, *S. marianum* (Asteraceae); Şarköy, Uçmakdere, 03.VII.2018, apt. 2♀♀, *S. marianum*; Şarköy, Ulaman, (40°42'45.9"N, 27°05'07.1"E) 14.V.2019, apt. 3♀♀, alt. ♀, *C. arvense* (Asteraceae).

General distribution. No information was found about its distribution, except for (Stroyan, 1984; Aslan, 2002).

Aphis (Aphis) galiiscabri (Schrank, 1801)

Material examined. Tekirdağ, Malkara, Danişment, (40°52'15.8"N, 26°44'25.6"E), 02.VIII.2018, apt. 3♀♀, *Galium* sp. L. (Rubiaceae); Şarköy, Çengelliköy, 06.V.2019, apt. 4♀♀, alt. 2♀♀, *Galium album* Mill.

General distribution. In Europe, west Siberia, Türkiye, Iran and Central Asia (Kazakhstan), Mongolia and Canada (Blackman & Eastop, 2023).

Aphis (Aphis) gossypii (Glover, 1877)

Material examined. Tekirdağ, Kapaklı, Mimar Sinan, 02.VI.2018, apt. 2♀♀, alt. ♀, *M. neglecta* (Malvaceae); Kapaklı, Pınarca, (41°52'20.6"N, 27°54'05.3"E), 02.VI.2018, apt. ♀, alt. ♀, *P. rhoeas* (Papaveraceae); Malkara, Güneşli, 06.VII.2018, apt. 2♀♀, alt. ♀, *Chenopodium* sp. (Amaranthaceae); Marmaraereğlisi, Bahçelievler, (40°58'26.4"N, 27°55'55.9"E), 10.VII.2018, apt. 2♀♀, alt. ♀, *A. retroflexus* (Amaranthaceae); Saray, Büyükyoncalı, (41°22'40.2"N, 27°55'44.0"E), 08.V.2019, apt. 2♀♀, alt. 2♀♀, *P. rhoeas*; Saray, Küçükyoncalı, 17.VI.2019, apt. 5♀♀, *Cucumis sativus* L. and *Citrullus lanatus* Thunb. (Cucurbitaceae); Süleymanpaşa, Hürriyet, 26.V.2019, apt. 3♀♀, alt. 2♀♀, *Portulaca oleracea* L. (Portulacaceae); Süleymanpaşa, Naip, 15.V.2019, apt. 3♀♀, alt. ♀, *S. lycopersicum* (Solanaceae) and *Abelmoschus esculentus* L. (Malvaceae); Şarköy, Cumhuriyet, (41°15'57.3"N, 28°01'10.3"E), 07.VII.2018, apt. 2♀♀, alt. 2♀♀, *M. piperita* (Lamiaceae); Şarköy, Eriklice, (40°38'15.0"N, 27°10'55.5"E), 23.V.2019, apt. 3♀♀, alt. ♀, *Carduus* sp. and *O. acanthium* (Asteraceae); Şarköy, Mürefte, (40°40'26.2"N, 27°14'17.6"E), 12.V.2019, apt. 4♀♀, alt. 2♀♀, *O. acanthium* (Asteraceae).

General distribution. They are found almost everywhere in the world and are especially common in the tropics, including the islands in the Pacific (Blackman & Eastop, 2023).

Aphis (Aphis) intybi (Koch, 1855)

Material examined. Tekirdağ, Çerkezköy, Kızılpınar, (41°16'00.2"N, 27°57'52.3"E), 18.VII.2018, apt. 2♀♀, alt. ♀, *Cichorium* sp. L. (Asteraceae); Şarköy, Bulgur, 14.VII.2019, apt. 3♀♀, *Cichorium intybus* L. (Asteraceae).

General distribution. West and central Asia east to Pakistan, in Europe, Mediterranean region (Blackman & Eastop, 2023).

Aphis (Aphis) nasturtii (Kaltenbach, 1843)

Material examined. Tekirdağ, Çerkezköy, Fevzipaşa, (41°16'59.9"N, 27°59'42.9"E), 04.VIII.2018, *H. sphondylium* (Apiaceae); Malkara, Gazibey 20.V.2019, apt. 2♀♀, alt. ♀, *H. sphondylium*; Malkara, Güneşli, 06.VIII.2018, apt. ♀, alt. ♀, *Chenopodium* sp. (Amaranthaceae); Malkara, Haliç, 14.V.2019, 2♀♀, alt. ♀, *M. neglecta*; Malkara, Hasköy, 26.VIII.2018, apt. 2♀♀, alt. 2♀♀, *M. piperita* (Lamiaceae); Şarköy, Ulaman, 03.VIII.2018, apt. 3♀♀, alt. ♀, *M. neglecta* (Malvaceae).

General distribution. Now almost world-wide (but not yet in Australasia) (Blackman & Eastop, 2023).

***Aphis (Aphis) nerii* (Boyer de Fonscolombe, 1841)**

Material examined. Tekirdağ, Kapaklı, Pınarca, (41°52'20.6"N, 27°54'05.3"E), 01.VI.2019, apt. 3♀♀, alt. ♀, *Euphorbia* sp.; Süleymanpaşa, Karaevli, (41°02'16.5"N, 27°39'56.7"E), 22.V.2019, apt. 2♀♀, *Cynanchum acutum* (L.) (Apocynaceae); Şarköy, Mürefte, 20.V.2018, apt. 6♀♀, *Euphorbia* sp. (Euphorbiaceae).

General distribution. Found throughout the world, especially prevalent in tropical and subtropical regions, which include a multitude of Pacific islands (Blackman & Eastop, 2023).

***Aphis (Aphis) plantaginis* (Goeze, 1778)**

Material examined. Tekirdağ, Süleymanpaşa, Naip, 04.VIII.2019, apt. 3♀♀, alt. 2♀♀, *Plantago major* L. (Plantaginaceae); Malkara, Develi, (40°55'36.5"N, 27°07'44.7"E), 10.VIII.2019, apt. 4♀♀ *P. major*; Süleymanpaşa, Hürriyet, 07.VIII.2020, apt. ♀, alt. ♀, *P. major*.

General distribution. In Europe, Central Asia, west and east Siberia, Mongolia (Blackman & Eastop, 2023).

***Aphis (Aphis) polygonata* (Nevsky, 1929)**

Material examined. Tekirdağ, Malkara, Danişment, 02.VIII.2018, *Polygonum* sp. L. (Polygonaceae); Saray, Kavacık, 08.VIII.2019, apt. 4♀♀, alt. ♀, *Polygonum* sp.; Süleymanpaşa, Altınova, 10.X.2018, apt. 4♀♀, alt. 2♀♀ *Polygonum* sp.; Marmaraereğlisi, Sultanköy 18.VI.2019, apt. 4♀♀, alt. ♀, *Polygonum* sp.

General distribution. Middle East, North Africa, Central Asia, in Europe, Pakistan and also in USA (Blackman & Eastop, 2020).

***Aphis (Aphis) pomi* (De Geer, 1773)**

Material examined. Tekirdağ, Süleymanpaşa, Hürriyet, 19.V.2019, apt. 2♀♀, alt. 2♀♀, *Hibiscus* sp. L. (Malvaceae); Süleymanpaşa, Hürriyet, 07.VI.2019, apt. 4♀♀, alt. 2♀♀, *Hibiscus* sp.

General distribution. In Europe, north Africa, Asia eastwards to India and (Blackman & Eastop, 2023).

***Aphis (Aphis) ruborum* (Börner & Schilder, 1931)**

Material examined. Tekirdağ, Saray, Küçükyoncalı, 08.V.2019, apt. 2♀♀, alt. 2♀♀, *Fragaria* sp. L. (Rosaceae); Saray, Küçükyoncalı, 08.V.2019, apt. 3♀♀, alt. ♀, *Fragaria* sp.; Süleymanpaşa, Hürriyet, 04.V.2018, apt. 2♀♀, *Fragaria* sp.

General distribution. It is present in Europe, North Africa, Southwest and Central Asia, extending eastward to India and Pakistan, and has been introduced to South America (Chile, Argentina) (Blackman & Eastop, 2023).

***Aphis (Aphis) rumicis* (L., 1758)**

Material examined. Muratlı, İnanlı, 24.VI.2019, apt. 3♀♀, *Rumex* sp. (Polygonaceae); Şarköy, Bulgur, 01.V.2019, apt. 4♀♀, alt. 2♀♀, *Rumex* sp.

General distribution. While it is extensively documented in the Northern Hemisphere, numerous North American records exist (Blackman & Eastop, 2023).

***Aphis (Aphis) salviae* (Walker, 1852)**

Material examined. Tekirdağ, Çorlu, Yenice, 26.VI.2018, apt. 5♀♀, alt. 2♀♀, *Salvia* sp. (Lamiaceae); Süleymanpaşa, Kumbağ, (40° 87'25N, 27°45'88E), 10.VI.2020, apt. 2♀♀, alt. ♀, *Salvia* sp.; Şarköy, Bulgur, 21.VII.2018, apt. 4♀♀, alt. 3♀♀, *Salvia* sp.

General distribution. Europe (Switzerland, Poland, Hungary, France, Spain, Portugal, Czech Republic, Bulgaria, Serbia), Israel, Türkiye, Iran and Kazakhstan (Blackman & Eastop, 2023).

***Aphis (Aphis) solanella* (Theobald, 1914)**

Material examined. Tekirdağ, Malkara, Gazibey, 22.VII.2019, apt. 3♀♀, alt. ♀, *Solanum nigrum* L. (Solanaceae); Süleymanpaşa, Hürriyet, 16.V.2018, apt. 4♀♀, *P. rhoeas* (Papaveraceae); Süleymanpaşa, Naip, 04.IV.2019, apt. 4♀♀, alt. 2♀♀, *U. urens* (Urticaceae).

General distribution. In Europe, Asia, Africa and South America (Blackman & Eastop, 2023).

***Aphis (Aphis) spiraecola* (Patch, 1914)**

Material examined. Tekirdağ, Ergene, Kırkgöz, (41°14'16.1"N, 27°40'38.5"E), 08.VIII.2018, apt. 3♀♀, alt. 2♀♀ *Chenopodium* sp. (Amaranthaceae); Malkara, Güneşli, 03.VI.2019, apt. 5♀♀, *Petroselinum crispum* Mill. (Apiaceae).

General distribution. Distribution is almost world-wide (Blackman & Eastop, 2023).

***Aphis (Aphis) tirucallis* (Hille Ris Lambers, 1954)**

Material examined. Tekirdağ, Kapaklı, Pınarca, 01.VI.2019, apt. 2♀♀, alt. 3♀♀, *Euphorbia* sp. (Euphorbiaceae); Süleymanpaşa, Namık Kemal, (40°59'41.2"N, 27°35'15.9"E), 22.V.2019, apt. 5♀♀, *Euphorbia* sp.; Şarköy, Mürefte, 23.VII.2018, apt. 2♀♀, alt. 4♀♀, *Euphorbia* sp.

General distribution. Southern Europe, Azores, Canaries, Madeira, Balearics, Yemen widely distributed in Africa (Blackman & Eastop, 2023).

***Aphis (Aphis) umbrella* (Börner, 1950)**

Material examined. Tekirdağ, Malkara, Develi, 05.IV. 2019, apt. 5♀♀, *Malva* sp. (Malvaceae); Saray, Osmanlı, (41°23'05.4"N, 27°40'58.5"E), 12.VI.2018, apt. 6♀♀, *M. neglecta* (Malvaceae); Süleymanpaşa, Değirmenaltı, (40°59'10.5"N, 27°34'48.9"E), 10.IV.2018, apt. 3♀♀, *M. neglecta* (Malvaceae).

General distribution. The species is found in Europe, North Africa, and Asia and North America (Blackman & Eastop, 2023).

***Aphis (Aphis) urticata* (Gmelin, 1790)**

Material examined. Çorlu, Çobanceşme, (41°09'20.7"N, 27°47'54.1"E), 18.IV.2018, apt. 2♀♀, alt. 4♀♀, *U. urens* (Urticaceae); Marmaraereğlisi, Sultanköy, 19.V.2019, apt. 4♀♀, alt. 2♀♀, *U. urens*; Saray, Kavacık, 21.VI.2018, apt. 3♀♀, alt. ♀, *U. urens*.

General distribution. In Europe, Middle East, Central Asia, Pakistan (Blackman & Eastop, 2023).

***Aphis (Aphis) valle* (Hille Ris Lambers & Stroyan, 1959)**

Material examined. Tekirdağ, Kapaklı, Pınarca, 01.VI.2019, apt. 3♀♀, *Euphorbia* sp. (Euphorbiaceae); Süleymanpaşa, Karaevli, 22.V.2019, apt. 3♀♀, alt. 2♀♀, *Euphorbia* sp.; Şarköy, Bulgur, 20.VII.2018, apt. 4♀♀, *Euphorbia* sp.

General distribution. In Spain, Portugal, the Balearics, France, Bulgaria, Greece, Ukraine and Türkiye (Blackman & Eastop, 2023).

***Aphis (Aphis) verbasci* (Schrank, 1801)**

Material examined. Tekirdağ, Hayrabolu, Tatarlı, (41°08'40.0"N, 27°03'49.3"E), 22.VIII.2018, apt. 5♀♀, alt. 2♀♀, *Verbascum* sp. (Scrophulariaceae); Marmaraereğlisi, Çeşmeli, (41°02'55.1"N, 27°49'47.3"E), 03.IX.2018, apt. 2♀♀, alt. 2♀♀, *Verbascum* sp.; Saray, Pazarlık, 04.VII.2019, 4♀♀, alt. ♀, *Verbascum* sp.

General distribution. In Europe (except Scandinavia), Middle East, North Africa, Kazakhstan India and Pakistan (Blackman & Eastop, 2023).

***Aulacorthum (Aulacorthum) solani* (Kaltenbach, 1843)**

Material examined. Tekirdağ, Malkara, Halıç, 14.V.2019, apt. 3♀♀, alt. 2♀♀, *Rumex* sp. (Polygonaceae); Muratlı, Aydıncık, 09.V.2019, apt. 4♀♀, *A. retroflexus* (Amaranthaceae); Saray, Demirler, 22.IV.2018, apt. 4♀♀, alt. 2♀♀, *P. rhoeas* (Papaveraceae); Süleymanpaşa, Değirmenaltı, 17.V.2018, apt. 3♀♀, alt. 2♀♀, *Galium aparine* L. (Rubiaceae); Süleymanpaşa, Yüzüncüyıl (40°96'69N, 27°49'41E), 20.VI.2019, apt. 5♀♀, alt. ♀, *Solanum tuberosum* L. (Solanaceae); Süleymanpaşa, Yüzüncüyıl 20.VI.2019, apt. 3♀♀, alt. ♀, *M. neglecta* (Malvaceae); Şarköy, Cumhuriyet, 07.05.2018, apt. 5♀♀, *S. marianum* (Asteraceae); Şarköy, Çengelli 08.V.2019, 4♀♀, alt. ♀, *S. marianum*.

General distribution. Probably of European origin, now almost world-wide (Blackman & Eastop, 2023).

***Brachycaudus (Prunaphis) cardui* (L., 1758)**

Material examined. Tekirdağ, Çorlu, Sarılar, (41°08'38.8"N, 27°539'45.4"E), 25.V.2018, apt. 5♀♀, *Cynara* sp. (Asteraceae); Ergene, Esenler, 08.V.2018, apt. 2♀♀, alt. 4♀♀, *S. marianum* (Asteraceae); Kapaklı, Mimar Sinan 02.VI.2018, apt. 2♀♀, alt. 6♀♀, *C. cardunculus* (Asteraceae); Malkara, Develi, 02.VIII.2018, apt. 6♀♀, *Eryngium* sp. (Apiaceae); Saray, Küçükyoncalı, 08.V.2019, apt. 4♀♀, alt. 2♀♀, *C. cardunculus* (Asteraceae); Şarköy, Çengelliköy 01.V.2019, apt. 3♀♀, *Onopordium* sp. L. (Asteraceae); Şarköy, Eriklice, 06.V.2019, apt. 5♀♀, *Carduus* sp. (Asteraceae).

General distribution. In Europe, Asia, north Africa and North America (Blackman & Eastop, 2023).

***Brachycaudus (Brachycaudus) helichrysi* (Kaltenbach, 1843)**

Material examined. (1) *S. marianum* (Asteraceae): Süleymanpaşa, Naip, 06.VI.2018; (2) *C. arvense* (Asteraceae): Çorlu, Kazımiye, (41°09'519.3"N, 27°49'36.3"E), 27.VII.2018; (3) *Taraxum officinale* (Weber) (Asteraceae): Malkara, Doğanlık, 06.VIII.2018; (4) *Carduus pycnocephalus* (L.) (Asteraceae): Şarköy, Çengelliköy, 01.V.2019; (5) *Cynara* sp. (L.) (Asteraceae): Saray, Küçükyoncalı, 08.V.2019; (6) *Onopordium* sp. (Asteraceae): Malkara, Doğanlık, 14.V.2019; (7) *Cirsium* sp. (Mill.) (Asteraceae): Süleymanpaşa, Hürriyet, 15.VII.2019.

General distribution. World-wide, and a major pest (Blackman & Eastop, 2023).

***Brevicoryne brassicae* (L., 1758)**

Material examined. Tekirdağ, Malkara, Doğanlık, 14.V.2019, apt. 4♀♀, *Brassicae napus* L. (Brassicaceae); Marmaraeğlisi, Sultanköy, 19.05.2019, apt. 2♀♀, alt. ♀, *B. napus*; Muratlı, Kepenekli, (41°06'30.9"N, 27°32'45.6"E), 22.V.2018, apt. 5♀♀, *Sinapis arvensis* L. (Brassicaceae); Süleymanpaşa, Naip, 28.III.2018, apt. 3♀♀ *Brassica oleracea* L. (Brassicaceae).

General distribution. This species can be found on various genera and species of Brassicaceae, and is considered a significant pest of field crops in all temperate and warm temperate regions worldwide (Blackman & Eastop, 2023).

***Capitophorus elaeagni* (Del Guercio, 1894)**

Material examined. Tekirdağ, Kapaklı, Karlı, 02.V.2018, 4♀♀, alt. ♀, *S. marianum* (Asteraceae); Saray, Büyükyoncalı, 08.V.2019, *S. marianum*, Süleymanpaşa, Hürriyet, (27.IV.2018, apt. 4♀♀, alt. 2♀♀, *Cynara* sp. L. (Asteraceae); Şarköy, Eriklice, 27.VI.2019, *C. arvense* (Asteraceae).

General distribution. Widely distributed in temperate and warm temperate regions of the world (Blackman & Eastop, 2023).

***Capitophorus hippophaes* (Walker, 1852)**

Material examined. Tekirdağ, Ergene, Kırkgöz, 11.VI.2018, apt. 2♀♀, alt. 2♀♀, *Polygonum* sp. (Polygonaceae); Malkara, Doğanköy, 15.VIII.2018, apt. 2♀♀, alt. ♀, *Polygonum* sp.; Saray, Kadıköy, (41°26'22.4"N, 27°41'57.3"E), 03.VII.2019, 4♀♀, alt. ♀, *C. arvense* (Asteraceae).

General distribution. In Europe, North Africa, south-west and central Asia, and introduced into North America (Blackman & Eastop 2023).

***Cavariella (Cavariella) aegopodii* (Scopoli, 1763)**

Material examined. Tekirdağ, Malkara, Develi, 25.V.2018, 2♀♀, alt. ♀, *Pimpinella anisum* L. (Apiaceae); Malkara, Doğanköy, 15.VI.2018, apt. 3♀♀, alt. 2♀♀, *Daucus carota* L. (Apiaceae); Süleymanpaşa, Karaevli, 22.V.2019, apt. 4♀♀, *Eryngium* sp. (Apiaceae); Şarköy, Eriklice, 23.V.2019, apt. 5♀♀, alt. ♀, *D. carota*.

General distribution. Asia, North and South America, Canada, North Africa, Russia, Serbia and Montenegro, Middle East, India, Tasmania, Australia, New Zealand (Blackman & Eastop, 2023).

***Dysaphis (Dysaphis) crataegi* (Kaltenbach, 1843)**

Material examined.

Tekirdağ, Çerkezköy, Bağlık, (41°17'56.2"N, 28°00'35.4"E), 20.VII.2018, apt. 3♀♀, alt. 2♀♀, *D. carota* (Apiaceae); Çorlu, Kazımiye, 27.VII.2018, apt. 2♀♀, alt. 4♀♀, *D. carota*; Şarköy, Kirazlı, (40°42'08.7"N, 27°15'50.1"E), apt. 2♀♀, alt. 2♀♀, 19.IX.2018, *Eryngium* sp. (Apiaceae); Şarköy, Uçmakdere, 02.VIII.2019, apt. 4♀♀, *D. carota*.

General distribution. Europe, Greece, Russia, Middle East, South-West Asia and America (Blackman & Eastop, 2023).

***Dysaphis (Dysaphis) tulipae* (Boyer de Fonscolombe, 1841)**

Material examined. Tekirdağ, Süleymanpaşa, Hürriyet, 30.I.2019, apt. 3♀♀, *Tulipa gesneirana* L. (Liliaceae).

General distribution. Europe, Greece, Russia, Middle East, South-West Asia and America (Blackman & Eastop, 2023).

***Eucarazzia elegans* (Ferrari, 1872)**

Material examined. Tekirdağ, Saray, Küçükyoncalı 02.V. 2019, apt. 2♀♀, alt. 2♀♀, *P. rhoeas* (Papaveraceae); Süleymanpaşa, Altınova, 27.IV.2019, apt. 5♀♀, *Mentha* sp. (Lamiaceae); Şarköy, Kocaali, 09.V.2018, apt. 5♀♀, alt. 2♀♀, *Mentha* sp.

General distribution. Central Asia, Pakistan, northern India, in the Mediterranean area, Madeira, Middle East, and also now in southern Poland, Australia, western USA (California, Oregon) and South America (Argentina), Africa south of the Sahara (Blackman & Eastop, 2023).

***Hayhurstia atriplicis* (L., 1761)**

Material examined. (1) Tekirdağ, Malkara, Haliç, 21.V.2018, apt. 2♀♀, alt. ♀, *C. album* (Amaranthaceae); Marmaraereğlisi, Sultanköy, 19.V.2019, apt. 2♀♀, alt. 2♀♀, *Chenopodium* sp. (Amaranthaceae); Saray, Kavacık, 22.IV.2018, apt. 2♀♀, alt. 2♀♀, *Atriplex* sp. L. (Amaranthaceae); Süleymanpaşa, Hürriyet, 26.VI.2020, apt. 4♀♀, alt. ♀, *Chenopodium* sp.

General distribution. It is prevalent in Europe and Asia, as well as North and Central Africa and North and Central America (Blackman & Eastop, 2023).

***Hyadaphis coriandri* (Das, 1918)**

Material examined. Tekirdağ, Saray, Osmanlı, 24.VI.2018, apt. 5♀♀, *Bifora radians* Bieb. (Apiaceae); Süleymanpaşa, Değirmenaltı, 16.V.2019, apt. 3♀♀, alt. ♀, *P. crispum* (Apiaceae); Süleymanpaşa, Naip, 05.VII.2018, apt. 5♀♀, alt. 2♀♀, *Amaranthus* sp. (Amaranthaceae); Süleymanpaşa, Yüzüncüyıl, 29.V.2020, apt. 5♀♀, *B. radians*; Şarköy, Yenikoy, 27.VIII.2018, apt. 2♀♀, alt. 2♀♀, *Eryngium maritimum* L. (Apiaceae).

General distribution. Probably of Asian origin, now in Portugal, Spain, the Mediterranean region, the Middle East, Central Asia, India, Pakistan, Africa, USA (Florida, Hawaii) and South America (Peru, Argentina) (Blackman & Eastop, 2023).

***Hyadaphis foeniculi* (Passerini, 1860)**

Material examined. Tekirdağ, Çerkezköy, Bağlık, 10.V.2019, apt. 2♀♀, alt. 2♀♀, *Eryngium* sp.; Malkara, Doğanköy, 14.V.2019, apt. 2♀♀, alt. ♀, *Foeniculum vulgare* Mill. (Apiaceae); Muratlı, İnanlı, 09.V.2019, apt. 5♀♀, alt. 3♀♀, *Eryngium* sp. (Apiaceae); Muratlı, Kepenekli, 08.VI.2018, apt. 6♀♀, alt. 2♀♀, *Campanula* sp. L. (Campanulaceae); Şarköy, Eriklice, 14.VIII.2018, apt. 4♀♀, alt. 2♀♀, *C. album* (Amaranthaceae).

General distribution. Widespread in Europe, especially in the north, eastward to Türkiye, Iran and Iraq, in North America (New York, New Brunswick, California), north-east Brazil (Blackman & Eastop, 2023).

***Hyalopterus pruni* (Geoffroy, 1762)**

Material examined. Tekirdağ, Muratlı, İnanlı, 08.05.2018, apt. 3♀♀, alt. ♀, *Phragmites* sp. (Poaceae); Süleymanpaşa, Naip, 15.V.2019, apt. 3♀♀, alt. 2♀♀, *Sonchus oleraus* (Asteraceae); Şarköy, Kocaali, 09.V.2018, apt. 4♀♀, *Phragmites* sp.

General distribution. With a wide distribution Asia, Europe and North America (Blackman & Eastop, 2023).

***Hydaphias hofmanni* (Börner, 1950)**

Material examined. Tekirdağ, Çorlu, Yenice, 01.VII.2018, apt. 3♀♀, *Galium* sp. (Rubiaceae); Şarköy, Demirler, 03.VII.2019, apt. 2♀♀, alt. ♀♀, *Galium* sp.

General distribution. Throughout Europe, and across Asia to east Siberia, Korea and China (Blackman & Eastop, 2023).

***Hyperomyzus (Hyperomyzus) lactucae* (L., 1758)**

Material examined. Tekirdağ, Malkara, Develi, 16.VIII.2018, apt. 3♀♀, *L. serriola* (Asteraceae); Saray, Küçükyoncalı, 08.VII.2019, apt. 2♀♀, alt. 2♀♀, *Lactuca* sp. L.; Süleymanpaşa, Hürriyet, 27.IV.2019, apt. 7♀♀, *Sonchus* sp. L.; Süleymanpaşa, Hürriyet, 15.VI.2018, apt. 2♀♀, alt. ♀♀, *S. oleraceus* (Asteraceae); Süleymanpaşa, Kumbağ (40°52'21.2"N 27°27'31.9"E), 28.IX.2020, apt. 2♀♀, alt. 2♀♀, *L. serriola*; Süleymanpaşa, Naip, 15.IV.2018, apt. 2♀♀, *Cirsium* sp. (Asteraceae); Süleymanpaşa, Namık Kemal, 21.VIII.2019, apt. 5♀♀, alt. ♀, *S. oleraceus*; Şarköy, Çengelliköy, 06.V.2019, apt. 2♀♀, alt. 2♀♀, *C. intybus* (Asteraceae); Şarköy, Mürefte, 12.VI.2019, apt. 6♀♀, alt. ♀, *L. serriola*.

General distribution. It is widespread and prevalent worldwide, except in southern Africa, although it can be found in the highlands of Kenya (Blackman & Eastop, 2023).

***Lipaphis (Lipaphis) erysimi* (Kaltenbach, 1843)**

Material examined. Tekirdağ, Hayrabolu, Yörükler, (41°07'21.8"N, 27°14'31.0"E), 06.V.2019 apt. 3♀♀, alt. 2♀♀, *Sisymbrium altissimum* L. (Brassicaceae); Malkara, Gazibey, 12.V.2018, apt. 2♀♀, alt. 2♀♀, *Camelina* sp. Crantz (Brassicaceae); Saray, Kavacık, 21.V.2019, apt. 2♀♀, alt. ♀, *Camelina* sp.; Süleymanpaşa, Değirmenaltı, 13.IV.2018, apt. 3♀♀, *Camelina* sp.

General distribution. It is present in Northern Europe and likely in Western Siberia and Central Asia as well (Blackman & Eastop, 2023).

Lipaphis (Lipaphidiella) lepidii (Nevsky, 1929)

Material examined. (1) Çorlu, Sarılar, 11.V.2018, apt. ♀, alt. ♀, *P. crispum* (Apiaceae); Malkara, Haliç, 21.V.2018, apt. ♀, alt. ♀, *P. crispum*; Süleymanpaşa, Köseilyas, (41°40'06.9"N, 27°34'55.6"E), 22.V.2018, apt. ♀, alt. ♀, *P. crispum*; Şarköy, Cumhuriyet, 23.V.2019, apt. 2♀♀, alt. ♀, *P. crispum*.

General distribution. Middle East and Central Asia, in Greece, eastward to Pakistan (Blackman & Eastop, 2023).

Macrosiphoniella (Macrosiphoniella) artemisiae (Boyer de Fonscolombe, 1841)

Material examined. Tekirdağ, Şarköy, Uçmakdere, 5.V.2018, apt. 2♀♀, *Tanacetum artemisioides* Sch. Bip. Ex Hook.fil. (Asteraceae).

General distribution. Throughout Europe, eastward across Siberia, south-west and Central Asia, Mongolia and China, Pakistan, and introduced to North America and Argentina (Blackman & Eastop, 2023).

Macrosiphoniella (Macrosiphoniella) sanborni (Gillette, 1908)

Material examined. Tekirdağ, Marmaraereğlisi, Yeniçiftlik, (41°00'33.8"N, 27°51'01.3"E), 07.VI.2018, apt. 3♀♀, alt. ♀♀, *Chrysanthemum* sp. L. (Asteraceae); Süleymanpaşa, Hürriyet, 16.VI.2018, apt. 2♀♀, *Chrysanthemum* sp.

General distribution. Distribution is almost world-wide (Blackman & Eastop, 2023).

Macrosiphoniella (Macrosiphoniella) tanacetaria (Kaltenbach, 1843)

Material examined. Tekirdağ, Çerkezköy, 24.VI.2019, apt. 2♀♀, alt. 2♀♀, *Achillea* sp. (Asteraceae).

General distribution. Throughout Europe, Morocco, Israel, Iran, Georgia, Kyrgyzstan, Kazakhstan, Mongolia, west and east Siberia, and introduced to North and South America (Blackman & Eastop, 2023).

Macrosiphum (Macrosiphum) euphorbiae (Thomas, 1878)

Material examined. Tekirdağ, Çorlu, Sarılar, 03.V.2019, apt. 3♀♀, alt. ♀, *Capsella bursa pastoris* L. (Brassicaceae); Malkara, Güneşli, 25.V.2019, apt. 2♀♀, alt. 2♀♀, *A. retroflexus*; Muratlı, Kepenekli, 24.V.2019, apt. 4♀♀, alt. 3♀♀, *O. acanthium*; Muratlı, Kepenekli, 24.V.2019, apt. 3♀♀, alt. 2♀♀, *A. retroflexus*; Saray, İnanlı, 28.VIII.2018, apt. 2♀♀, alt. 2♀♀, *Zea mays* L. (Poaceae); Saray, Kavacık, 10.VIII.2018, apt. 3♀♀, alt. ♀, *H. spondylium* (Apiaceae); Saray, Kavacık, 10.VIII.2018, apt. 2♀♀, alt. 2♀♀, *Heracleum spondylium* L. (Apiaceae); Saray, Küçükyoncalı, 09.VIII.2018, apt. 5♀♀, alt. 3♀♀, *Chenopodium* sp. (Amaranthaceae); Süleymanpaşa, Altınova, 15.V.2018, apt. 5♀♀, alt. 3♀♀, *A. retroflexus* (Amaranthaceae); Süleymanpaşa, Hürriyet, 07.VIII.2018, apt. 3♀♀, alt. 2♀♀, *O. acanthium* (Asteraceae); Süleymanpaşa, Hürriyet, 06.V.2019, apt. 3♀♀, *Euphorbia* sp. (Euphorbiaceae); Süleymanpaşa, 06.V.2019, apt. 4♀♀, alt. 2♀♀, *C. cardunculus* (Asteraceae); Süleymanpaşa, Namık Kemal 04.VI.2019, apt. 5♀♀, alt. ♀, *S. lycopersicum* (Solanaceae); Şarköy, Ulaman, 03.V.2018, apt. 5♀♀, alt. 2♀♀, *P. rhoeas* (Papaveraceae).

General distribution. Of North American origin, now almost world-wide (Blackman & Eastop, 2023).

Metopolophium (Metopolophium) dirhodum (Walker, 1849)

Material examined. Tekirdağ, Muratlı, İnanlı, 08.VI.2018, apt. 3♀♀, *Artemisia vulgaris* L. (Asteraceae); Süleymanpaşa, Köseilyas, 16.IX.2018, apt. 5♀♀, *Z. mays* (Poaceae); Şarköy, Palamut, (40°45'35.3"N, 27°09'26.02"E), 22.IX.2019, apt. 6♀♀, *Z. Mays*.

General distribution. Considered a significant pest of cereals, it has become extensively distributed, particularly in temperate regions worldwide (Blackman & Eastop, 2023).

***Microlophium carnosum* (Buckton, 1876)**

Material examined. Tekirdağ, Hayrabolu, Yörükler 12.V.2019, apt. 4♀♀, *Urtica* sp.; Malkara, Doğanköy, 06.XI.2018, apt. 5♀♀, *U. urens* (Urticaceae); Marmaraereğlisi, Sultanköy, 19.X.2019, apt. 2♀♀, alt. 2♀♀, *Urtica* sp.; Süleymanpaşa, Naip, 15.V.2019, apt. 2♀♀, *Urtica* sp.

General distribution. Asia east to Pakistan and Mongolia, in Europe, Africa (Burundi, Rwanda), North America and Chile (Blackman & Eastop, 2023).

***Myzus (Myzus) lythri* (Schrank, 1801)**

Material examined. Tekirdağ, Hayrabolu, 24.V.2019, apt. 2♀♀, alt. ♀, *Epilobium* sp. L. (Onagraceae); Süleymanpaşa, Karaevli, 01.VI.2018, apt. 3♀♀, alt. ♀, *Epilobium* sp.; Süleymanpaşa, Naip, 25.VI.2019, apt. 2♀♀, *Epilobium* sp.

General distribution. Middle East (Iran, Lebanon), central (Burundi) and southern Africa, throughout Europe, in North Africa (Tunisia), central Asia (Blackman & Eastop, 2023).

***Myzus (Myzus) ornatus* (Laing, 1932)**

Material examined. Tekirdağ, Malkara, Doğanköy, 06.VI.2018, apt. 4♀♀, *Urtica* sp. (Urticaceae); Süleymanpaşa, 01.VII.2019, apt. 3♀♀, alt. ♀, *Crysanthemum* sp. (Asteraceae).

General distribution. It is present on cultivated ornamental plants worldwide, but despite being prevalent in India since 1956, only one record exists from Southeast Asia (New Guinea) (Blackman & Eastop, 2023).

***Myzus (Nectarosiphon) persicae* (Sulzer, 1776)**

Material examined. Tekirdağ, Çerkezköy, Kızılpınar, 04.V.2018, apt. ♀, alt. ♀, *A. retroflexus* (Amaranthaceae); Ergene, Esenler, 08.V.2018, apt. 2♀♀, alt. 2♀♀, *P. rhoeas* (Papaveraceae); Hayrabolu, Kılıçlar, (41°14'33.4"N, 27°17'42.7"E), 22.VII.2019, apt. 3♀♀, *P. oleraceae* (Portulacaceae); Malkara, Develi, 16.XI.2018, apt. 4♀♀, alt. 2♀♀, *M. neglecta*; Marmaraereğlisi, Sultanköy, 06.V.2018, apt. 4♀♀, alt. 2♀♀, *Urtica* sp. (Urticaceae); Marmaraereğlisi, Sultanköy, 19.V.2019, apt. ♀, alt. ♀, *Lepidium* sp. L. (Brassicaceae); Muratlı, İnanlı, 24.V.2019, apt. ♀, alt. ♀, *Chenopodium* sp. (Amaranthaceae); Saray, Osmanlı 11.VI.2018, apt. 2♀♀, alt. ♀, *Sisymbrium* sp. L. (Brassicaceae); Süleymanpaşa, Değirmenaltı, 12.VI.2018, apt. 2♀♀, alt. ♀, *O. acanthium* (Asteraceae); Süleymanpaşa, 05.V.2018, apt. 2♀♀, alt. ♀, *C. cardundulus* (Asteraceae); Süleymanpaşa, Değirmenaltı, 16.VI.2018, apt. 2♀♀, alt. ♀, *Malva* sp. (Malvaceae); Süleymanpaşa, Köseilyas, 09.IX.2019, apt. 2♀♀, alt. ♀, *Solanum melongena* L. (Solanaceae); Süleymanpaşa, Naip, 06.VI.2018, apt. 2♀♀, alt. ♀, *H. sphondylium* (Apiaceae); Şarköy, Çengelliköy 01.V.2019, apt. 4♀♀, alt. ♀, *A. retroflexus*; Şarköy, Kirazlı, 28.IX.2019, apt. 5♀♀, alt. 3♀♀, *C. arvense* (Asteraceae); Şarköy, Palamut, 12.V.2018, apt. 2♀♀, alt. 2♀♀, *Capsella bursa pastoris* (Brassicaceae).

General distribution. Probably of east Asian origin, but is now world-wide (Blackman & Eastop, 2023).

***Nasonovia (Nasonovia) ribisnigri* (Mosley, 1841)**

Material examined. Tekirdağ, Çerkezköy, Gaziosmanpaşa, (41°17'12.3"N, 27°59'52.7"E), 04.V.2018, apt. 6♀♀, *T. officinale* (Asteraceae); Malkara, Haliç, 14.VII.2019, apt. 3♀♀, alt. 2♀♀, *Crepis* sp. (Asteraceae); Süleymanpaşa, Yüzüncüyıl, apt. 2♀♀, alt. ♀, 07.VII.2020 *Crepis pulchra*; Şarköy, Cumhuriyet, 23.V.2019, apt. 5♀♀, alt. 3♀♀ *T. officinale*.

General distribution. In Europe, Middle East, Central Asia, Africa (Algeria, Burundi, Rwanda), North and South America, New Zealand (Blackman & Eastop, 2023).

***Neomyzus (Aulacorthum) circumflexum* (Buckton, 1876)**

Material examined. Tekirdağ, Hayrabolu, Tatarlı, 20.VI.2018, 4♀♀, alt. ♀, *P. sativum* (Apiaceae); Süleymanpaşa, Namık Kemal, 01.VI. 2019, apt. 3♀♀, alt. 2♀♀, *Vicia sativa* L. (Fabaceae); Süleymanpaşa, Namık Kemal, 12.VI.2020, *Vicia sativa*.

General distribution. Virtually world-wide (Blackman & Eastop, 2023).

***Protaphis terricola* (Rondani, 1847)**

Material examined. Süleymanpaşa, Naip, 10.VII.2019, apt. 3♀♀, *Centaurea iberica* Trevir. & Spreng. (Asteraceae).

General distribution. In southern, central and eastern Europe, Iran, Türkiye, Israel, Kazakhstan, Pakistan, Egypt, Sudan, and introduced to South America (Blackman & Eastop, 2023).

***Rhopalosiphoninus (Rhopalosiphoninus) latysiphon* (Davidson, 1912)**

Material examined. Hayrabolu, Kılıçlar, 12.V.2019, apt. 3♀♀, alt. 2♀♀, *S. tuberosum* (Solanaceae).

General distribution. Europe and in Egypt, Nepal, Sri Lanka, Japan, Kenya, South Africa, India, Pakistan, China, Australia, New Zealand, and North and South America (Blackman & Eastop, 2023).

***Rhopalosiphum maidis* (Fitch, 1856)**

Material examined. Tekirdağ, Hayrabolu, Yörükler, 12.V.2019, apt. 3♀♀, alt. 2♀♀, *Sorghum halepense* L. (Poaceae); Malkara, Gazibey, 05.V.2018, apt. 3♀♀, alt. ♀, *Triticum durum* L. (Poaceae); Malkara, Güneşli, 03.VI.2019, apt. 4♀♀, alt. 2♀♀, *Avena* sp. L. (Poaceae); Süleymanpaşa, Karaevli, 22.IV.2018, apt. 2♀♀, alt. ♀, *Triticum aestivum* L. (Poaceae); Süleymanpaşa, Namık Kemal, Köseilyas, 22.V.2018, apt. 2♀♀, alt. 2♀♀, *T. aestivum*: (Poaceae); Süleymanpaşa, Namık Kemal, Köseilyas, 23.V.2019, apt. 2♀♀, alt. ♀, *T. aestivum*; Şarköy, Bulgur, 01.V.2019, apt. 6♀♀, *Hordeum* sp. L. (Poaceae).

General distribution. Virtually cosmopolitan (Blackman & Eastop, 2023).

***Rhopalosiphum oxyacanthae* (Schrank, 1801)**

Material examined. Tekirdağ, Saray, Kavacık, 21.V.2019, apt. 3♀♀, *Agrostis stolonifera* L. (Poaceae).

General distribution. In Europe, North Africa (Tunisia), the Azores, south-west and central Asia, and Japan (Blackman & Eastop, 2023).

***Rhopalosiphum padi* (L., 1758)**

Material examined. Tekirdağ, Süleymanpaşa, Karaevli, 26.IX.2018, apt. 4♀♀, *Z. mays* (Poaceae); Süleymanpaşa, Köseilyas, apt. 2♀♀, alt. 2♀♀, 25.V.2019, *Avena sativa* L.; Süleymanpaşa, Köseilyas, 26.09.2020, apt. 5♀♀, *Z. Mays*; Süleymanpaşa, Hürriyet, 03.V.2019, apt. 3♀♀, *Hordeum murinum* L.; Şarköy, Bulgur, 01.V.2019, apt. 2♀♀, alt. 2♀♀, *H. murinum*; Şarköy, Ulaman, 15.V.2018, apt. 3♀♀, alt. 2♀♀, *Cynodon dactylon* L. (Poaceae).

General distribution. Southern Europe and America Israel, Iran, Lebanon and Egypt (Blackman & Eastop, 2023).

***Rhopalosiphum rufiabdominale* (Sasaki, 1899)**

Material examined. Tekirdağ, Süleymanpaşa, Naip, 08.VII.2018, apt. 5♀♀, alt. ♀, *Allium cepa* L. (Amaryllidaceae).

General distribution. It is a cosmopolitan species that occurs all over the world (Nieto Nafria, 2017).

Schizaphis (Schizaphis) graminum (Rondani, 1852)

Material examined. Tekirdağ, Ergene, Kırkgöz, 27.V.2018, *Sorghum* sp. (Poaceae); Malkara, İbrice, (40°58'01.9"N, 26°52'24.0"E), 28.IX.2018, apt. 4♀♀, *Z. mays*; Muratlı, Aydınköy, 08.VI.2018, apt. 3♀♀, *Triticum* sp.; Saray, Kurtdere (41°24'16.4"N, 27°15'50.1"E), 02.IX.2019, apt. 5♀♀, *Z. mays*; Süleymanpaşa, Köseilyas, 25.V.2019, apt. 2♀♀, alt. 2♀♀ *Sorghum vulgare* Pers.

General distribution. Southern Europe, Middle East, Central Asia, Africa, India, Nepal, Pakistan, Thailand, Korea, China, Taiwan, Japan, and North, Central and South America (Blackman & Eastop, 2023).

Sitobion (Sitobion) avenae (Fabricius, 1775)

Material examined. Tekirdağ, Malkara, Güneşli, 25.V.2019, apt. 4♀♀, alt. 2♀♀, *Triticum* sp.; Saray, Kadıköy, 10.V.2018, apt. 4♀♀, alt. ♀ *T. aestivum*; Süleymanpaşa, Karaevli, apt. 3♀♀, alt. ♀, 06.V.2018, *T. aestivum* (Poaceae); Süleymanpaşa, Köseilyas, 22.V.2018, apt. 5♀♀, alt. ♀, *T. aestivum*; Süleymanpaşa, Naip, 25.V.2019, apt. 3♀♀, alt. 2♀♀, *Bromus* sp. Scop.; Şarköy, Mürefte, 12.V.2019, apt. 3♀♀, alt. 2♀♀, *T. aestivum*; Şarköy, Tepeköy, (40°40'21.6"N, 27°11'05.6"E), 22.V.2019, apt. 4♀♀, alt. 2♀♀, *T. aestivum*.

General distribution. Throughout Europe, the Mediterranean, the Middle East, Central Asia, India, Nepal, Pakistan, Africa; North, Central and South America (Blackman & Eastop, 2023).

Staegeriella necopinata (Börner, 1939)

Material examined. Tekirdağ, Çerkezköy, Bağlık, 10.VI.2019, apt. ♀, alt. ♀, *Galium* sp.; Şarköy, Eriklice, 15.VI.2018, apt. 2♀♀, alt. 2♀♀, *G. album* (Rubiaceae).

General distribution. Throughout Europe, western Siberia, Iran, Kazakhstan and Tunisia (Blackman & Eastop, 2023).

Uroleucon (Uroleucon) cichorii (Koch, 1855)

Material examined. Tekirdağ, Çerekezköy, Bağlık, 20.VII.2018, apt. 4♀♀, alt. 2♀♀, *T. officinale* (Asteraceae); Ergene, Esenler, 25.VI.2018, apt. 3♀♀, alt. 2♀♀, *C. intybus* (Asteraceae); Muratlı, Aydınköy, 08.VI.2018, apt. 5♀♀, alt. 3♀♀, *Rumex* sp. (Polygonaceae); Süleymanpaşa, Değirmenaltı, 17.VI.2019, apt. 3♀♀, *Cichorium* sp.; Süleymanpaşa, Namık Kemal, apt. 2♀♀, alt. 4♀♀, 26.VI.2020, *T. officinale*.

General distribution. In Europe, south-west and central Asia, Eritrea, Mongolia, Korea and east Siberia (Blackman & Eastop, 2023).

Uroleucon (Uroleucon) sonchi (L., 1767)

Material examined. Tekirdağ, Ergene, Kırkgöz, 27.V.2018, apt. 2♀♀, alt. 6♀♀, *Sonchus* sp. (Asteraceae); Saray, Osmanlı, 21.VI.2018, apt. 2♀♀, alt. 4♀♀, *Carduus* sp. (Asteraceae); Süleymanpaşa, Hürriyet, 25.VI.2018, apt. 4♀♀, alt. 2♀♀, *S. oleraeus* (Asteraceae); Süleymanpaşa, Hürriyet, 28.V.2019, apt. 3♀♀, alt. 2♀♀, *Rumex crispus* L. (Polygonaceae); Süleymanpaşa, Hürriyet, 28.IX.2019, apt. 3♀♀, alt. 2♀♀, *Sonchus* sp.; Şarköy, Tepeköy, 20.VI.2019, apt. 4♀♀, alt. 2♀♀, *Sonchus* sp.

General distribution. It has an almost world-wide distribution (Blackman & Eastop, 2023).

Uroleucon (Uroleucon) tanacetii (L., 1758)

Material examined. Tekirdağ, Saray, Büyükyoncalı, 08.VII.2019, apt. 5♀♀, alt. ♀, *Tanacetum* sp. L. (Asteraceae).

General distribution. In Europe, west Siberia, south-west and Central Asia, eastern Himalayas, and North America (Blackman & Eastop, 2023).

***Uroleucon (Uromelan) aeneum* (Hille Ris Lambers, 1939)**

Material examined. Tekirdağ, Hayrabolu, Kılıçlar, 01.VI.2018, apt. 6♀♀, alt. ♀, *Carduus* sp. (Asteraceae); Malkara, İbrice, 22.V.2019, apt. 2♀♀, alt. ♀, *C. arvense* (Asteraceae); Marmaraereğlisi, Sultanköy, 19.V.2019, apt. 3♀♀, alt. 2♀♀, *Urtica* sp. (Urticaceae); Saray, Kadıköy, 12.VI.2018, apt. 3♀♀, alt. 2♀♀, *Onopordium* sp. (Asteraceae); Şarköy, Ulaman, 15.V.2018, 2♀♀, alt. ♀, *S. marianum* (Asteraceae).

General distribution. In Europe, North Africa (Algeria), Türkiye, Armenia, Iran, Central Asia, east and west Siberia, and South America (Argentina, Chile) (Blackman & Eastop, 2023).

***Uroleucon (Uromelan) carthami* (Hille Ris Lambers, 1948)**

Material examined. Süleymanpaşa, Namık Kemal, 29.V.2019, apt. 4♀♀, alt. 2♀♀, *Carthamus tinctorius* L. (Asteraceae).

General distribution. In southern and central Europe, Algeria, Israel, Lebanon, Türkiye, and eastward to Pakistan and India (Kashmir) (Blackman & Eastop, 2023).

***Uroleucon (Uromelan) jaceae* (L., 1758)**

Material examined. Tekirdağ, Malkara, Gazibey, 20.V.2019, apt. 6♀♀, alt. 2♀♀, *Carduus crispis* L. (Asteraceae); Malkara, Haliç, 21.V.2018, apt. 3♀♀, alt. ♀, *Cynara* sp. (Asteraceae); Süleymanpaşa, Naip, 06.VI.2018, apt. 2♀♀, *Acroptilon repens* L. (Asteraceae); Şarköy, Çengelliköy, 22.V.2019, apt. 2♀♀, alt. ♀, *Cynara* sp.

General distribution. In Europe, west Siberia, Middle East, Central Asia and Pakistan (Blackman & Eastop, 2023).

***Uroleucon (Uromelan) nigrocampanulae* (Theobald, 1928)**

Material examined. Marmaraereğlisi, Bahçelievler, 18.VIII.2018, apt. 3♀♀, *Companula trachelium* L. (Campanulaceae).

General distribution. In Europe and across Asia to east Siberia (Blackman & Eastop, 2023).

Subfamily, Chaitophorinae***Sipha (Rungisia) elegans* (Del Guercio, 1905)**

Material examined. Tekirdağ, Kapaklı, Karlı, 01.VI.2019, apt. 2♀♀, *Agropyron* sp. Gaertn. (Poaceae); Süleymanpaşa, 07.VI.2018, apt. 4♀♀, *Agropyron* sp.

General distribution. In Europe, across Asia to China and east Siberia, and in North America (Blackman & Eastop, 2023).

***Sipha (Rungisia) maydis* (Passerini, 1860)**

Material examined. Tekirdağ, Kapaklı, Pınarca, 01.VI.2019, apt. 3♀♀, alt. 2♀♀, *Bromus* sp. (Poaceae); Süleymanpaşa, Hürriyet, 05.VI.2020, apt. 2♀♀, alt. 2♀♀, *Bromus* sp.; Süleymanpaşa, Naip, 24.VI.2018, apt. 3♀♀, alt. 2♀♀, *Bromus* sp.

General distribution. In regions with arid climates beyond northwest Europe, this species has the potential to become a pest of cereal crops (Blackman & Eastop, 2023).

Subfamily, Eriosomatinae

***Forda formicaria* (von Heyden, 1837)**

Material examined. Tekirdağ, Malkara, Gazibey, 12.V.2018, apt. 3♀♀, *T. aestivum* (Poaceae); Malkara, Güneşli, 03.VI.2019, apt. 4♀♀, *T. aestivum*; Süleymanpaşa, Hürriyet, 17.V.2019, apt. 3♀♀, *Poa annua* (L.) (Poaceae); Süleymanpaşa, Köseilyas, 29.V.2019, apt. 5♀♀, *T. aestivum*.

General distribution. In northern Europe, Iran, Siberia, North America and Central Asia (Blackman & Eastop, 2023).

***Forda marginata* (Koch, 1857)**

Material examined. Tekirdağ, Malkara, Develi, 11.V.2018, apt. 6♀♀, *P. annua* (Poaceae); Süleymanpaşa, Namık Kemal, 09.V.2019, apt. 5♀♀, *P. annua*; Şarköy, Tepeköy, 01.V.2019, apt. 2♀♀, *H. murinum* (Poaceae).

General distribution. Siberia, Central Asia, India, in northern and central Europe, North America and China (Blackman & Eastop, 2023).

***Pemphigus (Pemphigus) bursarius* (L., 1758)**

Material examined. Tekirdağ, Çorlu, Kazımiye, (41°09'519.3"N, 27°49'36.3"E), 24.V.2018, apt. 5♀♀, *T. officinale* (Asteraceae); Çorlu, Yenice, 28.V.2019, apt. 3♀♀, *T. officinale*; Saray, Kavcık, 21.V.2019, apt. 3♀♀, *T. officinale*.

General distribution. Northern and southern Africa, in Europe, across Asia to eastern Siberia, North and South America (Blackman & Eastop, 2023).

***Rectinasus buxtoni* (Theobald, 1914)**

Material examined. Tekirdağ, Hayrabolu, Tatarlı, 30.VII.2018, apt. 6♀♀, *Xanthium strumarium*; Marmaraeğlisi, Sultanköy, 18.VIII.2018, apt. 3♀♀, *Xanthium strumarium* (L.) (Asteraceae); Muratlı, Kepenekli, 23.VIII.2019, apt. 3♀♀, *Xanthium* sp.; Süleymanpaşa, Değirmenaltı, 12.VIII.2019, apt. 4♀♀, *Lactuca* sp. (Asteraceae).

General distribution. Southern Europe, North Africa, in southwest Asia (Israel, Iran, Türkiye), northern Caucasus, Transcaucasia, Kazakhstan, Turkmenistan and Dagestan (Blackman & Eastop, 2023).

***Smynthuroides betae* (Westwood, 1849)**

Material examined. Tekirdağ, Muratlı, Kepenekli 02.V.2018, 3♀♀, *Lens culinaris* L. (Fabaceae); Saray, Büyükoncalı, 09.VI.2018, apt. 2♀♀, *Orabanche* sp. L. (Orobanchaceae); Süleymanpaşa, Karaevli, 22.V.2019, 5♀♀, *T. sativum*; Süleymanpaşa, Namık Kemal, 25.VI.2018, apt. 3♀♀, *P. oleracea* (Portulacaceae); Şarköy, Koçeli, 09.V.2018, apt. 5♀♀, *Triticum sativum* L. (Poaceae).

General distribution. Algeria, Morocco, Israel, Syria, Iran, southern Crimea, Transcaucasia and Pakistan (Blackman & Eastop, 2023).

***Tetraneura (Tetraneura) ulmi* (L., 1758)**

Material examined. Tekirdağ, Malkara, Danişment, 02.V.2018, apt. 4♀♀ *Dactylis glomerata* L. (Poaceae).

General distribution. Europe, Asia, eastern Siberia, northern Japan, and North America (Blackman & Eastop, 2020).

Subfamily, Lachninae

Protrama radialis (Kaltenbach, 1843)

Material examined. Malkara, Doğanköy, 15.VIII.2018, 4♀♀, *C. arvense* (Asteraceae); Marmaraereğlisi, Bahçelievler, 18.VIII.2018, apt. 3♀♀, *C. arvense*; Şarköy, Palamut, 05.VIII.2019, 6♀♀, *C. pycnocephalus* (Asteraceae).

General distribution. Excluding the Iberian Peninsula, the species is present in Europe, as well as Southwest and Central Asia (Blackman & Eastop, 2023).

Of the species found during the study, *M. persicae* and *A. fabae* were found in 16 different hosts, *A. craccivora* in 13 different hosts, *M. euphorbiae* in 10 different hosts, *A. solani*, *B. cardui* and *H. lactucae* in 6 different hosts. In this study, the most common *Aphis* genus was *A. gossypii*. In addition, *C. lanatus*, *C. sativus*, *P. oleracea*, *Carduus* sp., *A. esculentus*, *S. lycopersicum*, *O. acanthium*, *Chenopodium* sp., *M. piperita*, *A. retroflexus*, *M. neglecta*, and *P. rhoeas* were detected on 12 different host plants. Out of the various families, Asteraceae (Compositae) stood out as the most favored, boasting a total of 30 aphid species. Asteraceae was followed by Apiaceae (Umbelliferae) with 16 aphid species, Poaceae (Gramineae) and Amaranthaceae families with 11 aphid species. *E. tenuifolia*, *Cachyrs* sp., *M. neglecta*, *C. intybus*, *Achillea* sp., *A. retroflexus* and *S. marianum* have been identified as new host records.

Analysis of both the present study and previous research, such as Tuatay (1988), Akyürek (2013), Özdemir (2004), Kök et al. (2016), Görür et al. (2017), Öztürk & Muştu (2017), Kuloğlu & Özder (2017), Kök & Kasap (2019, 2022), Başer & Tozlu (2020), Özdemir (2020), Kök (2021), Görür (2022), Kök & Özdemir (2021, 2022) reveals that conducting taxonomic studies on various regions would make a significant contribution to the understanding of aphid fauna in Türkiye. This is due to the fact that Türkiye possesses rich biodiversity, diverse regions, microclimates, as well as a varied fauna and flora.

Acknowledgments

We would like to thank Assoc. Prof. Dr. Işıl Özdemir (Kocaeli University, Faculty of Agriculture, Department of Plant Protection) for the identification aphids and Prof. Dr. Evren Cabi (Tekirdağ Namık Kemal University, Faculty of Science, Department of Biology) for the identification of the host plants.

References

- Akyürek, B., 2013. Samsun İli Aphididae (Hemiptera: Aphidoidea) Familyası Türlerinin Taksonomik Yönden İncelenmesi. Ondokuz Mayıs Üniversitesi, Fen Bilimleri Enstitüsü, (Unpublished) PhD Thesis, Samsun, 378 pp (in Turkish with abstract in English).
- Başer, G. & G. Tozlu, 2020. Determination of aphid species (Hemiptera: Aphididae) on some weeds in Atatürk University Campus (Erzurum). Plant Protection Bulletin, 60 (2): 99-110 (in Turkish with abstract in English).
- Bissel, T. L., 1978. Aphids on Juglandaceae in North America. Maryland Agricultural Experiment Station, 78 pp.
- Blackman, R. L. & V. F. Eastop, 1984. Aphids on The World's Crops. An Identification Guide. A Wiley. Interscience Publication, 466 pp.
- Blackman, R. L. & V. F. Eastop, 1994. Aphids on The World's Trees: An Identification & Information Guide CAB International, 986 pp.
- Blackman, R. L. & V. F. Eastop, 2000. Aphids on The World's Crops: An Identification guide. (Second Edition). A Wiley. Interscience Publication, 414 pp.
- Blackman, R. L. & V. F. Eastop, 2023. Aphids on the world's plants an online identification and information guide. (Web page: <http://www.aphidsonworldsplants.info/>) (Date accessed: August 2023).
- Bodenheimer, F. S. & E. Swirski, 1957. The Aphidoidea of the Middle East. Weizmann Science Press of Israel, Jerusalem, 378 pp.

- Börner, C., 1952. Europae Centralis Aphides. Die Blattläuse Mitteleuropas. Namen, Synonyme, Wirtspflanzen, Generationszyklen supplement 3 (2): 265-488.
- Börner, C. & K. Heinze, 1957. Aphidina. Part 4 (Homoptera II) (Aphidoidea). Handbuch der Pflanzenkrankheiten (Ed. Sorauer) (5 th Ed.), 402 pp.
- Cottier, W., 1953. Aphids of New Zealand. N.Z. Department of Scientific and Industrial Research Bulletin 106: 1-382.
- Davis, P.H., R. Mill & K. Tan, 1988. Flora of Türkiye and The East Aegean Islands, Edinburgh University Press, 590 pp.
- Fahringer J., 1922. Eine rhynchotenausbeute aus der Türkei. Kleinasien und den benachbarten gebieten. Konowia, 137 (44): 296-307 (in German).
- Favret, C., 2023. Aphid Species File 5.0/5.0. (Web page: <http://aphid.speciesfile.org>) (Date accessed: October 2023).
- Görür, G., 2022. Contribution to the aphid fauna of the Ordu province with first record of an exotic aphid species, *Euceraphis gillettei* Davidson, 1915, in Turkey. Turkish Journal of Zoology, 46 (5): 418-422.
- Görür, G., Ö. Şenol, G. Gezici & D. Parmaksız, 2018. Adıyaman, Malatya ve Şanlıurfa İlleri Afıt (Homoptera: Aphididae) faunasının belirlenmesi, (TUBİTAK: 115Z325), 263 pp (in Turkish).
- Görür, G., Ö. Şenol, G. Gezici, H. Akyıldırım Beğen & D. Parmaksız, 2017. New aphid (Hemiptera: Aphidoidea) records from South Eastern Parts of Turkey. Journal of Insect Biodiversity and Systematics, 3 (3): 257-264.
- Görür, G., Ö. Şenol, H. Akyıldırım & E. Demirtaş, 2014. İç Batı Anadolu Bölümü afıt (Homoptera: Aphididae) faunasının belirlenmesi, (TUBİTAK: 111T866.), 235 pp (in Turkish).
- Görür, G., Ö. Şenol, H. Akyıldırım Beğen, G. Başer & B.V. Akçay, 2023. A further contribution to the Aphid (Hemiptera: Aphidoidea) fauna of Turkey including a description of a new host plant associations and colony appearances. Journal of the Entomological Research Society, 25 (1): 181-191.
- Görür, G., Ü. Zeybekoğlu, B. Akyürek, M., Işık & H. Akyıldırım, 2009. Trabzon, Rize ve Artvin İllerinin Afıt (Homoptera: Aphididae) Faunasının Belirlenmesi. (TUBİTAK: 107T450), 223 pp (in Turkish).
- Hille Ris Lambers D., 1945. De Bloedvlekkenluis van Appel, *Sappaphis devecta* (Wlk). Tijdschrift Over Plantenziekten, 51: 57-66 (in German).
- Hille Ris Lambers D., 1969. Four new species of Cavariella del Guercio, 1911 (Homoptera: Aphididae). Estratto Dalle Memorie Della Societe Entomologica Italiana, 48: 285-299.
- Hille Ris Lambers, D., 1947a. Contributions to a monograph of the Aphididae of Europe. III. Temminckia, 7: 179-319.
- Hille Ris Lambers, D., 1947b. On some mainly Western European aphids. Zoologische Mededeelingen, 28: 291-333.
- Hille Ris Lambers, D., 1949. Contribution to a monograph of the Aphididae of Europe. Temminckia, 3: 282-285.
- Hille Ris Lambers, D., 1950. On mounting aphids and other soft skinned insects. Entomologische Berichten, 13 (298): 55-58.
- Hille Ris Lambers, D., 1973. Notes on some oriental aphids. Oriental Insects, 7 (2): 239-258.
- Holman, J., 2009. Host Plant Catalog of Aphids, Palearctic Region. Springer, Bratislava. 1216 pp.
- Houard, C., 1922. Les zoocécidies des plantes d'Afrique, d'Asie et d'Océanie (Vol. 1). J. Hermann, 496 pp (in French).
- Kök, Ş., 2021. Diversity and plant interactions of aphids (Hemiptera: Aphidomorpha) adjacent to Çardak Lagoon with new aphid and host records for Turkey. Turkish Journal of Entomology, 45 (4): 425-439.
- Kök, Ş. & I. Özdemir, 2021. Annotated systematic checklist of the aphids (Hemiptera: Aphidomorpha) of Turkey. Zootaxa, 4925 (1): 1-74.
- Kök, Ş. & I. Özdemir, 2022. Alien aphids (Hemiptera: Aphidomorpha) of Türkiye. Trakya University Journal of Natural Sciences, 23 (Special Issue: Biodiversity of Insect): 9-22.
- Kök, Ş. & İ. Kasap, 2019. Aphid (Hemiptera: Aphididae) species of the South Marmara Region of Türkiye including the first record of *Dysaphis radicola meridialis* Shaposhnikov, 1964 for the aphid fauna of Türkiye. Turkish Journal of Entomology, 43 (1): 63-78.
- Kök, Ş. & İ. Kasap, 2022. Interactions of aphids (Hemiptera: Aphididae) with their primary and secondary host plants in orchards in Çanakkale Province, Turkey. Turkish Journal of Entomology, 46 (1): 51-62.

- Kök, Ş., I. Kasap & I. Özdemir, 2016. Aphid (Hemiptera: Aphididae) species determined in Çanakkale Province with a new record for the aphid fauna of Turkey. Turkish Journal of Entomology, 40 (4): 397-412.
- Kuloğlu, I. & N. Özder, N. 2017. Aphids (Hemiptera: Aphididae) on Ornamental Plants from Yalova Province, Türkiye. Journal of Agriculture Faculty, 5 (2): 69-72.
- Özdemir, I., 2004. Ankara İlinde Otsu Bitkilerde Aphidoidea Türleri Üzerinde Taksonomik Araştırmalar. Ankara Üniversitesi, Fen Bilimleri Enstitüsü, (Unpublished) PhD Thesis, Ankara, 208 pp (in Turkish with abstract in English).
- Özdemir, I., 2020. Some new records on aphid (Hemiptera, Aphididae) fauna of Turkey and aphid host plant interactions. Journal of the Entomological Research Society, 22 (2): 191-201.
- Öztürk, D. Ö. & Muştu, M. 2017. Kayseri'nin merkez ilçelerinde süs bitkilerinde bulunan yaprakbiti (Hemiptera: Aphididae) türleri. Türkiye Entomoloji Bülteni, 7 (4): 277-292.
- Patlar, G., Oğuzoğlu, S., Avcı, M. & Şenol, Ö. 2021. Aphid (Hemiptera: Aphididae) species in Burdur urban parks with three records for the fauna of Turkey, their host plants and predators. Turkish Journal of Entomology, 45 (3): 381-397.
- Schimitschek, E., 1944. Forstinsekten der Türkei und Ihre Umwelt Grundlagen der Türkischen Forstentomologie. Prag: Volk und Reich Verlag, 371 pp (in German).
- Shaposhnikov, G. Ch., 1964. 'Suborder Aphidinea-Plant Lice, 4489-616'. In: Keys to the Insects of the European Part of the USSR. Vol 1. Ed. G. Bei-Bienko) Moscow, USSR: Zoologicheskii Institut Akademiia Nauk, 936 pp.
- Stroyan, H. L. G., 1957. Further additions to the British aphid fauna. Transactions of the Royal Entomological Society of London, 109 (11): 311-359.
- Stroyan, H. L. G., 1961. Identification of Aphids Living on Citrus. FAO Plant Protection Bulletin. 9 (4): 45-65.
- Stroyan, H. L. G., 1963. The British Species of *Dysaphis* Börner (*Sappaphis aucti* nec Mats.) Part II. Her Majesty's Stationery Office, London 119 pp.
- Stroyan, H. L. G., 1977. Hemiptera, Aphidoidea (Part), Chaptophoridae and Callaphidae. Handbooks for the Identification of British Insects. II, Part 4 (a). Royal Entomology Society of London, 130 pp.
- Stroyan, H. L. G., 1984. Aphids-Pterocommatinae and Aphidinae (Aphidini) Hemiptera: Aphididae. Handbooks for the Identification of British Insects. Royal Entomology Society of London, 2 (6): 232.
- Şenol, Ö., G. Görür, G. Baser & H. Akyıldırım Beğen, 2021. Contributions to the Turkish Aphid Fauna from Aegean and Mediterranean Part of Turkey. Journal of Suleyman Demirel University Institute of Science and Technology, 25 (3): 717-720.
- Tuatay, N., 1988. Türkiye yaprakbitleri (Homoptera: Aphididae) I. Aphidinae Macropsophini (I. Kısım). Bitki Koruma Bülteni, 28 (1-2): 1-28 (in Turkish with abstract in English).