

A Study on the Heteroptera Fauna of Bozcaada (Çanakkale Province)

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Abstract: Ecological and faunistic information on 385 Heteropteran specimens, belonging to 38 species of 30 genera of 9 families, collected from Bozcaada, between May and September 1996, is given. Thirty-six of these 38 species are new records for the fauna of Bozcaada.

Key Words: Bozcaada (Çanakkale), ecology, fauna, Heteroptera, terrestrial

Bozcaada (Çanakkale) Heteroptera Faunasının Araştırılması

Özet: Bu çalışmada 1996 yılının Mayıs-Eylül ayları arasında Bozcaada'dan arazi çalışmaları sonucunda toplanan 9 familya, 30 cins ve 38 türe ait toplam 385 karasal Heteroptera örneğinin fauna ve ekolojilerine ait bilgiler verilmiştir. Bu 38 türden 36'sı Bozcaada faunası için yeni kayıttır.

Anahtar Sözcükler: Bozcaada (Çanakkale), fauna, ekoloji, Heteroptera, karasal

Introduction

Although Heteroptera is an important group among the insect orders not only for its numbers of species but also for its distribution and food preference, faunistic, systematic and ecological studies on Heteropteran insect fauna carried out in Turkey, are not sufficient (1- 23).

The research area, Bozcaada, is one of the islands situated in the Aegean Sea. After having been collected, the Heteropteran specimens were identified and then the species were assessed according to systematic and faunistic concepts. The main reason for choosing Bozcaada as a research area was that no study concerning the fauna of Heteropteran insects has been done, and it is an island.

Materials and Methods

The field study was carried out in different periods between May and September 1996 on the island of Bozcaada. The specimens collected were put into killing jars filled with 70% alcohol and then they were relaxed, and pinned.

Ahmad and Abbas (23), Kıyak (6,7), Çakır and Önder

(24), Kerzhner and Yachevskii (25), Stichel (20), and Wagner (22) were used to describe the samples; Ahmad and Abbas (23), Altınayar (1), Aysev (2), Çakır and Önder (24), Hoberlandt (18), Karsavuran (4), Kıyak (6-8), Lodos and China (26), Lodos and Önder (14), Pehlivan (15), Stichel (20), Tuatay (27), Wagner (22) and Yiğit and Uygun (16) to determine the distribution of species in Turkey and in the rest of the world; and Altınayar (1), Aysev (2), Çağlar (3), Çakır and Önder (24), Hoberlandt (18), Karsavuran (5), Kıyak (6-8), Lodos and China (26), Lodos and Önder (9-12), Önder (13,14), Pehlivan (15), Stichel (20), Tuatay (27), Kaya and Hıncal (28), Wagner (22), and Zümreoğlu (29) to assess the habitats and host plants of species.

Hocaoğlu (30,31) and Seçmen (32,33) were used to determine the vegetation and soil types of localities.

Localities Studied

Locality 1: Centre - İğdelik.

a) **Vegetation type:** Vineyards and phrygana vegetation are dominant.

b) **Altitude:** ca. 10-20 m.

c) **Dominant plant species:** *Posidonia oceanica*, *Zostera marina*, *Ranunculus sanicilifolius*, *R. sphaerospermus*, *Eleocharis palustris*, *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Astragalus hamasus*, *Valantia hispada*, *Vitis vinifera*.

Locality 2: Hacıhasan tepe - Hacımahmut tepe.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 40-90 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Coridothymus capitatus*, *Crateagus monogyna* ssp. *monogyna*, *Trifolium uniflorum*, *Carlina corymbosa*, *Leontodon tuberosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*, *V. hispada*, *Astragalus hamasus*.

Locality 3: Hacıhasan tepe - Sedef tepe.

a) **Vegetation type:** Phrygana vegetation and vineyards are dominant.

b) **Altitude:** ca. 30-50 m.

c) **Dominant plant species:** *Posidonia oceanica*, *Zostera marina*, *Holoschoenus vulgaris*, *Bellis annua*, *Cyperus kalli*, *Statice sieberi*, *Schoenus nigricans*, *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Lotus edulis*, *Astragalus hamasus*, *Valantia hispada*, *Coridothymus capitatus*, *Trifolium uniflorum*, *Carlina corymbosa*, *Leontodon tuberosum*, *Vitis vinifera*.

Locality 4: Centre - Sedef tepe.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 10-60 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Coridothymus capitatus*, *Trifolium uniflorum*, *Carlina corymbosa*, *Leontodon tuberosum*, *Iris mellita*, *Ornithogalum fimbriatum*.

Locality 5: Centre - Çayır

a) **Vegetation type:** Phrygana vegetation and vineyards are dominant.

b) **Altitude:** ca. 10-40 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Posidonia oceanica*, *Vitis vinifera*.

Locality 6: Centre - Göztepe.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 10-110 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*, *Lotus edulis*, *Astragalus hamasus*, *Valantia hispada*.

Locality 7: Sulubahçe - Ayazma.

a) **Vegetation type:** Phrygana and macchie vegetations are dominant.

b) **Altitude:** ca. 10-20 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*, *Lotus edulis*, *Astragalus hamasus*, *Quercus coccifera*, *Pistacia lentiscus*, *Thymelaea tartonraira*, *Anthyllis hermanniae*.

Locality 8: Tuzburun tepe - Hacımahmut tepe.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 50 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*.

Locality 9: Centre - Hacıhasan tepe.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 20 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Coridothymus capitatus*, *Crateagus monogyna* ssp. *monogyna*, *Trifolium uniflorum*, *Carlina corymbosa*, *Leontodon tuberosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephale*.

Locality 10: Centre - Seramit tepe.

a) **Vegetation type:** Phrygana vegetation and vineyards are dominant.

b) **Altitude:** ca. 50 m.

c) **Dominant plant species:** *Vitis vinifera*, *Sarcopterium spinosum*, *Trifolium uniflorum*, *Astragalus spruneri*, *Valantia muralis*.

Locality 11: Hacıhasan tepe - Seramit tepe.

a) **Vegetation type:** Macchie and phrygana vegetation, *Olea* spp. and vineyards are dominant.

b) **Altitude:** ca. 10-50 m.

c) **Dominant plant species:** *Vitis vinifera*, *Quercus coccifera*, *Pistacia lentiscus*, *Thymelaea tartonraira*, *Anthyllis hermänniae*, *Sarcopterium spinosum*, *Trifolium uniflorum*, *Iris mellita*, *Ornithogalum fimbriatum*.

Locality 12: Batıburnu - Çayır.

a) **Vegetation type:** *Pinus brutia*, vineyards, and phrygana vegetation are dominant.

b) **Altitude:** ca. 10-50 m.

c) **Dominant plant species:** *Ammophila littoralis*, *Centaurea spinosa* var. *spinosa*, *Cistus creticus*, *Anthyllis hermänniae*, *Sarcopterium spinosum*, *Corydanthus capitatus*, *Pistacia lentiscus*, *Thymelaea tartonraira*, *Osyris alba*, *Vitis vinifera*, *Pinus brutia*, *Muscari racemosum*, *Valantia muralis*, *Clypeola jonthlaspi*, *Dorycnium hirsutum*, *Carex distans*, *Teucrium divariacatum* ssp. *villosum*, *Anthemis pseudocotula*, *Asteriscus aquaticus*, *Aegilops caudata*, *Geranium lucidum*, *Senecio vulgaris*.

Locality 13: Latif çamlığı.

a) **Vegetation type:** *Pinus brutia* is predominant.

b) **Altitude:** ca. 10-50 m.

c) **Dominant plant species:** *Pinus brutia*, *Muscari racemosum*, *Valantia muralis*, *Clypeola jonthlaspi*, *Dorycnium hirsutum*, *Carex distans*, *Teucrium divariacatum* ssp. *villosum*, *Anthemis pseudocotula*, *Asteriscus aquaticus*, *Aegilops caudata*, *Geranium lucidum*, *Senecio vulgaris*, *Cerastium pumilum*, *Galium aparine*.

Locality 14: Hacımahmut tepe - Latif çamlığı.

a) **Vegetation type:** *Pinus brutia* and vineyards are dominant.

b) **Altitude:** ca. 10-50 m.

c) **Dominant plant species:** *Vitis vinifera*, *Pinus brutia*.

Locality 15: The cape Killik.

a) **Vegetation type:** Vineyards are dominant.

b) **Altitude:** ca. 60 m.

c) **Dominant plant species:** *Vitis vinifera*.

Locality 16: Çamlık sırtı.

a) **Vegetation type:** *Pinus brutia*, vineyards, and phrygana vegetation are dominant.

b) **Altitude:** ca. 50 m.

c) **Dominant plant species:** *Pinus brutia*, *Sarcopterium spinosum*, *Coridothymus capitatus*, *Anthemis rigida*, *Valantia muralis*, *V. hispada*, *Astragalus hamasus*, *Vitis vinifera*.

Locality 17: The cape Mermer.

a) **Vegetation type:** Phrygana and macchie vegetations are dominant.

b) **Altitude:** ca. 10 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephala*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*, *Lotus edulis*, *Astragalus hamasus*, *Quercus coccifera*, *Pistacia lentiscus*, *Thymelaea tartonraira*, *Anthyllis hermänniae*.

Locality 18: Tuzburnu.

a) **Vegetation type:** Phrygana vegetation is dominant.

b) **Altitude:** ca. 40 m.

c) **Dominant plant species:** *Sarcopterium spinosum*, *Iris mellita*, *Ornithogalum fimbriatum*, *Paronychia macrocephala*, *Anthemis rigida*, *Holosteum umbellatum* var. *umbellatum*, *Astragalus spruneri*, *Plantago lagopus*, *Valantia muralis*, *Lotus edulis*, *Astragalus hamasus*, *Valantia hispada*.

Results

Miridae Hahn, 1831

Deraeocoris rutilus (Herrich-Schaeffer, 1838)

Habitat: The specimens belonging to *D. rutilus* were found on *Carduus pycnocephalus* subsp. *albidus* (Bieb) Kazmi. (18,8,9,13).

Materials examined: 1♀, 24.6.1996 (Loc. 1), 1♂, 24.6.1996 (Loc.6).

Distribution in Turkey: The Aegean, the Marmara, and the Anatolia regions (18,10,8,13,29).

Distribution in the world: Israel, Sardinia, Syria, Cyprus, Poland, the Balkans, Russia, and Turkey (18,25).

Deraeocoris schach (Fabricius, 1781)

Habitat: The specimens belonging to *D. schach* were found on *Dorycnium hirsutum* in shrub formations below the *Pinus brutia* forest zone (18,9).

Materials examined: 2♂♂, 24.6.1996 (Loc. 3)

Distribution in Turkey: The Aegean and the Marmara regions and Amasya (9,18).

Distribution in the world: Israel, the western part of Europe, Portugal, the Balkans, Italy, Russia and Turkey (18,25).

Capsodes infuscatus (Brull, 1832)

Habitat: The samples belonging to *C. infuscatus* were found on macchie, on *Hordeum bulbosum* L., *Anthemis rigida* Boiss., *Carduus acicularis* Bentol below the forest formation and on *Juniperus oxycedrus* L. ssp. *oxycedrus*.

Materials examined: 2♀♀, 6♂♂, 5.5.1996 (Loc. 1), 3♀♀, 2♂♂, 6.5.1996 (Loc. 3) 10♀♀, 5♂♂ (Loc.14).

Distribution in Turkey: The Aegean and South-East Anatolia regions, Balıkesir and Çanakkale (18,9,29).

Distribution in the world: The Balkans, Egypt, Cyprus, Russia, the Middle East and Turkey (26,18).

Reduviidae Latreille, 1807

Rhynocoris punctiventris (Herrich-Schaeffer, 1846)

Habitat: The samples belonging to *R. punctiventris* were found on *Urtica urens* L. (18,6,3,8).

Materials examined: 4♂♂, 17.8.1996 (Loc. 18)

Distribution in Turkey: The Aegean region, Kocaeli, Bursa, Adana, Kahramanmaraş, Gaziantep, and Elazığ (18,6,8,3,4,29).

Distribution in the world: Cyprus, Syria, Russia, the Balkans and Turkey (18,25).

Lygaeidae Schilling, 1829

Lygaeus equestris ssp. *equestris* (Linne, 1758)

Habitat: The specimens belonging to the species *L. equestris* ssp. *equestris* were found on *Astragalus spruneri* Boiss., *Cardaria draba* and *Astragalus hamasus* in shrub formations and in vineyards.

Materials examined: 1♀, 3♂♂, 6.5.1996 (Loc. 2), (Loc. 3), (Loc. 4), (Loc. 12), 1♀, 3♂♂, 24.8.1996 (Loc. 1).

Distribution in Turkey: The Aegean, Middle Anatolia, Marmara, East Anatolia, West Black Sea and East Mediterranean regions, Gaziantep and Diyarbakır (1,9, 10,12,6,8,18,16,3).

Distribution in the world: The Middle East, Tunisia, Guinea, India, Japan, Russia, Spain, Morocco, Algeria, Albania, China, Turkey and widespread in Europe (2,18).

Lygaeus pandurus ssp. *pandurus* (Scopoli, 1763)

Habitat: The samples belonging to *L. pandurus* ssp. *pandurus* were found on *Fumaria judaica* Boiss. and *Capsella bursa-pastoris* (L.) Medik.

Materials examined: 1♀, 2♂♂, 5.5.1996 (Loc. 1), 3♂♂, 7.5.1996 (Loc. 12).

Distribution in Turkey: The Aegean, Marmara, Middle Anatolia, West Black Sea, and West Mediterranean regions, Adana and Elazığ (2,9,10,12,6,8,18,29).

Distribution in the world: Russia, Algeria, Sudan, Madeira, Morocco, India, Philippines, Africa, Tunisia, Mediterranean, Albania, the Balkans, Turkey and widespread in Europe (2,18).

Piocoris erythrocephalus (Peletier and Serville, 1825)

Habitat: The samples belonging to *P. erythrocephalus* were found on *Teucrium polium* L.

Materials examined: 2♀♀, 20.8.1996 (Loc. 6).

Distribution in Turkey: The Mediterranean, Marmara, West Black Sea, Middle Anatolia, Aegean, and East Anatolia regions, Diyarbakır and Gaziantep (2,11,9, 10,8,23,29).

Distribution in the world: Russia, Africa, the Middle East, and southern France, Portugal, Mediterranean, Balkans and Turkey (2,18).

***Emblethis denticollis* Horvath, 1878**

Habitat: The samples belonging to *E. denticollis* were found on *Lepidium* sp. (9,18,13).

Materials examined: 1♀, 20.8.1996 (Loc. 6), 1♀, 9.5.1996 (Loc. 5).

Distribution in Turkey: The Middle Anatolia region, Burdur, Gaziantep, Erzincan and Edirne (10,18,13,29).

Distribution in the world: Russia, Europe, Morocco, the Balkans, the Middle East and Turkey (18).

Stenocephalidae Dallas 1852***Dicranocephalus albipes* (Fabricius, 1781)**

Habitat: The specimens belonging to *D. albipes* were found within cultivated areas.

Materials examined: 2♂♂, 4 nymphs, 19.7.1996 (Loc. 12).

Distribution in Turkey: The Aegean, West Black Sea, and Marmara regions, western parts of Middle Anatolia, and the South-East Anatolia and East Anatolia regions (15,3,18,8,29).

Distribution in the world: Europe, Mediterranean, the northern parts of Africa, the Middle East, Russia, the Balkans and Turkey (15,18).

***Dicranocephalus agilis* ssp. *agilis* (Scopoli, 1763)**

Habitat: The specimens belonging to *D. agilis* ssp. *agilis* were found on *Dorycnium hirsutum* in shrub formations below the *Pinus brutia* forest zone.

Materials examined: 2♀♀, 4♂♂, 24.6.1996 (Loc. 14), 2♀♀, 1♂, 25.6.1996 (Loc. 12).

Distribution in Turkey: The Aegean, West Black Sea, and Middle Anatolia regions, the eastern parts of the Marmara region, Kars, Muş and Elazığ (15,6,18,3).

Distribution in the world: Europe, Mediterranean, the northern parts of Africa, the Middle East, Russia and Turkey (15,18).

Coreidae Leach, 1815***Coreus marginatus* ssp. *marginatus* (Linne, 1758)**

Habitat: The specimens belonging to *C. marginatus* ssp. *marginatus* were found on *Eryngium campestre* L. var. *virens*, and among the leaves of *Nigella arvensis*. (6,8,18).

Materials examined: 1♀, 15.8.1996 (Loc. 6), 1♀, 1♂, 26.6.1996 (Loc. 7).

Distribution in Turkey: The East Anatolia, Marmara and East Black Sea regions, Zonguldak, Gaziantep, Ankara, Adana and Hatay (6,8,18).

Distribution in the world: The Middle East, Europe, the Balkans, Russia, China, Japan and Turkey (18).

***Haploprocta sulcicornis* ssp. *sulcicornis* (Fabricius, 1794)**

Habitat: The specimens belonging to *H. sulcicornis* ssp. *sulcicornis* were found on *Scorzonera sublanata* Lip., and on *Allium roseum* L. var. *bulbilliform* Vis. in vineyards.

Materials examined: 1♀, 3♂♂, 5.5.1996 (Loc. 8), 6♂♂, 24.7.1996 (Loc. 12).

Distribution in Turkey: Elazığ, Ankara, Bursa and İzmir (6,18).

Distribution in the world: Cyprus, Europe, the northern parts of Africa, the Middle East and Turkey (18).

***Enoplops disciger* (Kolenati, 1845)**

Habitat: The specimens belonging to *E. disciger* were found among the leaves of *Centaurea polyclada* (27,19,8).

Materials examined: 1♀, 23.6.1996 (Loc. 7).

Distribution in Turkey: The Middle Anatolia and East Anatolia regions, Diyarbakır and Adana (1,19, 27,8,12).

***Phyllomorpha lacerata* Herrich-Schaeffer, 1835**

Habitat: The specimens belonging to *P. lacerata* were found on *Alyssum minus* (L.) Rothm. var. *minus*.

Materials examined: 1♂, 5.5.1996 (Loc. 6).

Distribution in Turkey: Ankara, İstanbul, and İzmir (18).

Distribution in the world: The Middle East, Italy, the northern parts of Africa, the southern parts of Europe, Russia, the Balkans and Turkey (18).

Alydidae Dallas, 1852***Camptopus lateralis* (Germar, 1817)**

Habitat: The samples belonging to *C. lateralis* were found on *Poa bulbosa* L. and *Poa sylvicola* Guss. in cultivated areas.

Materials examined: 2♂♂, 20.8.1996, (Loc. 4).

Distribution in Turkey: The Middle Anatolia, East Anatolia, Marmara, Mediterranean, Aegean, The South-East Anatolia and East Black Sea regions (1,6,8,15,18, 29).

Distribution in the world: Middle Europe, Germany, India, Cyprus, the Middle East, Russia and Turkey (18).

Rhopalidae Amyot & Serville, 1843

***Corizus hyoscyami* ssp. *hyoscyami* (Linne, 1758)**

Habitat: The specimens belonging to *C. hyoscyami* ssp. *hyoscyami* L. were found under *Echinops viscosus* DC. subsp. *bithynicus* (Boiss) Rech f., and on *Solanum nigrum* L. subsp. *nigrum*.

Materials examined: 5♂♂, 24.6.1996 (Loc. 4), 2♀♀, 1♂, 26.8.1996 (Loc. 7).

Distribution in Turkey: The West Mediterranean, Aegean and East Anatolia regions, Amasya, Artvin, Edirne, Bursa, Ankara, Konya and Diyarbakır (15,6,8, 18,12).

Distribution in the world: Cyprus, Middle East, the northern parts of Africa, Europe, the Balkans, Russia, China and Turkey (18).

***Liorhyssus hyalinus* (Fabricius, 1794)**

Habitat: The specimens belonging to *L. hyalinus* were found on shrub formations on the leaves of *Trifolium* sp. and *Cardaria draba* (L.) Devs. subsp. *draba*.

Materials examined: 2♂♂, 17.8.1996 (Loc. 1).

Distribution in Turkey: The East Anatolia, Middle Anatolia and South-East Anatolia regions, Adana, Kocaeli, Artvin and Denizli (6,18).

Distribution in the world: The Middle East, the northern parts of Africa, Europe, the Balkans, Cyprus, Russia, China, Japan and Turkey (18).

***Rhopalus rufus* Schilling, 1829**

Habitat: The specimens belonging to *R. rufus* were found on shrubs and on *Bromus tectorum* L. (3, 18).

Materials examined: 1♀, 13.7.1996 (Loc. 8).

Distribution in Turkey: Adana, Ankara and Thrace (3).

Distribution in the world: Turkey and Europe, the southern parts of Russia (18)

***Stictopleurus pictus* (Fieber, 1861)**

Habitat: The samples belonging to *S. pictus* were found on *Veronica anagallis-aquatica* L.

Material examined: 1♂, 13.7.1996 (Loc.8).

Distribution in Turkey: The East Anatolia, Aegean, Marmara, South-East Anatolia, and The East Black Sea regions, Ankara, Burdur and Adana (15).

Distribution in the world: Europe, Mediterranean, the northern parts of Africa, Israel, Cyprus, Caucasia and Turkey (15).

***Maccevetus lutheri* Wagner, 1953**

Habitat: The samples belonging to *M. lutheri* were found on *Hypericum triquetrifolium* in vineyards and on *Hypericum aucheri* at forest broad.

Materials examined: 1♂, 13.7.1996 (Loc. 12), 2♂♂, 13.7.1996 (Loc. 1) 1♂ 14.7.1996 (Loc.7).

Distribution in Turkey: The Aegean and Marmara regions, Mersin and Ankara (15,3,8).

Distribution in the world: Europe, Mediterranean, southern parts of Russia, and Turkey (15).

Pyrrhocoridae Dohrn, 1859

***Pyrrhocoris apterus* Linne, 1758**

Habitat: The samples belonging to *P. apterus* were found on the surface of soil and on steppe formations.

Materials examined: 13♂♂, 2♀♀, 5.5.1996 (Loc. 1), 3♂♂, 6♀♀, 24.6.1996 (Loc. 6), 6♂♂, 28.8.1996, (Loc. 12) 6♂♂, 4♀♀, 2.9.1996 (Loc. 2), (Loc. 7) and lots of nymphs 28.8.1996 (Loc. 10).

Distribution in Turkey: The East Anatolia, Middle Anatolia and Marmara regions, Adana, Aydın and Manisa (6,8,18,22).

Distribution in the world: The northern parts of Africa, Europe, the Balkans, the Middle East, Asia, Cyprus and Turkey (6,7,18,22,25).

***Scantius aegypticus* (Linne, 1758)**

Habitat: The samples belonging to *S. aegypticus* were found on the surface of soil and under the bark of trees.

Materials examined: 5♂♂, 5.5.1996 (Loc. 1) 2♂♂, 19.8.1996 (Loc. 15), 8♂♂, 20.8.1996 (Loc. 3).

Distribution in Turkey: The East Mediterranean,

Aegean, Marmara, South-East Anatolia regions and the northern part of Middle Anatolia (18,22).

Distribution in the world: Cyprus, The Middle East, Russia, and Turkey (18,22).

Pentatomidae leach, 1815

***Ventocoris trigonus* (Krynicky, 1871)**

Habitat: The samples belonging to *V. trigonus* were found on *Nigella arvensis* L. var. *involverata* Boiss in vineyards and on *Astragalus spruneri* Boiss. below the *Pinus brutia* zone.

Materials examined: 2♂♂ 1♀, 15.8.1996 (Loc. 12) (Loc. 16), 1♂ 1♀, 16.8.1996 (Loc.10), 2♂♂ 1♀, 16.8.1996 (Loc. 2).

Distribution in Turkey: The Aegean, Marmara, Middle Anatolia, and East Mediterranean regions and Gaziantep (9,10,18,29).

Distribution in the world: Europe, the Middle East, Cyprus, South Russia, and the Balkans (18).

***Ancyrosoma leucogrammes* (Gallen, 1789)**

Habitat: The samples belonging to *A. leucogrammes* were found on *Triticum vulgare* in cultivated areas.

Materials examined: 2♂♂, 6.6.1996 (Loc. 10).

Distribution in Turkey: The Aegean, Marmara and Middle Anatolia regions, Artvin, Elazığ, Burdur, Isparta and Adana (9,10,6,3,16,18,29).

Distribution in the world: Europe, Cyprus, Egypt, the Middle East, Russia, the northern parts of Africa, the Balkans and Turkey (18).

***Graphosoma semipunctatum* (Fabricius, 1775)**

Habitat: The samples belonging to *G. semipunctatum* were found on *Eryngium campestre* L. var. *viren*. Link., *Alyssum umbellatum* Devs. in cultivated areas and on *Melilotus* sp. in vineyards.

Materials examined: 9♀♀, 2♂♂, 7.5.1996 (Loc. 6), 10♀♀, 6♂♂, 23.6.1996 (Loc. 1), 7♀♀, 4♂♂, 16.8.1996 (Loc. 12), 6♀♀, 6♂♂, 18.7.1996 (Loc. 18).

Distribution in Turkey: The Marmara, and South-East Anatolia regions, Elazığ, Artvin, Kars, Aydın, İzmir, Ankara and Kayseri (9,10,6,8,3,18,29).

Distribution in the world: Cyprus, Egypt, Israel, Iran, Russia and Turkey (18).

***Graphosoma lineatum* Linne, 1758**

Habitat: The samples belonging to *G. lineatum* were found on *Eryngium campestre* L. var. *viren* Link. with *G. semipunctatum* and on *Alyssum umbellatum* Devs., and on *Melilotus* sp. in cultivated areas and vineyards.

Materials examined: 12♀♀, 3♂♂, 7.5.1996 (Loc.6), 10♀♀, 7♂♂, 23.6.1996 (Loc.1), 4♀♀, 2♂♂, 18.7.1996 (Loc.18), 1♀ 8♂♂, 16.8.1996 (Loc.12).

Distribution in Turkey: The Marmara, and Aegean regions and Isparta (9).

Distribution in the world: The southern parts of Europe, the northern parts of Africa, Bulgaria, Iran and Turkey (18).

***Aelia acuminata* (Linne, 1758)**

Habitat: The samples belonging to *A. acuminata* were found on *Triticum* and *Hordeum* in cultivated areas.

Materials examined: 2♂♂, 20.8.1996 (Loc. 11).

Distribution in Turkey: The Middle Anatolia, Middle Black Sea and East Mediterranean regions, İstanbul, Kocaeli, Edirne and Burdur (1,10,9,19).

Distribution in the world: Europe, Cyprus, the Middle East, the northern parts of Africa, Tunisia, Morocco, Algeria, Russia and Turkey (18).

***Aelia rosrata* Boheman, 1852**

Habitat: The samples belonging to *A. rosrata* were found on *Triticum* and *Hordeum* in cultivated areas.

Materials examined: 2♂♂, 20.8.1996 (Loc. 5).

Distribution in Turkey: The Middle Anatolia, West Black Sea, Aegean and Marmara regions, Isparta, Kars, Gaziantep and Diyarbakır (1,9,10,12,3,18).

Distribution in the world: Sweden, southern Europe, and Turkey (18).

***Stagonomus pusillus* (Herrich-Schaeffer, 1830)**

Habitat: The samples belonging to *S. pusillus* were found on *Trifolium* sp. *Hypericum*, *Verbascum* (8).

Materials examined: 1♀, 5.5.1996 (Loc. 1), 2♀♀, 8.5.1996 (Loc. 11).

Distribution in Turkey: Zonguldak and Ankara (10,8).

***Carpocoris fuscispinus* (Boheman, 1851)**

Habitat: The samples belonging to *C. fuscispinus* were found on *Carduus pycnocephalus* L. subsp. *albidus* (Bieb) Kazmi, the leaves of *Verbascum sinuatum* L., *Centaurea polyclada* DC. and *Poa pulbosa*.

Materials examined: 3♂♂, 4♀♀, 24.6.1996 (Loc. 12), 2♂♂, 5♀♀, 25.6.196 (Loc. 7), 1♂, 12.7.1996 (Loc. 15), and 2♂♂, 2♀♀ (Loc. 17).

Distribution in Turkey: The Middle Anatolia and East Anatolia regions, Muğla, Isparta, Kastamonu, Gaziantep and Sakarya (1,9,10,6,18).

Distribution in the world: The Middle East, Russia, Europe, China, Japan, Albania and Turkey (18).

***Carpocoris mediterraneus mediterraneus* Tamanini, 1958**

Habitat: The samples belonging to *C. mediterraneus* were found on *Poa sylvicola* Gus., *Carduus acicularis* Bertal., *Alyssum umbellatum* Devs within cultivated areas, and on *Papaver hybridum* L. (3).

Materials examined: 2♂♂, 4♀♀, 17.7.1996 (Loc. 13).

Distribution in Turkey: Ankara and Konya (10,3).

Distribution in the world: Europe, the Balkans, Egypt, Cyprus, the southern parts of Russia, the Middle East and Turkey (18).

***Pausias martini* (Puton, 1890)**

Habitat: The samples belonging to *P. martini* were found on the window of the Bozcaada post office.

Materials examined: 2♂♂, 5.5.1996 (Loc. 1).

Distribution in Turkey: İzmir, Konya, Ankara and Erzincan (9,10).

***Dolycoris baccarum* (Linne, 1758),**

Habitat: The samples belonging to *D. baccarum* were found on macchie vegetation, *Verbascum sinuatum* L., *Pinus brutia*, and *Juniperus oxycedrus*.

Materials examined: 2♂♂, 8.5.1996 (Loc. 13), 3♂♂ 1♀, 9.5.1996 (Loc. 7), 2♂♂, 24.8.1996 (Loc. 2).

Distribution in Turkey: The Middle Anatolia, Marmara, Aegean, Black Sea and East Mediterranean regions, Gaziantep and Diyarbakır (1,9,10,12,6,8,3, 16).

Distribution in the world: Cyprus, the Middle East, Russia, Europe, the Balkans, Asia, Japan and Turkey (18).

***Codophila varia* (Fabricius, 1787)**

Habitat: The samples belonging to *C. varia* were found on *Pinus brutia*, macchie, *Anemone coronaria* L., and *Dianthus corymbosus*.

Materials examined: 3♂♂, 24.6.1996 (Loc. 10), 1♂♂, 25.6.1996 (Loc. 2), 1♂, 1♀, 27.6.1996 (Loc. 3), and 2♂♂, 2♀, 1.9.1996 (Loc. 12).

Distribution in Turkey: The Middle Anatolia, Marmara and Aegean regions, Elazığ, Erzurum, Edirne, Zonguldak, Adana, and Burdur (9,10,12,6,8).

Distribution in the world: Cyprus, the Middle East, the northern parts of Africa, Europe, the Balkans, Russia and Turkey (18).

***Dyroderes umbraculatus* (Fabricius, 1775)**

Habitat: The samples belonging to *D. umbraculatus* were found on *Verbascum* sp.

Materials examined: 1♂, 8.5.1996 (Loc. 15), 1♂, 22.6.1996 (Loc. 12).

Distribution in Turkey: The Aegean region, the western part of the Marmara region, the Middle Anatolia region, Bolu, Zonguldak, Adana and Gaziantep (9,10,18).

Distribution in the world: Europe, Israel, Syria, Russia and Turkey (18).

***Eurydema spectabile* (Dohrn, 1860)**

Habitat: The samples belonging to *E. spectabile* were found on *Ranunculus muricatus* L., *Adonis flammea* Jacq., *Nigella arvensis* and in the forest of *Pinus brutia*.

Materials examined: 7♂♂, 1♀, 7.5.1996 (Loc. 8) (Loc. 3), 1♂, 18.8.1996 (Loc. 12).

Distribution in Turkey: Zonguldak (10).

Distribution in the world: Syria, Israel, the southern parts of Russia, the Balkans and Turkey (18).

***Eurydema rugulosum* (Dohrn, 1860)**

Habitat: The samples belonging to *E. rugulosum* were found on *Alyssum* sp., *Ranunculus miricatus* L., *Adonis flammea*, the leaves of *Nigella arvensis* in the forest of *Pinus brutia*, and on shrubs, and macchie and steppe vegetations.

Materials examined: 3♂♂, 2♀♀, 22.8.1996 (Loc. 14), 4♂♂, 24.6.1996 (Loc. 7).

Distribution in Turkey: The Aegean region, Çanakkale, Bursa, Adana, Konya, Ankara and Gaziantep (9,10,18,8).

Distribution in the world: Egypt, Cyprus, Israel, Syria and Turkey (18).

***Eurydema ornatum* (Linne, 1758)**

Habitat: The samples belonging to *E. ornatum* were found on *Triticum vulgare*, *Alyssum* sp., *Ranunculus muricatus* L., *Adonis flammea*, *Nigella arvensis* in cultivated areas, and on steppe vegetation and on shrub formations.

Materials examined: 1♂, 5.5.1996 (Loc. 6), 2♂♂, 3♀♀, 8.5.1996 (Loc. 4), 3♂♂, 1♀, 19.8.1996 (Loc. 2), and 1♀, 20.8.1996 (Loc. 12).

Distribution in Turkey: The West Black Sea, Aegean, Marmara and Middle Anatolia regions, Burdur, Adana, Elazığ and Ağrı (9,10,6,8,16,18,13).

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