European Journal of Taxonomy 937: 1–127
https://doi.org/10.5852/ejt.2024.937.2571
ISSN 2118-9773
www.europeanjournaloftaxonomy.eu
2024 · Çerçi B. *et al.*

Monograph

urn:lsid:zoobank.org:pub:7E02539C-95F7-482D-88CF-4D0884583EE5

Review of the Heteroptera (Hemiptera) fauna of Turkey: perspectives for future research

Barış ÇERÇI [1,*], Özgür KOÇAK [2] & Serdar TEZCAN [3]

[1] Faculty of Medicine, Hacettepe University, Ankara, Turkey.
[2] Çevre ve Şehircilik Müdürlüğü Başakşehir Mah. 2020 Sk. No:3, Karaman, Turkey.
[3] Department of Plant Protection, Faculty of Agriculture, Ege University, Izmir, Turkey.

[*] Corresponding author: heteropteran99@gmail.com
[2] Email: turkelebek@yahoo.com
[3] Email: serdar.tezcan@gmail.com

[1] urn:lsid:zoobank.org:author:5F611F63-A541-4DC5-8B39-B72B48667757
[2] urn:lsid:zoobank.org:author:4613E478-7E8F-45BC-BCE8-C7592C96FD8C
[3] urn:lsid:zoobank.org:author:AFA68D52-CF3D-4CD2-873D-EBFD8C388985

Abstract. Research on the Heteroptera fauna of Turkey has not been extensive enough to illustrate its true diversity. Although several factors contribute to this, the lack of an up-to-date and comprehensive review is a basic factor. To address this issue, we compiled a list of all the Heteroptera species recorded from Turkey in the literature and iNaturalist. In addition, we re-examined several specimens preserved in the Lodos Entomological Museum, İzmir, Turkey (LEMT). Consequently, we excluded 24 species from the checklist of Heteroptera fauna of Turkey, and proposed a new synonymy: *Psallus* (*Psallus*) *pardalis* Seidenstücker, 1966 = *Psallus* (*Psallus*) *oenderi* Wagner, 1976 syn. nov. Furthermore, we recorded following six species from Turkey for the first time: *Blissus hirtulus* Burmeister, 1835 (Blissidae), *Loricula* (*Loricula*) *pselaphiformis* Curtis, 1833 (Microphysidae), *Globiceps* (*Globiceps*) *coryli* V.G. Putshkov, 1970, *Heterocordylus* (*Heterocordylus*) *cytisi* Josifov, 1958, *Mesopsallus fagi* (Drapolyuk, 1990) and *Psallus* (*Psallus*) *helenae* Josifov, 1969 (Miridae); and described following six species as new for science: *Orthonotus efei* Çerçi & Koçak sp. nov., *Orthotylus* (*Parapachylops*) *oenderi* Çerçi, Tezcan & Koçak sp. nov., *Orthotylus* (*Pinocapsus*) *girayi* Çerçi & Tezcan sp. nov., *Psallus* (*Psallus*) *eceae* Çerçi & Koçak sp. nov., *Psallus* (*Psallus*) *pehlivani* Çerçi & Tezcan sp. nov. and *Ribautocapsus tezcani* Çerçi sp. nov. Altogether, 1668 species of Heteroptera have been recorded from Turkey (664 species in the European part and 1633 species in the Anatolian part) until now, out of them, the presence of 37 species needs confirmation. We determined the chorotypical composition of species as follows: Mediterranean (399 spp., 23.9%), European (380 spp., 22.8%), Local (280 spp., 16.8%), Widespread (182 spp., 10.9%), Endemic (128 spp., 7.7%), Turanian (127 spp., 7.5%), Turano-Mediterranean (89 spp., 5.3%), Europeo-Mediterranean (68 spp., 4.1%) and Alien (12 spp., 0.7%). We showed that provinces in the Eastern Anatolian, Southeastern Anatolian, and Black Sea regions had lower numbers of species recorded, compared to the provinces in the remaining regions. Finally, we underlined that 109 species, absent from Turkey, were recorded from three or more neighboring countries of Turkey. In summary, our findings emphasize that despite the abundant research devoted over the last 150 years to the Heteroptera fauna of Turkey, our understanding of it remains incomplete in

the majority, if not in all, of the regions. Our findings strongly encourage further research, particularly in regions with small numbers of recorded species. This endeavor will undoubtedly lead to numerous novel discoveries and provide a better understanding of the true Heteroptera diversity in Turkey.

Keywords. Heteroptera, Turkey, review, new species, perspective.

Çerçi B., Koçak Ö. & Tezcan S. 2024. Review of the Heteroptera (Hemiptera) fauna of Turkey: perspectives for future research. *European Journal of Taxonomy* 937: 1–127. https://doi.org/10.5852/ejt.2024.937.2571

Introduction

The suborder Heteroptera Latreille, 1810, classified under the order Hemiptera Linnaeus, 1758, is one of the most diverse insect groups in the world. They show a wide variety of feeding habits, including phytophagy, zoophagy, phytozoophagy, zoophytophagy, mycophagy and even hematophagy. They are also known to have adapted to a great diversity of ecological niches, including spider webs, ant nests, bird nests, aquatic and semi-aquatic habitats (including the surface of the open ocean), intertidal zone, tree trunks, semi-edaphic habitats, and caves (Schuh & Weirauch 2020). More than 45 000 species of Heteroptera are known across all continents, except Antarctica, and more than 10 000 of these species are distributed in the Palearctic region (Henry 2017; Aukema 2023). The total number of Heteroptera species recorded from Turkey was first calculated by Hoberlandt (1956) at 941. Later, Önder *et al.* (2006) compiled a list of all the Heteroptera species recorded from Turkey and calculated this number at 1526 and Tezcan (2020) revised this number at 1536. Finally, the online database of the Catalogue of Palearctic Heteroptera lists 1519 species from Turkey (Aukema 2023).

Faunistic research on the Heteroptera of Turkey has been going on for more than 150 years. However, the intensity of the research has changed over time. Only a few faunistic papers were published until the 1950s (e.g., Horváth 1883, 1901, 1905, 1918, 1919; Reuter 1890; Puton 1892; Puton & Noualhier 1895; Escherich 1897; Kiritshenko 1918, 1924; Fahringer 1922; Poisson 1925; Gadeau de Kerville 1939). Since the 1950s, the study of Heteroptera of Turkey has accelerated with numerous articles published by several distinguished authors, e.g., Ludvík Hoberlandt (1918–2005), Rauno Linnavuori (1927–2019), Gustav Seidenstücker (1912–1989) and Eduard Wagner (1896–1978) (Hoberlandt 1952, 1956; Linnavuori 1953, 1965; Seidenstücker 1954a, 1954b, 1954c, 1954d, 1956a, 1956b, 1956c, 1957a, 1957b, 1957c, 1958, 1959a, 1959b, 1960a, 1960b, 1960c, 1961, 1962a, 1962b; Wagner 1954a, 1954b, 1955, 1959, 1960, 1966). Faunistic research conducted by these entomologists has built the fundamental knowledge of the Heteroptera fauna of Turkey. Towards the end of 1970s, faunistic studies published by other prominent authors, e.g., Niyazi Lodos (1921–1997), Feyzi Önder (1943–2000), and Suat Kıyak have greatly enhanced this knowledge (Önder 1974, 1976, 1980, 1981, 1982; Lodos & Önder 1978, 1979, 1980a, 1980b, 1982, 1983; Lodos *et al.* 1978, 1998, 1999; Önder *et al.* 1981, 1984, 1995a, 1995b; Péricart & Önder 1982; Štusák & Önder 1982; Önder & Lodos 1983; Özesmi & Önder 1988; Ahmad & Önder 1990; Çakır & Önder 1990; Kıyak 1990, 1993a, 1993b, 2000; Kıyak & Çağlar 1991; Heiss & Önder 1991; Ahmad *et al.* 1996; Awad & Önder 1997a, 1997b; Özsaraç *et al.* 2001a, 2001b; Kıyak *et al.* 2004). Especially, the monographs published by Jean Péricart (1928–2011) during this period have been the major source for species identification in many heteropteran families besides their valuable contributions to the knowledge of Heteroptera fauna of Turkey (Péricart 1972, 1983, 1984, 1998a, 1998b, 1998c). However, it remained far from complete and an increasing number of extensive faunistic studies have been published in the last two decades by a few prominent Turkish entomologists, e.g., Ahmet Dursun, Meral Fent, Gülten Yazıcı, Erol Yıldırım (Fent & Aktaç 1999, 2007, 2008; Dursun & Kartal 2006, 2008a, 2008b, 2008c; Dursun 2009, 2011a, 2011b, 2011c, 2012; Dursun & Fent 2009, 2010, 2011a, 2011b, 2013 2015, 2016a, 2016b, 2017, 2018a, 2018b, 2019; Külekçi *et al.* 2009; Dursun *et al.* 2010; Fent 2010, 2011; Fent *et al.* 2010, 2011, 2013; Yıldırım *et al.* 2010, 2011,

2013a, 2013b, 2014; Dursun & Salur 2013; Yazıcı *et al.* 2014, 2015a, 2015b; Fent & Dursun 2016, 2018, 2019; Yazıcı & Yıldırım 2016a, 2016b, 2016c, 2017a, 2017b, 2017c, 2018; Zengin & Dursun 2019) and by us (Çerçi & Koçak 2016, 2017a, 2017b, 2023; Çerçi & Dursun 2017; Çerçi *et al.* 2018, 2019, 2020, 2021a, 2021b, 2021c, 2022; Çerçi & Gözüaçık 2019; Çerçi 2020, 2021, 2022a, 2022b; Çerçi & Tezcan 2020, 2021; Çerçi & Oruz 2021; Çerçi & Özgen 2021). Although the contribution of foreign researchers in faunistic research has decreased considerably in the last few decades, several papers, mostly dealing with the description of new species, have been published by prominent foreign researchers, e.g., Attilio Carapezza, Ernst Heiss, Armand Matocq, Pierre Moulet and Petr Kment (Carapezza 1998, 2009; Matocq 2000, 2007, 2019a, 2019b; Matocq & Özgen 2010; Matocq & Pluot-Sigwalt 2001, 2011; Matocq *et al.* 2014; Kment & Jindra 2005; Fent & Kment 2011; Kment & Fent 2012; Kment *et al.* 2013a; Carapezza & Kment 2018; Moulet 2020; Heiss *et al.* 2022, 2023).

During our literature research, we noticed a trend. Despite an apparent increase in the number of faunistic research published in the last few decades, there has been a decrease in the number of species newly recorded or described from Turkey. This suggests that the faunistic research conducted in this period was focused more on the elucidation of the regional distribution of species that were already known from Turkey. We think that several factors contributed to the establishment of such a trend. These include the paucity of research carried out by foreign entomologists, lack of sound literature written in Turkish, research conducted in regions already comparatively well-known, and the paucity of Turkish entomologists specialized in Heteroptera, and especially Miridae, taxonomy. However, we think that the lack of an up-to-date review and analysis of the Heteroptera fauna of Turkey has greatly contributed to this trend. Apart from the annotated catalog of aquatic and semi-aquatic Heteroptera of Turkey by Fent *et al.* (2011), the last comprehensive treatment of the Heteroptera of Turkey was published by Hoberlandt (1952, 1956). Therefore, we were not fully aware of our current knowledge of the Heteroptera fauna of Turkey, which might have led to misconceptions. Moreover, the unavailability of this knowledge prevents the singling out of less studied regions, hence, making the planning of future faunistic research difficult.

To fill this gap, we considered the records of all the Heteroptera species reported from Turkey and re-examined some of them. We calculated the number of species recorded from each province and identified less studied regions. Furthermore, we analyzed the chorotypical composition of these provinces and prepared a list of species that are known from its neighboring countries but not from Turkey. Finally, we described six species new for science and recorded six species new for the fauna of Turkey. Our findings strongly suggest that our knowledge of Heteroptera fauna of Turkey is yet incomplete in most, if not in all, regions of Turkey, and foresee that future faunistic research, conducted in less studied regions, will reveal many novelties.

The year 2023 is the 100th anniversary of the foundation of the Republic of Turkey (29 October 1923) and we are pleased to commemorate this historic occasion by presenting this comprehensive and up-to-date analysis of the Heteroptera fauna of Turkey. We hope that this analysis will guide the research on this topic for the upcoming decades.

Material and methods

Most of the examined specimens are preserved in LEMT. However, some of the examined species were sampled during recent field research conducted in Karaman and Ordu. These samples were collected by sweep netting or foliage beating. When necessary, the genital examination was performed by macerating the last abdominal segment in 10% KOH overnight and examining it with a Celestron 44215 Microscope. Photographs were captured by a Nikon D3300 DSLR Camera combined with a 68mm extension tube and a Lomo 3.7× 0.11 Microscope lens. The stacking of images was done using Helicon Focus software. t-SNE analysis was performed in Python using the code from the scikit-learn

library. Spearman correlation analysis was performed in SPSS 23. Maps were created with SimpleMappr (Shorthouse 2010). The dataset for Research Grade observations from iNaturalist is given in Supp. file 2. Each observation is checked by the first author for the correctness of the identification and any Research Grade observation with an unreliable identification is omitted. Chorotypes of species were based on geographical limitations designated by Vigna Taglianti *et al.* (1999). The chorotype-group 'Local' includes chorotypes that geographically include Anatolia and its close neighbors (Fig. 24). A map of Turkey is provided below which includes labels for administrative divisions and color coding for ecoregions (Fig. 1). Additionally, global environmental zones, developed by Metzger *et al.* (2013), of Turkey at 30 arcsec resolution (equivalent to 0.86 km^2 at the equator) is illustrated in Fig. 2. A larger figure can be found in Supp. file 1 (GEnS_ TURKEY sheet).

Fig. 1. Map of Turkey with provinces labeled and ecoregions colored.

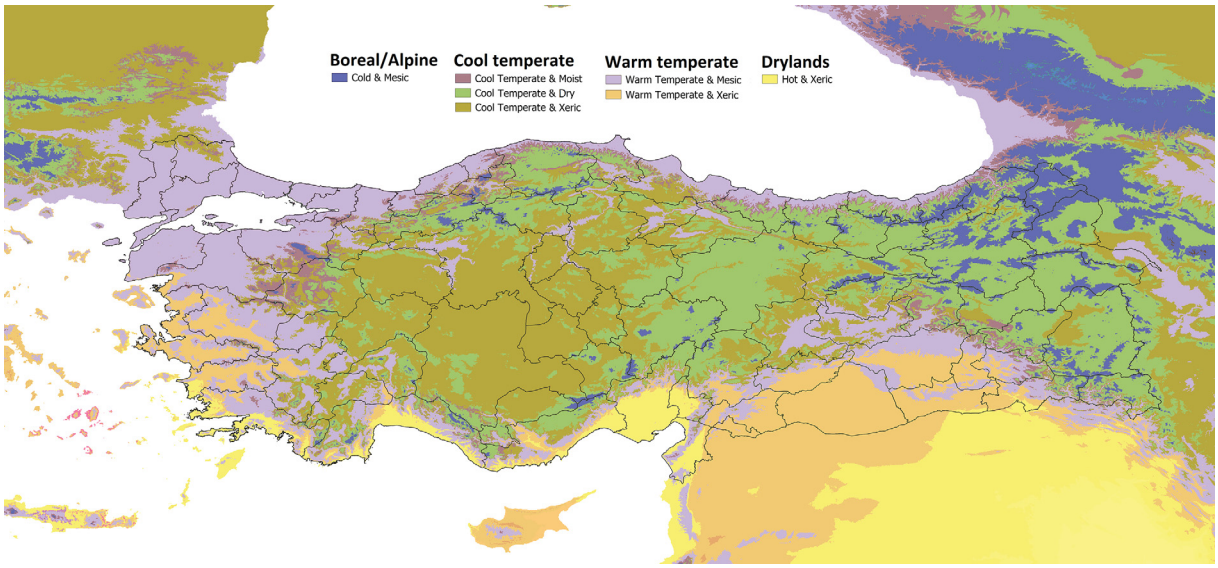

Fig. 2. Global environmental zones (GEnZs) of Turkey at 30 arcsec resolution (Data retrieved from Metzger *et al.* 2013).

Abbreviations for collections and expeditions

LEMT = Lodos Entomological Museum, İzmir, Turkey
BCIT = Barış Çerçi private collection, İzmir, Turkey
EUAPP exped. = Ege University, Faculty of Agriculture, Department of Plant Protection expeditions to Aegean, Central Anatolian, Marmara, Mediterranean, Southeastern Anatolian and Western Black Sea regions

Results

Species with confirmed presence in Turkey

Class Insecta Linnaeus, 1758
Order Hemiptera Linnaeus, 1758
Suborder Heteroptera Latreille, 1810
Family Miridae Hahn, 1833
Subfamily Phylinae Douglas & Scott, 1865
Genus *Acetropis* Fieber, 1858

Acetropis* (*Acetropis*) *sinuata Wagner, 1951

Acetropis sinuata – Önder 1976: 23.

Material examined

TURKEY – **İzmir Province** • 1 ♀; Bornova; 20 Jul. 1971; F. Önder leg.; LEMT.

Comments

This is a Mediterranean species with two isolated distribution ranges, one in the Balkan Peninsula and one in the Iberian Peninsula and Northwestern Africa (Aukema 2023). In Turkey, it was recorded only once from İzmir by Önder (1976), but this record was overlooked by Kerzhner & Josifov (1999). A re-examination of the voucher specimen confirmed its identity.

Genus *Eurycolpus* Reuter, 1875

Eurycolpus flaveolus (Stål, 1858)
Fig. 3A

Eurycolpus flaveolus – Önder 1976: 390.

Material examined

TURKEY – **İzmir Province** • 2 ♂♂, 1 ♀; Bergama; 21 Jun. 1969; F. Önder leg.; LEMT.

Comments

Another Sibero-European species that is known from Bulgaria and Greece (Aukema 2023). It has only been recorded from İzmir in Turkey, by Önder (1976). This record was overlooked by Kerzhner & Josifov (1999). A re-examination of voucher specimens confirmed the identification (Fig. 3A).

Genus *Lopus* Hahn, 1831

Lopus decolor (Fallén, 1807)

Lopus decolor – Önder 1976: 367.

Material examined

TURKEY – **Artvin Province •** 2 ♀♀; Borçka; 30 Aug. 1967; F. Önder leg.; LEMT.

Comments

Lopus decolor is a European species that has not been recorded from any countries in Asia, except for Turkey and Georgia. The record from Georgia was considered doubtful by Kerzhner & Josifov (1999). It was recorded from Artvin by Önder (1976), and Mersin and Nevşehir by Lodos *et al.* (2003). A re-examination of relevant specimens revealed that only the specimens from Artvin belong to this species. Other records must be referred to a different species (see below).

Genus *Pilophorus* Hahn, 1826

Pilophorus confusus (Kirschbaum, 1856)

Pilophorus confusus – Önder 1976: 237.

Material examined

TURKEY – **Artvin Province •** 1 ♀; Borçka; 25 Aug. 1967; F. Önder leg.; LEMT.

Comments

Asiatic-European species that extends to Northern Iran in Transcaucasian region (Aukema 2023). It was recorded from Artvin, Turkey, by Önder (1976), but the record was overlooked by Kerzhner & Josifov (1999). A re-examination of the voucher specimen confirmed this record.

Subfamily Mirinae Hahn, 1833
Genus *Dichrooscytus* Fieber, 1858

Dichrooscytus rufipennis (Fallén, 1807)

Dichrooscytus rufipennis – Önder 1976: 64.

Material examined

TURKEY – **Isparta Province •** 2 ♂♂, 6 ♀♀; Eğridir, Taşköy; 11 Jun. 1973; F. Önder leg.; LEMT. **– Kütahya Province •** 1 ♂, 1♀; Domaniç; 19 Jun. 1975; F. Önder leg.; LEMT.

Comments

This species was recorded from Isparta, Turkey by Önder (1976) and, based on this record, reported from Turkey by Kerzhner & Josifov (1999). This species is strictly Sibero-European without any records from Southwestern Asia, Caucasus, Turanian region, Central Asia, or northern Africa (Aukema 2023) so its record from the Mediterranean region of Turkey could seem questionable. However, examination of the relevant specimens proved that they belong to *D. rufipennis*, confirming its presence in Turkey.

Genus *Lygus* Hahn, 1833

Lygus wagneri Remane, 1955
Fig. 3B

Lygus wagneri – Önder 1976: 185.

Material examined

TURKEY – **Trabzon Province** • 2 ♂♂, 2 ♀♀; Zigana Pass; 22 May 1962; Guichard & Harvey leg.; LEMT.

Comments

A boreomontane Asiatic-European species known from Georgia and the Caucasus region of Russia (Aukema 2023). It was recorded from Trabzon, Turkey, by Önder (1976). This record was overlooked by Kerzhner & Josifov (1999). A re-examination of corresponding specimens confirmed this record (Fig. 3B).

Genus *Pantilius* Curtis, 1833

Pantilius* (*Pantilius*) *tunicatus (Fabricius, 1781)
Fig. 3C

Pantilius tunicatus – Önder 1976: 67.

Material examined

TURKEY – **Artvin Province** • 4 ♂♂, 1 ♀; Borçka, Göktaş; 11 Sep. 1971; F. Önder leg.; LEMT. – **Ordu Province** • 1 ♂; Ünye; 18. Sep. 1972; F. Önder leg.; LEMT.

Comments

Sibero-European species that extends deep into the Transcaucasian region and is known from Armenia, Georgia and norhtern Iran (Ghahari & Chérot 2014; Aukema 2023). It was recorded from Artvin by Önder (1976), but the record was overlooked by Kerzhner & Josifov (1999). A re-examination of corresponding specimens confirmed this record (Fig. 3C).

Subfamily Orthotylinae Van Duzee, 1916
Genus *Orthotylus* Fieber, 1858

Orthotylus* (*Pseudorthotylus*) *bilineatus (Fallén, 1807)

Orthotylus bilineatus – Önder 1976: 277.

Material examined

TURKEY – **Artvin Province** • 2 ♂♂; Borçka; 5 Sep. 1971; F. Önder leg.; LEMT.

Comments

Sibero-European species that was recorded from the Caucasian region and Azerbaijan (Aukema 2023). This species was recorded from Artvin, Turkey by Önder (1976). This record was missed by Kerzhner & Josifov (1999). After examining the voucher specimens, we can confirm this record.

Family Rhyparochromidae Amyot & Serville, 1843
Subamily Rhyparochrominae Amyot & Serville, 1843
Genus *Pachybrachius* Hahn, 1826

Pachybrachius capitatus (Horváth, 1882)
Fig. 3D

Pachybrachius capitatus – Önder *et al.* 1981: 167.

Material examined

TURKEY – **Sakarya Province** • 1 ♀; Yağbasan; 9 Jul. 1977; F. Önder leg.; LEMT.

Comments

A rare species that is locally distributed in the southern Balkan peninsula and Azerbaijan (Aukema 2023). Although it was recorded from Sakarya, Turkey by Önder *et al.* (1981), this record was overlooked by Péricart (2001). We examined the corresponding specimen and confirmed this record (Fig. 3D).

Species whose presence in Turkey need confirmation

Family Artheneidae Stål, 1872
Genus *Artheneis* Spinola, 1837

Artheneis aegyptiaca Lindberg, 1939

See Péricart (1998a).

Family Ceratocombidae Fieber, 1860
Genus *Ceratocombus* Signoret, 1852

Ceratocombus* (*Ceratocombus*) *coleoptratus (Zetterstedt, 1819)

See Heiss & Péricart (2007).

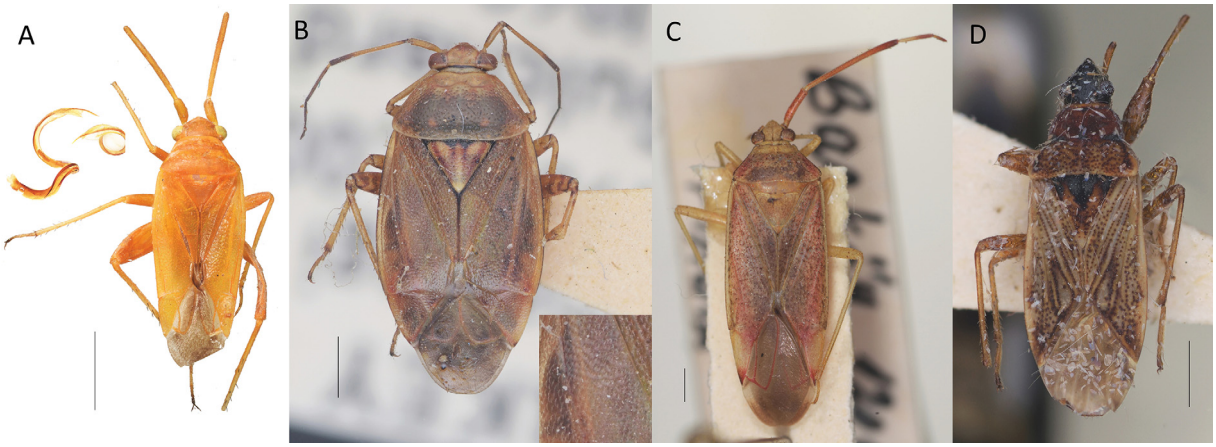

Fig. 3. A. *Eurycolpus flavoleus* (Stål, 1858), ♀ (LEMT), with vesica and its apex. **B**. *Lygus wagneri* Remane, 1955, ♀ (LEMT), with close-up view of dorsal vestiture. **C**. *Pantilius* (*Pantilius*) *tunicatus* (Fabricius, 1781), ♂ (LEMT). **D**. *Pachybrachius capitatus* (Horváth, 1882), ♀ (LEMT). Scale bars = 1 mm.

Family Coreidae Leach, 1815
Subfamily Pseudophloeinae Stål, 1868
Genus *Coriomeris* Westwood, 1842

Coriomeris brevicornis Lindberg, 1923

Comments

This species is an endemic of Crete and outside Crete, it was only recorded from Kahramanmaraş, Turkey by Kıyak (2002). Although it is plausible that this species lives in a wider area in the East Mediterranean region, lack of records from other East Mediterranean countries indicates otherwise. Hence the only record of this species outside Crete is doubtful and its confirmation is needed.

Family Corixidae Leach, 1815
Subfamily Cymatiainae Walton, 1940
Genus *Cymatia* Flor, 1860

Cymatia coleoptrata (Fabricius, 1777)

See Fent *et al.* (2011).

Subfamily Corixinae Leach, 1815
Genus *Sigara* Fabricius, 1775

Sigara* (*Halicorixa*) *stagnalis stagnalis (Leach, 1817)

See Fent *et al.* (2011).

Sigara* (*Subsigara*) *falleni (Fieber, 1848)

See Fent *et al.* (2011).

Sigara* (*Tropocorixa*) *confluens (Fieber,1851)

See Fent *et al.* (2011).

Family Cydnidae Billberg, 1820
Subfamily Sehirinae Amyot & Serville, 1843
Genus *Canthophorus* Mulsant & Rey, 1866

Canthophorus dubius dubius (Scopoli, 1763)

See Gapon (2018).

Family Geocoridae Dahlbom, 1851
Subfamily Geocorinae Baerensprung, 1860
Genus *Geocoris* Fallén, 1814

Geocoris* (*Geocoris*) *arenarius (Jakovlev, 1867)

See Péricart (1998b).

Family Lygaeidae Schilling, 1829
Subfamily Lygaeinae Amyot & Serville, 1843
Genus *Horvathiolus* Josifov, 1965

Horvathiolus fulvescens (Puton, 1874)

See Péricart (1998a).

Subfamily Orsillinae Stål, 1872
Genus *Ortholomus* Stål, 1872

Ortholomus jordani Hoberlandt, 1953

Comments

The validity of this species was questioned by Péricart (1998b). The only records of this species after its discovery, were published by Lodos *et al.* (1999). However, due to the paucity of records and suspicion about its taxonomic validity, these records are doubtful and need confirmation (A. Carapezza pers. comm.).

Family Micronectidae Jaczewski, 1924
Genus *Micronecta* Kirkaldy, 1897

Micronecta* (*Micronecta*) *minutissima (Linnaeus, 1758)

Comments

This species was listed from Turkey without locality by Kıyak & Özsaraç (2001). Fent *et al.* (2011) excluded this species from the Heteroptera checklist of Turkey, due to lack of records in the literature. However, this species was recorded by Özsaraç (2004) from Kırşehir. Still, this record needs confirmation, due to its great distance from the known range of this species.

Micronecta* (*Micronecta*) *poweri poweri (Douglas & Scott, 1869)

See Fent *et al.* (2011).

Family Miridae Hahn, 1833
Subfamily Cylapinae Kirkaldy, 1903
Genus *Fulvius* Stål, 1862

Fulvius oxycarenoides (Reuter, 1878)

See Çerçi *et al.* (2021a).

Subfamily Phylinae Douglas & Scott, 1865
Genus *Hadrophyes* Puton, 1874

Hadrophyes sulphurella Puton, 1874

Comments

This species was mentioned from Turkey without exact locality by Stichel (1956). As this species has not been recorded from Turkey by other authors, this record needs confirmation.

Genus *Monosynamma* Scott, 1864

Monosynamma sabulicola (Wagner, 1947)

See Kerzhner & Josifov (1999).

Genus *Psallus* Fieber, 1858

Psallus* (*Pityopsallus*) *pinicola Reuter, 1875

Comments

A central European species that is not known from most of the Balkan Peninsula, the European part of Russia, the Caucasian region, or northern Iran (Aukema 2023). However, this species was recorded from the Aegean region and the middle and east Black Sea regions of Turkey by Önder (1976) and Yazıcı & Yıldırım (2016c). A re-examination of specimens collected in Eskişehir, Çankırı, and Ankara by Önder (1976) revealed that they belonged to other taxa (see below). The records of this species from Artvin and Erzurum in Turkey, are isolated from the known distribution of this species and need confirmation.

Genus *Tuponia* Reuter, 1875

Tuponia* (*Tuponia*) *tamarisci (Perris, 1857)

See Kerzhner & Josifov (1999).

Subfamily Orthotylinae Van Duzee, 1916
Genus *Heterocordylus* Fieber, 1858

Heterocordylus* (*Bothocranum*) *erythropthalmus erythropthalmus Hahn, 1833

See Kerzhner & Josifov (1999).

Genus *Reuteria* Puton, 1875

Reuteria marqueti Puton, 1875

See Çerçi *et al.* (2020).

Subfamily Mirinae Hahn, 1833
Genus *Mermitelocerus* Reuter, 1908

Mermitelocerus schmidtii (Fieber, 1836)

Comments

This European species was recorded from Turkey only by Reuter (1890), without any exact locality. Since this record, it has not been collected in Turkey, and it was not mentioned from Turkey by Kerzhner & Josifov (1999). Therefore, the presence of this species in Turkey should be confirmed. However, its presence in the eastern Black Sea region is not unlikely.

Genus *Miris* Fabricius, 1794

Miris striatus (Linnaeus, 1758)

Comments

This European species was recorded from Turkey only by Reuter (1896), without exact locality. It has not been reported from Turkey since then and its presence in Turkey should be confirmed.

Genus *Myrmecoris* Gorski, 1852

Myrmecoris gracilis (R.F. Sahlberg, 1848)

Comments

This is a Sibero-European species that was recorded from Turkey, twice, by Yayla (1984) from Antalya and by Kıyak (2019) from Ankara. As discussed below, the record by Yayla (1984) was based on a misidentified specimen. Similarly, it is highly probable that the record by Kıyak (2019) too is based on the misidentification of a similar myrmecomorphic Heteroptera species. Therefore, this record needs confirmation.

Genus *Odontoplatys* Fieber, 1858

Odontoplatys bidentulus (Herrich-Schaeffer, 1842)

Comments

This species was recorded from Turkey by Önder (1976), based on specimens that were collected from Karabük and preserved in British Museum of Natural History. However, this species is distributed locally in Balkan Peninsula, and it is highly likely that these specimens belong to *Odontoplatys suturalis* (Jakovlev, 1883), a Ponto-Caucasian species that is widely distributed along the Black Sea costs of Turkey (Çerçi *et al.* 2022). Therefore, this record needs confirmation.

Family Pentatomidae Leach, 1815
Subfamily Asopinae Amyot & Serville, 1843
Genus *Picromerus* Amyot & Serville, 1843

Picromerus nigridens (Fabricius, 1803)

See Fent & Dursun (2022).

Subfamily Pentatominae Leach, 1815
Genus *Menaccarus* Amyot & Serville, 1843

Menaccarus dohrnianus (Mulsant & Rey, 1866)

See Fent & Dursun (2022).

Subfamily Phyllocephalinae Amyot & Serville, 1843
Genus *Schyzops* Spinola, 1837

Schyzops aegyptiaca aegyptiaca (Lefebvre, 1831)

See Fent & Dursun (2022).

Subfamily Podopinae Amyot & Serville, 1843
Genus *Sternodontus* Mulsant & Rey, 1856

Sternodontus ampliatus Jakovlev, 1887

See Fent & Dursun (2022).

Family Reduviidae Latreille, 1807
Subfamily Harpactorinae Amyot & Serville, 1843
Genus *Coranus* Curtis, 1833

Coranus* (*Coranus*) *subapterus (De Geer, 1773)

See Putshkov & Moulet (2010).

Genus *Rhynocoris* Hahn, 1833

Rhynocoris* (*Rhynocoris*) *niger (Herrich-Schaeffer, 1842)

See Putshkov & Putshkov (1996).

Subfamily Stenopodainae Amyot & Serville, 1843
Genus *Oncocephalus* Klug, 1830

Oncocephalus notatus Klug, 1830

See Putshkov & Putshkov (1996).

Family Rhopalidae Amyot & Serville, 1843
Subfamily Rhopalinae Amyot & Serville, 1843
Genus *Maccevethus* Dallas, 1852

Maccevethus errans (Fabricius, 1794)

See Kment & Baňař (2010).

Family Rhyparochromidae Amyot & Serville, 1843
Subfamily Rhyparochrominae Amyot & Serville, 1843
Genus *Peritrechus* Fieber, 1860

Peritrechus angusticollis (R.F. Sahlberg, 1848)

Comments

European species that does not reach the southern Balkan Peninsula. However, it was recorded from Edirne by Önder *et al.* (1984). This isolated record is considered doubtful, and its confirmation is needed. Unfortunately, during our investigation in LEMT, we could not locate the voucher specimen.

Family Tingidae Laporte, 1832
Subfamily Tinginae Laporte, 1832
Genus *Agramma* Stephens, 1829

Agramma* (*Agramma*) *laetum (Fallén, 1807)

See Aukema (2023).

Genus *Campylosteira* Fieber, 1844

Campylosteira orientalis Horváth, 1881

See Péricart & Golub (1996).

Campylosteira bosnica Horváth, 1892

Comments

The isolated record of this European species from Diyarbakır, by Önder & Adıgüzel (1979) was considered doubtful by Péricart & Golub (1996). Unfortunately, despite our thorough examination in LEMT, we could not locate the voucher specimens, hence this record could not be confirmed.

Family Veliidae Brullé, 1836
Subfamily Veliinae Brullé, 1836
Genus *Velia* Latreille, 1804

Velia* (*Plesiovelia*) *saulii Tamanini, 1947

Comments

This is a European species that does not reach to the Balkans or Caucasus (Berchi & Kment 2015; Berchi *et al.* 2023; Aukema 2023). It was recorded from Turkey once, by Küçükbasmacı & Kıyak (2015) from Kastamonu. Concerning its distribution, this record is doubtful and needs verification (P. Kment, pers. comm.).

Species excluded from the Heteroptera checklist of Turkey

Family Corixidae Leach, 1815
Subfamily Corixinae Leach, 1815
Genus *Heliocorisa* Lundblad, 1928

Heliocorisa vermiculata (Puton, 1874)

Material examined

Sigara* (*Subsigara*) *daghestanica
TURKEY – **Bursa Province** • 1 ♂; Mustafakemalpaşa, Aliseydi; 21 Jun. 1977; F. Önder leg.; LEMT.

Corixidae sp.
TURKEY – **Kocaeli Province** • 1 ♀; Karamürsel; 16 Aug. 1977; F. Önder leg.; LEMT.

Comments

As discussed by Fent *et al.* (2011), the records of *Heliocorisa vermiculata* by Önder *et al.* (1981) needed confirmation. A re-examination of corresponding specimens revealed that the specimen from Bursa (Fig. 4A) referred to *Sigara* (*Subsigara*) *daghestanica* Jansson, 1983 (Petr Kment det.) and the specimen from Kocaeli was in poor condition, therefore could not be identified to species level. As these were the only records of this species from Turkey, it is now excluded from the checklist of Heteroptera of Turkey.

Family Miridae Hahn, 1833
Subfamily Phylinae Douglas & Scott, 1865
Genus *Amblytylus* Fieber, 1858

Amblytylus jani Fieber, 1858

Material examined

***Amblytylus* sp.**
TURKEY – **Gaziantep Province** • 1 ♀; Yavuzeli; 25 Apr. 1986; EUAPP exped.; LEMT.

Comments

Amblytylus jani is a West Mediterranean species with records from Crete in the East Mediterranean region. This species was recorded from Gaziantep by Lodos *et al.* (2003). A re-examination of the only collected specimen revealed that it was a female and a reliable identification to species level was not possible. Hence this species is excluded from the checklist of Heteroptera species of Turkey.

Genus *Macrotylus* Fieber, 1858

Macrotylus* (*Macrotylus*) *longulus Poppius, 1912

Material examined

Macrotylus* (*Macrotylus*) *anahtaris
TURKEY – **Adana Province** • 1 ♂, 2 ♀♀; Tufanbeyli; 12 Jul. 1986; EUAPP exped.; LEMT. – **Kahramanmaraş Province** • 1 ♂; Andırın; 10 Jun. 1985; EUAPP exped.; LEMT • 1 ♂; Kırıkhan; 7 Jul. 1984; EUAPP exped.; LEMT. – **Hatay Province** • 2 ♂♂; Yayladağ; 10 Jul. 1984; EUAPP exped.; LEMT.

Comments

This species was recorded from Adana, Hatay, Kahramanmaraş and Mersin by Lodos *et al.* (2003). We could find the specimens collected from Adana, Hatay and Kahramanmaraş but could not locate specimens from Mersin in LEMT. A re-examination of these specimens revealed that they belong to *M.* (*M.*) *anahtaris* Seidenstücker, 1959. We strongly believe that the specimens from Mersin either belong to *M. anahtaris* or *M. antennalis,* another endemic species of Anatolia that is remarkably similar to *M. longulus* and can only be reliably distinguished by examination of the male genitalia.

Genus *Mesopsallus* Wagner, 1970

Mesopsallus ambiguus (Fallén, 1807)

Material examined

Psallus* (*Phylidea*) *quercus

TURKEY – **Artvin Province** • 1 ♂; Borçka, Murgul; 5 Sep. 1971; F. Önder leg.; LEMT.

Lepidargyrus ancorifer
TURKEY – **Denizli Province** • 3 ♀♀; Tavas; 3 Jul. 1969; F. Önder leg.; LEMT. – **İzmir Province** • 1 ♂; Ödemiş, Bozdağ; 5 Jun. 1969; F. Önder leg.; LEMT.

Comments

This species was recorded from Artvin, Denizli, İzmir and Kütahya by Önder (1976). We examined the vouchers specimens collected from Artvin, Denizli and İzmir, but the specimens from Kütahya could not be located in LEMT. Our examination revealed that the specimens from İzmir and Denizli belonged to *Lepidargyrus ancorifer* (Fieber, 1858) and the specimen from Artvin belonged to *Psallus* (*Phylidea*) *quercus* (Kirschbaum, 1856). Therefore, we believe that the missing specimens also belong to another species and *M. ambiguus* should be excluded from the Heteroptera checklist of Turkey.

Mesopsallus rhodani (Fieber, 1861)

Material examined

Psallus* (*Apocremnus*) *skylla
TURKEY – **Hatay Province** • 2 ♂♂, 6 ♀♀; Antakya; 28 Apr. 1986; EUAPP exped.; LEMT. – **Kahramanmaraş Province** • 3 ♂♂, 2 ♀♀; Nurhak dağı; 13 Jun. 1985; EUAPP exped.; LEMT • 2 ♂♂, 4 ♀♀; Göksun; 14 Jun. 1986; EUAPP exped.; LEMT.

***Mesopsallus* sp.**
TURKEY – **Antalya Province** • 1 ♂; Korkuteli; 23 May 1986; EUAPP exped.; LEMT.

Mesopsallus amygdali
TURKEY – **Antalya Province** • 1 ♂ Kumluca; 20 Jun. 1986; EUAPP exped.; LEMT.

Comments

A central European species that extends to Ukraine and Romania in the east (Aukema 2023). It was recorded in Turkey from Antalya, Hatay and Kahramanmaraş, by Lodos *et al.* (2003) as *Atractotomus rhodani*. A re-examination of these specimens revealed that records from Hatay and Kahramanmaraş referred to *Psallus* (*Apocremnus*) *skylla* Linnavuori, 1994, the record from Kumluca, Antalya to *Mesopsallus amygdali* (Wagner, 1960), and the record from Korkuteli, Antalya to a new *Mesopsallus* species closely related to *M. rhodani*.

Genus *Parapsallus* Wagner, 1952

Parapsallus vitellinus (Scholtz, 1847)

Material examined

Europiella alpina
TURKEY – **Mersin Province** • 1 ♀; Çamlıyayla; 10 Jul. 1986; EUAPP exped.; LEMT.

Comments

This species was recorded from Mersin by Lodos *et al.* (2003), based on a single female specimen. A re-examination of the voucher specimen (Fig. 4B) revealed that it belongs to *Europiella alpina* (Reuter, 1875). Therefore, *Parapsallus vitellinus* is excluded from the Heteroptera checklist of Turkey.

Genus *Phylus* Hahn, 1831

Phylus* (*Teratoscopus*) *plagiatus (Herrich-Schaeffer, 1835)

Material examined

***Phylinae* sp.**

TURKEY – **Artvin Province** • 2 ♀♀; Borçka; 5 Sep. 1971; F. Önder leg.; LEMT.

Comments

A central European species that is not known from the Balkanian or Caucasian regions (Aukema 2023). Önder (1976) recorded this species from Artvin, Turkey. We examined the voucher specimens. Although the specimens resemble *P.* (*T.*) *plagiatus*, they were both females and cannot be reliably identified to species level. Therefore, this species is excluded from the Heteroptera checklist of Turkey.

Genus *Psallus* Fieber, 1858

Psallus* (*Psallus*) *mollis (Mulsant & Rey, 1852)

Material examined

Psallus* (*Psallus*) *varians

TURKEY – **Çanakkale Province** • 2 ♀♀; Gökçeada; 29 May 1975; F. Önder leg.; LEMT. – **Isparta Province** • 1 ♀; Eğirdir; 11 Jun. 1973; F. Önder leg.; LEMT. – **İzmir Province** • 1 ♀; Bergama, Kozak; 23 May 1973; F. Önder leg.; LEMT • 2 ♀; Kemalpaşa; 23 May 1970; F. Önder leg.; LEMT. – **Manisa Province** • 1 ♂, 1 ♀; Salihli, Sart; 7 May 1973; F. Önder leg.; LEMT. – **Muğla Province** • 1 ♂; Fethiye, Seki; 9 Jun. 1973; F. Önder leg.; LEMT. – **Tekirdağ Province** • 1 ♀; Şarköy; 31 May 1975; F. Önder leg.; LEMT. – **Uşak Province** • 1 ♂, 1 ♀; Merkez; 17 Jun. 1975; F. Önder leg.; LEMT • 1 ♀; Eşme; 16 Jun. 1975; F. Önder leg.; LEMT.

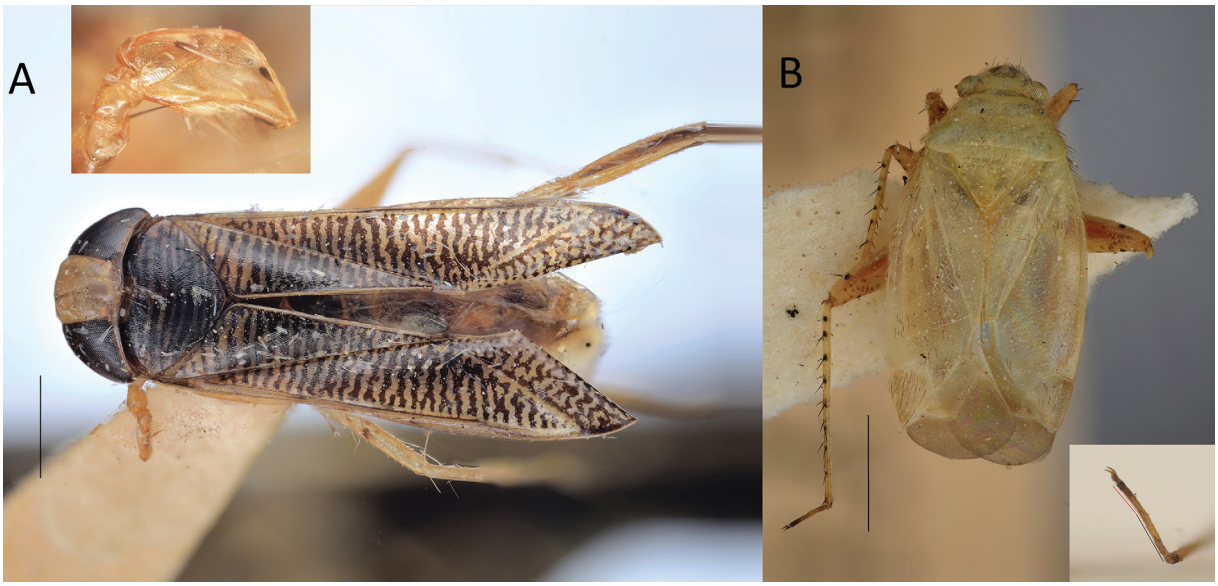

Fig. 4. A. *Sigara* (*Subsigara*) *daghestanica* Jansson, 1983, with close-up view of foretibia, ♀♂ (LEMT). **B**. *Europiella alpina* (Reuter, 1875), with close-up view of posterior tarsus, ♀ (LEMT). Scale bars = 1 mm.

Psallus* (*Psallus*) *asthenicus
TURKEY – **Kütahya Province** • 4 ♂♂, 3 ♀♀; Merkez; 21 Jun. 1975; F. Önder leg.; LEMT.

Psallus* (*Psallus*) *anaemicus
TURKEY – **Samsun Province** • 2 ♂♂; Bafra; 4 Jun. 1973; F. Önder leg.; LEMT.

Psallus* (*Psallus*) *turcicus
TURKEY – **Kayseri Province** • 1 ♂; Talas; 31 May 1973; F. Önder leg.; LEMT.

Psallus* (*Hyalopsallus*) *perrisi
TURKEY – **Kayseri Province** • 1 ♂; Merkez; 1 Jun. 1973; F. Önder leg.; LEMT.

Comments

This species was recorded from numerous localities in Turkey by Önder (1976*)*. After re-examination of the voucher specimens from all localities, except from Ödemiş, İzmir, we concluded that none of these specimens belong to *P. mollis*, but to other taxa. Records from Çanakkale, Isparta, İzmir, Manisa, Muğla and Tekirdağ refer to *Psallus* (*Psallus*) *varians* (Herrich-Schaeffer, 1841), those from Kütahya to *Psallus* (*Psallus*) *asthenicus* Seidenstücker, 1966, those from Samsun to *Psallus* (*Psallus*) *anaemicus* Seidenstücker, 1966, that from Merkez, Kayseri to *Psallus* (*Hylopsallus*) *perrisi* (Mulsant & Rey, 1852) and that from Talas, Kayseri to *Psallus* (*Psallus*) *turcicus* Wagner, 1971. The specimens from Uşak were all females and could not be reliably identified to species level.

Psallus* (*Apocremnus*) *betuleti (Fallén, 1826)

Material examined

Mesopsallus fagi
TURKEY – **Artvin Province** • 1 ♂; Borçka, Murgul; 5 Sep. 1971; F. Önder leg.; LEMT.

Comments

This species was recorded from Turkey, based on a single specimen collected in Artvin by Önder (1976). We examined the voucher specimen and discovered that it belonged to *Mesopsallus fagi* (Drapolyuk, 1990). Detailed information about this newly recorded species for Turkey is given below.

Subfamily Mirinae Hahn, 1833
Genus *Dichrooscytus* Fieber, 1858

Dichrooscytus valesianus Fieber, 1861

Material examined

Dichrooscytus seidenstueckeri
TURKEY – **İzmir Province** • 2 ♂♂, 3 ♀♀; Bornova; 28 Apr. 1967; F. Önder leg.; LEMT – **Kütahya Province** • 1 ♀; Merkez; 16 Jun. 1972; F. Önder leg.; LEMT. – **Muğla Province** • 4 ♂♂, 8 ♀♀; Fethiye, Seki; 9 Jun. 1973; F. Önder leg.; LEMT. – **Kastamonu Province** • 1 ♀; Tosya; 4 Aug. 1979; EUAPP exped.; LEMT.

Comments

This European species was recorded from İzmir, Kütahya, Muğla and Kastamonu in Turkey (Önder 1976; Lodos *et al.* 2003). A re-examination of the corresponding specimens revealed that they all belong

to *Dichrooscytus seidenstueckeri* Josifov, 1974, a species that is widely known from western and central Anatolia.

Genus *Grypocoris* Douglas & Scott, 1868

Grypocoris* (*Lophyromiris*) *sexguttatus (Fabricius, 1777)

Material examined

Grypocoris heinzi

TURKEY – **Bolu Province** • 1 ♀; Abant; 13 Jul. 1962; Guichard and Harvey leg.; British Natural History Museum coll.; LEMT.

Comments

This species was recorded from Turkey by Önder (1976), based on several specimens collected from Bolu and preserved in British Museum of Natural History. Fortunately, one of these specimens was also present in LEMT and its examination revealed its identity as *Grypocoris* (*Turciocoris*) *heinzi* Wagner, 1966.

Genus *Lygus* Hahn, 1833

Lygus punctatus (Zetterstedt, 1838)

Material examined

Lygus rugulipennis

TURKEY – **Artvin Province** • 22 ♂♂, 2 ♀♀; Merkez; 12 Jun. 1973; F. Önder leg.; LEMT • 3 ♂♂; Borçka; 20 Aug. 1969; F. Önder leg.; LEMT • 1 ♀; ibid.; 27 Aug. 1971; F. Önder leg.; LEMT • 1 ♂; ibid.; 17 Aug. 1970; F. Önder leg.; LEMT. • 1 ♂; ibid.; 12 Jun. 1973; F. Önder leg.; LEMT. – **Erzurum Province** • 7 ♂♂, 1 ♀; Merkez; 15 Jun. 1973; F. Önder leg.; LEMT • 1 ♂; ibid.; 16 Jun. 1973; F. Önder leg.; LEMT. – **Kars Province** • 1 ♂; Merkez; 13 Jun. 1973; F. Önder leg.; LEMT. – **Samsun Province** • 3 ♂♂, 1 ♀; Merkez; 9 Jul. 1972; F. Önder leg.; LEMT • 2 ♂♂; Bafra; 4 Jun. 1973; F. Önder leg.; LEMT. – **Trabzon Province** • 1 ♀; Merkez; 9 Jun. 1973; F. Önder leg.; LEMT.

Comments

Önder (1976) recorded this species for the first time from Turkey, from several provinces in the Black Sea region. This species has not been recorded from Turkey since then. We re-examined the voucher specimens that these records refer to and found that they all belong to *Lygus rugulipennis* Poppius, 1911.

Genus *Phytocoris* Fallén, 1814

Phytocoris* (*Eckerleinius*) *calliger Wagner, 1957

Material examined

Phytocoris* (*Compsocerocoris*) *falcatus

TURKEY – **Çorum Province** • 1 ♀; Merkez; 5 Aug. 1969; F. Önder leg.; LEMT.

Comments

This species was originally described from Iran and only recorded from Çorum, Turkey, outside its type locality by Lodos *et al.* (2003). Examination of the voucher specimen (Fig. 5A) revealed that it belongs to *P.* (*Compsocerocoris*) *falcatus* Linnavuori, 1984, a species already known from Çorum.

Phytocoris* (*Exophytocoris*) *scituloides Lindberg, 1948

Material examined

Phytocoris* (*Exophytocoris*) *pinihalepensis
TURKEY – **İzmir Province** • 1 ♀; Kemalpaşa; 8 Jun. 1968; F. Önder leg.; LEMT.

Phytocoris* (*Exophytocoris*) *scitulus scitulus
TURKEY – **İstanbul Province** • 2 ♂♂; Merkez; 4–11 Aug. 1925; Miss G. Edwards leg.; British Natural History Museum coll.; LEMT. – **Mersin Province** • 1 ♂, 1 ♀; Silifke; 3 Jun. 1972; F. Önder leg.; LEMT.

Comments

This species was recorded from Antalya, İstanbul, İzmir and Mersin by Önder (1976). Pagola-Carte & Rieger (2021) argued that the records of this species from Turkey most probably referred to other closely related species that occur in this region, e.g., *Phytocoris carapezzai* Çerçi, Koçak & Tezcan, 2019, or undescribed new species. Accordingly, our re-examination of the voucher specimens revealed that these records refer to other species. The record from İzmir refers to *P.* (*E.*) *pinihalepensis* Lindberg, 1948 and the records from İstanbul and Mersin refer to *P.* (*E.*) *scitulus scitulus* Reuter, 1908. Unfortunately, the voucher specimen belonging to the record from Antalya could not be located in LEMT. However, considering these erroneous identifications, combined with lack of genital examinations in species identification during that period, we strongly believe that the missing specimens also belonged to species other than *P. scituloides*. Therefore, this species is excluded from the Heteroptera checklist of Turkey.

Phytocoris* (*Phytocoris*) *longipennis Flor, 1861

Material examined

Phytocoris* (*Exophytocoris*) *scitulus scitulus
TURKEY – **Adana Province** • 1 ♂, 1 ♀; Hasanbeyli; 28 Aug. 1978; A. Yiğit leg.; on *Pyrus*; LEMT. – **Çorum Province** • 1 ♀; Alaca; 7 Aug. 1979; EUAPP exped.; LEMT • 1 ♀; İskilip; 5 Aug. 1979; EUAPP exped.; LEMT. – **Kayseri Province** • 1 ♀; Merkez, Hacılar; 10 Aug. 1979; EUAPP exped.; LEMT. – **Nevşehir Province** • 1 ♀; Merkez, Göreme; 15 Aug. 1979; LEMT • 1 ♂; Gülşehir; 15 Aug. 1979; EUAPP exped.; LEMT • 1 ♂, 4 ♀♀; Ürgüp; 15 Aug. 1979; EUAPP exped.; LEMT. – **Sinop Province** • 1 ♀; Merkez; 21 Jul. 1979; EUAPP exped.; LEMT • 1 ♀; Gerze; 21 Jul. 1979; EUAPP exped.; LEMT. – **Yozgat Province** • 1 ♀; Merkez; 19 Aug. 1979; EUAPP exped.; LEMT.

***Phytocoris* (*Exophytocoris*) sp.**
TURKEY – **Zonguldak Province** • 1 ♀; Ereğli; 15 Jul. 1979; EUAPP exped.; LEMT.

***Phytocoris* (*Phytocoris*) sp.**
TURKEY – **Kastamonu Province** • 1 ♀; Merkez; 19 Jul. 1979; EUAPP exped.; LEMT. – **Sinop Province** • 1 ♀; Boyabat; 21 Jul. 1979; EUAPP exped.; LEMT.

Comments

This Sibero-European species has been recorded from numerous localities in Central Anatolian, Mediterranean and Black Sea regions of Turkey by Yiğit & Uygun (1982) and Lodos *et al.* (2003). However, after re-examination of voucher specimens, we discovered that all records of this species by Lodos *et al.* (2003) and Yiğit & Uygun (1982) refer to other species. Specimens from Kastamonu and Boyabat, Sinop, were females and could not be identified to species level but refer to *P.* (*Phytocoris*) sp. The female specimen from Zonguldak refers to an unidentified *P.* (*Exophytocoris*) sp. and the rest of the specimens refer to *P.* (*Exophytocoris*) *scitulus scitulus*.

Genus *Trigonotylus* Fieber, 1858

Trigonotylus psammaecolor Reuter, 1885

Comments

This species was recorded from İzmir, Turkey by Önder (1976). However, the presence in İzmir of this European species, which is absent in the Balkan Peninsula, is highly unlikely. Hence we considered this record erroneous, and excluded it from the checklist.

Subfamily Bryocorinae Baerensprung, 1860
Genus *Dicyphus* Fieber, 1858

Dicyphus* (*Idolocoris*) *pallicornis (Fieber, 1861)

Material examined

***Dicyphus* sp.**
TURKEY – **Bilecik Province** • 1 ♀; Bozöyük; 29 May 1971; F. Önder leg.; LEMT. – **Zonguldak Province** • 1 ♀; Çaycuma; 31 May 1980; EUAPP exped.; LEMT.

Comments

This Euro-Mediterranean species was recorded twice from Turkey (Önder 1976; Lodos *et al.* 2003). We examined specimens that these records refer to, and they were both females and could not be reliably identified to species level. However, their morphological and morphometric characters could reliably exclude *D.* (*I.*) *pallicornis*. Therefore, we excluded this species from the checklist.

Subfamily Orthotylinae Van Duzee, 1916
Genus *Orthotylus* Fieber, 1858

Orthotylus* (*Orthotylus*) *quercicola Reuter, 1885

Material examined

***Orthotylus* (*Orthotylus*) sp.**
TURKEY – **Kastamonu Province** • 1 ♂, 1 ♀; Tosya; 8 Jun. 1980; EUAPP exped.; LEMT.

Comments

This Balkanian species was recorded from Turkey once, by Lodos *et al.* (2003). We examined the voucher specimens and the male genital structures of the only male specimen. They show remarkably unique morphology, easily distinguishing it from all the previously described species. However, the poor condition of the specimen did not allow description of this new species.

Orthotylus* (*Pinocapsus*) *fuscescens (Kirschbaum, 1856)

Material examined

***Orthotylus* (*Pinocapsus*) *girayi* sp. nov.**
TURKEY – **Isparta Province** • 1 ♂, 1 ♀; Eğirdir; 11 Jun. 1973; F. Önder leg.; LEMT.

Comments

This species was recorded from Turkey by Önder (1976). After examining the voucher specimens, we discovered that they belong to a new species described below as *Orthotylus* (*Pinocapsus*) *girayi* Çerçi & Tezcan sp. nov.

Genus *Platycranus* Fieber, 1870

Platycranus* (*Platycranus*) *putoni Reuter, 1879

Material examined

Platycranus* (*Platycranus*) *remanei
TURKEY – **Elazığ Province** • 13 ♂♂, 7 ♀♀; Karakoçan; 15 Jun. 1975; F. Önder leg.; LEMT.

Comments

This species was recorded from Elazığ, Turkey by Önder (1976). In the recent review of the genus, Knyshov & Konstantinov (2013) did not mention the presence of this species in Turkey. We examined the voucher specimens collected from Elazığ and concluded that they belong to *P.* (*P.*) *remanei* Wagner, 1955, therefore, we excluded this species from the Heteroptera checklist of Turkey.

Family Nabidae A. Costa, 1853
Subfamily Nabinae, A. Costa, 1853
Genus *Nabis* Latreille, 1802

Nabis* (*Dolichonabis*) *limbatus Dahlbom, 1851

Comments

This species was recorded from Turkey once, by Kıyak (1993a). In this paper, the author shared an illustration of a specimen identified as *Nabis limbatus.* The examination of this illustration revealed that it depicted a nymph of a *Nabis* species, which, due to its long wings, surely did not belong to *N. limbatus*. Hence we excluded this species from the checklist.

Nabis* (*Nabis*) *provencalis Remane, 1953

Comments

Nabis (*Nabis*) *provencalis* is a West European species and its presence in Anatolia is highly unlikely. Therefore, we considered its only record from Turkey, by (Kıyak 1990), erroneous and did not include this species in the checklist.

Family Oxycarenidae Stål, 1862
Genus *Metopoplax* Fieber, 1860

Metopoplax ditomoides (A. Costa, 1847)

Comments

A West Mediterranean species that was recorded from Kırşehir and Çankırı (Özsaraç 2004; Yazıcı *et al.* 2022). These records most probably refer to *M. origani* (Kolenati, 1845), a species similar to *M. ditomoides* but widely distributed in Turkey. Therefore, *M. ditomoides* is excluded from the Heteroptera checklist of Turkey.

Family Rhyparochromidae Amyot & Serville, 1843
Subfamily Rhyparochrominae Amyot & Serville, 1843
Genus *Pachybrachius* Hahn, 1826

Pachybrachius fracticollis (Schilling, 1829)

Material examined

Remaudiereana annulipes
TURKEY – **Diyarbakır Province** • 1 ♂; Merkez; 15 Jul. 1977; F. Önder leg.; LEMT. – **Mersin Province** • 1 ♀; Merkez; 14 Feb. 1984; EUAPP exped.; LEMT. – **Hatay Province** • 1 ♀; Dörtyol; 29 May 1985; EUAPP exped.; LEMT.

Comments

This species was recorded from Diyarbakır, Hatay and Mersin (Önder & Adıgüzel 1979; Lodos *et al.* 1999). A re-examination of specimens from all these provinces revealed that they belonged to *Remaudiereana annulipes* (Baerensprung, 1859). Therefore, this species is excluded from the Heteroptera checklist of Turkey.

Corrections to published records

Family Miridae Hahn, 1833
Subfamily Mirinae Hahn, 1833
Genus *Closterotomus* Fieber, 1858

Closterotomus putoni (Horváth, 1888)

Closterotomus costae sensu Önder (1976: 142).
Closterotomus costae sensu Lodos *et al.* (2003: 18).
Closterotomus costae sensu Yazıcı & Yıldırım (2016b: 872).

Comments

Closterotomus costae is a Caucasian species whose distribution is restricted to the Caucasian region (Aukema 2023). It has been recorded from the Black Sea, Mediterranean, Central Anatolian, Southeastern Anatolian, and Marmara regions of Turkey by several authors (Önder 1976; Lodos *et al.* 2003; Yazıcı & Yıldırım 2016b). However, considering its local distribution in Caucasus and Transcaucasia, records of this species other than the Black Sea region should refer to *C. putoni*, a closely related species that distributes in the East Mediterranean region (Aukema 2023).

Genus *Cyphodema* Fieber, 1858

Cyphodema sp.

Cyphodema rubricum sensu Önder (1976: 162).

Comments

Cyphodema rubrica Seidenstücker, 1954, was recorded from İstanbul by Önder (1976). Matocq *et al.* (2014) convincingly argued that this record was highly dubious, since this species had only been recorded from Syria, Iraq, and Southeast Anatolia. Unfortunately, despite our thorough search in the collection of LEMT, we could not locate the voucher specimen. However, in accordance with Matocq *et al.* (2014), we consider this record erroneous and eliminate this species from the Heteroptera fauna of İstanbul.

Genus *Polymerus* Hahn, 1831

Polymerus* (*Poeciloscytus*) *asperulae (Fieber, 1861)

Polymerus microphthalmus sensu Lodos *et al.* (2003: 37).

Material examined

TURKEY – **Kahramanmaraş Province** • 1 ♀; Andırın; 20 Jul. 1984; EUAPP exped.; LEMT.

Polymerus* (*Poeciloscytus*) *unifasciatus (Fabricius, 1794)

Polymerus microphthalmus sensu Önder (1976: 159).
Polymerus palustris sensu Önder (1976: 160).

Material examined

TURKEY – **Kütahya Province** • 1 ♀; Merkez; 15 Jul. 1967; F. Önder leg.; LEMT. –**Adana Province** • 5 ♀♀; Hasanbeyli, Alman pınarı yaylası; 8 Jun. 1972; F. Önder leg.; LEMT.

Comments

As recognized by the illustration provided in the article, the record of *P. palustris* from Eskişehir by Kıyak & Ersoy (2022) refers to *P.* (*P.*) *cognatus* (Fieber, 1858).

Genus *Phytocoris* Fallén, 1814

***Phytocoris* (*Compsocerocoris*)** sp.

Phytocoris confusus sensu Lodos *et al.* (2003: 33).

Material examined

TURKEY – **Kayseri Province** • 1 ♀; Merkez; 11 Aug. 1979; EUAPP exped.; LEMT.

Phytocoris* (*Exophytocoris*) *carapezzai Çerçi, Koçak & Tezcan, 2019
Fig. 5B

Phytocoris pinihalepensis sensu Lodos *et al.* (2003: 34).

Material examined

TURKEY – **Antalya Province** • 2 ♂♂; Güllük mountain; 27 Jul. 1985; EUAPP exped.; LEMT.

Phytocoris* (*Exophytocoris*) *matocqi Pagola-Carte, 2019
Fig. 5C

Phytocoris pinihalepensis sensu Lodos *et al.* (2003: 34).

Material examined

TURKEY – **Antalya Province** • 1 ♂; Serik; 28 May 1986; EUAPP exped.; LEMT.

Phytocoris* (*Exophytocoris*) *scitulus scitulus Reuter, 1908

Phytocoris femoralis sensu Lodos *et al.* (2003: 33).

Material examined

TURKEY – **Konya Province** • 1 ♀; Ereğli; 1 Jul. 1980; EUAPP exped.; LEMT.

Phytocoris* (*Leptophytocoris*) *ustulatus Herrich-Schaeffer, 1835

Phytocoris (*Leptophytocoris*) *chardoni* sensu Önder (1976: 80).
Phytocoris chardoni sensu Önder *et al.* (1984: 220).

Material examined

TURKEY – **Balıkesir Province** • 1 ♀; Dursunbey; 13 Jul. 1972; F. Önder leg.; LEMT. – **Sakarya Province** • 1 ♂; Geyve, Sarıgazi; 6 Jul. 1977; F. Önder leg.; LEMT.

Subfamily Orthotylinae Van Duzee, 1916
Genus *Halticus* Hahn, 1832

Halticus apterus apterus (Linnaeus, 1758)

Halticus pusillus sensu Önder (1976: 231).

Material examined

TURKEY – **İzmir Province** • 1 ♂; Ödemiş Bozdağ; 30 Jul. 1975; F. Önder leg.; LEMT.

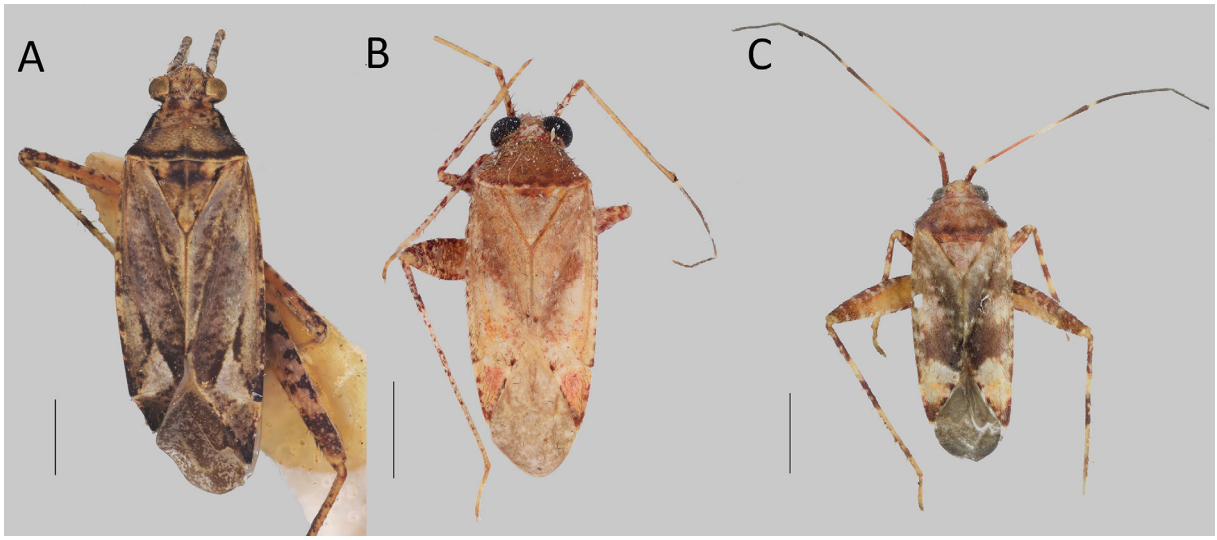

Fig. 5. A. *Phytocoris* (*Compsocerocoris*) *falcatus* Linnavuori, 1984, ♀ (LEMT). **B**. *Phytocoris* (*Exophytocoris*) *carapezzai* Çerçi, Tezcan & Koçak, 2019, ♂ (LEMT). **C**. *Phytocoris* (*Exophytocoris*) *matocqi* Pagola-Carte, 2019, ♂ (LEMT). Scale bars = 1 mm.

Halticus luteicollis (Panzer, 1804)

Halticus saltator sensu Önder (1976: 229).

Material examined

TURKEY – **İzmir Province •** 10 ♂♂, 8 ♀♀; Kiraz; 7 Jun. 1967; F. Önder leg.; LEMT.

Genus *Heterocordylus* Fieber, 1858

Heterocordylus* (*Heterocordylus*) *leptocerus (Kirschbaum, 1856)

Heterocordylus (*Heterocordylus*) *genistae* sensu Önder (1976: 273).

Material examined

TURKEY – **İzmir Province •** 2 ♂♂, 5 ♀♀; Bozdağ; 20 May 1973; F. Önder leg.; LEMT.

Genus *Orthotylus* Fieber, 1858

***Orthotylus* (*Pinocapsus*)** sp.

Plagiognathus flavipes sensu Lodos *et al.* (2003: 67).

Material examined

TURKEY – **Antalya Province •** 2 ♂♂, 2 ♀♀; Saklıkent; 7 Jul. 1985; EUAPP exped.; LEMT.

Comments

Plagiognathus reuterellus Schuh, 2001 (new name for *P. flavipes* Reuter, 1875) was recorded from Antalya, Turkey, by Lodos *et al.* (2003). A re-examination of the specimens from Antalya revealed that they belong to a new *Orthotylus* species that is closely related to *Orthotylus* (*Orthotylus*) *troodensis* Wagner, 1961 and *Orthotylus* (*Parapachylops*) *bureschi* Josifov, 1969. However, during our research in LEMT, we discovered specimens of *P. reuterellus* that had not been published before. These specimens were collected from Mardin, Derik on 4 Jun. 1976, on *Lonicera* sp. (Adıgüzel & Önder leg.).

Subfamily Phylinae Douglas & Scott, 1865
Genus *Macrotylus* Fieber, 1858

Macrotylus* (*Alloeonycha*) *dentifer Wagner, 1969

Macrotylus elevatus sensu Önder (1976: 324).

Material examined

TURKEY – **Balıkesir Province •** 3 ♂♂, 2 ♀♀; Bigadiç; 8 Jun. 1970; F. Önder leg.; LEMT.

Genus *Megalocoleus* Reuter, 1890

Megalocoleus exsanguis (Herrich-Schaeffer, 1835)

Lopus decolor sensu Lodos *et al.* (2003: 58).

Material examined

TURKEY – **Mersin Province** • 1 ♂; Erdemli; 30 May 1984; EUAPP exped.; LEMT.

Genus *Mimocoris* Scott, 1872

Mimocoris rugicollis (A. Costa, 1853)

Myrmecoris gracilis sensu Yayla (1984: 19).

Comments

Yayla (1984) recorded *Myrmecoris gracilis* (R.F. Sahlberg, 1848) from Antalya and provided its hand-drawn illustration. An examination of this illustration clearly shows that the illustrated specimen belongs to *Mimocoris rugicollis*. Hence, the record of *Myrmecoris gracilis* from Antalya is erroneous.

Genus *Oncotylus* Fieber, 1858

Oncotylus* (*Oncotylus*) *nigdensis Linnavuori, 1961

Oncotylus punctipes sensu Önder (1976: 352).

Material examined

TURKEY – **Erzurum Province** • 1 ♀; Merkez; 16 Aug. 1967; F. Önder leg.; LEMT. – **Kütahya Province** • 1 ♀; Domaniç; 19 Jun. 1975; F. Önder leg.; LEMT.

Genus *Psallus* Fieber, 1858

Psallus* (*Hylopsallus*) *perrisi (Mulsant & Rey, 1852)

Psallus variabilis sensu Önder *et al.* (1981: 156).

Material examined

TURKEY – **Bursa Province** • 1 ♂; Süpürtü; 26 Jun. 1977; F. Önder leg.; LEMT • 1 ♀; ibid.; 31 Sep. 1977; F. Önder leg.; LEMT • 1 ♀; ibid.; 17 Jun. 1977; F. Önder leg.; LEMT.

Psallus* (*Pityopsallus*) *piceae Reuter, 1878

Psallus pinicola sensu Lodos *et al.* (2003: 70).

Material examined

TURKEY – **Çankırı Province** • 11 ♂♂, 25 ♀♀; Ilgaz; 22 Jul. 1979; EUAPP exped.; LEMT. – **Ankara Province** • 1 ♂; Elmadağ; 4 May 1979; EUAPP exped.; LEMT.

Psallus* (*Psallus*) *anaemicus Seidenstücker, 1966
Fig. 6A

Psallus mollis sensu Önder (1976: 448).
Psallus variabilis sensu Lodos *et al.* (2003: 71).

Material examined

TURKEY – **Antalya Province** • 1 ♂; Merkez; 18 May 1986; EUAPP exped.; LEMT. – **Samsun Province** • 2 ♂♂; Bafra; 4 Jun. 1973; F. Önder leg.; LEMT.

Psallus* (*Psallus*) *asthenicus Seidenstücker, 1966
Fig. 6B

Psallus variabilis sensu Lodos *et al.* (2003: 71).

Material examined

TURKEY – **Antalya Province** • 2 ♂♂, 4 ♀♀; Merkez; 18 May 1986; EUAPP exped.; LEMT.

Psallus* (*Psallus*) *konyanensis Matocq, 2019

Psallus pinicola sensu Lodos *et al.* (2003: 70).

Material examined

TURKEY – **Eskişehir Province** • 1 ♂; Seyitgazi; 8 Jul. 1979; EUAPP exped.; LEMT.

Psallus* (*Psallus*) *thomashenryi Carapezza & Kment, 2018
Fig. 6C

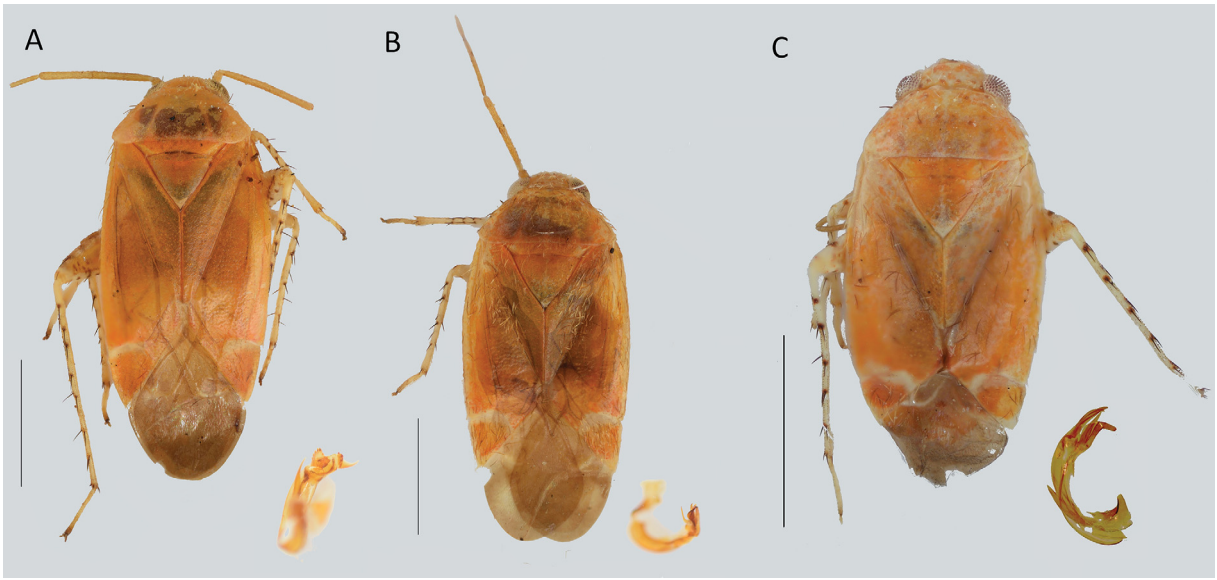

Fig. 6. A. *Psallus* (*Psallus*) *anaemicus* Seidenstücker, 1966, with vesica, ♂ (LEMT). **B**. *Psallus* (*Psallus*) *asthenicus* Seidenstücker, 1966, with vesica, ♂ (LEMT). **C**. *Psallus* (*Psallus*) *thomashenryi* Carapezza & Kment, 2018, with vesica, ♂ (LEMT). Scale bars = 1 mm.

Psallus milenae sensu Lodos *et al.* (2003: 70).

Material examined

TURKEY – **Antalya Province** • 1 ♂, 5 ♀♀; Gazipaşa; 23 May 1984; EUAPP exped.; LEMT. – **Mersin Province** • 1 ♂, 2 ♀♀; Mut; 26 May 1984; EUAPP exped.; LEMT.

New synonymy proposed

Family Miridae, Hahn, 1833
Subfamily Phylinae Douglas & Scott, 1865
Genus *Psallus* Fieber, 1858

Psallus* (*Psallus*) *pardalis Seidenstücker, 1966
Fig. 7

Psallus (*Psallus*) *oenderi* Wagner, 1976, **syn. nov.**

Material examined

TURKEY – **Isparta Province** • 2 ♂♂, 1 ♀ (paratypes of *Psallus oenderi*); Kovada; 11 Jun. 1975; F. Önder leg.; LEMT.

Comments

Psallus oenderi was described from two localities in Turkey by Wagner (1976). In the original article, the author wrote that 14 out of 15 type specimens were collected at Kovada (Isparta) and one of the

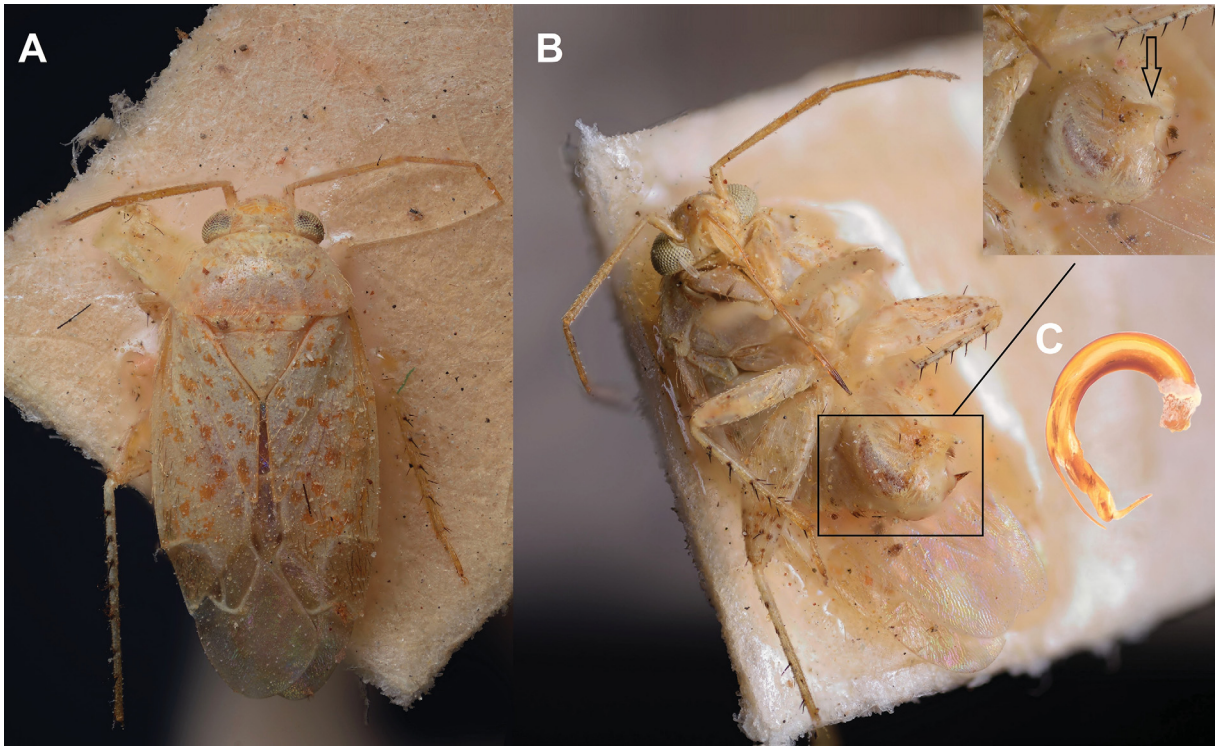

Fig. 7. *Psallus* (*Psallus*) *pardalis* Seidenstücker, 1966. **A**–**B**. Paratype of *Psallus* (*Psallus*) *oenderi*. **A**. Dorsal view, ♀ (LEMT). **B**. Ventral view, pygophore enlarged in upper right corner, arrow indicates characteristic pre-apical protrusion of pygophore of *P.* (*P.*) *pardalis*, ♂ (LEMT). **C**. Vesica, ♂ (LEMT).

type specimens was collected at Tak Bah. The latter paratype was preserved in LEMT and we examined the labels of this specimen. The label writes "Fak. Bah." which stands for the collecting locality and is the abbreviation of "Fakülte Bahçesi" (in English "Garden of the faculty"). Hence this specimen was in fact collected from Bornova, İzmir where the Faculty of Agriculture of Ege University is located. However, an examination of this specimen revealed that it belonged to *Psallopsis kirgisica* (Becker, 1864). Moreover, we had the chance to examine some of the paratypes collected at Kovada (Isparta) and we discovered that they do not differ from *Psallus* (*Psallus*) *pardalis* Seidenstücker, 1966, both in coloration, morphology (Fig. 7A–B) and in the structure of vesica (Fig. 7C). The illustration of male genitalia of *P. oenderi* by Wagner (1976) also matches with that of examined paratypes. Therefore, *Psallus* (*Psallus*) *oenderi* Wagner, 1976 is regarded as a junior synonym of *Psallus* (*Psallus*) *pardalis* Seidenstücker, 1966.

New records for Turkey

Family Microphysidae Dohrn, 1859
Genus *Loricula* Curtis, 1833

Loricula* (*Loricula*) *pselaphiformis Curtis, 1833
Fig. 8

Material examined

TURKEY – **Karaman Province** • 1 ♂; Sarıveliler, Karahasan Pass; 1750 m; 25 Jun. 2023; B. Çerçi leg.; on *Berberis vulgaris*; BCIT. – **Mersin Province** • 1 ♀; Tarsus, Ballıca; 8 May 1985; EUAPP exp.; on *Quercus* sp.; LEMT.

Comments

This small microphysid species lives on lichens growing on deciduous trees of many species and feeds on small insects, mostly psyllids. It is widely distributed in the European continent, but it prefers cold

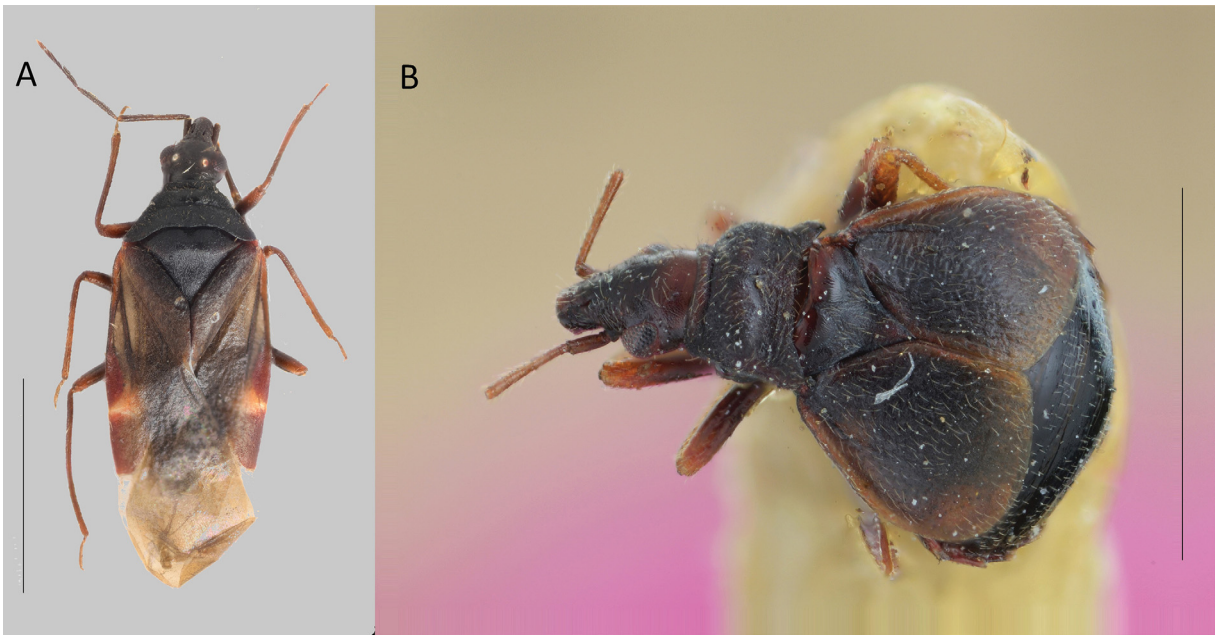

Fig. 8. *Loricula* (*Loricula*) *pselaphiformis* Curtis, 1833. **A**. ♂, (LEMT). **B**. ♀, (LEMT). Scale bars = 1 mm.

climate and becomes exceedingly rare towards the southern regions (Péricart 1972). In the Mediterranean basin, it was recorded from Greece and Israel (Aukema 2023). The record from Israel was from the western Judaean Mountains and the exact locality of the record from Greece was not mentioned (Péricart 1972). Both examined specimens were collected from Southern Turkey. The specimen from Karaman (Fig. 8A) was collected at 1750 m and the specimen from Mersin (Fig. 8B) was collected at sea level, in a region with very warm climate. Until now, only one species of Microphysidae, *Loricula* (*Loricula*) *bipunctata* (Perris, 1857), was known from Turkey. It is easily distinguished from *L.* (*L.*) *pselaphiformis* by shiny dorsum and pale-colored hemelytra (Péricart 1972).

Family Blissidae Stål, 1862
Genus *Blissus* Burmeister, 1835

Blissus hirtulus Burmeister, 1835
Fig. 9A

Material examined

TURKEY – **Hatay Province** • 1 ♂; İslahiye; 3 Jun. 1985; EUAPP exped.; LEMT.

Comments

A rarely collected species that lives on banks of water. Its biology is unknown (Péricart 1998a). It has a wide distribution range spanning from North Africa and the Afrotropical region to the Arabian Peninsula and extends to India, China, and Japan in the east (Aukema 2023). It was recorded from Egypt, Tunisia, and Israel in the Mediterraean basin (Péricart 1998a; Kment & Batelka 2005; Linnavuori *et al.* 2014). A close relative of this species, *Blissus putoni* Jakovlev, 1875 has a Central Asian-Mediterranean distribution extending from Greece to SW China (Aukema 2023). This species was recorded from Selçuk, İzmir in Turkey, lives in an ecological niche similar to that of *B. hirtulus*. It is distinguished from the latter by the rounded apex of scutellum, hemelytra not reaching to the apex of abdomen and clavi of hemelytra not touching each other (Péricart 1998a).

Family Miridae Hahn, 1833
Subfamily Orthotylinae Van Duzee, 1916
Genus *Heterocordylus* Fieber, 1858

Heterocordylus* (*Heterocordylus*) *cytisi Josifov, 1958
Fig. 9B

Material examined

TURKEY – **İzmir Province** • 4 ♂♂, 2 ♀♀; Ödemiş, Bozdağ; 24 May 1978; F. Önder leg.; on Leguminosae; LEMT.

Comments

A Balkanian species that lives on *Chamaecytisus* spp. (Fabaceae Lindl.) and captured together mostly with *H.* (*H.*) *leptocerus* (Kirschbaum, 1856) and rarely with *H.* (*H.*) *genistae* (Scopoli, 1763) (Josifov 1958; Kment & Baňař 2012; Kment *et al.* 2013b). Due to its close resemblance to both species, it was repeatedly overlooked or misidentified in the literature (Kment & Baňař 2012; Kment *et al.* 2013b). Males of the newly recorded species can only be reliably distinguished from these two species by the different shape of parameres. However, females can be distinguished by the shape of second antennal segment which is cylindrical in *H. leptocerus*, cylindrical in the basal ⅓ and strongly inflated in the apical ⅔ in *H. cytisi* and gradually inflated throughout its whole length in *H. genistae* (Fig. 9B) (Josifov

1958). Additionally, females of *H. cytisi* and *H. genistae* are distinguished by different shapes of squama covering the base of ovipositor (Kment *et al.* 2013b).

Genus *Globiceps* Lepeletier & Serville, 1825

Globiceps* (*Globiceps*) *coryli V.G. Putshkov, 1970
Fig. 10A–C

Material examined

TURKEY – **Bartın Province** • 1 ♂; Merkez; 31 May 1980; EUAPP exped.; on *Crataegus* sp.; LEMT. – **Bolu Province** • 2 ♀♀; Merkez; 19 Jul. 1979; EUAPP exped.; LEMT. – **Bolu Province** • 3 ♀♀; Çerkeş; 13 Jul. 1979; EUAPP exped.; LEMT. – **Giresun Province** • 1 ♂; Piraziz; 26 Jun. 1981; EUAPP exped.; on *Corylus avellana*; LEMT. – **Kastamonu Province** • 5 ♂♂, 1 ♀; Devrekâni; 19 Jun. 1979; EUAPP exped.; LEMT. – **Samsun Province** • 1 ♂; Tekkeköy, Gelemen; 16 Jun. 1981; EUAPP exped.; on *Corylus avellana*; LEMT. – **Trabzon Province** • 1 ♂; Akçaabat; 26 Jun. 1981; EUAPP exped.; on *Corylus avellana*; LEMT. – **Ordu Province** • 3 ♂♂, 2 ♀♀; Altınordu; 26 Jun. 2017; B. Çerçi leg.; on *Corylus avellana*; BCIT.

Comments

This species is distributed locally in the Caucasian region and is strictly bound to *Corylus avellana* L. (Putshkov 1970). We examined many specimens collected from *Corylus avellana* along the Black Sea

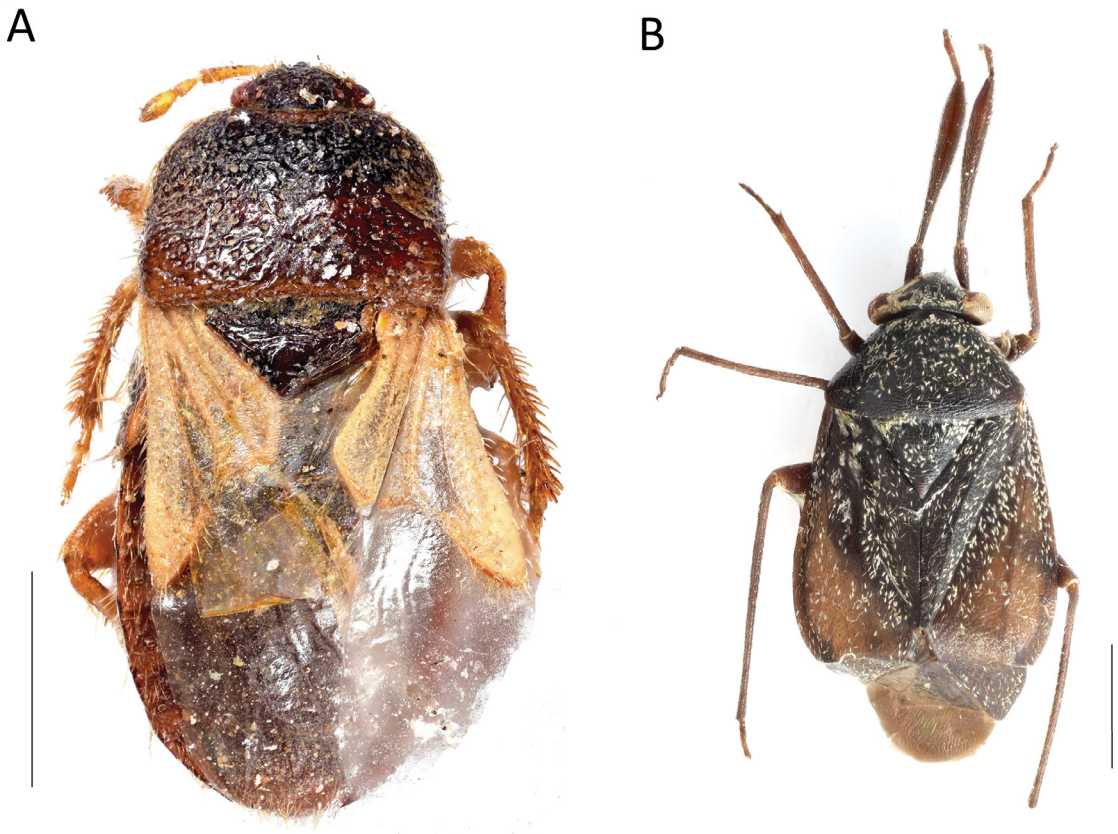

Fig. 9. A. *Blissus hirtulus* Burmeister, 1835, ♀ (LEMT). **B**. *Heterocordylus* (*Heterocordylus*) *cytisi* Josifov, 1958, ♀ (LEMT). Scale bars = 1 mm.

region, from Bartın in the west to Trabzon in the east. Specimens from Ordu (Fig. 10A–C) were collected with *Orthonotus rufifrons* (Fallén, 1807), *Phylus* (*Phylus*) *coryli* (Linnaeus, 1758) and *Leucodellus zagdani* (V.G. Putshkov, 1970). The newly recorded species appears very similar to *Globiceps sphaegiformis* (Rossi, 1790), a species associated with *Quercus* spp., but differs from it by the shape of the callosity of anterior lobe of pronotum, which projects upward to form a distinct horn in the latter (Fig. 10D) but does not project at all and forms a rectangle in the former (Fig. 10B) (Putshkov 1970).

Subfamily Phylinae Douglas & Scott, 1865
Genus *Mesopsallus* Wagner, 1970

Mesopsallus fagi Drapolyuk, 1990
Fig. 11A

Material examined

TURKEY – **Artvin Province** • 1 ♂; Borçka, Murgul; 5 Sep. 1971; F. Önder leg.; LEMT.

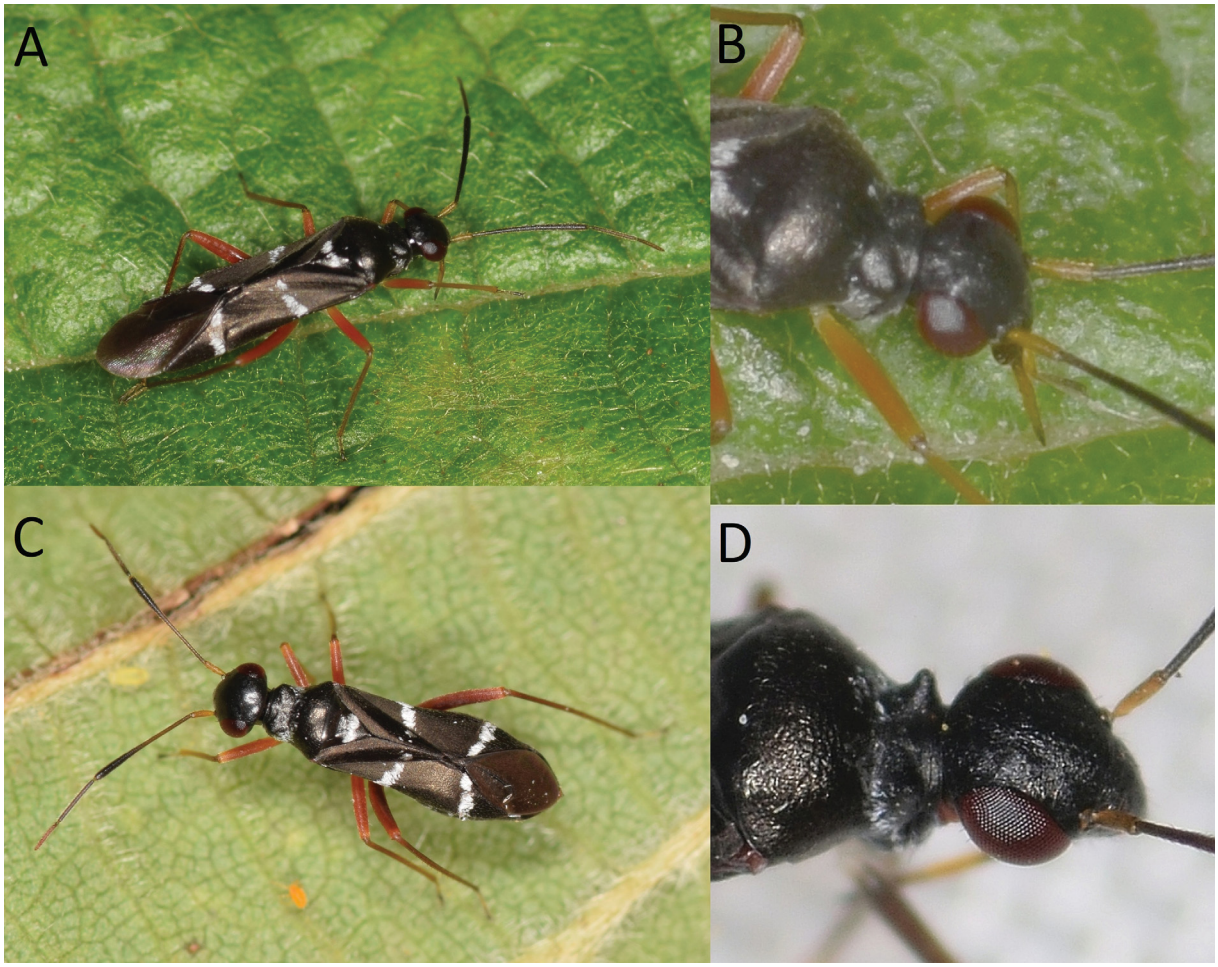

Fig. 10. A–C. *Globiceps* (*Globiceps*) *coryli* V.G. Putshkov, 1970. **D**. *Globiceps* (*Globiceps*) *sphaegiformis* (Rossi, 1790). **A–B**. ♂, sucking the leaf of *Corylus avellana* L. (BCIT). **C**. ♀, on *Corylus avellana* (BCIT). **D**. Head and pronotum of male (BCIT).

Comments

The genus *Mesopsallus* Wagner, 1970 was recently erected to genus level and re-diagnosed by Konstantinov (2023). Several species that previously were placed in three different genera were brought together in this genus by Konstantinov (2023) due to shared J-shaped vesica equipped with a large, round and distinctly sculptured secondary gonopore located almost at the apex of the vesica, and straight apical blade. The genus now contains following ten species: *M. ambiguus* (Fallén, 1807), *M. tibialis* (Reuter, 1894), *M. fagi* (Drapolyuk, 1990), *M. holomelas* (Reuter, 1906), *M. samdzijonicus* (Josifov, 1983), all previously in *Psallus*; *M. amygdali* (Wagner, 1960), *M. mali* (Meyer-Dür, 1843), *M. rhodani* (Fieber, 1861), all previously in *Atractotomus*; *M. pici* (Reuter, 1899) and *M. validus* (Reuter, 1901), both previously in *Heterocapillus* (Konstantinov 2023). *Mesopsallus tibialis* is endemic of the Iberian Peninsula and distinguished from other species of *Mesopsallus* that were previously placed in *Psallus*, by unicolorous black hemelytra, including cuneus (Wagner 1975). Both *M. ambiguus* and *M. fagi* are variable in coloration, the latter is paler in coloration and has yellowish-brown to yellow-colored legs whereas the legs of the former are brown (Drapolyuk 1990; Wyniger 2004). More importantly, the apical process of vesica is longer and claw-like in *M. ambiguus* (see Rizzotti Vlach 2000: figs 1–6) but much shorter and hook-like in *M. fagi* (Fig. 11A). This species was described from Zakatala and Kuba districts of Azerbaijan and has never been recorded in the literature since its original description (Drapolyuk 1990). It lives on *Fagus orientalis* and feeds on psyllid larvae (Drapolyuk 1990).

Genus *Psallus* Fieber, 1858

Psallus* (*Psallus*) *helenae Josifov, 1969
Fig. 11B

Material examined

TURKEY – **Karaman Province** • 1 ♂; Başyayla; 1500 m; 25 Jun. 2023; B. Çerçi leg.; BCIT.

Fig. 11. A. *Mesopsallus fagi* (Drapolyuk, 1990), dorsal and lateral view, with vesica, left and right parameres, ♂ (LEMT). **B**. *Psallus* (*Psallus*) *helenae* Josifov, 1969, with vesica, ♂ (BCIT). Scale bar: A = 1 mm

Comments

A European species associated with *Quercus cerris* Lipsky and collected with other *Quercus*-associated *Psallus* spp. (Bryja & Kment 2002). It is a cryptic species in Europe and its distribution is most probably much wider than known to date (Aukema 2023). It is known from Italy, mainland Greece and from the Lesbos Island in the Mediterranean region (Wyniger 2004; Aukema 2023). The examined specimen was collected with light trap that was set up in an area dominated by trees of *Quercus* spp., at an elevation of 1500 m. This species can be easily distinguished from its congeners known from Turkey by the unique shape of its vesica and dominancy of the thick and black setae (Fig. 11B).

Description of new species

Family Miridae Hahn, 1833
Subfamily Orthotylinae Van Duzee, 1916
Genus *Orthotylus* Fieber, 1858

Orthotylus* (*Parapachylops*) *oenderi Çerçi, Tezcan & Koçak sp. nov.
urn:lsid:zoobank.org:act:CAC59FB4-021C-459C-AC1A-4F584A8927A5
Figs 12–14

Diagnosis

The new species is diagnosed by the combination of following characters: small size, 2.1–2.9 mm, coloration predominantly vivid orange (Fig. 12A–B), frons distinctly globose and the shapes of parameres and vesica as in Fig. 13.

Differential diagnosis

The subgenus *Parapachylops* Ehanno & Matocq, 1990 includes small species living on *Juniperus* spp. and related Cupressaceae Bartlett, characterized by genital opening with one or more sclerotized processes, left paramere transversely wider and flattened, right paramere longitudinally expanded and provided with teeth and vesica profusely branching and serrated (Carapezza 1997; Ehanno & Matocq 1997; Pagola-Carte & Matocq 2020). The new species is placed into this subgenus due to complying structures of parameres and vesica, as well as to its host plant association. The subgenus consists of seven species, six of them distributed in the Mediterranean region and one in the Turanian region (Aukema 2023). *Orthotylus* (*Parapachylops*) *bureschi* Josifov, 1969 was placed into this subgenus by Carapezza (1997), mainly due to its host plant association. However, considering the shape of its parameres and vesica which do not fit with the characteristics of this subgenus, mentioned above, this species most probably belongs to another subgenus (S. Pagola-Carte pers. comm.). The rest of the species are very closely related, small, 2.1–3.7 mm long and uniformly green species. Strikingly, the new species is easily distinguished from all these species by relatively small size ranging between 2.1 and 2.9 mm and unicolorous orange coloration. To our knowledge, this species is the only known *Orthotylus* species with such coloration in the West Palearctic region, and potentially in the entire world. Interestingly, the external appearance of *O.* (*P.*) *oenderi* sp. nov. is similar to the phyline *Juniperia rubescens* Linnavuori, 1965, a very small species of 1.9–2.1 mm with unicolorous vivid orange coloration which also lives on *Juniperus* species in Mediterranean region of Turkey, including Karaman (Linnavuori 1965; Çerçi & Koçak 2023). Among other species within this subgenus, male genital structures of *O.* (*P.*) *oenderi* sp. nov. are most similar to the Turanian *O.* (*P.*) *putshkovi* Josifov, 1974 (Josifov 1974). This raises the question whether these two species evolved from a common ancestor and the population of this species that settled in the Toros mountains have evolved to this uniquely orange colored species, under a selective pressure occurring in this region.

Etymology

The new species is named after Feyzi Önder (1943–2000), a pioneer in person (önder, meaning "pioneer" in English), who was the entomologist who contributed most to our current knowledge on the Heteroptera of Turkey, with his countless research, many field works and numerous students whom he educated. He also contributed the most in the creation of the Heteroptera collection in LEMT and was part of the field expeditions carried out between 1979 and 1987, during which this new species was originally collected.

Type material

Holotype

TURKEY – **Karaman Province** • ♂; Ermenek; 3 Jul. 1980; EUAPP exped.; on *Juniperus* sp.; LEMT.

Paratypes

TURKEY – **Karaman Province** • 1 ♂, 2 ♀♀; same data as for holotype; LEMT • 3 ♂♂, 2 ♀♀; Merkez, Kurucabel village; 800 m; 24 Jun. 2023; B. Çerçi & Ö. Koçak leg.; on *Juniperus oxycedrus*; BCIT.

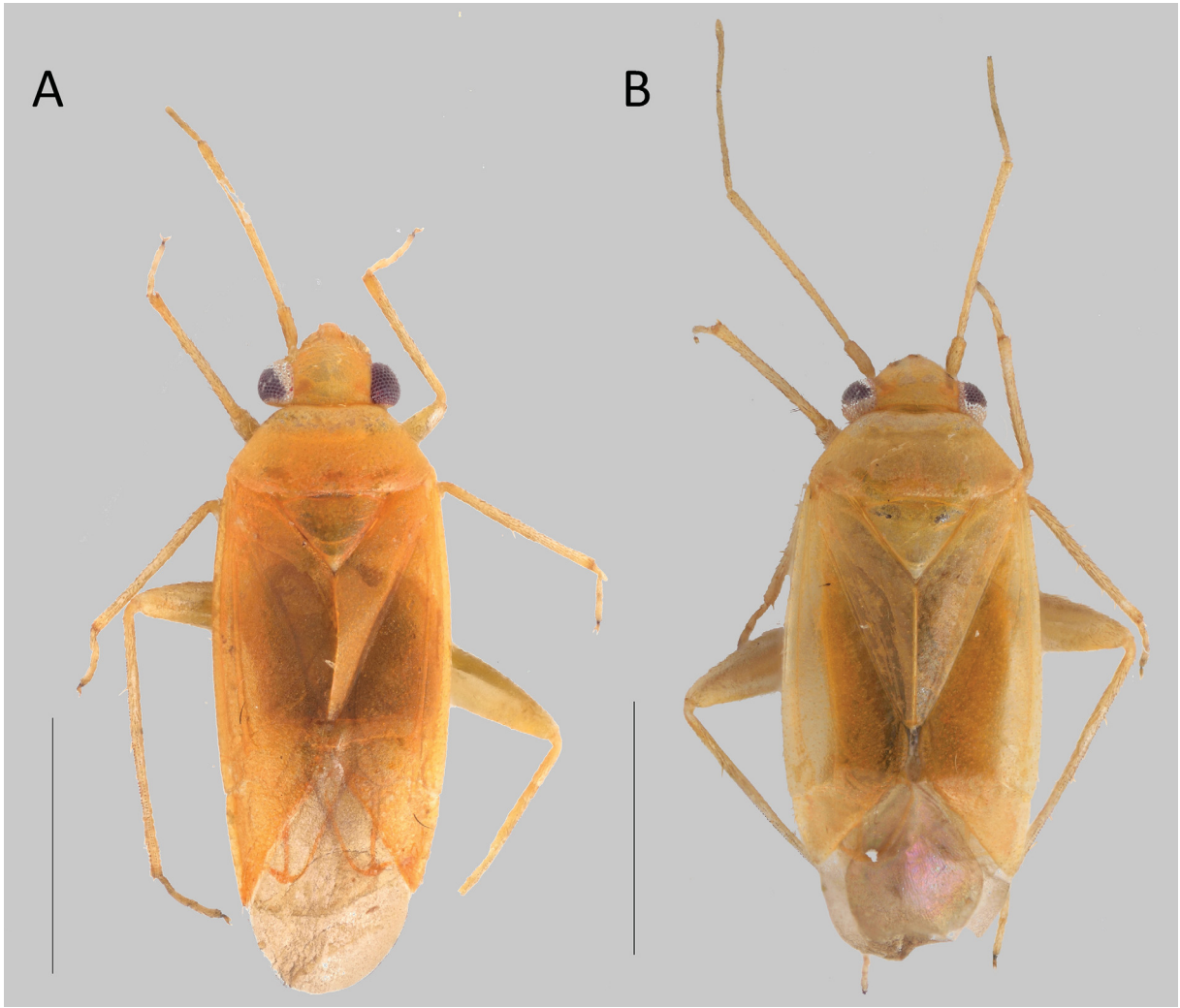

Fig. 12. *Orthotylus* (*Parapachylops*) *oenderi* Çerçi, Tezcan & Koçak sp. nov. **A**. Paratype, ♂ (BCIT). **B**. Paratype, ♀ (BCIT). Scale bars = 1 mm.

Description

Male

Coloration. General coloration yellow to orange. Head unicolorous orange. Antennae unicolorous yellow. Pronotum orange with collar region broadly yellowish. Hemelytra immaculate orange with base of exocorium paler, membrane dusky brown, veins orange. Legs pale yellow, tibial spines pale.

Vestiture. Simple short and adpressed pale setae.

Structure. Size 2.1–2.6 mm, oblong-oval, 3× as long as width of pronotum. Head globose, frons strongly rounded and slightly protruding, posterior margin with an indistinct ridge, 1.0× as long as high in lateral view, 0.6× as long as wide, ocular index 2.7, rostrum surpassing metacoxae but not reaching apex of abdomen. First antennal segment 0.5× as long as vertex, 0.23× as long as second one, second antennal segment 1.0× as long as width of posterior margin of pronotum, 1.5× as long as diatone, ratios of antennal segments 9:40:16:?. Pronotum strongly trapezoid, 0,45× as long as wide across posterior margin, posterior margin 2.2× as wide as anterior one, lateral margins straight, both anterior and posterior corners broadly rounded, anterior margin with a shallow depression. Hemelytra subparallel-sided, narrowing apically, surpassing apex of abdomen. Legs short, posterior femora thickened, only 2.9× as long as wide.

Genitalia. Genital opening with a deep and broad recess at the middle of dorsal edge, without the appendage characteristic of the subgenus. Left and right parameres as in Fig. 13C–G. Vesica with four sclerotized processes, one noticeably short and denticulate apically, one long and thin, strongly undulating medially, also denticulate apically, one thick and edenticulate and the last one the longest and denticulate apically, as well (Fig. 13A–B).

Fig. 13. *Orthotylus* (*Parapachylops*) *oenderi* Çerçi, Tezcan & Koçak sp. nov., paratypes, ♂ (BCIT). **A–B**. Vesica with and without theca. **C–F**. Left paramere from different views. **G**. Right paramere.

Female

Similar to male but slightly larger, 2.1–2.9 mm, more ovate, 2.7× as long as width of pronotum, ocular index 3.0–3.2.

Biology

Type specimens were collected from *Juniperus oxycedrus L.* (Cupressaceae) in a dry hill located in a steep valley, at 700 m elevation (Fig. 14A–B). The area was densely populated with trees of *Juniperus* sp. and *Quercus* sp. (Fig. 14C–D). The new species was collected together with *Rhopalus distinctus* (Signoret, 1859).

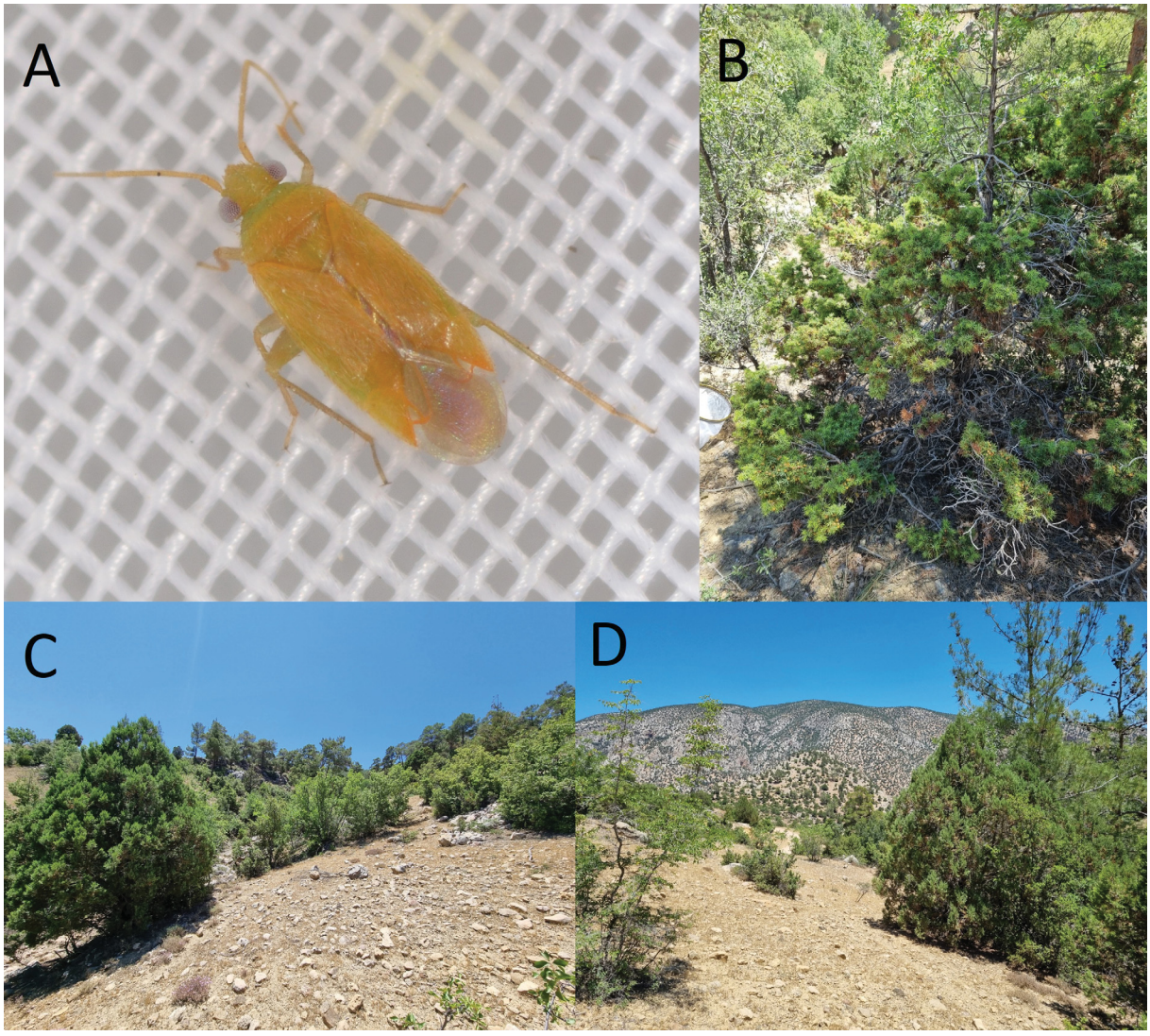

Fig. 14. A. *Orthotylus* (*Parapachylops*) *oenderi* Çerçi, Tezcan & Koçak sp. nov., alive specimen collected from *Juniperus oxycedrus* L. (BCIT). **B**. Host plant of the new species, *Juniperus oxycedrus*. **C–D**. Habitat of the new species, a dry hill, with sparse trees of *Juniperus* sp. and *Quercus* sp., in a steep valley. Photographs B–D by B. Çerçi.

Orthotylus* (*Pinocapsus*) *girayi Çerçi & Tezcan sp. nov.
urn:lsid:zoobank.org:act:395E8376-D6B4-4348-819A-29793FE52FC3
Figs 15–16

Orthotylus fuscescens sensu Önder (1976: 281).

Diagnosis

The new species is characterized by the combination of following features: unicolorous brown with orange tinge, ocular index 2.5/2.6 (♂/♀), shape of parameres, and vesica with a single sclerotized process resembling a diapason.

Differential diagnosis

We placed the new species in the subgenus *Pinocapsus* of the genus *Orthotylus* due to the close resemblence of its parameres to those of species of this subgenus, especially *O.* (*P.*) *fuscescens* (Kirschbaum, 1856) and *O.* (*P.*) *olympicus* Matocq, Pagola-Carte & Pluot-Sigwalt, 2018. The subgenus consists of nine species in the Palearctic region, seven of which are distributed in the western Palearctic (Aukema 2023). Çerçi *et al.* (2021a) provided illustrations of male genitalia of all these species. Regarding the male genital structures, the new species is distinguished from all the west Palearctic species, except *O.* (*P.*) *thaleia* Linnavuori, 1999, by the presence of only one sclerotized vesical process. The single vesical process of *O.* (*P.*) *thaleia* has two falcate processes coming out from a common origin and diverging distally. This differs distinctly from the sclerotized vesical process of *O.* (*P.*) *girayi* sp. nov., provided with two flattened processes that do not diverge but run parallel to each other. The new species can be easily distinguished from all other species of this subgenus by the unique shape of its vesical sclerotized process, the remarkably small eyes, and the large ocular index of 2.5–2.6.

Fig. 15. *Orthotylus* (*Pinocapsus*) *girayi* Çerçi & Tezcan sp. nov., paratype, ♀ (LEMT). Scale bar = 1 mm.

Etymology

The new species is named after Hasan Giray (1926–1987), a valuable scientist, who made important contributions to Turkish entomology through his faunistic research and field works. He was also the major contributor to the Diptera collection of LEMT.

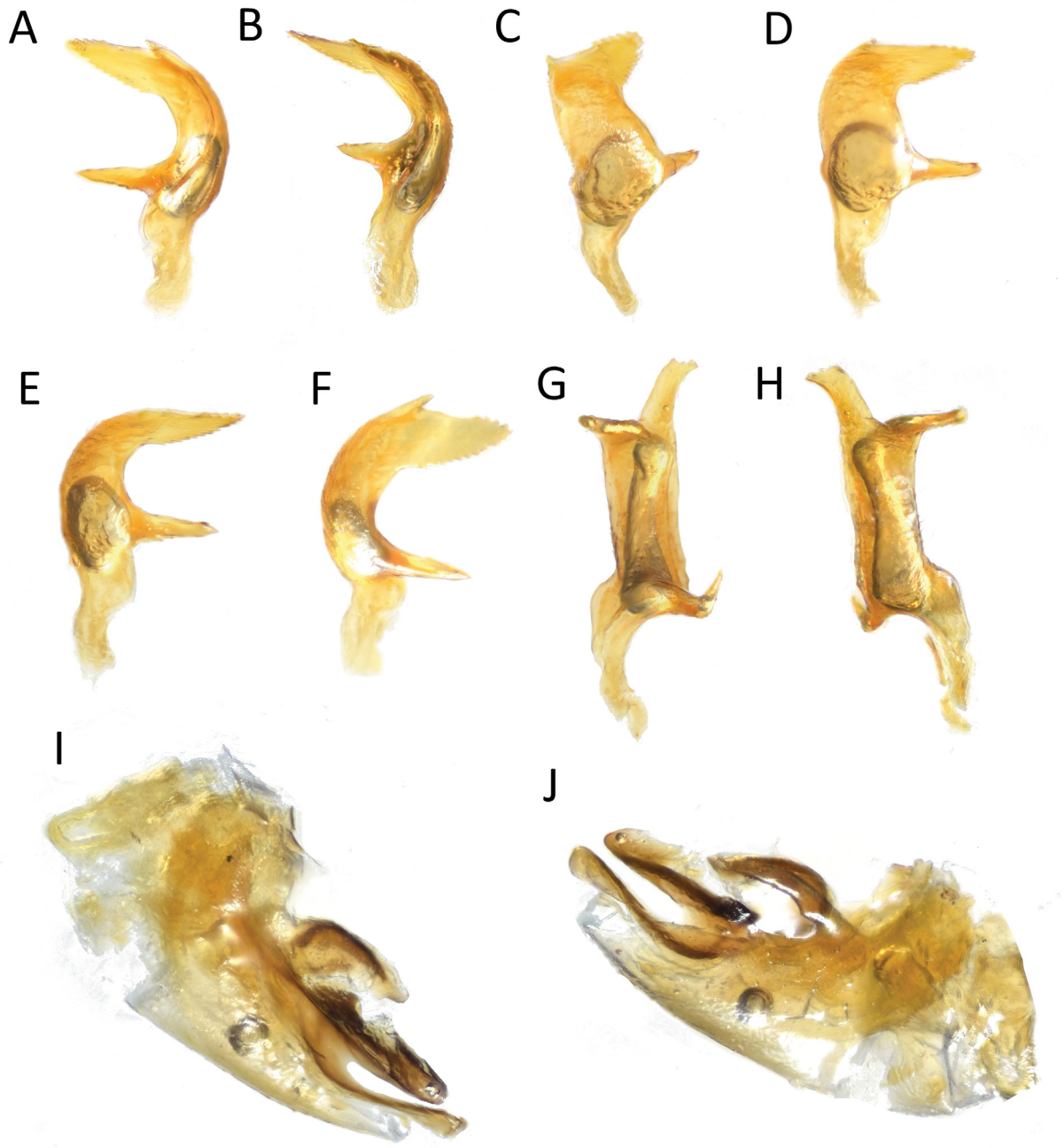

Fig. 16. *Orthotylus* (*Pinocapsus*) *girayi* Çerçi & Tezcan sp. nov., holotype, ♂ (LEMT) **A–F**. Right paramere from different views, **G–H**. Left paramere from different views. **I–J**. Vesica from different views.

Type material

Holotype

TURKEY – **Isparta Province** • ♂; Eğirdir; 11 Jun. 1973; F. Önder leg.; on *Pinus* sp.; LEMT.

Paratype

TURKEY – **Isparta Province** • 1 ♀; same data as for holotype; LEMT.

Description

Male

Coloration. Brown with orange tinge, unicolorous without any patterns in head, pronotum, scutellum hemelytra, body, and legs. Membrane dark brown.

Vestiture. Short adpressed pale setae on antennae, pronotum, scutellum, hemelytra, and legs. Head with pale semi-erect setae, denser than on pronotum and hemelytra.

Structure. Body length 4.2 mm, elongated, 3.8× as long as width of pronotum, ocular index 2.5, head remarkably short, 0.63× as long as wide, 0.75× as high as long in lateral aspect. First antennal segment surpassing clypeus by half of its length, second antennal segment 1.5× as long as diatone, 0.9× as long as width of posterior margin of pronotum, ratios of antennal segments 5:18:?:?. Pronotum strongly trapezoid, 2.2× as long as wide, posterior margin 2.8× as wide as anterior one. Hemelytra parallel-sided, surpassing apex of abdomen.

Genitalia. Right paramere with a basal process sharply pointed, and an apical wide and flat triangular process with one of its margins serrated along its entire length, the other margin serrated only in its distal half and a small but distinct preapical tooth (Fig. 16A–F). Body of left paramere subrectangular, slender, with basal process small and curved almost at right angle in the middle and apically pointed, and two apical processes, one is a long tube apically blunt, the other flat and almost rectangular but slightly bent outwards, apical edge with several minute teeth (Fig. 16G–H). Vesica with single sclerotized vesical process, reminding a diapasone, with two flattened, parallel processes coming out from a broad stem (Fig. 16I–J).

Female

Similar to male but differing in the following features: head 0.5× as long as wide, ocular index 2.6, first antennal segment surpassing apex of clypeus as much as ⅔ of its length, second antennal segment 1.3× as long as diatone, ratios of antennal segments 8:26:17:8, hemelytra widest in the middle, narrowing distal.

Biology

The examined specimens were collected from *Pinus* sp.

Subfamily Phylinae Douglas & Scott, 1865
Genus *Orthonotus* Stephens, 1829

Orthonotus efei Çerçi & Koçak sp. nov.
urn:lsid:zoobank.org:act:98BB3D7F-A570-49B8-9778-6C04AB8F46A3
Fig. 17

Diagnosis

Characterized by the combination of the following characters: dorsum covered with two types of adpressed pale setae, one long and simple, other short and scalelike, first and second antennal segments

slightly thickened, second antennal segment of male yellow with small basal ring, anterior and middle femora yellow, posterior one dark brown except for pale apical fourth and the shape of the vesica.

Differential diagnosis

The genus *Orthonotus* Stephens, 1829 is characterized by sexual dimorphism, males almost always macropterous with parallel sided hemelytra and females brachypterous, head before eyes remarkably elongated, lateral margins of pronotum concave, tibial spines without basal spots and vesica U or S-shaped with diverse shapes of apical processes (Wagner 1975; Matocq & Pluot-Sigwalt 2001). Matocq & Pluot-Sigwalt (2001) recognized four groups of species in this genus with regard to the shape of the apical process of vesica. The new species undoubtedly belongs to the group of species with vesical process of their type 1. Within this group, its vesical process is most similar to those of *O. longiceps* (Reuter, 1883) and *O. graecus* Rieger, 1985 (Rieger 1985). Although similar, several significant differences separate the vesical process of the new species and these two species. Most noticeably, the width of the large apical process tapers down gradually along its entire length in both species whereas it tapers down abruptly at the middle in the new species. Moreover, the small vesical process below is closer to apex in these species but very remote in the new species. Apart from the differences in vesical structure, *O. graecus* differs from the new species by black second antennal segment of male and *O. longiceps* differs by the extensive pale coloration of hemelytra and smaller ocular index of male (1.5) (Wagner 1975; Rieger 1985). Finally, both these species lack scalelike setae on dorsum. The slightly thickened pale second antennal segment of male is an important feature of the new species that allows its distinction from most of the West Palearctic species. Only three species have such pale colored second antennal segments in males: *O. longiceps*, *O. luteocinctus* (Kiritshenko, 1951) and *O. syriacus* (Puton, 1881). However, all these species have slender second antennal segments and the latter two species have remarkably long first antennal segments which surpass the tip of clypeus by more than ⅔ of their lengths.

Etymology

We dedicate the name of this new species to Efe Koçak, son of the second author.

Material examined

Holotype

TURKEY – **Karaman Province •** ♂; Ermenek; 9 Jun. 2020; Ö. Koçak leg.; LEMT.

Description

Male

Coloration. Dark reddish brown. Head unicolorous dark reddish brown. First antennal segment unicolorous black, second antennal segment pale yellow with a small black ring basally, third antennal segment unicolorous yellow, last antennal segments missing. Pronotum and scutellum unicolorous dark reddish brown. Corium completely and clavus largely reddish brown, only very apex of exocorium pale yellow, cuneus largely whitish, inner margin, including apex, red. Membrane dark colored, pale along the margin with cuneus, veins red. Posterior femur largely dark brown, apical fourth pale yellow, middle and anterior femora unicolorous pale yellow, tibiae and tarsi pale, tibial spines pale. Abdomen dark reddish brown.

Vestiture. Dorsum covered with two types of adpressed pale setae, one long and simple, other shorter and scalelike. Antennae covered with short adpressed pale setae. Pronotum with one long and thick seta on each anterior corner.

Structure. Size 3.5 mm, 4.2× as long as width of posterior margin of pronotum. Head 0.83× as long as wide, 1.6× as long as high in lateral aspect, portion of head distal to eyes, as long as height of eyes,

ocular index 2.0, clypeus narrow and distinctly protruding, rostrum reaching posterior coxae. First two antennal segments slightly thicker than third one, first antennal segment only very slightly surpassing apex of clypeus, 0.43× as long as diatone, second antennal segment 1.5× as long as diatone, 1.0× as long as width of posterior margin of pronotum, ratios of antennal segments 10:35:28:?. Pronotum strongly trapezoid, 0.5× as long as wide, posterior margin 3× as wide as anterior one, anterior corners rounded, posterior corners flat and broadly rounded, lateral margins slightly concave, posterior margin straight. Hemelytra parallel sided, surpassing abdomen. Legs short and slender.

Genitalia. Left paramere as in Fig. 17D. Right paramere typical of the genus. Vesica robust, S-shaped, its body thick, apically with two processes, the more basal one resembles a small tooth with sharp tip, the more apical one with a straight and rectangular body in the basal half that abruptly tapers down at its distal half, to a flat and narrow blade-like process, additionally, two small, blunt and curved teeth on the upper margin of this transition zone (Fig. 17B–C).

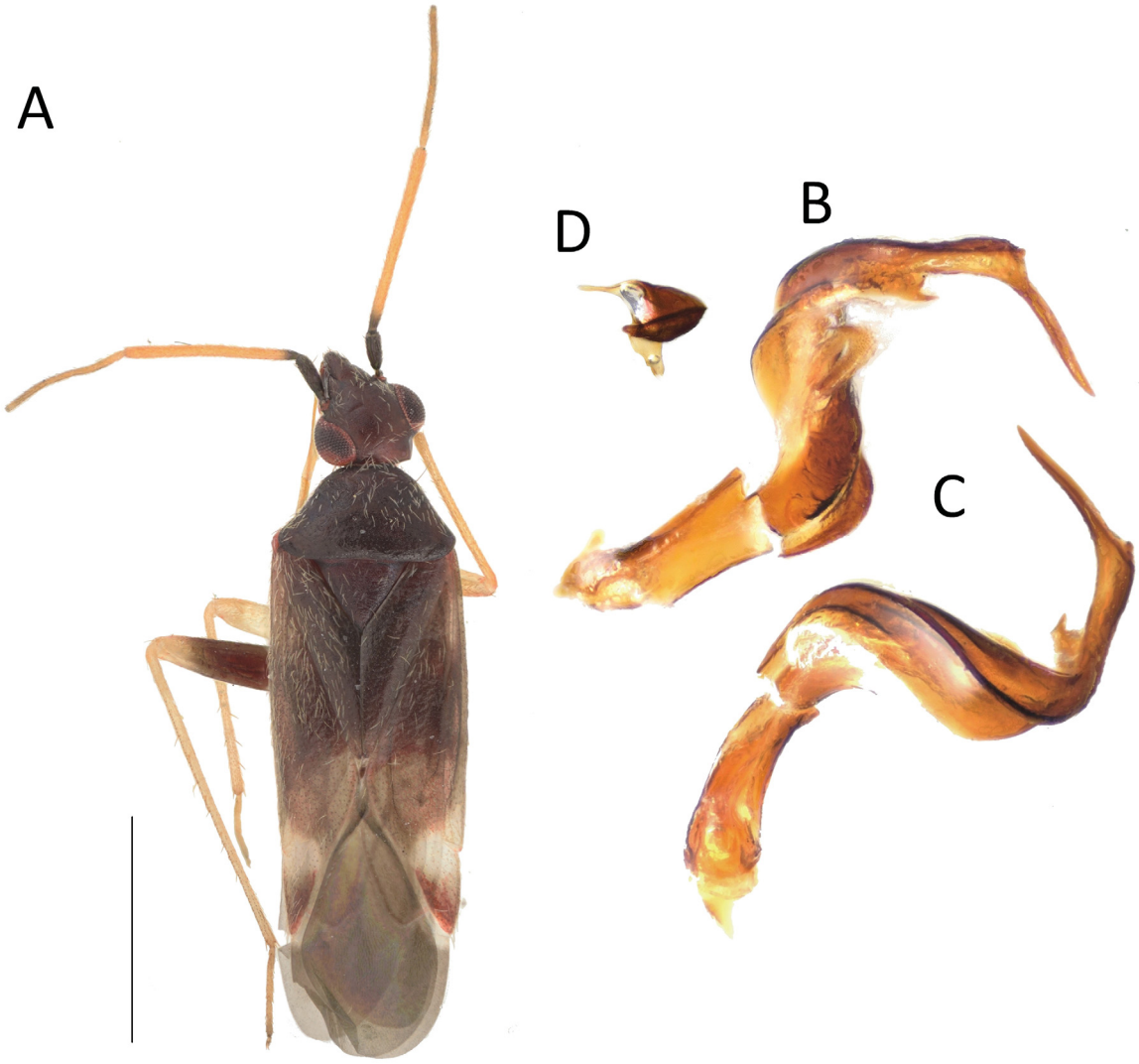

Fig. 17. *Orthonotus efei* Çerçi & Koçak sp. nov, holotype, ♂ (LEMT). **A**. Dorsal view. **B–C**. Vesica from different views. **D**. Left paramere. Scale bar = 1 mm.

Genus *Psallus* Fieber, 1858

Psallus* (*Psallus*) *pehlivani Çerçi & Tezcan sp. nov.
urn:lsid:zoobank.org:act:26A2A803-3771-4E04-B772-2BAF647EB052
Figs 18–19

Diagnosis

The new species is diagnosed by the combination of following characters: vestiture composed of two types of setae, long, semi-erect black setae and short adpressed scalelike pale setae, antennae unicolorous yellow, hemelytra yellowish brown, base of cuneus narrowly pale, rest of cuneus orange colored and the unique shape of vesica.

Differential diagnosis

The new species belongs to the *P. haematodes* species group characterized by vesica bearing single lateral process and apex of vesica widened, curved, bearing teeth on its entire length and a membranous lobe basally (Wyniger 2004). This species group includes the following 17 species in alphabetical order: *P*. (*P.*) *anashanti* Pagola-Carte, 2017, *P*. (*P.*) *corsicus* Puton, 1875, *P*. (*P.*) *enejokosu* Pagola-Carte, 2018, *P*. (*P.*) *falleni* Reuter, 1883, *P*. (*P.*) *flavellus* Stichel, 1933, *P*. (*P.*) *georgicus* Zaitzeva, 1968, *P*. (*P.*) *gidajatovi* Drapolyuk, 1987, *P*. (*P.*) *haematodes* (Gmelin, 1790), *P*. (*P.*) *lepidus* Fieber, 1858, *P*. (*P.*) *minusculus* Zaitzeva, 1968, *P*. (*P.*) *nigricornis* Yasunaga & Vinokurov, 2000, *P*. (*P.*) *orni* Wagner, 1968, *P*. (*P.*) *oyashimanus* Yasunaga & Vinokurov, 2000, *P*. (*P.*) *salicis* (Kirschbaum, 1856), *P*. (*P.*) *shulsangaricus* Linnavuori, 2010, *P*. (*P.*) *siculus* Reuter, 1875 and *P*. (*P.*) *vicinus* Reuter, 1899 (Zaitzeva 1968; Wagner 1975; Drapolyuk 1987; Carapezza 1997; Yasunaga & Vinokurov 2000; Wyniger 2004; Linnavuori 2010; Matocq 2011; Pagola-Carte 2017, 2018). The new species is distinguished from these species by the massive apical process and its large basal membranous lobe. The vesica of the new species resembles that of *P. corsicus* and *P. siculus* due to the strongly twisted vesical body and the laterally projecting basal membranous lobe of apical process. However, the new species differs from both *P. corsicus* and *P. siculus* in the much longer apical process and the larger basal membranous lobe. Furthermore, the new species is much larger than both species (2.2–3.0 mm), shows dissimilar general coloration, and is associated with *Fraxinus* sp. (Oleaceae Hoffmanns. & Link). *Psallus flavellus*, *P. gidajatovi*, *P. oyashimanus* and *P. vicinus* also have distinctly long apical processes of vesica, however, their vesicas differ from the new species in several aspects. First, the apical process of *P. pehlivani* sp. nov. is proportionally much longer than that of any of these species. Moreover, in none of these species the basal membranous lobe of the apical process is as large and distinct as in the new species. The vesica of *P. flavellus* is further distinguished from that of the new species by the much longer and straight lateral process. *Psallus oyashimanus* is also distinguished from the new species by the lateral process of vesica being very small. Furthermore, the vesica of *P. vicinus* is strongly bent throughout its length forming a C shape whereas the vesica of *P. pehlivani* sp. nov. is S-shaped. Finally, the new species is further distinguished from *P. gidajatovi* by the distinctly thicker vesical body.

Etymology

The new species is dedicated to Esat Pehlivan (1942–), an influential scientist who researched the insect fauna of Turkey in great depth in projects in which he took part and especially contributed to heteropterology through his works on Coreoidea.

Type material

Holotype

TURKEY – **Hakkâri Province** • ♂; 14 Jun. 1976; F. Önder leg.; on *Fraxinus* sp.; LEMT.

Paratypes

TURKEY – **Hakkâri Province** • 3 ♂♂, 3 ♀♀; same data as for holotype; LEMT.

Description

Male

Coloration. Head and pronotum yellowish brown with orange tinge. Antennae unicolorous yellow. Hemelytra yellowish brown, base of cuneus narrowly pale, rest of cuneus orange colored, membrane dusky brown, veins yellow. Femora yellow with apically concentrated medium sized dark brown dots, tibiae yellow with minute black dots at the base of each tibial spine which are black.

Vestiture. Densely covered with two types of setae, long, semi-erect black setae and short adpressed scalelike pale setae. Head with short adpressed pale simple and scalelike setae. Antennae covered with short adpressed pale setae. Pronotum with short adpressed scalelike pale setae throughout, semi-erect black setae concentrated along posterior half of lateral margins. Hemelytra densely covered with both types of setae mentioned above. Legs with short adpressed pale setae on both femora and tibiae, tibiae additionally with black tibial spines.

Structure. Size: 3.1–4.0 mm, oblong-ovate, 3× as long as width of pronotum. Head transverse, 0.38× as long as wide, 1.2× as long as high in lateral view, ocular index 1.5–1.8. First two segments slightly

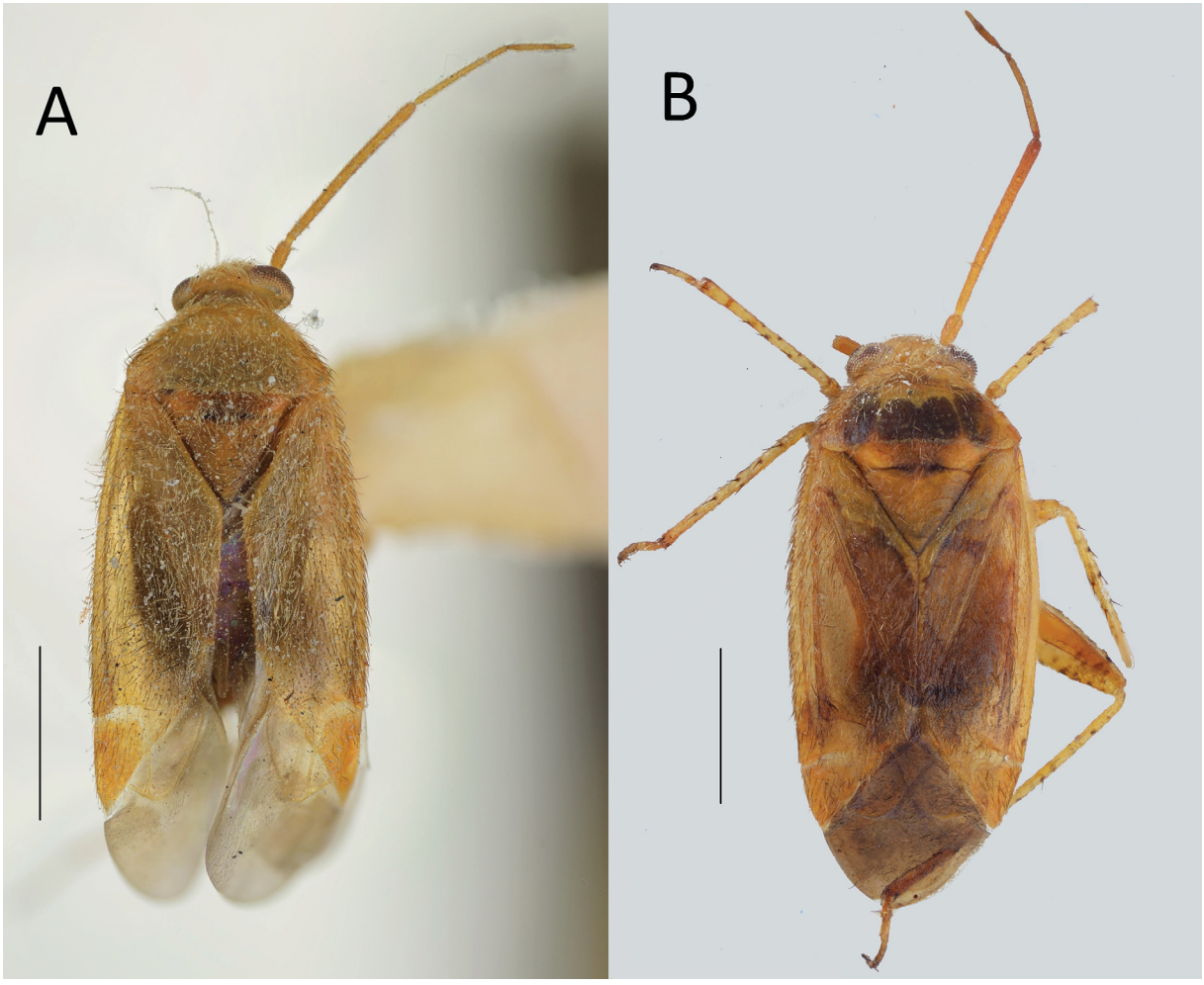

Fig. 18. *Psallus* (*Psallus*) *pehlivani* Çerçi & Tezcan sp. nov. **A**. Holotype, ♂ (LEMT). **B**. Paratype, ♀ (LEMT). Scale bars = 1 mm.

thicker than last two segments, first antennal segment 0.57× as long as width of vertex, second antennal segment 1.3–1.5× as long as diatone, 0.9–0.93× as long as width of posterior margin of pronotum, ratios of antennal segments 6:30:19:12. Pronotum weakly trapezoid, 0.43× as long as wide, posterior margin 2.3× as wide as anterior one, lateral margins straight, posterior corners rounded. Hemelytra subparallel sided, weakly arched medially, surpassing apex of abdomen. Legs short, metafemur slender, 3.8× as long as wide.

Genitalia. Left and right parameres as in Fig. 18F–G. Vesica S-shaped, apically strongly twisted, with two apical processes, one is long and thick, curved gradually at distal half, armed with a row of small

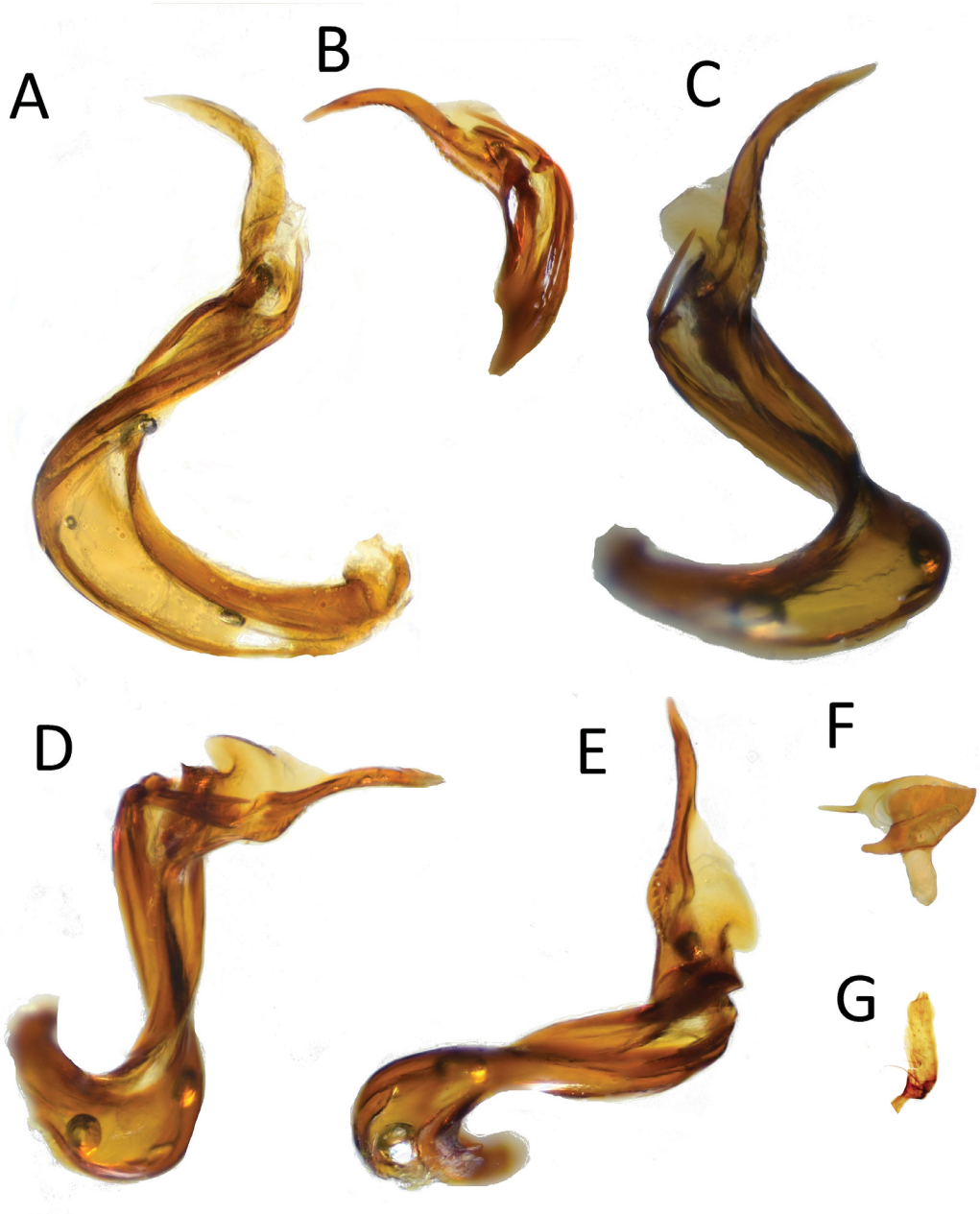

Fig. 19. *Psallus* (*Psallus*) *pehlivani* Çerçi & Tezcan sp. nov, paratypes, ♂ (LEMT). **A–E**. Vesica from different views. **F**. Left paramere. **G**. Right paramere.

teeth along its inner margin, the other one, positioned laterally, is a short and simple spine. A large flat membranous lobe originates from the base of long vesical process (Fig. 19A–E).

Female

Similar to male in all aspects, except for slightly robuster body and larger ocular index (2.0).

Biology

Examined specimens were collected from *Fraxinus* sp.

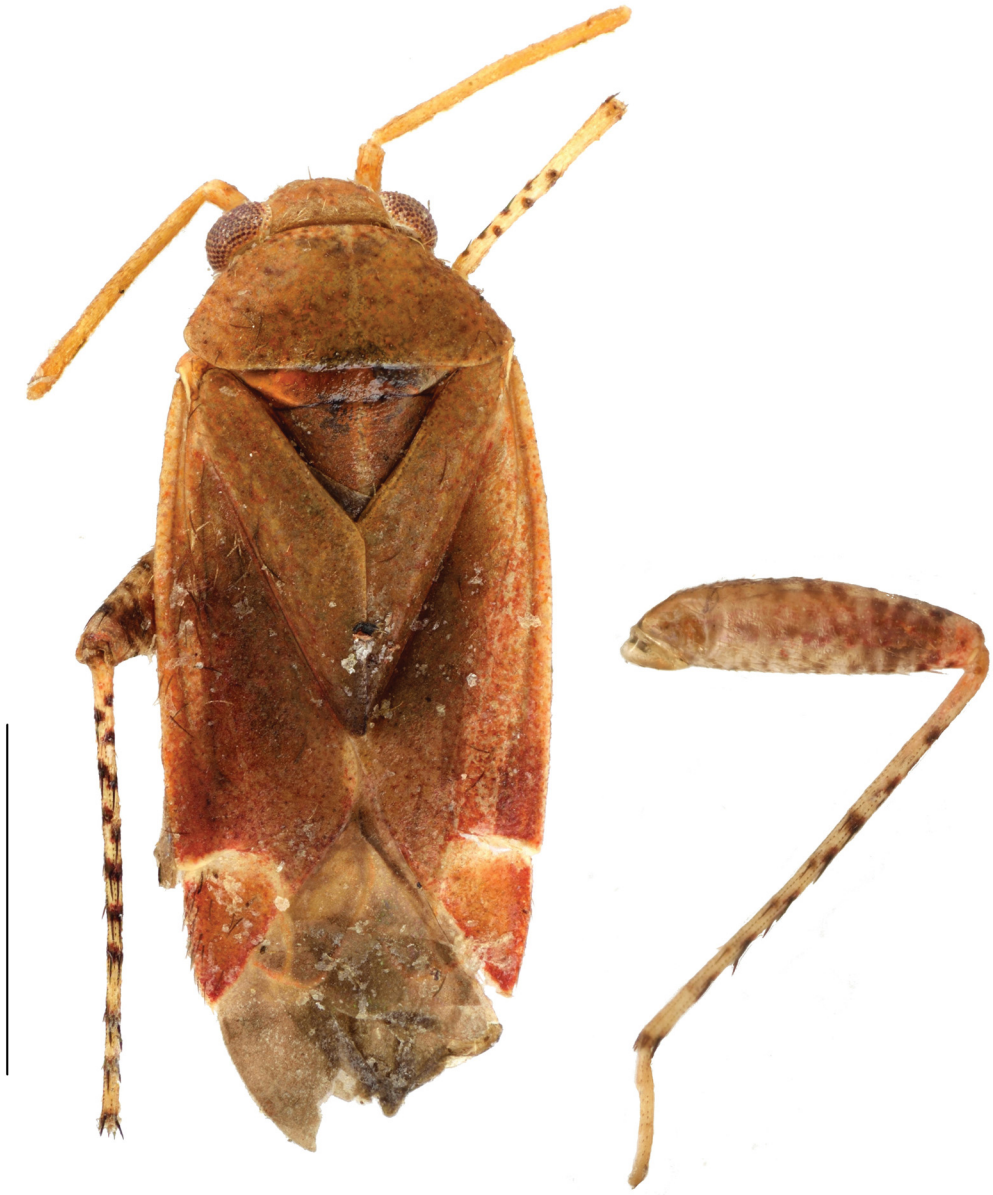

Fig. 20. *Psallus* (*Psallus*) *eceae* Çerçi & Koçak sp. nov., holotype, ♂ (LEMT) with posterior leg detached. Scale bar = 1 mm.

Psallus (Psallus) eceae Çerçi & Koçak sp. nov.
urn:lsid:zoobank.org:act:0F7CC35D-25E9-438C-B9BD-42D2FFD8AFA8
Figs 20–21

Diagnosis

The new species is diagnosed by the following features: size small, 2,8 mm, general coloration yellowish brown with extensive small red mottling, tibial dots large and dense, frons distinctly spherical and unique shape of vesica.

Differential diagnosis

This new species also belongs to the *P. haematodes* group of species due to the shape of its vesica. Among these species, its vesica resembles that of *P. flavellus* the most, especially due to the long lateral process. However, the vesica of the latter is larger, has a narrow apex of vesical body, a longer and apically less strongly bent apical process and its lateral process is almost straight (Fig. 21F). Furthermore, *P. flavellus* is a larger species, its male range between 3.4–4.0 mm (Wagner 1975). The new species can be easily distinguished from the rest of the *P. haematodes* group of species by the long lateral process which is distinctly falciform.

Etymology

The new species is named after Ece Elif Koçak, daughter of the second author.

Type material

Holotype

TURKEY – **Karaman Province** • ♂; Bucakkışla; 20 May 2020; Ö. Koçak leg.; LEMT.

Description

Male

Fig. 21. A–E. *Psallus* (*Psallus*) *eceae* Çerçi & Koçak sp. nov, holotype, ♂ (LEMT). **A–C**. Left paramere. **D–E**. Vesica from different views. **F**. *Psallus* (*Psallus*) *flavellus* Stichel, 1933. All figures are in scale, F is adapted from Çerçi (2020).

Coloration. Yellowish brown with extensive small red mottling. Head yellowish brown with several random small dark brown dots on vertex. Antennae unicolorous yellow, last two segments missing. Pronotum yellowish brown, numerous randomly distributed small dark brown dots, a vague narrow longitudinal yellow stripe at the midline. Scutellum yellowish brown with a narrow median yellow stripe. Ground color of hemelytra yellowish brown, with dense dark red mottling, intensifying posteriorly, cuneus mostly dark red, only its base narrowly pale yellow. Membrane dark brown, veins yellow. Femora yellow with dense black dots both ventrally and dorsally, tibiae yellow with large black dots at the base of each tibial spine.

Vestiture. Simple, adpressed, predominantly pale hairs with interspersed black setae on head, pronotum and hemelytra. Antennae with short, adpressed pale setae. Tibial spines strong and black.

Structure. Size 2.8 mm, oblong oval, 2.9× as long as the width of posterior margin of pronotum. Head short, 0.8× as long as high in lateral aspect, 0.43× as long as wide, frons distinctly spherical, eyes large, occupying the whole height of head in lateral view, ocular index 1.9. First antennal segment 0.46× as long as width of vertex, second antennal segment 5.2× as long as first one, 1.2× as long as diatone and 0.8× as long as width of posterior margin of pronotum. Pronotum trapezoid, anterior margin 0.5× as wide as posterior one, 2.2× as wide as long, lateral margins straight, posterior corners broadly rounded. Hemelytra subparallel sided, slightly widened at the middle, surpassing abdomen. Legs short, posterior femur 3.7× as long as wide.

Genitalia. Left paramere as in Fig. 21A–C. Right paramere typical of phyline species. Vesica small, J-shaped, vesical apex enlarged at the level of secondary gonopore, apical and lateral processes wide apart, apical process slender, twisted around its longitudinal axis, apically blunt and strongly bent, decorated with a row of small teeth along its inner margin, lateral process long and thin, falciform (Fig. 21D–E).

Biology

Unknown.

Genus *Ribautocapsus* Wagner, 1962

Ribautocapsus tezcani Çerçi sp. nov.
urn:lsid:zoobank.org:act:770E1C2C-3640-4A0D-A597-9C1D1A5587D9
Fig. 22

Diagnosis

The new species is characterized by the combination of following features: tricolorous hemelytra with basal half orange, distal half mostly dark brown with a white band along apical margin of corium and another narrower horizontal white band between the color zones, disc of pronotum not inflated, scutellum with a distinct protuberance, clypeus separated from frons, very large right paramere and very small and simple U-shaped vesica with apical secondary gonopore.

Differential diagnosis

Following the identification key provided by Wagner (1974), the new species keyes out to *Ribautocapsus*. Only known species of this rarely collected genus, *R. bruckii* (Reuter, 1879), is known from the West Mediterranean region and characterized by wide and robust body, pseudobrachypterous female, base of vertex without a keel, clypeus not separated from frons by angle, pronotum remarkably inflated, scutellum with a cone shaped protuberance and hemelytra with two white bands, the basal one starkly shrinking medially (Wagner 1974; Streito & Matocq 2006). The new species shows several diagnostic

features of this genus, e.g., wide and robust, pseudobrachypterous female, vertex without keel, cone shaped protuberance of scutellum and double white bands of hemelytra. However, it lacks rest of the diagnostic criteria: clypeus distinctly separated from frons (Fig. 22D), pronotum not inflated (Fig. 22C) and basal white band of hemelytra not shrinking (Fig. 22A–B). Despite these differences, both species are confirmed to be congeneric, based on essentially identical male genitalia (Fig. 22E–G) (A. Matocq, pers. comm.). Secondary gonopore is located preapically or far away from apex in most species of Hallodapini, hence vesica with apically located secondary gonopore is an important diagnostic feature of *Ribautocapsus*. Apart from abovementioned differences, the new species is distinguished from *R. bruckii* by several remarkable features. The most remarkable difference is the starkly contrasting orange and dark brown colored zones of hemelytra. Although hemelytra of *R. bruckii* show color changes from dark brown to pale brown, these are not contrasting in two separate zones, as in the new species. The pronotum has pale semilunar markings at the posterior margin in the new species, whereas the pronotum of *R. bruckii* is unicolorous. The apical white band reaches the tip of clavus in the new species whereas this white band does not even reach medial border of corium in *R. bruckii*. Finally, the general coloration of the new species is reddish brown whereas *R. bruckii* is dark brown colored.

Etymology

The name of the new species is dedicated to Prof. Dr. Serdar Tezcan, a renowned Turkish entomologist who has worked on elucidation of the diverse entomofauna of Turkey for decades and is currently the curator of Lodos Entomological Museum, İzmir, Turkey (LEMT). He was also a member of the expedition carried out in the Mediterranean region of Turkey between 1984 and 1987, during which this new species was collected.

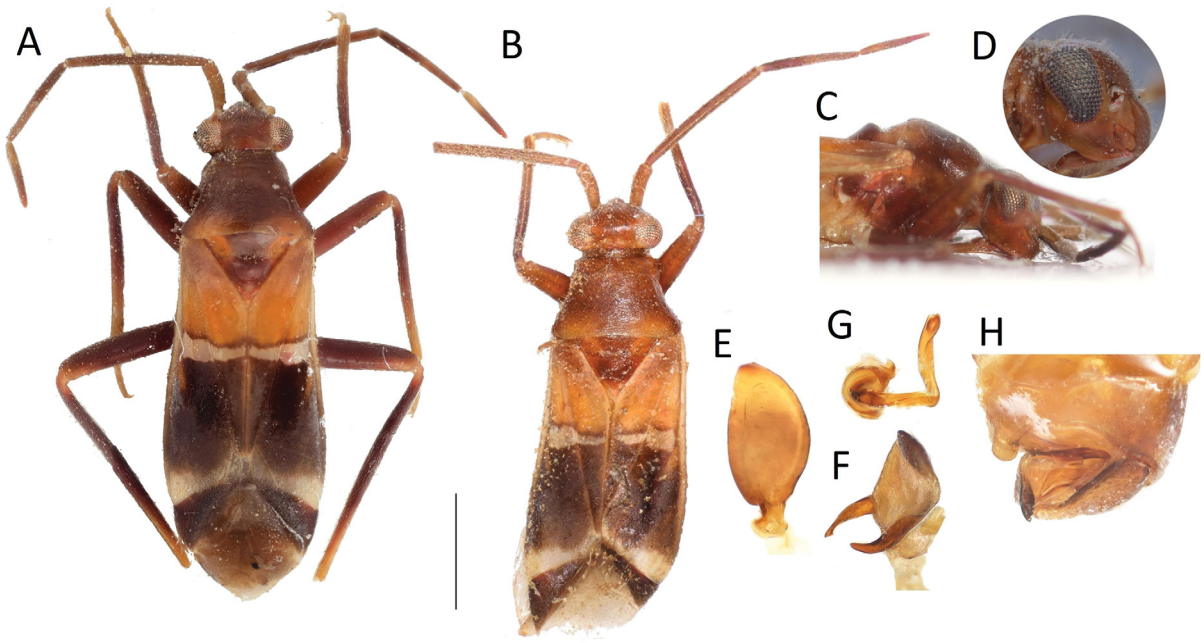

Fig. 22. *Ribautocapsus tezcani* Çerçi sp. nov. **A**. Holotype, ♂ (LEMT). **B**. Paratype, ♀ (LEMT). **C**. Head, pronotum and scutellum from lateral view, paratype, ♀ (LEMT). **D**. Head from lateral view, paratype, ♀ (LEMT). **E**. Right paramere, paratype, ♂ (LEMT). **F**. Left paramere, paratype, ♂ (LEMT). **G**. Vesica, paratype, ♂ (LEMT). **H**. Pygophore from dorsal view, paratype, ♂ (LEMT). E, F and G are to scale with each other. Scale bar: A–B = 1 mm

Type material

Holotype

TURKEY – **Hatay Province •** ♂; Yayladağ; 10 Jul. 1984; EUAPP exped.; on *Platanus* sp.; LEMT.

Paratypes

TURKEY – **Hatay Province •** 1 ♂, 5 ♀♀; same data as for holotype; LEMT.

Description

Male

Coloration. Tricolored, reddish brown, orange and white. Head unicolorous reddish brown. Antennae entirely reddish brown, base of fourth segment slightly paler. Pronotum reddish brown, base of pronotum with two semilunar, pale patches. Scutellum reddish brown, a large orange colored rectangular patch on each anterior corner. Basal half of hemelytra uniformly orange colored, distal half dark brown except for distal margin of corium which has a broad white band and a small orange spot laterally, a narrow, sharply bordered white stripe separating basal orange and distal dark brown areas, equally wide at corium and clavus, anteriorly bordered very narrowly with a dark brown band. Basal ⅔ of exocorium yellow, distal ⅓ dark brown, change of coloration diffuse, cuneus dark brown. Membrane grayish. Femora and tibiae reddish brown, joints pale, coxae whitish yellow. Abdomen dark brown, thoracic pleura light brown.

Vestiture. Dorsum with short, erected pale setae on head, pronotum, hemelytra and also present on eyes. Antennae with double vestiture, densely covered with short adpressed pale setae, and sparsely with short erect pale setae.

Structure. Macropterous or pseudomacropterous, size 3.8–4.0 mm, oblong-ovate, 3.3× as long as width of pronotum. Head transverse, 0.62× as long as wide, 0.8× as long as high in lateral view, frons slightly globose, clypeus separated from this, ocular index 1.75, rostrum reaching posterior coxae. Antennal segments equally thick, as thick as anterior tibia, last antennal segment gradually narrowed apically, first antennal segment as long as vertex, second antennal segment 1.6× as long as diatone, 1.15× as long as width of posterior margin of pronotum, 0.8–0.9× as long as combined length of last two segments, ratios of antennal segments 10:27:18:14. Pronotum tall and close to rectangular, 0.66× as long as wide, posterior margin 2.1–2.4× as wide as anterior one, with a very narrow collar, lateral margins concave, posterior corners rounded but distinctly protruding, posterior margin shallowly concave. Scutellum with a distinct protuberance medially. Hemelytra parallel sided in basal ⅔, distinctly enlarged at distal ⅓, distal ⅓ of corium and basal ⅓ of clavus mat, rest of hemelytra shiny, surpassing tip of abdomen. Legs short and thick.

Genitalia. Left paramere as in Fig. 22F. Right paramere large, as in Fig. 22E. Vesica small, simple, U-shaped, secondary gonopore apically located, without any sclerotized processes (Fig. 22G).

Female

Similar to male, differs in following morphometric characters: size 3.9–4.3 mm, ocular index 2.0 and ratios of antennal segments 10:27:21:14.

Biology

The new species was collected from *Platanus* sp.

Checklist of species of Heteroptera of Turkey

The checklist of the Heteroptera species of Turkey is presented at the end of the article (Appendix 1). The data used for analysis below is given in Supp. file 1. In this supplementary file, chorotypes and

provincial distribution of each species are given with references. Species in red need confirmation, those in yellow are newly described and those in green are newly recorded from Turkey. A column for each ecoregion, t-SNE suggested group and province is provided that allows for filtration. For example, filtering for the value 'TRUE' in Karaman column gives the complete list of species recorded from Karaman. Additionally, lists of referenced articles, number of species recorded from each province and ecoregion, chorotypical composition of provinces, chorotype composition of t-SNE suggested groups and species absent from Turkey but known from its neighboring countries, are given in separate sheets.

Analysis of the Heteroptera fauna of Turkey

To analyze the Heteroptera fauna of Turkey, we first prepared an up-to-date checklist of all the Heteroptera species recorded from Turkey. Later, we compiled literature records of each species that constitute their first mention from a province, to determine the known distribution of each species, at the provincial level. We enhanced our data by including 5047 Research Grade observations of Heteroptera species from Turkey published in the observation-sharing platform iNaturalist. 493 new provincial records were found for 336 species among these observations (Supp. file 2). Additionally, we also included 53 unpublished new provincial records for 40 species, based on specimens from the private collection of Ernst Heiss, recently donated to Tiroler Landesmuseum Ferdinandeum (E. Heiss, pers. comm.). Finally, we assigned a chorotype to each species, in accordance with the chorotypes as defined by Vigna Taglianti *et al.* (1999) and based on their known Palearctic and worldwide distribution given by Aukema (2023). As a result, we determined that 1668 Heteroptera species have been recorded from Turkey up to now. The first checklist of Heteroptera species of Turkey, published by Hoberlandt (1952, 1956), included 941 species, subspecies and varieties. However, after re-evaluating these records in accordance with contemporary taxonomic concepts, we found that 784 species had been recorded from Turkey, until 1956. The last checklist of Heteroptera species of Turkey, published by Önder *et al.* (2006), included 1526 species. However, we determined that, by the end of 2005, only 1456 species had been recorded from Turkey. Finally, the up-to-date online database of Catalogue of Palaearctic Heteroptera, by Aukema (2023), lists only 1519 Heteroptera species from Turkey.

Fig. 23. Distribution of the new species described in this paper.

The preliminary analysis of the composition of Heteroptera fauna of Turkey, by Hoberlandt (1956), indicated that 55% and 15% of recorded species were of Mediterranean and European origin, respectively. In our analysis, we determined that 23.92% of species (399 spp.) belonged to Mediterranean related chorotypes, 22.78% of species (380 spp.) belonged to European related chorotypes, 16.85% of species (281 spp.) showed local distribution patterns around Turkey, 10.91% of species (182 spp.) showed widespread distribution, 7.67% of species (128 spp.) were endemic to Turkey, 7.61% of species (127 spp.) had Turanian related chorotypes, 5.45% of species (91 spp.) belonged to Turano-Mediterranean chorotype, 4.08% of species (68 spp.) had Europeo-Mediterranean chorotype and 0.72% of species (12 spp.) were invasive alien species. The percentages of individual chorotypes within these chorotype groups are summarized in Fig. 24.

In a further analysis, we determined the species composition of each province. As a result, we found that the Mediterranean species were richer in provinces along western and southern coasts of Turkey (Fig. 25). European species, on the other hand, were more abundant in provinces along the Black Sea coast, inner Aegean region and north of Eastern Anatolian region (Fig. 26). Both Turanian and locally distributed elements constituted a higher percentage of the recorded species in the provinces of the Central and Southeastern Anatolian regions (Figs 27–28). Finally, endemic species are concentrated in

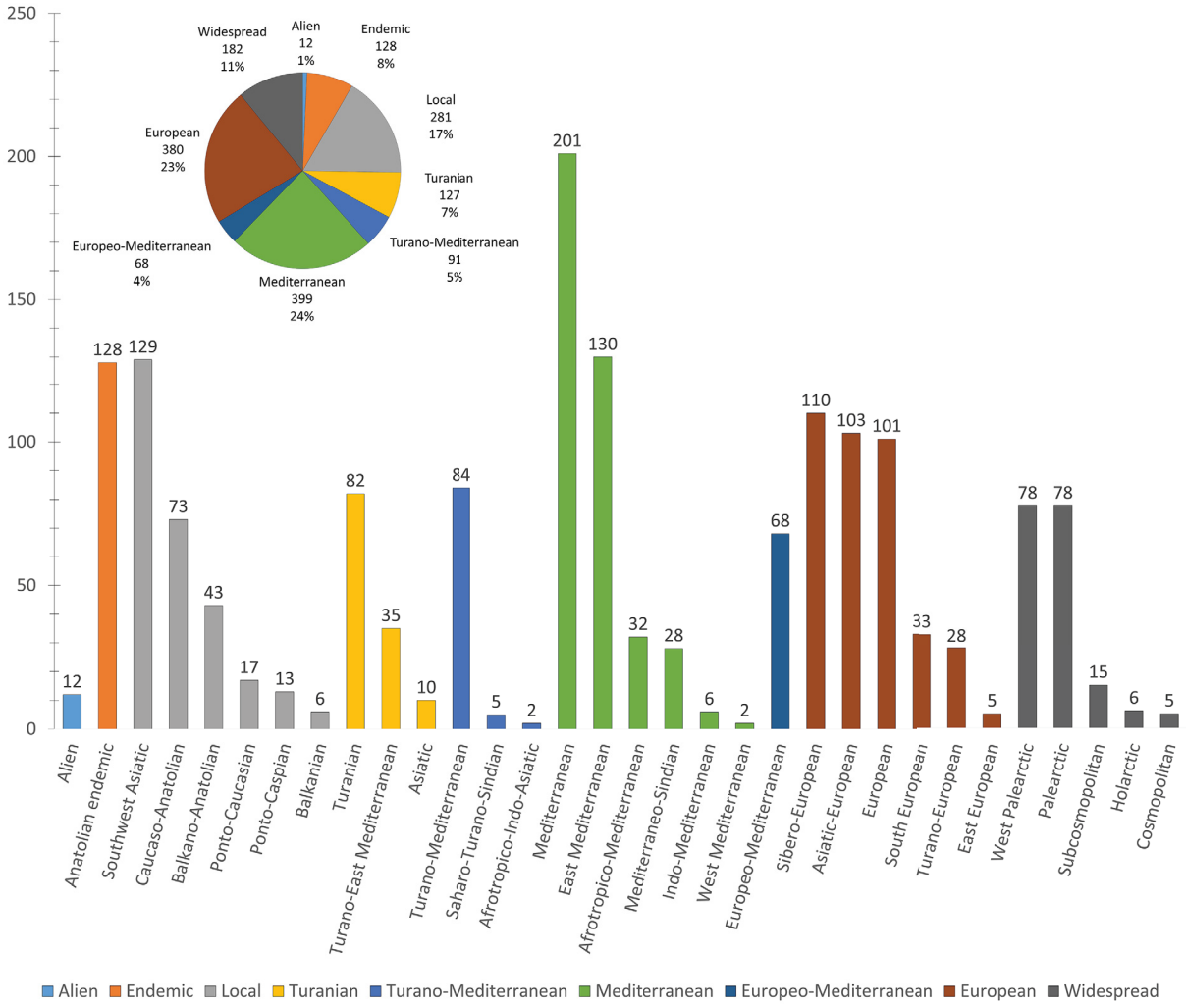

Fig. 24. Number of species per chorotype (bar chart) and per chorotype group (pie chart).

the Central Anatolian and the Mediterranean regions (Fig. 29). We also recognized that the percentage of widespread species in a province had a strong negative correlation with the total number of species recorded from this province (Spearman correlation coefficient: -0,711, $p < 0.001$). The chorotype composition of each province and ecoregion is given in Table 1.

To compare provinces, based on the composition of chorotype groups, we performed t-distributed stochastic neighbor embedding (t-SNE) analysis, a statistical method to visualize high-dimensional data

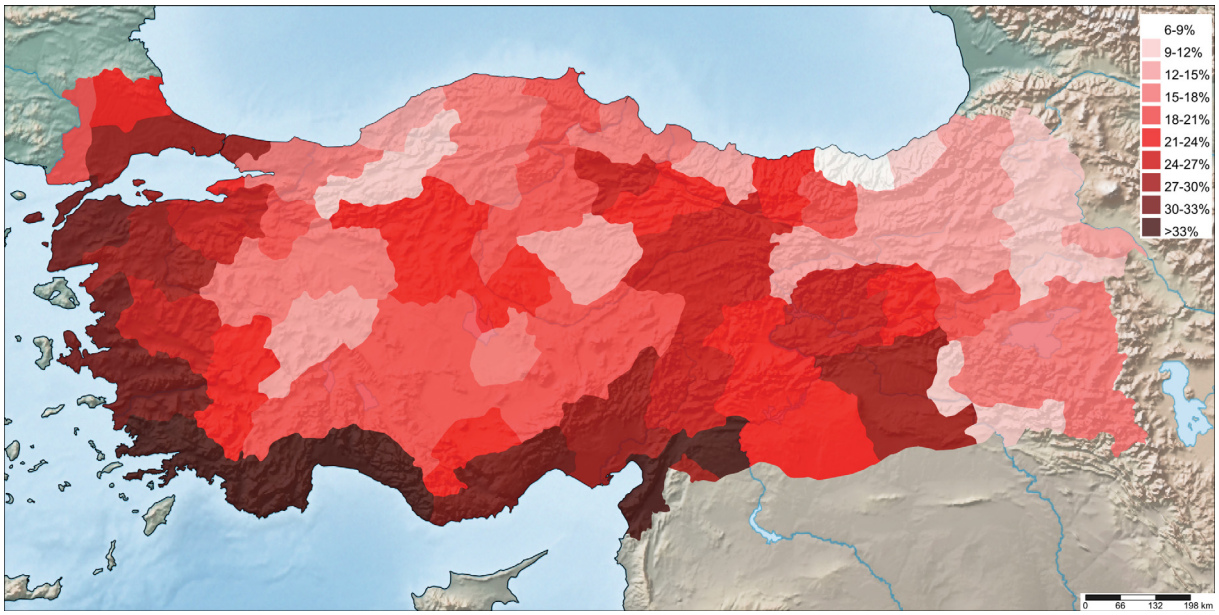

Fig. 25. Heat map of provinces according to the frequency of species within the Mediterranean chorotype group.

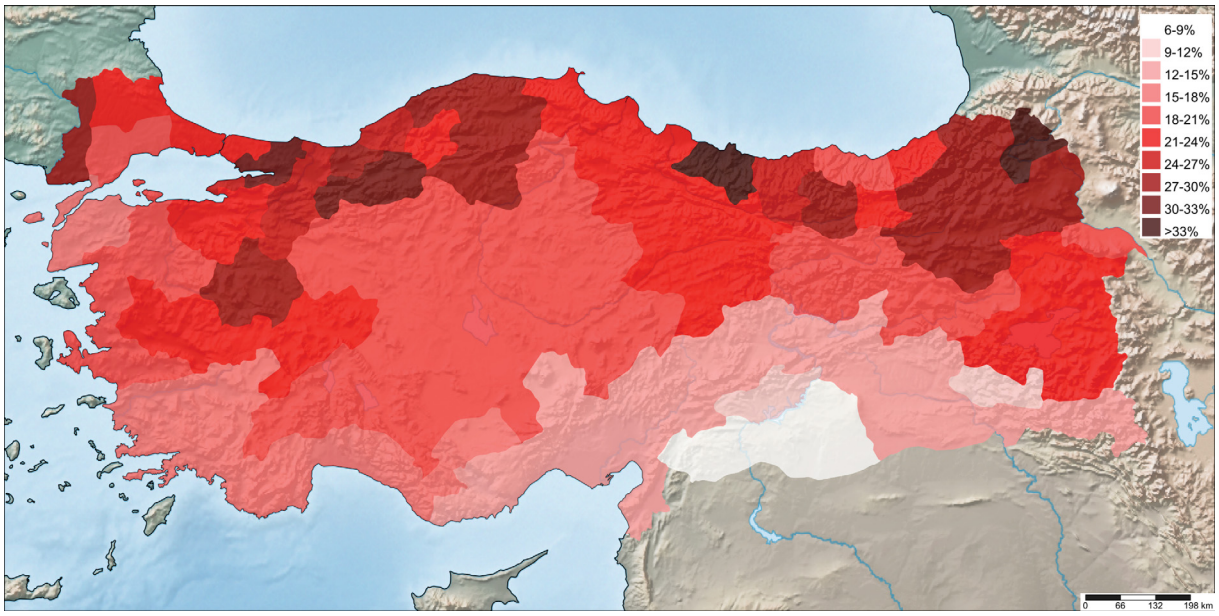

Fig. 26. Heat map of provinces according to the frequency of species within the European chorotype group.

in a two-dimensional space (Maaten & Hinton 2008). Importantly, we excluded alien species and species with widespread chorotypes, as these species do not represent the fauna of a province and the latter is associated with how well a province has been studied. Furthermore, we excluded provinces with less than 100 species recorded, because we recognized that such a low number of species cannot reflect the true species composition of a region. Figure 30 illustrates the results of the t-SNE analysis. As expected, provinces that are close to each other are aggregated in the graph and have similar composition of chorotypes (Fig. 31). On the bottom right corner of the graph, provinces with high proportions of the

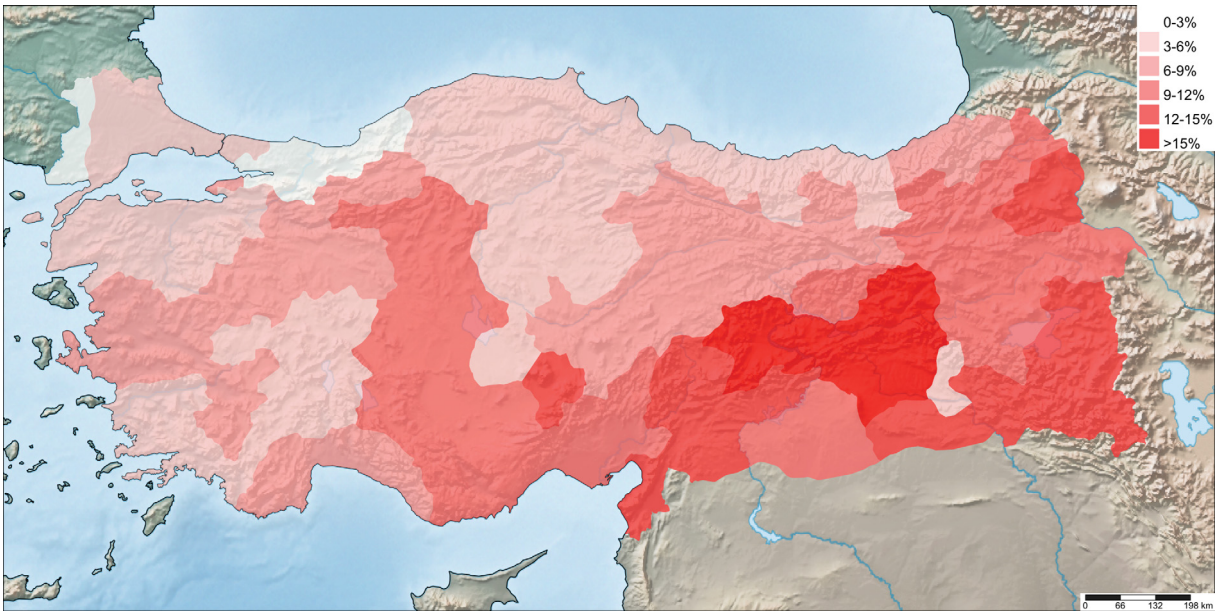

Fig. 27. Heat map of provinces according to the frequency of species within the Local chorotype group.

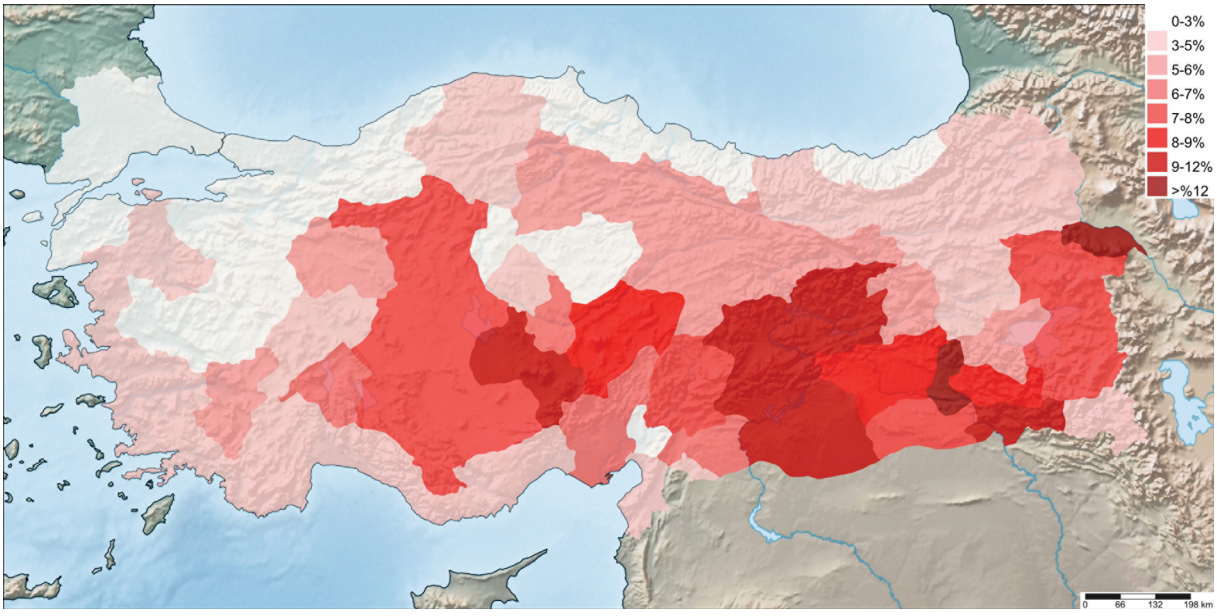

Fig. 28. Heat map of provinces according to the frequency of species within the Turanian chorotype group.

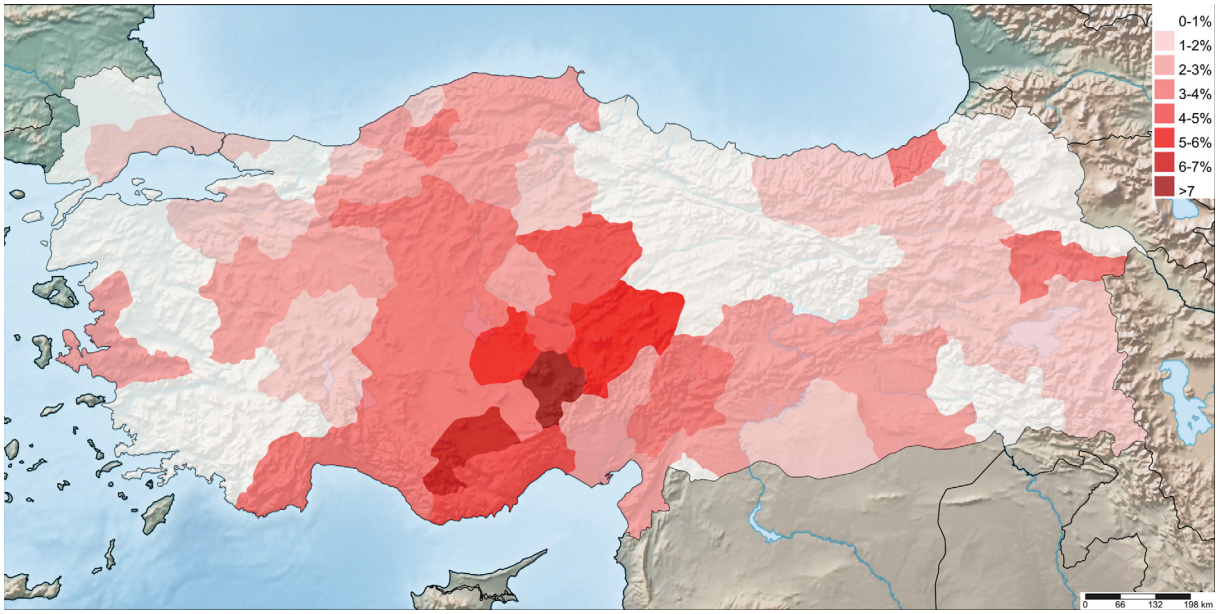

Fig. 29. Heat map of provinces according to the frequency of species within the Endemic chorotype group.

Table 1 (continued on the next 2 pages)**.** Composition of species in each province and ecoregion, according to the chorotype groups.

Provinces	Alien	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean	Widespread	Species recorded
Mediterranean	**0.40%**	**5.25%**	**15.84%**	**4.75%**	**14.36%**	**28.81%**	**7.03%**	**8.12%**	**15.45%**	**1010**
Adana	0.18%	2.58%	14.02%	4.80%	10.52%	28.97%	6.64%	10.89%	21.40%	542
Antalya	0.43%	3.91%	15.65%	5.00%	6.96%	33.04%	3.70%	8.04%	23.26%	460
Burdur	0.61%	0.00%	20.25%	2.45%	4.91%	19.02%	3.68%	9.20%	39.88%	163
Hatay	0.00%	2.75%	12.05%	4.86%	13.53%	34.04%	4.86%	9.51%	18.39%	473
Isparta	0.46%	1.85%	19.91%	4.63%	4.63%	20.37%	6.94%	9.26%	31.94%	216
Kahramanmaraş	0.00%	3.90%	13.41%	3.90%	14.88%	25.12%	7.56%	9.76%	21.46%	410
Mersin	0.59%	4.52%	13.56%	5.89%	11.00%	30.65%	4.72%	8.84%	20.24%	509
Osmaniye	0.56%	3.39%	13.56%	3.39%	11.30%	28.81%	1.13%	9.60%	28.25%	177
Aegea	**1.19%**	**2.77%**	**21.24%**	**5.67%**	**8.71%**	**28.36%**	**4.22%**	**7.92%**	**19.92%**	**758**
Afyonkarahisar	1.20%	1.20%	22.89%	5.42%	4.82%	13.86%	3.01%	5.42%	42.17%	166
Aydın	1.28%	0.85%	17.52%	5.13%	4.70%	31.20%	4.27%	5.98%	29.06%	234
Denizli	1.04%	0.52%	16.67%	4.69%	6.25%	21.88%	5.21%	7.29%	36.46%	192
İzmir	1.21%	2.07%	19.52%	5.53%	6.91%	30.05%	3.63%	9.15%	21.93%	579
Kütahya	1.12%	2.23%	27.37%	5.59%	8.94%	16.76%	2.79%	5.59%	29.61%	179
Manisa	0.48%	0.96%	23.44%	4.78%	6.70%	26.79%	1.91%	7.18%	27.75%	209
Muğla	0.99%	0.99%	16.17%	4.62%	4.62%	33.66%	4.95%	7.59%	26.40%	303
Uşak	0.88%	2.63%	21.05%	7.02%	3.51%	21.93%	2.63%	7.02%	33.33%	114

Table 1 (continued)**.** Composition of species in each province and ecoregion, according to the chorotype groups.

Provinces	Alien	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean	Widespread	Species recorded
Marmara	**0.85%**	**1.82%**	**27.91%**	**7.16%**	**7.52%**	**24.39%**	**3.40%**	**7.28%**	**19.66%**	**824**
Balıkesir	0.90%	0.45%	20.27%	6.31%	4.05%	28.83%	3.60%	7.21%	28.38%	222
Bilecik	1.16%	1.74%	24.42%	7.56%	6.98%	18.60%	2.33%	8.14%	29.07%	172
Bursa	1.23%	1.23%	23.40%	5.67%	4.93%	25.62%	2.96%	8.13%	26.85%	406
Çanakkale	0.37%	0.00%	16.48%	6.23%	5.13%	31.14%	2.93%	8.79%	28.94%	273
Edirne	1.25%	0.75%	29.43%	6.48%	2.24%	20.95%	1.75%	8.73%	28.43%	401
İstanbul	1.28%	1.03%	23.08%	8.21%	3.85%	27.69%	1.03%	7.69%	26.15%	390
Kırklareli	1.75%	0.88%	21.49%	6.58%	3.95%	22.37%	2.19%	6.58%	34.21%	228
Kocaeli	1.90%	0.00%	31.65%	6.96%	2.53%	17.72%	0.63%	4.43%	34.18%	158
Sakarya	1.97%	0.66%	26.97%	7.89%	1.97%	17.11%	1.32%	4.61%	37.50%	152
Tekirdağ	2.60%	1.04%	18.75%	4.17%	5.73%	27.60%	1.04%	7.81%	31.25%	192
Yalova	5.77%	0.00%	26.92%	5.77%	7.69%	21.15%	0.00%	1.92%	30.77%	52
Black Sea	**0.92%**	**3.69%**	**28.46%**	**5.53%**	**10.28%**	**18.45%**	**5.53%**	**6.98%**	**20.16%**	**759**
Amasya	1.36%	0.68%	20.75%	4.08%	5.10%	23.13%	5.44%	8.84%	30.61%	294
Artvin	1.38%	0.92%	29.36%	6.88%	8.26%	13.30%	3.67%	5.50%	30.73%	218
Bartın	2.13%	1.06%	29.79%	8.51%	3.19%	12.77%	0.00%	2.13%	40.43%	94
Bayburt	0.00%	1.10%	23.08%	2.20%	4.40%	12.09%	3.30%	5.49%	48.35%	91
Bolu	1.92%	2.88%	32.69%	7.21%	7.21%	10.58%	1.44%	3.37%	32.69%	208
Çorum	2.34%	1.87%	18.69%	5.14%	5.14%	19.16%	5.61%	7.01%	35.05%	214
Düzce	1.90%	1.90%	29.52%	6.67%	0.95%	16.19%	0.00%	2.86%	40.00%	105
Giresun	1.77%	1.77%	24.78%	2.65%	4.42%	22.12%	3.54%	5.31%	33.63%	113
Gümüşhane	0.00%	1.02%	29.59%	3.06%	6.12%	18.37%	3.06%	7.14%	31.63%	98
Karabük	0.79%	3.97%	22.22%	6.35%	4.76%	11.90%	3.17%	9.52%	37.30%	126
Kastamonu	1.46%	2.55%	28.47%	6.20%	4.01%	15.69%	4.01%	6.20%	31.39%	274
Ordu	2.97%	0.99%	35.64%	2.97%	4.95%	12.87%	0.99%	2.97%	35.64%	101
Rize	1.75%	3.51%	21.05%	7.02%	8.77%	10.53%	0.00%	1.75%	45.61%	57
Samsun	2.94%	0.00%	21.32%	6.62%	5.15%	15.44%	1.47%	5.88%	41.18%	136
Sinop	0.64%	2.56%	21.79%	7.05%	4.49%	20.51%	1.28%	7.05%	34.62%	156
Tokat	1.03%	0.00%	23.59%	3.59%	7.69%	22.05%	5.13%	9.23%	27.69%	195
Trabzon	3.85%	1.28%	20.51%	8.97%	5.13%	7.69%	1.28%	3.85%	47.44%	78
Zonguldak	2.84%	2.84%	25.53%	9.93%	2.84%	13.48%	2.13%	4.96%	35.46%	141
Eastern Anatolia	**0.13%**	**2.43%**	**22.94%**	**3.91%**	**16.73%**	**19.16%**	**9.31%**	**7.29%**	**18.08%**	**741**
Ağrı	0.00%	3.57%	23.57%	2.86%	10.00%	10.00%	7.14%	7.14%	35.71%	140
Ardahan	1.96%	0.00%	35.29%	0.00%	11.76%	9.80%	3.92%	1.96%	35.29%	51
Bingöl	0.00%	1.30%	19.48%	1.30%	16.88%	22.08%	5.19%	5.19%	28.57%	77
Bitlis	0.00%	1.30%	22.08%	2.60%	11.69%	15.58%	5.19%	5.19%	36.36%	77
Elazığ	0.33%	2.30%	13.16%	3.29%	16.12%	24.34%	10.53%	11.18%	18.75%	304
Erzincan	0.00%	0.00%	20.99%	6.63%	8.84%	14.92%	5.52%	5.52%	37.57%	181

Table 1 (continued)**.** Composition of species in each province and ecoregion, according to the chorotype groups.

Provinces	Alien	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean	Widespread	Species recorded
Erzurum	0.27%	1.10%	29.95%	5.49%	9.89%	14.29%	4.40%	6.59%	28.02%	364
Hakkâri	0.00%	1.25%	12.50%	2.50%	15.00%	17.50%	5.00%	10.00%	36.25%	80
Iğdır	0.00%	0.56%	20.90%	3.95%	10.17%	12.99%	14.12%	6.78%	30.51%	177
Kars	0.00%	0.00%	28.57%	3.36%	13.03%	11.76%	3.78%	6.72%	32.77%	238
Malatya	0.00%	2.13%	14.89%	0.00%	16.31%	23.40%	9.93%	11.35%	21.99%	141
Muş	0.00%	1.22%	19.51%	4.88%	10.98%	18.29%	3.66%	8.54%	32.93%	82
Tunceli	0.00%	0.90%	18.02%	3.60%	9.01%	24.32%	9.91%	9.01%	25.23%	111
Van	0.00%	1.06%	21.16%	3.17%	12.17%	16.40%	7.41%	10.05%	28.57%	189
Southeastern Anatolia	**0.17%**	**3.41%**	**11.75%**	**3.24%**	**17.04%**	**30.32%**	**7.84%**	**8.18%**	**18.06%**	**587**
Adıyaman	0.00%	2.34%	10.16%	1.56%	12.50%	22.66%	9.38%	13.28%	28.13%	128
Batman	0.00%	0.00%	14.29%	0.00%	3.57%	10.71%	14.29%	14.29%	42.86%	28
Diyarbakır	0.28%	2.53%	12.36%	2.53%	15.73%	28.65%	8.71%	8.15%	21.07%	356
Gaziantep	0.00%	2.33%	8.64%	2.99%	14.95%	34.55%	6.64%	8.64%	21.26%	301
Kilis	0.00%	0.00%	6.49%	1.30%	12.99%	28.57%	3.90%	10.39%	36.36%	77
Mardin	0.00%	2.99%	13.93%	2.49%	13.43%	27.86%	7.96%	7.96%	23.38%	201
Siirt	0.00%	0.88%	10.53%	1.75%	14.91%	16.67%	8.77%	16.67%	29.82%	114
Şanlıurfa	0.00%	1.57%	7.09%	0.79%	10.24%	21.26%	10.24%	15.75%	33.07%	127
Şırnak	0.00%	0.00%	14.81%	0.00%	14.81%	11.11%	11.11%	3.70%	44.44%	27
Central Anatolia	**0.58%**	**7.40%**	**21.73%**	**4.52%**	**12.88%**	**21.44%**	**7.88%**	**7.40%**	**16.15%**	**1040**
Aksaray	0.00%	6.56%	19.67%	3.28%	3.28%	16.39%	9.84%	8.20%	32.79%	61
Ankara	0.79%	3.79%	20.70%	4.74%	10.43%	21.17%	7.27%	8.85%	22.27%	633
Çankırı	1.01%	2.51%	27.64%	4.02%	3.02%	16.08%	3.52%	6.53%	35.68%	199
Eskişehir	2.01%	2.01%	20.10%	6.53%	6.03%	17.09%	5.53%	9.55%	31.16%	199
Karaman	0.43%	6.96%	15.22%	4.13%	9.78%	23.04%	7.83%	9.35%	23.26%	460
Kayseri	0.26%	5.80%	19.79%	4.49%	8.97%	19.79%	8.44%	8.71%	23.75%	379
Kırıkkale	0.00%	3.90%	20.78%	3.90%	5.19%	20.78%	2.60%	6.49%	36.36%	77
Kırşehir	0.00%	2.18%	20.96%	3.93%	3.06%	22.27%	4.80%	10.48%	32.31%	229
Konya	0.00%	3.70%	20.74%	4.94%	11.11%	20.00%	7.90%	9.14%	22.47%	405
Nevşehir	0.00%	4.48%	20.90%	4.98%	6.47%	19.90%	6.47%	6.97%	29.85%	201
Niğde	0.33%	7.24%	14.14%	2.96%	13.16%	18.75%	11.84%	10.20%	21.38%	304
Sivas	0.00%	0.00%	21.09%	2.04%	7.48%	24.49%	5.44%	8.84%	30.61%	147
Yozgat	0.00%	4.88%	19.51%	6.10%	3.66%	12.20%	2.44%	2.44%	48.78%	82

Mediterranean (30.64%), Local (19.61%) and Turanian (9.95%) chorotype groups and a low proportion of the European (18.74%) chorotype groups, are aggregated (Group 1). These provinces are Adıyaman, Diyarbakır, Gaziantep, Mardin, Siirt and Şanlıurfa from the Southeastern Anatolian region; Adana, Hatay, Kahramanmaraş, Mersin and Osmaniye from the Mediterranean region; Karaman and Niğde from the Central Anatolian region and Elazığ, Malatya and Tunceli from the Eastern Anatolian regions.

Provinces with the following characteristics are aggregated in the upper right corner (Group 2): almost equally high proportions of European- (28.69%) and Mediterranean-related (33.80%) chorotypes, but the latter is slightly more dominant, and low proportions of Local (11.38%) and Turanian (5.46%) related chorotypes. These provinces are Antalya from the Mediterranean region; Aydın, İzmir, Manisa, Muğla, and Uşak from the Aegean region; Balıkesir, Bursa, Çanakkale, İstanbul, Kırklareli and Tekirdağ from the Marmara region; and Amasya from the Black Sea region. On the lower middle region of the graph, provinces with slightly more dominant European chorotype groups (26.68%) than Mediterranean chorotype groups (26.08%) but with higher proportions of local (15,87%) and Turanian (10,34%) chorotype groups, are aggregated (Group 3). These provinces are Ankara, Eskişehir, Kayseri, Kırşehir, Konya, Nevşehir, and Sivas from the Central Anatolian region; Burdur and Isparta from the Aegean region; Çorum and Tokat from the Black Sea region and Iğdır and Van from the Eastern Anatolian region. On the left side of the graph, provinces with high proportions of European-related chorotypes (37.15%) and low proportions of Mediterranean-related chorotypes (22.53%), are aggregated (Group 4). These provinces are Ağrı, Erzincan, Erzurum, and Kars from the Eastern Anatolian region; Artvin, Bolu, Çankırı, Düzce, Giresun, Karabük, Kastamonu, Ordu, Samsun, Sinop and Zonguldak from the Black Sea region; Bilecik, Edirne, Kocaeli, and Sakarya from the Marmara region and Afyonkarahisar and Kütahya from the Aegean region (Table 2).

Analysis of the publications on the Heteroptera fauna of Turkey

The research on the Heteroptera fauna of Turkey dates back to the first half of the 19th century, with the description of *Mustha spinosula* (Lefebvre, 1831) from Turkey by Lefebvre (1831). Hoberlandt (1956) compiled all the important faunistic research on the Heteroptera species of Turkey, published until 1955. With this paper, we have compiled all of the faunistic research on the Heteroptera fauna of Turkey which includes either a new species record for Turkey or a province. As a result, we determined that 642 articles and books dealing with faunistic of the Heteroptera of Turkey have been published. When these papers were analyzed according to their year of publication, we observed that the number

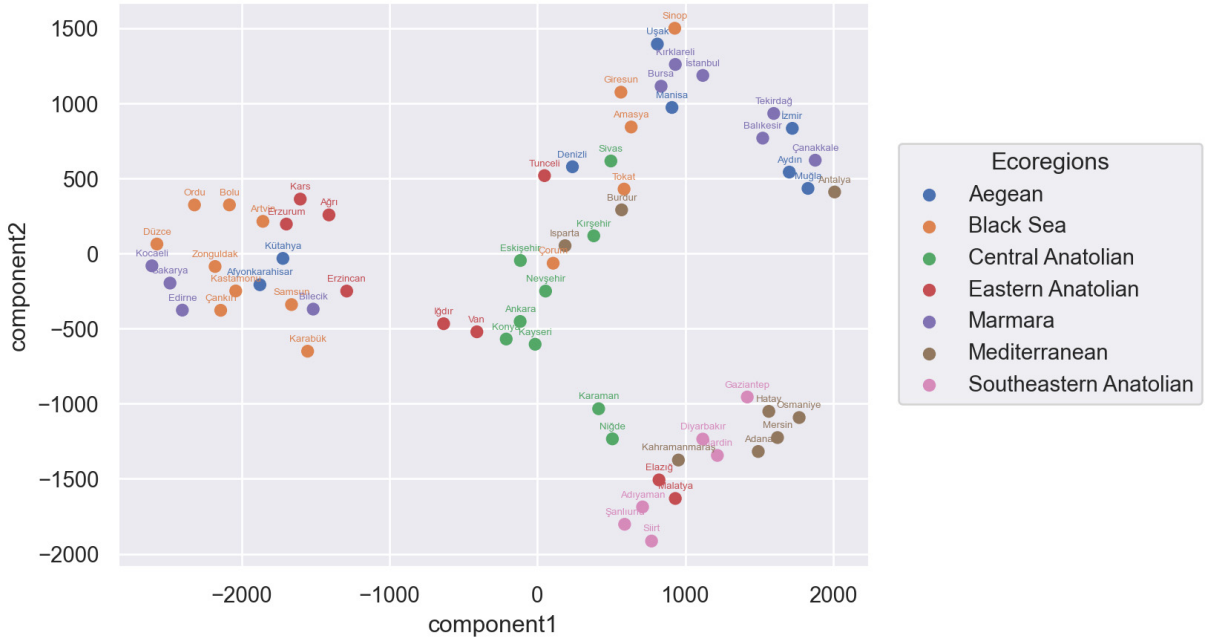

Fig. 30. t-SNE plot of provinces analyzed for the composition of chorotype groups, excluding Alien and Widespread.

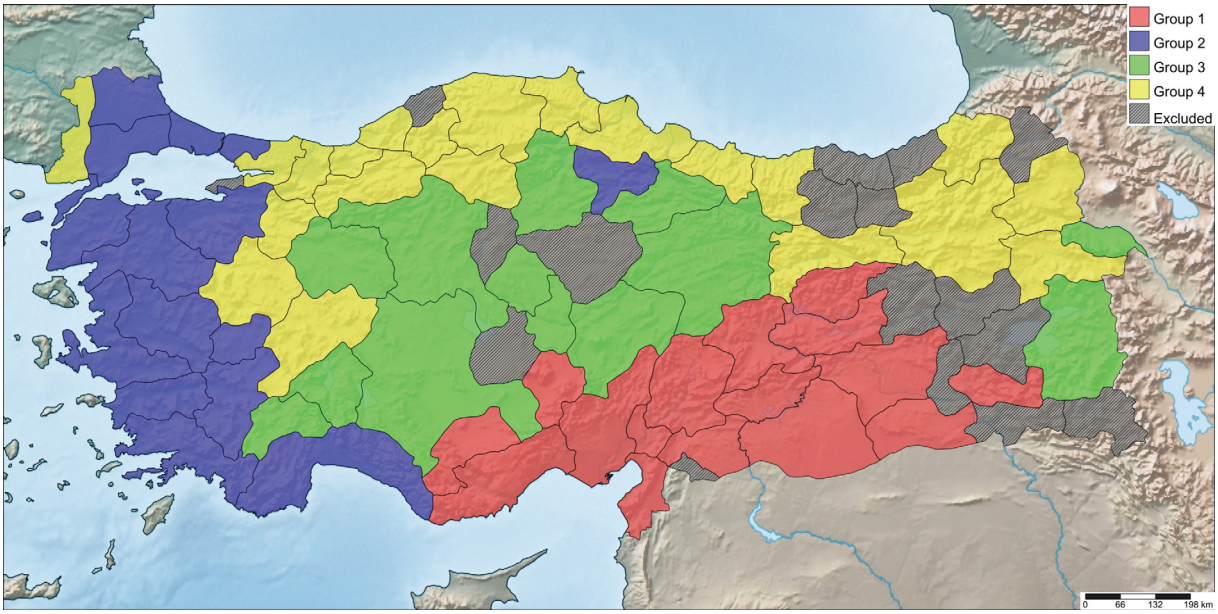

Fig. 31. Partition of provinces according to the groups suggested by t-SNE analysis.

Table 2 (continued on next 2 pages)**.** Composition of species in each province and group, according to the chorotype groups, excluding Alien and Widespread.

Province	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean
Group 1	**7.88%**	**18.82%**	**4.73%**	**19.61%**	**30.64%**	**9.95%**	**8.37%**
Adıyaman	3.26%	14.13%	2.17%	17.39%	31.52%	13.04%	18.48%
Diyarbakır	3.21%	15.71%	3.21%	20.00%	36.43%	11.07%	10.36%
Gaziantep	2.95%	10.97%	3.80%	18.99%	43.88%	8.44%	10.97%
Mardin	3.90%	18.18%	3.25%	17.53%	36.36%	10.39%	10.39%
Siirt	1.25%	15.00%	2.50%	21.25%	23.75%	12.50%	23.75%
Şanlıurfa	2.35%	10.59%	1.18%	15.29%	31.76%	15.29%	23.53%
Adana	3.29%	17.88%	6.12%	13.41%	36.94%	8.47%	13.88%
Hatay	3.37%	14.77%	5.96%	16.58%	41.71%	5.96%	11.66%
Kahramanmaraş	4.97%	17.08%	4.97%	18.94%	31.99%	9.63%	12.42%
Mersin	5.71%	17.12%	7.44%	13.90%	38.71%	5.96%	11.17%
Osmaniye	4.76%	19.05%	4.76%	15.87%	40.48%	1.59%	13.49%
Karaman	9.12%	19.94%	5.41%	12.82%	30.20%	10.26%	12.25%
Niğde	9.24%	18.07%	3.78%	16.81%	23.95%	15.13%	13.03%
Elazığ	2.85%	16.26%	4.07%	19.92%	30.08%	13.01%	13.82%
Malatya	2.73%	19.09%	0.00%	20.91%	30.00%	12.73%	14.55%
Tunceli	1.20%	24.10%	4.82%	12.05%	32.53%	13.25%	12.05%

Table 2 (continued)**.** Composition of species in each province and group, according to the chorotype groups, excluding Alien and Widespread.

Province	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean
Group 2	**4.76%**	**28.69%**	**7.08%**	**11.38%**	**33.80%**	**5.46%**	**8.83%**
Antalya	5.13%	20.51%	6.55%	9.12%	43.30%	4.84%	10.54%
Aydın	1.23%	25.15%	7.36%	6.75%	44.79%	6.13%	8.59%
Denizli	0.83%	26.67%	7.50%	10.00%	35.00%	8.33%	11.67%
İzmir	2.70%	25.39%	7.19%	8.99%	39.10%	4.72%	11.91%
Manisa	1.33%	32.67%	6.67%	9.33%	37.33%	2.67%	10.00%
Muğla	1.36%	22.27%	6.36%	6.36%	46.36%	6.82%	10.45%
Uşak	4.00%	32.00%	10.67%	5.33%	33.33%	4.00%	10.67%
Balıkesir	0.64%	28.66%	8.92%	5.73%	40.76%	5.10%	10.19%
Bursa	1.71%	32.53%	7.88%	6.85%	35.62%	4.11%	11.30%
Çanakkale	0.00%	23.32%	8.81%	7.25%	44.04%	4.15%	12.44%
İstanbul	1.41%	31.80%	11.31%	5.30%	38.16%	1.41%	10.60%
Kırklareli	1.37%	33.56%	10.27%	6.16%	34.93%	3.42%	10.27%
Tekirdağ	1.57%	28.35%	6.30%	8.66%	41.73%	1.57%	11.81%
Amasya	1.00%	30.50%	6.00%	7.50%	34.00%	8.00%	13.00%
Group 3	**6.85%**	**26.68%**	**5.77%**	**15.87%**	**26.08%**	**10.34%**	**8.41%**
Ankara	4.93%	26.90%	6.16%	13.55%	27.52%	9.45%	11.50%
Eskişehir	3.01%	30.08%	9.77%	9.02%	25.56%	8.27%	14.29%
Kayseri	7.64%	26.04%	5.90%	11.81%	26.04%	11.11%	11.46%
Kırşehir	3.23%	30.97%	5.81%	4.52%	32.90%	7.10%	15.48%
Konya	4.78%	26.75%	6.37%	14.33%	25.80%	10.19%	11.78%
Nevşehir	6.38%	29.79%	7.09%	9.22%	28.37%	9.22%	9.93%
Sivas	0.00%	30.39%	2.94%	10.78%	35.29%	7.84%	12.75%
Burdur	0.00%	34.02%	4.12%	8.25%	31.96%	6.19%	15.46%
Isparta	2.74%	29.45%	6.85%	6.85%	30.14%	10.27%	13.70%
Çorum	2.99%	29.85%	8.21%	8.21%	30.60%	8.96%	11.19%
Tokat	0.00%	33.09%	5.04%	10.79%	30.94%	7.19%	12.95%
Iğdır	0.81%	30.08%	5.69%	14.63%	18.70%	20.33%	9.76%
Van	1.48%	29.63%	4.44%	17.04%	22.96%	10.37%	14.07%
Group 4	**4.78%**	**37.32%**	**6.91%**	**14.48%**	**22.31%**	**6.24%**	**7.97%**
Ağrı	5.56%	36.67%	4.44%	15.56%	15.56%	11.11%	11.11%
Erzincan	0.00%	33.63%	10.62%	14.16%	23.89%	8.85%	8.85%
Erzurum	1.53%	41.76%	7.66%	13.79%	19.92%	6.13%	9.20%
Kars	0.00%	42.50%	5.00%	19.38%	17.50%	5.63%	10.00%
Artvin	1.35%	43.24%	10.14%	12.16%	19.59%	5.41%	8.11%
Bolu	4.41%	50.00%	11.03%	11.03%	16.18%	2.21%	5.15%
Çankırı	3.97%	43.65%	6.35%	4.76%	25.40%	5.56%	10.32%
Düzce	3.28%	50.82%	11.48%	1.64%	27.87%	0.00%	4.92%

Table 2 (continued)**.** Composition of species in each province and group, according to the chorotype groups, excluding Alien and Widespread.

Province	Endemic	European	Europeo-Mediterranean	Local	Mediterranean	Turanian	Turano-Mediterranean
Giresun	2.74%	38.36%	4.11%	6.85%	34.25%	5.48%	8.22%
Karabük	6.41%	35.90%	10.26%	7.69%	19.23%	5.13%	15.38%
Kastamonu	3.80%	42.39%	9.24%	5.98%	23.37%	5.98%	9.24%
Ordu	1.61%	58.06%	4.84%	8.06%	20.97%	1.61%	4.84%
Samsun	0.00%	38.16%	11.84%	9.21%	27.63%	2.63%	10.53%
Sinop	3.96%	33.66%	10.89%	6.93%	31.68%	1.98%	10.89%
Zonguldak	4.60%	41.38%	16.09%	4.60%	21.84%	3.45%	8.05%
Bilecik	2.50%	35.00%	10.83%	10.00%	26.67%	3.33%	11.67%
Edirne	1.06%	41.84%	9.22%	3.19%	29.79%	2.48%	12.41%
Kocaeli	0.00%	49.50%	10.89%	3.96%	27.72%	0.99%	6.93%
Sakarya	1.09%	44.57%	13.04%	3.26%	28.26%	2.17%	7.61%
Afyonkarahisar	2.13%	40.43%	9.57%	8.51%	24.47%	5.32%	9.57%
Kütahya	3.23%	39.52%	8.06%	12.90%	24.19%	4.03%	8.06%

of papers published before 1950 was considerably low (86, 13.4%) and the number of papers published had increased greatly in the 1950s and remained stably high, at around 50 papers per decade, until 2000s (Fig. 32). Since the beginning of 21st century, a remarkable increase in the papers published on the faunistic of Heteroptera species of Turkey, occurred. Alone, between 2010 and 2019, 150 papers were published, which is almost equivalent to the number of papers published in the three decades between 1970 and 2000.

Analysis of the number of species recorded in Turkey and each province

We also analyzed the number of species newly recorded from Turkey by each decade (Fig. 33). It is observed that about 90 new species per decade have been recorded from Turkey, between 1861 and 1920. The total number of newly recorded species decreased abruptly to 50 in the following three decades. In the decade between 1950 and 1959, the number of newly recorded species increased to 273 and this number has been decreasing almost every decade since then, except for the last decade. Between 2010 and 2019, the number of newly recorded Heteroptera species increased by more than two-fold compared to the preceding decade. This increase is in accordance with the abovementioned observations.

Additionally, to determine the gaps in our knowledge of the Heteroptera fauna of Turkey, we also analyzed the number of species recorded from each province and region (Table 1). On average, 212 species are recorded per province, however, the median is 180 and most provinces have less than 212 species recorded. The number of species recorded from each region is as follows: Central Anatolian region (1040 spp.), Mediterranean region (1010 spp.), Marmara region (824 spp.), Aegean region (758 spp.), Black Sea region (759 spp.), Eastern Anatolian region (741 spp.), and Southeastern Anatolian region (587 spp.). These data highlight the fact that the Eastern Anatolian, Southeastern Anatolian, and Black Sea regions are less studied than other regions. Surprisingly, the number of Heteroptera species recorded from the Aegean region is comparable with the Black Sea and the Eastern Anatolian regions, even though the former has been studied extensively, compared to the last two regions. The top ten provinces with the most species recorded are the following: Ankara (633 spp.), İzmir (579

spp.), Adana (542 spp.), Mersin (509 spp.), Hatay (473 spp.), Antalya (460 spp.), Karaman (460 spp.), Kahramanmaraş (410 spp.), Bursa (406 spp.) and Konya (405 spp.). We noticed that most of the provinces in Eastern Anatolian and Southeastern Anatolian regions have comparatively small numbers of recorded species. Interestingly, the number of species recorded from provinces in the Black Sea region were also exceptionally low, especially the provinces in the eastern Black Sea subregion. Another interesting finding is that inner Aegean region provinces also have a small number of species recorded (Fig. 34).

Finally, to highlight the potential of discoveries that can be made in future studies, we compiled Heteroptera species that have been recorded from neighbors of Turkey. Çerçi *et al.* (2022) had already demonstrated that 255 species that were known from at least one of the three Transcaucasian countries, Armenia, Azerbaijan, and Georgia, were not recorded from Turkey and highlighted the fact that future research done in the Eastern Anatolian region of Turkey would have great potential to discover many of these species. We expand this analysis to all the neighboring countries of Turkey. As a result of our analysis, we reveal that 1255 species were recorded from at least one of its neighboring countries, but not from Turkey (Supp. file 1, Absent species sheet). Among these, 39 species, listed in Table 3, were

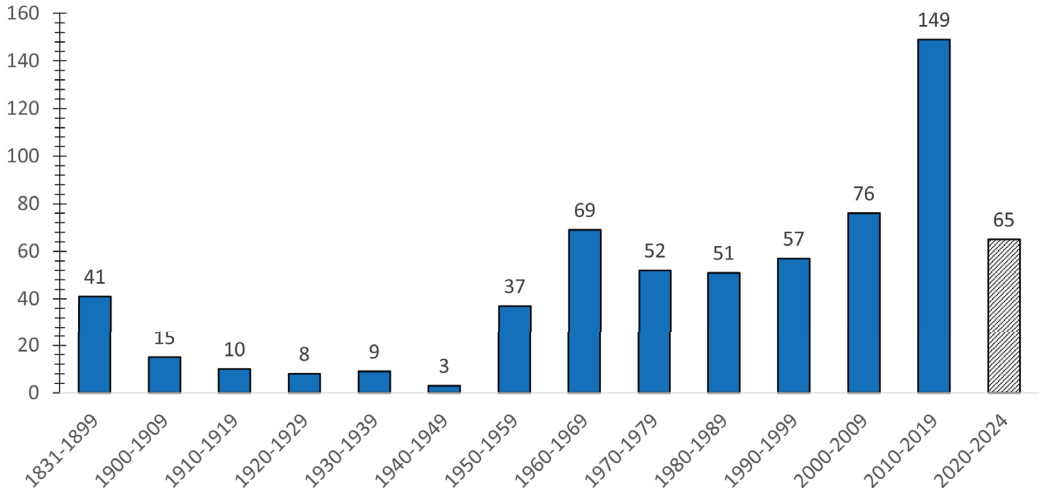

Fig. 32. Number of faunistic papers about Heteroptera of Turkey, by decade.

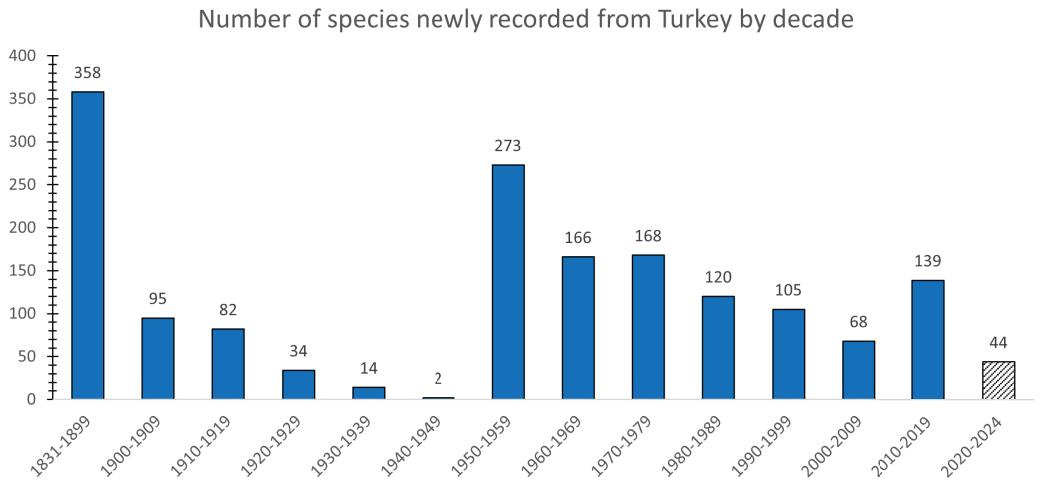

Fig. 33. Number of species newly recorded from Turkey, by decade.

recorded from four or more neighboring countries of Turkey and these species are very likely to be discovered in Turkey in the future. Furthermore, 70 species are known from any three neighboring countries of Turkey and 279 species from any two neighboring countries. Finally, 867 species are known from a single neighboring country of Turkey. Consequently, 109 species are known from three or more neighboring countries of Turkey, and the majority of these species are likely to be discovered from Turkey, in the future.

Discussion

Our knowledge of the Heteroptera fauna of Turkey has grown greatly over the last 150 years. However, this knowledge had only been compiled and analyzed once by Hoberlandt (1952, 1956). As a result, a holistic view of the Heteroptera fauna of Turkey has been lacking which made the assessment of priority areas in faunistic research difficult. Hence, an up-to-date analysis of the Heteroptera fauna was necessary.

In this paper, we listed all the Heteroptera species recorded from Turkey in the literature and complemented this list by re-evaluating several of these records, of which the voucher specimens were deposited in LEMT. Ultimately, we prepared a checklist of Heteroptera species of Turkey that included their known distribution at the provincial level, and chorotypes of each species. Finally, we analyzed the compiled data to clearly illustrate our current knowledge of the Heteroptera fauna of Turkey.

We examined voucher specimens of several Heteroptera species that were recorded from Turkey (Önder 1976; Wagner 1976; Önder *et al.* 1981; Lodos *et al.* 1999, 2003). Consequently, we confirmed the records of nine species from Turkey and determined that 20 species previously recorded from Turkey, were misidentified. These findings highlight the importance of the preservation of voucher specimens in museum collections as re-evaluation of these in light of taxonomic changes could reveal new species that might have been missed previously.

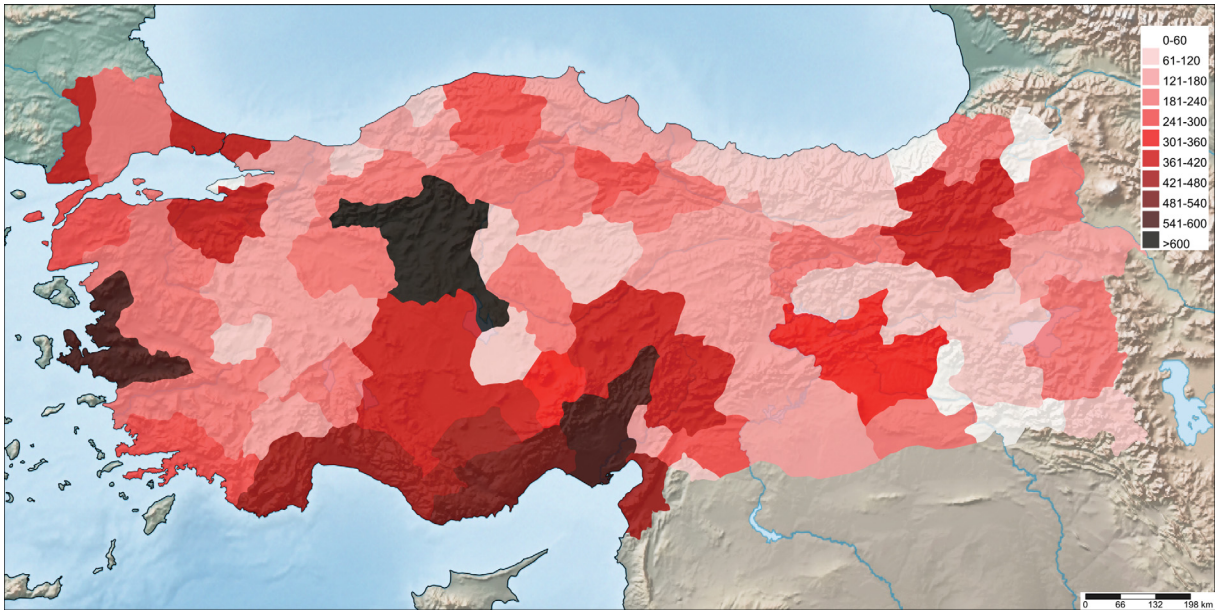

Fig. 34. Heat map of provinces according to the number of species recorded.

Table 3 (continued on next page)**.** List of species that have been recorded from at least four neighboring countries of Turkey but not recorded in this country.

Family	Species	Chorotype	Distribution among neighbours
Anthocoridae	*Orius* (*Dimorphella*) *albidipennis* (Reuter, 1884)	Saharo-Turano-Sindian	Iran, Syria, Iraq, Cyprus
Aradidae	*Aradus* (*Aradus*) *depressus leptocerus* Horváth, 1882	Caucasian	Azerbaijan, Armenia, Georgia, Iran
Berytidae	*Metacanthus* (*Metacanthus*) *lineatus* (Jakovlev, 1875)	Turanian	Azerbaijan, Armenia, Iran, Iraq
Corixidae	*Heliocorisa vermiculata* (Puton, 1874)	Turano-Mediterranean	Azerbaijan, Armenia, Iran, Iraq
Cydnidae	*Byrsinus fossor* (Mulsant & Rey, 1866)	European	Azerbaijan, Armenia, Bulgaria, Iran
	Stibaropus henkei (Jakovlev, 1874)	Turano-European	Azerbaijan, Armenia, Bulgaria, Iran
Geocoridae	*Geocoris* (*Geocoris*) *fedtschenkoi* Reuter, 1885	Saharo-Turano-Sindian	Azerbaijan, Armenia, Iran, Syria, Iraq
Lygaeidae	*Kleidocerys privignus* (Horváth, 1894)	European	Azerbaijan, Georgia, Bulgaria, Greece, Iran
Miridae	*Auchenocrepis alboscutellata* Puton, 1874	Afrotropico-Mediterranean	Iran, Syria, Iraq, Cyprus
	Chlamydatus (*Eurymerocoris*) *evanescens* (Boheman, 1852)	European	Azerbaijan, Armenia, Bulgaria, Iran
	Dicyphus (*Brachyceroea*) *globulifer* (Fallén, 1829)	Sibero-European	Azerbaijan, Armenia, Georgia, Bulgaria, Greece
	Hallodapus montandoni Reuter, 1895	Turano-European	Azerbaijan, Armenia, Georgia, Bulgaria, Iran
	Leptopterna inopinata Vinokurov, 1982	Caucasian	Azerbaijan, Armenia, Georgia, Iran
	Orthotylus (*Melanotrichus*) *fieberi fieberi* Frey-Gessner, 1864	Turanian	Azerbaijan, Armenia, Georgia, Iran
	Phytocoris (*Phytocoris*) *nitidicollis* Reuter, 1908	Caucasian	Azerbaijan, Armenia, Georgia, Iran
	Pilophorus sinuaticollis Reuter, 1879	Turanian	Azerbaijan, Armenia, Georgia, Iran
	Psallopsis similis Wagner, 1958	Turano-East Mediterranean	Azerbaijan, Armenia, Iran, Syria, Iraq
	Psallus (*Hylopsallus*) *wagneri* Ossiannilsson, 1953	European	Azerbaijan, Georgia, Bulgaria, Greece
	Trigonotylus caelestialium (Kirkaldy, 1902)	Asiatic-European	Azerbaijan, Armenia, Georgia, Bulgaria, Greece, Iran
Nabidae	*Nabis* (*Aspilaspis*) *pallidus* Fieber, 1861	Turanian	Azerbaijan, Armenia, Georgia, Iran
Nepidae	*Ranatra* (*Ranatra*) *unicolor* Scott, 1874	Asiatic	Azerbaijan, Armenia, Iran, Iraq
Oxycarenidae	*Leptodemus bicolor* Lindberg, 1924	Turano-East Mediterranean	Greece, Iran, Iraq, Cyprus
Pentatomidae	*Acrosternum arabicum* Wagner, 1959	Turano-East Mediterranean	Azerbaijan, Armenia, Greece, Iran, Iraq
	Bagrada (*Nitilia*) *monticola* Horváth, 1936	Turanian	Azerbaijan, Armenia, Iran, Iraq
	Peribalus (*Asioperibalus*) *congenitus* (V.G. Putshkov, 1965)	Turanian	Azerbaijan, Armenia, Bulgaria, Iran, Iraq
	Ventocoris (*Astirocoris*) *modestus* (Jakovlev, 1880)	Saharo-Turano-Sindian	Azerbaijan, Armenia, Iran, Iraq
Piesmatidae	*Parapiesma kochiae* (Becker, 1867)	Turano-European	Azerbaijan, Armenia, Georgia, Bulgaria, Greece, Iran
	Parapiesma rotundatum (Horváth, 1906)	Indo-Mediterranean	Iran, Syria, Iraq, Cyprus

Table 3 (continued)**.** List of species that have been recorded from at least three neighboring countries of Turkey but not recorded in this country.

Family	Species	Chorotype	Distribution among neighbours
Reduviidae	*Empicoris culiciformis* (De Geer, 1773)	West Palaearctic	Azerbaijan, Armenia, Georgia, Bulgaria, Greece, Iran
	Empicoris vagabundus (Linnaeus, 1758)	Sibero-European	Azerbaijan, Georgia, Bulgaria, Iran
	Metapterus caspicus (Dohrn, 1863)	Ponto-Caspian	Azerbaijan, Georgia, Bulgaria, Greece
	Reduvius inermis (Jakovlev, 1886)	Caucasian	Azerbaijan, Armenia, Iran, Iraq
Rhopalidae	*Leptoceraea femoralis* (Horváth, 1897)	Turano-Mediterranean	Armenia, Greece, Iran, Iraq, Cyprus
Rhyparochromidae	*Bleteogonus beckeri* (Frey-Gessner, 1863)	Caucasian	Azerbaijan, Armenia, Georgia, Iran
	Eremocoris abietis fraternus Horváth, 1883	Caucasian	Azerbaijan, Armenia, Georgia, Iran
	Megalonotus antennatus (Schilling, 1829)	Sibero-European	Azerbaijan, Armenia, Georgia, Bulgaria, Greece
Saldidae	*Chartoscirta elegantula longicornis* (Jakovlev, 1882)	Sibero-European	Azerbaijan, Georgia, Bulgaria, Greece, Iran
Tingidae	*Oncochila simplex* (Herrich-Schaeffer, 1833)	Sibero-European	Azerbaijan, Armenia, Georgia, Bulgaria
	Dictyla subdola (Horváth, 1905)	Turanian	Azerbaijan, Armenia, Georgia, Iran

Accordingly, during the re-examination of Miridae specimens preserved in LEMT, we discovered four new species that had not been described before. To collect fresh specimens of these new species, we conducted field research in Karaman province and, during that, we discovered a further two undescribed Miridae species. As a result, five of the six new Miridae species described in this paper, were collected from the Mediterranean region of Turkey (Fig. 23). These findings indicate that, the Mediterranean region of Turkey harbors a great diversity of Heteroptera species and despite being one of the most studied regions, it is still in need of further research.

With the results of our examinations in LEMT at hand, we compiled all the Heteroptera species that have been recorded from Turkey until now. As a result, we revealed that 1668 Heteroptera species were recorded from Turkey, which is the highest number of species among all West Palearctic countries (Aukema 2023). However, when species richness, defined as the number of species per unit area, is considered at the country level, Turkey, with one species per 470 km^2, is one of the most species-poor countries among both European and Middle Eastern countries (A. Carapezza, pers. comm.). Many factors influence species richness, including, but not restricted to, geographic location, topographic, climatic and faunal diversities, invasive species, latitudinal diversity gradient, and human impact (Brown 2014; Brown *et al.* 2016). Accordingly, many of these factors, some of which are discussed further below, favor high species richness in Turkey. Therefore, the apparent low heteropteran species richness in Turkey is possibly an indicator of lack of adequate research.

We also analyzed the chorotypical composition of Heteroptera species recorded from Turkey. To our surprise, Mediterranean- and European-related species were almost equally represented in Turkey. Turanian-related and local species were also relatively strongly represented. To further analyze the chorotypical composition of species at the provincial level, we compiled the provincial records of each species in the literature and iNaturalist. As a result, we found out that there is a strong separation in the representation of Mediterranean and European species between the ecoregions of Turkey. Mediterranean

species constituted a much greater percentage of species in southern, southeastern, and western provinces. Conversely, European species constituted a much greater percentage of species in northern and northeastern provinces. These findings highlight that European species are strongly represented in the Heteroptera fauna of Turkey and they are mostly concentrated in northern and northeastern provinces. Moreover, our results support the argument that there may be numerous species of European origin that remain to be discovered in the Black Sea and Eastern Anatolian regions (Çerçi 2022a; Çerçi *et al.* 2022). Anatolian endemic species represent 7.68% (128 spp.) of Heteroptera species recorded from Turkey. These species are mostly concentrated in the Mediterranean and Central Anatolian regions. This observation highlights the well-known phenomenon that Toros mountain range is a hotspot for speciation of Heteroptera species and future research conducted in this region may very well lead to the discovery of further new endemic species.

In a further analysis, we performed a t-SNE analysis to determine provinces with a similar composition of Heteroptera species, according to their chorotoype groups. This analysis suggested four distinct groups of provinces. Group 1 provinces are composed of a high percentage of Mediterranean, Turanian, and local species but an exceptionally low percentage of European species. These provinces are in Southeastern Anatolia. Interestingly, Elazığ and Tunceli are also included in this group of provinces, despite being a part of the Eastern Anatolian region. Group 2 provinces are characterized by a high percentage of Mediterranean, as well as European species but a low percentage of Turanian and local species. These provinces are in western Turkey. Interestingly, Amasya shows a similar composition of chorotypes with this group of provinces, despite being in the Black Sea region. Group 3 provinces are characterized by almost equal representation of Mediterranean and European elements and a relatively high percentage of Turanian and local elements. These provinces are in the Central Anatolian region. Two exceptions are Iğdır and Van in the Eastern Anatolian region and Burdur and Isparta in the Mediterranean region. The last group, Group 4, provinces have a high percentage of European and a low percentage of Mediterranean elements. These provinces are in the Black Sea and the northern Eastern Anatolian regions. Noticeably, different from the Black Sea provinces, the provinces in the Eastern Anatolian region have a high percentage of Turanian and local elements. Interestingly, Afyonkarahisar and Kütahya, although located in the Aegean region, are also included in this group of provinces. Another remarkable finding is that Edirne is distinguished from the rest of the provinces in Turkish Thrace by the composition of chorotypes and it is included in group 4, whereas other provinces in this region show characteristics of group 2 provinces. All these findings indicate that Heteroptera species are not uniformly distributed throughout Turkey and there are distinct regions with characteristic composition of species. These findings are in accordance with the climatic composition of Turkey and each ecoregion and province encompasses different climate zones in different extend which contributes to floral and faunal diversity (Fig. 2).

We also analyzed the number of species recorded from each province and ecoregion. Our results revealed that the average number of species recorded was 212, only 12.7% of the species recorded from Turkey, per province and 817, 49% of the species recorded from Turkey, per ecoregion. When the provinces were compared, it was observed that the provinces in the Southeastern Anatolian, Eastern Anatolian, and East Black Sea regions had comparatively lower numbers of recorded species. However, the average number of species recorded per province is also low, hence most of the provinces are inadequately researched in Turkey, and field research is needed in most of the provinces, to uncover their true Heteroptera diversity and composition.

Finally, we analyzed the Heteroptera species which were recorded from neighboring countries of Turkey but absent from this country. As a result, we found out that 109 species were known from three or more countries neighboring Turkey and a further 279 species were known from two neighboring countries of Turkey. These results highlight the fact that hundreds of Heteroptera species, which are already widely

known from around Turkey but have not yet been recorded from it due to lack of research, can be discovered in future field research. Moreover, the flora of Turkey is highly diverse with more than 10,000 known species, of which one third is endemic (Özhatay *et al.* 2022). Accordingly, there are undoubtedly many undescribed phytophagous Heteroptera species in this region, potentially bound to these endemic plant species (Çerçi 2022b). Therefore, the number of the actual number of Heteroptera species inhabiting Turkey is very likely above 2000.

In conclusion, this paper presents the descriptions of six new species previously not described in the literature and the identification of six species new to the fauna of Turkey. Additionally, we have compiled a complete list of Heteroptera species recorded in Turkey and conducted a thorough analysis of the chorotypical composition of the Heteroptera fauna in the country. The results of our study strongly emphasize the gaps in our knowledge and further research is essential in most, if not all, of the regions to fully grasp the true diversity of Heteroptera species in Turkey.

Acknowledgements

We are deeply thankful to Petr Kment (Prague, Czechia) for providing much of the literature that was difficult to access for us, for the identification of *Sigara daghestanica*, and for the many suggestions during the review process, to Armand Matocq (Paris, France) for examining the male genitalia of *R. bruckii,* to Santiago Pagola-Carte (Donostia, Spain) for his suggestions and insightful discussions on the identity of some of the new species described in this article, to Attilio Carapezza (Palermo, Italy) for his discussion about the identification of *G. coryli* specimens and for reviewing the manuscript, to Ernst Heiss for sharing the list of Heteroptera species collected from Turkey in his private collection and to Hasan Yaşayacak (Bartın, Turkey) for the identification of the host plant of *O. oenderi* sp. nov. Some of the museum materials examined in this paper were collected during field expeditions which were financially supported by TÜBİTAK (The Scientific and Technological Research Council of Turkey), research projects: TOAG/168, TOAG/336 and TOAG/502.

References

Ahmad I. & Önder F. 1990. Revision of the genus *Picromerus* Amyot & Serville [Asopini-Pentatominae Pentatomidae (Heteroptera)] from western Palaearctic with description of two new species from Turkey. *Turkish Journal of Entomology* 14: 75–84.

Ahmad I., Schaefer C.W. & Önder F. 1996. The first species of Myrocheini (Hemiptera: Pentatomidae: Pentatominae) from the Palaearctic region. *European Journal of Entomology* 93: 255–262.

Aukema B. 2023. Catalogue of the Palaearctic Heteroptera. Available from https://catpalhet.linnaeus.naturalis.nl/linnaeus_ng/app/views/introduction/topic.php?id=9&epi=1 [accessed 5 Aug. 2023].

Awad T.I. & Önder F. 1997a. Contribution to the study of Turkish Pyrrhocoridae (Heteroptera). *Turkish Journal of Entomology* 21 (3): 163–171.

Awad T.I. & Önder F. 1997b. Preliminary list of Piesmatidae (Heteroptera) with notes on distribution and importance of species in Turkey. *Turkish Journal of Entomology* 21 (4): 259–268.

Berchi G.M. & Kment P. 2015. Review of the family Veliidae in Romania (Hemiptera: Heteroptera: Gerromorpha). *Zootaxa* 3963 (1): 74–88. https://doi.org/10.11646/zootaxa.3963.1.5

Berchi G.M., Copilaș-Ciocianu D., Kment P. & Mumladze L. 2023. Water bugs (Heteroptera: Gerromorpha, Nepomorpha) of the Caucasus ecoregion. *The European Zoological Journal* 90 (1): 167–192. https://doi.org/10.1080/24750263.2023.2174190

Brown J.H. 2014. Why are there so many species in the tropics? *Journal of Biogeography* 41 (1): 8–22. https://doi.org/10.1111/jbi.12228

Brown R.L., Reilly L.A.J. & Peet R.K. 2016. Species richness: small scale. *eLS*: 1–9. https://doi.org/10.1002/9780470015902.A0020488.PUB2

Bryja J. & Kment P. 2002. New and interesting records of plant bugs (Heteroptera: Miridae) from the Czech and Slovak Republics. *Klapalekiana* 38: 1–10.

Çakır S. & Önder F. 1990. Türkiye Geocorinae (Heteroptera: Lygaeidae) altfamilyası üzerinde sistematik ve faunistik araştırmalar. *Türkiye Entomoloji Dergisi* 14: 37–52.

Carapezza A. 1997. Heteroptera of Tunisia. *Naturalista Siciliano* 21 (suppl. A): 331.

Carapezza A. 1998. *Taurocalocoris* gen. n. *samai* sp. n., new Mirinae from Southern Turkey (Insecta, Heteroptera, Miridae). *Naturalista Siciliano* (4) 22 (3–4): 321–326.

Carapezza A. 2009. On some Old World Scutelleridae (Heteroptera). *Nouvelle Revue d'Entomologie* 25 (3): 197–212.

Carapezza A. & Kment P. 2018. *Psallus thomashenryi* sp. n. and *Psallus lucanicus* from Turkey (Hemiptera, Heteroptera, Miridae). *ZooKeys* 796: 253–265. https://doi.org/10.3897/zookeys.796.21536

Çerçi B. 2020. *Psallus* (*Psallus*) *flavellus* Stichel, 1933, a new Miridae (Hemiptera: Heteroptera) species for the fauna of Turkey. *Journal of the Heteroptera of Turkey* 2 (2): 134–139. https://doi.org/10.5281/zenodo.4290083

Çerçi B. 2021. First record of *Halyomorpha halys* (Stål, 1855) (Pentatomidae: Heteroptera) in Aegean Region of Turkey. *Acta Biologica Turcica* 34 (1): 35–37.

Çerçi B. 2022a. *Nemocoris fallenii* Sahlberg, 1848 (Heteroptera: Coreidae), new for the fauna of Turkey. *Journal of the Heteroptera of Turkey* 4 (2): 132–138. https://doi.org/10.5281/zenodo.7358915

Çerçi B. 2022b. A new species of *Plagiognathus* (Heteroptera: Miridae) associated with the locally endemic *Phlomis leucophracta* (Lamiales: Lamiaceae) from Karaman, Turkey. *European Journal of Taxonomy* 806: 148–160. https://doi.org/10.5852/ejt.2022.806.1709

Çerçi B. & Dursun A. 2017. *Isometopus anlasi* sp. nov. (Heteroptera: Miridae) from Turkey. *Zootaxa* 4353 (2): 378–384. https://doi.org/10.11646/zootaxa.4353.2.9

Çerçi B. & Gözüaçık C. 2019. Contribution to Pentatomoidea (Heteroptera) fauna of Iğdır and Istanbul with three new records for Turkish fauna. *Journal of Heteroptera of Turkey* 1 (1–2): 33–40. https://doi.org/10.5281/zenodo.4297746

Çerçi B. & Koçak Ö. 2016. Contribution to the knowledge of Heteroptera (Hemiptera) fauna of Turkey. *Journal of Insect Biodiversity* 4 (15): 1–18. https://doi.org/10.12976/jib/2016.4.15

Çerçi B. & Koçak Ö. 2017a. Six new Heteroptera (Hemiptera) species for the fauna of Turkey with a new synonymy. *Munis Entomology & Zoology* 12 (2): 532–538.

Çerçi B. & Koçak Ö. 2017b. Further contribution to the Heteroptera (Hemiptera) fauna of Turkey with a new synonymy. *Acta Biologica Turcica* 30 (4): 121–127.

Çerçi B. & Koçak Ö. 2023. Heteroptera (Hemiptera) fauna of Karaman with new records for Turkey. *Journal of the Heteroptera of Turkey* 5 (1): 10–128. https://doi.org/10.5281/zenodo.7986562

Çerçi B. & Oruz T. 2021. First record of Sycamore seed bug *Belonochilus numenius* (Say, 1831) (Hemiptera: Heteroptera: Lygaeidae) in Turkey. *Journal of the Heteroptera of Turkey* 3 (1): 40–45. https://doi.org/10.5281/zenodo.4839506

Çerçi B. & Özgen İ. 2021. Contribution to the knowledge of Heteroptera (Hemiptera) fauna of Elazığ Province with a new record for the fauna of Turkey. *Journal of the Heteroptera of Turkey* 3 (1): 50–75. https://doi.org/10.5281/zenodo.4840031

Çerçi B. & Tezcan S. 2020. Contribution to the Lygaeoidea (Heteroptera) fauna of Turkey based on specimens preserved in the Lodos Entomological Museum, Turkey (LEMT) and additional information. *Journal of Insect Biodiversity* 15 (1): 6–15. https://doi.org/10.12976/jib/2020.15.1.2

Çerçi B. & Tezcan S. 2021. New records of Heteroptera (Hemiptera) species from Turkey, with the reconsideration of several previous records. *North-Western Journal of Zoology* 17 (2): 160–169.

Çerçi B., Özgen İ. & Dioli P. 2018. Additional faunistic notes on Heteroptera (Hemiptera: Insecta) in East Anatolia (Turkey). *Journal of Entomology and Zoology Studies* 6 (1): 1225–1231.

Çerçi B., Koçak Ö. & Tezcan S. 2019. Two new species and ten new records of heteroptera from Turkey, including the first record of the potential alien *Campylomma miyamotoi* in the western Palaearctic. *Acta Entomologica Musei Nationalis Pragae* 59 (1): 295–306. https://doi.org/10.2478/aemnp-2019-0023

Çerçi B., Tezcan S. & Özgen İ. 2020. Review of *Reuteria* Puton, 1875 (Heteroptera: Miridae) species present in Lodos Entomological Museum, Turkey (LEMT). *Zootaxa* 4878 (1): 159–168. https://doi.org/10.11646/zootaxa.4878.1.7

Çerçi B., Gorczyca J. & Koçak Ö. 2021a. Description of new Miridae and Tingidae species (Hemiptera: Heteroptera) and new records from southern Turkey. *Zootaxa* 4949 (2): 312–322. https://doi.org/10.11646/zootaxa.4949.2.5

Çerçi B., Karataş A. & Karataş Ayşegül 2021b. Insecta non gratae: new distribution records of eight alien bug (Hemiptera) species in Turkey with contributions of citizen science. *Zootaxa* 5057 (1): 1–28. https://doi.org/10.11646/zootaxa.5057.1.1

Çerçi B., Özgen İ. & Tezcan S. 2021c. Description of a new *Phytocoris* (*Compsocerocoris*) species (Heteroptera: Miridae) from southeastern Anatolia with a checklist of the *Phytocoris* species of Turkey. *Zoology in the Middle East* 67 (4): 321–331. https://doi.org/10.1080/09397140.2021.1992834

Çerçi B., Gültekin N., Gözüaçık C., Güdek-Güçlü M. & Doğan D. 2022. Contributions to the Heteroptera (Hemiptera) fauna of Anatolia with new records for Turkey. *Journal of Insect Biodiversity* 36 (1): 1–35. https://doi.org/10.12976/jib/2022.36.1.1

Drapolyuk I.S. 1987. Two new species of capsid bugs (Heteroptera, Miridae) from Talysh. *Entomologicheskoe Obozrenie* 66: 120–122.

Drapolyuk I.S. 1990. A new species of the genus *Psallus* (Heteroptera, Miridae) from Azerbaijan. *In*: Akimov I.A. (ed.) *News in Faunistics and Sytematics*: 40–41. Naukova dumka, Kiev.

Dursun A. 2009. Studies on the Alydidae, Rhopalidae and Stenocephalidae (Heteroptera: Coreoidea) species of the Kelkit Valley of Turkey. *Turkish Journal of Entomology* 33 (3): 205–215.

Dursun A. 2011a. A study on the Nepomorpha (Hemiptera) species of some provinces of Anatolia, Turkey, with new records of *Anisops debilis perplexus* Poisson, 1929 and *Notonecta reuteri* Hungerford, 1928. *Turkish Journal of Entomology* 35 (3): 461–474.

Dursun A. 2011b. Additional records of Coreidae (Hemiptera: Heteroptera) from Turkey, with checklist. *Entomological News* 122 (2): 135–148. https://doi.org/10.3157/021.122.0205

Dursun A. 2011c. A study on the Nabidae and Reduviidae (Hemiptera: Heteroptera) of the Kelkit Valley and Amasya, Turkey. *Acta Entomologica Serbica* 16 (1/2): 35–43.

Dursun A. 2012. Additional records of Gerromorpha (Hemiptera: Heteroptera) and redescription of *Rhagovelia nigricans nigricans* (Burmeister, 1835) from Anatolia (Turkey). *Turkish Journal of Zoology* 36 (5): 652–661. https://doi.org/10.3906/zoo-1107-12

Dursun A. & Fent M. 2009. A study on the Coreidae (Insecta: Heteroptera) of the Kelkit valley, Turkey. *Acta Entomologica Serbica* 14 (1): 13–25.

Dursun A. & Fent M. 2010. Systematische und faunistische Untersuchungen über die Überfamilie Pentatomoidea (Insecta, Heteroptera) aus dem Kelkit-Tal der Türkei. *Linzer biologische Beiträge* 42 (1): 587–598.

Dursun A. & Fent M. 2011a. A study on the Sciocorini Amyot & Serville, 1843 and Strachiini Mulsant & Rey, 1866 (Hemiptera: Pentatomidae: Pentatominae) faunas of the Kelkit Valley (Turkey). *Turkish Bulletin of Entomology* 1 (3): 181–188.

Dursun A. & Fent M. 2011b. Additional records on the Halyini, Carpocorini, Aeliini and Eysarcorini (Hemiptera: Pentatomidae: Pentatominae) of the Kelkit Valley, Turkey. *Biharean Biologist* 5 (2): 151–156.

Dursun A. & Fent M. 2013. Overview of the subgenus *Ventocoris* s. str. (Hemiptera: Heteroptera: Pentatomidae) with new records and a revised key to the *Ventocoris* species of Turkey. *Zootaxa* 3682 (1): 151–177. https://doi.org/10.11646/zootaxa.3682.1.8

Dursun A. & Fent M. 2015. Notes on some little known species of heteroptera from Turkey with new records for the fauna of Europe and the Turkish Thrace. *North-Western Journal of Zoology* 11 (1): 92–96.

Dursun A. & Fent M. 2016a. Neue Funde und Beiträge zur Heteropteren-Fauna (Hemiptera: Heteroptera) des Thrakien-Gebietes in der Türkei. *Heteropteron* 47: 24–26.

Dursun A. & Fent M. 2016b. Beiträge zur Lygaeidae-Fauna (Hemiptera: Heteroptera) des Westlichen Schwarzmeer-Gebietes in der Türkei. *Heteropteron* 47: 30–36.

Dursun A. & Fent M. 2017. Neue Funde für die Cydnidae-Fauna (Hemiptera: Heteroptera) der Türkei: Crocistethus basalis (Fieber, 1861). *Heteropteron* 49: 18–20.

Dursun A. & Fent M. 2018a. Contributions to Nepomorpha (Insecta: Hemiptera: Heteroptera) fauna in wetland areas. *Acta Biologica Turcica* 31 (4): 193–202.

Dursun A. & Fent M. 2018b. Erstnachweis von *Perillus bioculatus* (Fabricius, 1775) (Hemiptera: Heteroptera: Pentatomidae) für Anatolien (Türkei). *Heteropteron* 53: 18–20.

Dursun A. & Fent M. 2019. Contributions of the infraorders Gerromorpha and Leptopodomorpha (Insecta: Hemiptera: Heteroptera) fauna in Amasya's wetlands of Turkey. *Entomofauna* 40 (2): 443–452.

Dursun A. & Kartal V. 2006. A study on the *Scirtetellus vittatus* Kiritshenko, 1951 (Heteroptera: Miridae). *Turkish Journal of Entomology* 30 (3): 235–240.

Dursun A. & Kartal V. 2008a. A faunistic study on the Carpocorini Stål, 1876 (Heteroptera: Pentatomidae: Pentatominae) species of the Middle Black Sea Region of Turkey. *Turkish Journal of Entomology* 32 (1): 43–59.

Dursun A. & Kartal V. 2008b. A faunistic study on the Halyini Amyot & Serville, 1843, Sciocorini Amyot & Serville, 1843, Aeliini Douglas & Scott, 1865 and Eysarcorini Mulsant & Rey, 1866 (Heteroptera: Pentatomidae: Pentatominae) species of the Middle Black Sea Region of Turkey. *Turkish Journal of Entomology* 32 (4): 303–315.

Dursun A. & Kartal V. 2008c. A faunistic study on the Strachiini Mulsant & Rey, 1866, Pentatomini Leach, 1815 and Piezodorini Atkinson, 1888 (Heteroptera: Pentatomidae: Pentatominae) species of the Middle Black Sea Region of Turkey. *Turkish Journal of Entomology* 32 (3): 225–239.

Dursun A. & Salur A. 2013. Presence of *Sphedanolestes sanguineus* (Fabricius,1794) in Turkey, followed by an annotated checklist of Reduviidae (Hemiptera: Heteroptera). *Turkish Journal of Zoology* 37 (5): 610–620. https://doi.org/10.3906/zoo-1203-17

Dursun A., Kaçar G. & Ulusoy M.R. 2010. The Alydidae (Hemiptera: Heteroptera: Coreoidea) of Turkey: a key to the genera, new records and a species checklist. *Entomological News* 121 (5): 487–497. https://doi.org/10.3157/021.121.0512

Ehanno B. & Matocq A. 1997. Compléments à la faune de France des Hétéroptères Miridae. *Orthotylus* (*Parapachylops* n. subgen.) *armoricanus* n. sp. *Bulletin de la Société entomologique de France* 94: 265–272. https://doi.org/10.3406/bsef.1989.17611

Escherich K. 1897. Beitrag zur Hemipterenfauna Kleinasiens. *Entomologische Nachrichten* 23: 124–127.

Fahringer J. 1922. Eine Rhynchotenausbeute aus der Türkei, Kleinasien und den benachharten Gebieten. *Konowia* 1: 137–144.

Fent M. 2010. Contributions to Pentatomoidea (Heteroptera) fauna of Western Black Sea Region with a new record for Anatolian fauna: *Neottiglossa lineolata* (Mulsant & Rey, 1852). *Journal of Entomological Research Society* 12 (1): 53–65.

Fent M. 2011. Gökçeada ve Bozcaada Heteroptera (Insecta: Hemiptera) Faunasına Katkılar. *Trakya University Journal of Science* 12 (1): 35–46.

Fent M. & Aktaç N. 1999. Edirne Yöresi Pentatomidae (Heteroptera) Faunası Üzerine Taksonomik ve Faunistik Araştırmalar. *Turkish Journal of Zoology* 23 (Supplement 2): 377–395.

Fent M. & Aktaç N. 2007. New records of Pentatomoidea (Heteroptera) for the fauna of Europe, Turkey, and the Turkish Thrace. *Entomological News* 118 (4): 336–349. https://doi.org/10.3157/0013-872X(2007)118[336:NROPHF]2.0.CO;2

Fent M. & Aktaç N. 2008. Anmerkungen zu einigen im Adultstadium überwinternden Heteropteren und ihren Überwinterungsplätze in der (Türkischen) Provinz Edirne. *Heteropteron* 28: 11–15.

Fent M. & Dursun A. 2016. Neue Funde und Beiträge zur Saldiden-Fauna (Hemiptera: Heteroptera) der Türkei. *Heteropteron* 47: 27–29.

Fent M. & Dursun A. 2018. Erster präzise lokalisierter Nachweis für *Ochterus marginatus marginatus* (Latreille, 1804) im Gebiet von Thrakien (Türkei). *Heteropteron* 52: 22–24.

Fent M. & Dursun A. 2019. Contributions to Coreoidea (Hemiptera: Heteroptera) fauna of Western Black Sea Region. *Munis Entomology & Zoology* 14 (1): 217–223.

Fent M. & Dursun A. 2022. An up-to-date checklist of Turkish Pentatomidae (Hemiptera: Heteroptera) with additional records. *Trakya University Journal of Natural Sciences* 23: 65–111. https://doi.org/10.23902/trkjnat.1123152

Fent M. & Kment P. 2011. First record of the invasive western conifer seed bug *Leptoglossus occidentalis* (Heteroptera: Coreidae) in Turkey. *North-Western Journal of Zoology* 7 (1): 72–80.

Fent M., Dursun A., Karsavuran Y., Tezcan S. & Demirözer O. 2010. A review of the tribe Halyini in Turkey (Hemiptera: Heteroptera: Pentatomidae) with two new records: *Apodiphus integriceps* and *Mustha vicina*. *Journal of the Entomological Research Society* 12 (2): 1–13.

Fent M., Kment P., Çamur-Elipek B. & Kırgız T. 2011. Annotated catalogue of Enicocephalomorpha, Dipsocoromorpha, Nepomorpha, Gerromorpha, and Leptopodomorpha (Hemiptera: Heteroptera) of Turkey, with new records. *Zootaxa* 2856 (1): 1–84. https://doi.org/10.11646/zootaxa.2856.1.1

Fent M., Dursun A. & Tezcan S. 2013. First record of *Graphosoma inexpectatum* (Hemiptera, Pentatomidae, Podopinae) from Turkey with description of the female. *Zookeys* 319: 51–57. https://doi.org/10.3897/zookeys.319.4298

Gadeau de Kerville H. 1939. *Voyage zoologique d'Henri Gadeau de Kerville en Asie-Mineure (Avril-Mai 1912)*. *Tome I, Par. 1*. Paul Lechevalier, Paris.

Gapon D. 2018. Morphology of male and female terminalia and taxonomic revision of the burrower bugs genus *Canthophorus* (Heteroptera: Cydnidae). *Annales de la Société entomologique de France, nouvelle Série* 54 (3): 183–228. https://doi.org/10.1080/00379271.2018.1467788

Ghahari H. & Chérot F. 2014. An annotated catalog of the Iranian Miridae (Hemiptera: Heteroptera: Cimicomorpha). *Zootaxa* 3845 (1): 1–101. https://doi.org/10.11646/zootaxa.3845.1.1

Heiss E. & Önder F. 1991. On the Aradidae fauna of Turkey (Heteroptera). *Turkish Journal of Entomology* 15 (2): 65–70.

Heiss E. & Péricart J. 2007. *Hémiptères Aradidae, Piesmatidae et Dipsocoromorphes Euro-méditerranéens*. Fédération Faune de France. Française des Sociétés de Sciences Naturelles, Paris.

Heiss E., Eckelt A., Lederwasch M. & Unterasinger R. 2022. The Heteroptera Collection Ernst Heiss at the Tiroler Landesmuseum Ferdinandeum. Part III: Cimicomorpha: Family Reduviidae. *Entomologica Austriaca* 29: 39–85.

Heiss E., Eckelt A., Lederwasch M. & Unterasinger R. 2023. The Heteroptera Collection Ernst Heiss at the Tiroler Landesmuseum Ferdinandeum. Part X: Pentatomomorpha III: Family Coreidae. *Entomologica Austriaca* 30: 85–145.

Henry T.J. 2017. Biodiversity of Heteroptera. *In*: Foottit R.G. & Adler P.H. (eds) *Insect Biodiversity: Science and Society, Second Edition*: 279–335. John Wiley & Sons, Ltd, Chichester. https://doi.org/10.1002/9781118945568.ch10

Hoberlandt L. 1952. Results of the zoological scientific expedition of the National Museum in Praha to Turkey. 2. Hemiptera-Heteroptera I. The aquatic and semiaquatic Heteroptera of Turkey. *Acta Entomologica Musei Nationalis Pragae* 26 (352): 1–74.

Hoberlandt L. 1956. Results of the zoological scientific expedition of the National Museum in Praha to Turkey. 18. Hemiptera IV. Terrestrial Hemiptera-Heteroptera of Turkey. *Acta Entomologica Musei Nationalis Pragae* Suppl. 3: 1–264.

Horváth G. 1883. Heteroptera Anatolica in regione Brussae collecta enumeravit. *Természetrajzi Füzetek* 7: 21–30.

Horváth G. 1901. Hémiptères du voyage de M. Martinez Escalera dans l'Asie-Mineure. *Természetrajzi Füzetek* 24: 469–485.

Horváth G. 1905. Ergebnisse einer naturwissenschaftlichen Reise zum Erdschias-Dagh (Kleinasien). Hemipteren. *Annalen des K.K. Naturhistorischen Hofmuseums* 20: 179–189.

Horváth G. 1918. Ad cognlitionem faunae Hemipterorum Balcanicae. *Annales Musei Nationalis Hungarici* 16: 321–340.

Horváth G. 1919. Ergebnisse einer mit Unterstützung der Kais. Akademie der Wissenschaften in Wien ausgeführten zoologischen Forschungsreise von weiland Prof. Dr. Franz Tölg nach Kleinasien (Amanus-Gebirge). *Archiv für Naturgeschichte. Abteilung A* 85 (8): 146–147.

Josifov M. 1958. *Heterocordylus cytisi* n. sp. Eine neue Miriden-Art aus Bulgarien (Hem. Heteroptera). *Fragmenta Balcanica* 2: 83–89.

Josifov M. 1974. Eine neue *Psallus*-Art aus Bulgarien und eine neue *Orthotylus*-Art aus Kirgisien (Heteroptera, Miridae). *Reichenbachia* 15: 89–92.

Kerzhner I.M. & Josifov M. 1999. Miridae Hahn, 1833. *In*: Aukema B. & Rieger C. (eds) *Catalogue of the Heteroptera of the Palaearctic Region. Vol. 3*: 1–576. The Netherlands Entomological Society, Amsterdam.

Kiritshenko A.N. 1918. Bugs (Hemiptera-Heteroptera) of the Caucasian region. I. *Mémoires du Musée du Caucase* (*A*) 6: 1–177.

Kiritshenko A.N. 1924. Beitrag zur Hemipterenfauna des südlichen Armenien. *Wiener entomologische Zeitung* 41: 1–5.

Kıyak S. 1990. Systematisch-Ökologische Untersuchungen über die Wanzen (Insecta- Heteroptera) aus dem Gebiet Hazar-See, Maden und Ergani (Prov. Elazığ). *Journal of Biology of Gazi University Faculty of Arts and Sciences* 1: 43–95.

Kıyak S. 1993a. Über terrestrische Wanzenarten von Soğuksu Nationalpark. *Priamus* 6 (3/4): 131–156.

Kıyak S. 1993b. Erstnachweisen für die Fauna Heteroptera der Türkei. *Priamus* 6 (3/4): 160–164.

Kıyak S. 2000. Işık Dağı ve Çevresinde Yaşayan Heteroptera (Insecta) Türlerinin Faunistik, Sistemik ve Ekolojik Yönden Araştırılması I-II. *Journal Institute Science and Technology, Gazi University* 13 (2): 323–367.

Kıyak S. 2002. A short excursion result on Heteroptera of Engizek and Öksüz Mountains (Kahramanmaraş Province). *Gazi Üniversitesi Fen Bilimleri Dergisi* 15 (1): 1–10.

Kıyak S. 2019. A confirmed species to Turkish Miridae fauna: *Myrmecoris gracilis* (Sahlberg, 1848) (Heteroptera). *Munis Entomology & Zoology* 14 (2): 662.

Kıyak S. & Çağlar S.S. 1991. Über Heteropteren von Nord- und Nordostanatolien. *Centre for Entomological Studies Ankara, Miscellaneous Papers* 11: 3–8.

Kıyak S. & Ersoy D.E. 2022. A rare species from Turkey collected by light traps: *Polymerus palustris* (Reuter, 1907) (Heteroptera: Miridae). *Journal of the Heteroptera of Turkey* 4 (2): 205–210. https://doi.org/10.5281/zenodo.7358970

Kıyak S. & Özsaraç Ö. 2001. Cheklist of aquatic and semiaquatic Heteroptera of Turkey, with a new record. *Journal of the Entomological Research Society* 3: 17–32.

Kıyak S., Özsaraç Ö. & Salur A. 2004. Additional notes on the Heteroptera fauna of Nevşehir Province (Turkey). *Gazi University Journal of Science* 17 (1): 21–29.

Kment P. & Bařnař P. 2010. On the taxonomy and distribution of the genus *Maccevethus* (Hemiptera: Heteroptera: Rhopalidae). *Acta Musei Moraviae, Scientiae biologicae (Brno)* 95 (1): 15–47.

Kment P. & Bařnař P. 2012. True bugs (Hemiptera: Heteroptera) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). *Acta Musei Moraviae, Scientiae biologicae (Brno)* 96 (2): 323–628.

Kment P. & Batelka J. 2005. Contribution to the faunistics of the true bugs (Heteroptera) of Tunisia. *Klapalekiana* 41: 53–62.

Kment P. & Fent M. 2012. First record of *Metatropis rufescens* (Hemiptera: Heteroptera: Berytidae) from Turkey. *Turkish Journal of Zoology* 36 (6): 828–830. https://doi.org/10.3906/zoo-1111-7

Kment P. & Jindra Z. 2005. New and interesting records of true bugs (Heteroptera) from Turkey, southeastern Europe, Near and Middle East. *Acta Entomologica Musei Nationalis Pragae* 45 (1): 3–16.

Kment P., Fent M. & Japoshvili G. 2013a. Redescription of *Urartucoris ermolenkoi* (Hemiptera, Heteroptera, Coreidae) and a revised key to the genera of Pseudophloeini of the Western Palaearctic Region. *ZooKeys* 319: 191–209. https://doi.org/10.3897/zookeys.319.4309

Kment P., Hradil K., Bařnař P., Balvín O., Cunev J., Ditrich T., Jindra Z., Roháčová M., Straka M. & Sychra J. 2013b. New and interesting records of true bugs (Hemiptera: Heteroptera) from the Czech Republic and Slovakia V. *Acta Musei Moraviae, Scientiae biologicae (Brno)* 98 (2): 495–541.

Knyshov A. & Konstantinov F.V. 2013. A taxonomic revision of the genus *Platycranus* Fieber, 1870 (Hemiptera: Heteroptera: Miridae: Orthotylinae). *Zootaxa* 3637 (3): 201–253. https://doi.org/10.11646/zootaxa.3637.3.1

Konstantinov F.V. 2023. Plant bugs with swollen antennae: a morphology-based phylogenetic analysis of *Heterocapillus* Wagner, 1960 and related genera (Hemiptera: Miridae: Phylinae). *Arthropod Systematics & Phylogeny* 81: 845–879. https://doi.org/10.3897/asp.81.e104396

Küçükbasmacı I. & Kıyak S. 2015. A study on the fauna of Heteroptera of Ilgaz Mountains (Kastamonu, Çankırı) with a new record for Turkey. *Nevşehir Bilim ve Teknoloji Dergisi* 4 (1): 1–33.

Külekçi G., Yıldırım E. & Tezcan S. 2009. Contribution to the knowledge of the Pentatomidae (Heteroptera) fauna of Turkey. *Linzer Biologische Beiträge* 41 (1): 697–708.

Lefebvre A. 1831. Description de *Halys spinosula*. *Magasin de Zoologie* 1 (21): 1–2.

Linnavuori R.E. 1953. A Palaearctic Heteropterous material collected by J. Sahlberg and U. Saalas. *Annales Entomologici Fennici* 19: 147–167.

Linnavuori R.E. 1965. Studies on the South-and East-Mediterranean Hemipterous Fauna. *Acta Entomologica Fennica* 21: 1–69.

Linnavuori R.E. 2010. Studies on the Miridae (Phylinae, addenda to Deraeocorinae and Orthotylinae) of Khuzestan and the adjacent provinces of Iran. *Acta Entomologica Musei Nationalis Pragae* 50 (2): 369–414.

Linnavuori R.E., Carapezza A. & Kment P. 2014. Order Hemiptera, suborder Heteroptera. Infraorder Pentatomomorpha, superfamily Lygaeoidea. *In*: van Harten A. (ed.) *Arthropod Fauna of the United Arab Emirates Vol. 5*: 192–246. Multiply Marketing Consultancy Services, Abu Dhabi.

Lodos N. & Önder F. 1978. Türkiye Pentatomoidea (Heteroptera) üstfamilyası üzerinde araştırmalar. II. familya: Plataspidae DALL. *Türkiye Bitki Koruma Dergisi* 2 (4): 195–239.

Lodos N. & Önder F. 1979. Contribution to the study on the Turkish Pentatomoidea (Heteroptera) IV. Family: Acanthosomatidae Stal 1864. *Türkiye Bitki Koruma Dergisi* 3 (3): 139–160.

Lodos N. & Önder F. 1980a. Two new species of Pentatomidae from Turkey (Heteroptera). *Türkiye Bitki Koruma Dergisi* 4: 7–13.

Lodos N. & Önder F. 1980b. Türkiye Pentatomoidea (Heteroptera) üst familyası üzerinde araştırmalar. III. Familya: Cydnidae Billberg. *Ege Üniversitesi: Ziraat Fakültesi Yayınları* 381: 81.

Lodos N. & Önder F. 1982. Contribution to the study of the Turkish Pentatomoidea (Heteroptera). V. Sciocorini Bergroth (Pentatomidae). *Türkiye Bitki Koruma Dergisi* 6: 133–146.

Lodos N. & Önder F. 1983. Contribution to the study of Turkish Pentatomoidea (Heteroptera) VI. Asopinae Amyot & Serville 1843. *Türkiye Bitki Koruma Dergisi* 7: 221–230.

Lodos N., Önder F., Pehlivan E. & Atalay R. 1978. *Ege ve Marmara Bölgesi'nin Zararlı Böcek Faunasının Tespiti Üzerinde Çalışmalar [Curculionidae, Scarabaeidae* (*Coleoptera*)*; Pentatomidae, Lygaeidae, Miridae* (*Heteroptera*)*]*. Gıda-Tarım ve Hayvancılık Bakanlığı Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü, Ankara.

Lodos N., Önder F., Pehlivan E., Atalay R., Erkin E., Karsavuran Y., Tezcan S. & Aksoy S. 1998. *Faunistic Studies on Pentatomoidea* (*Plataspidae, Acanthosomatidae, Cydnidae, Scutelleridae, Pentatomidae*) *of Western Black Sea, Central Anatolia and Mediterranean Regions of Turkey*. Ege Üniversitesi Basımevi, İzmir.

Lodos N., Önder F., Pehlivan E., Atalay R., Erkin E., Karsavuran Y., Tezcan S. & Aksoy S. 1999. *Faunistic Studies on Lygaeidae* (*Heteroptera*) *of Western Black Sea, Central Anatolia and Mediterranean Regions of Turkey*. Ege Üniversitesi Basımevi, İzmir.

Lodos N., Önder F., Pehlivan E., Atalay R., Erkin E., Karsavuran Y., Tezcan S. & Aksoy S. 2003. *Faunistic Studies on Miridae* (*Heteroptera*) *of Western Black Sea, Central Anatolia and Mediterranean Regions of Turkey*. Ege Üniversitesi Basımevi, İzmir.

Maaten L.J.P. van der & Hinton G.E. 2008. Visualizing High-Dimensional Data Using t-SNE. *Journal of Machine Learning Research* 9 (2008): 2579–2605.

Matocq A. 2000. Une nouvelle espèce de *Cymus* de Turquie (Heteroptera, Lygaeidae, Cyminae). *Revue française d'Entomologie* (*N.S.*). 22: 73–75.

Matocq A. 2007. Description d'une nouvelle espèce de *Tinicephalus* de Turquie et compléments à la révision du genre (Heteroptera, Miridae). *Bulletin de la Société entomologique de France* 112 (2): 171–178. https://doi.org/10.3406/bsef.2007.16416

Matocq A. 2011. Mise au point sur *Psallus vicinus* Reuter, 1899, une espèce peu connue [Hemiptera, Heteroptera, Miridae]. *Revue française d'Entomologie (nouvelle Série)* 33: 1–4.

Matocq A. 2019a. Un nouveau *Psallus* Fieber, 1858 de Turquie et de Jordanie (Hemiptera, Heteroptera, Miridae). *Revue de l'Association roussillonnaise d'Entomologie* 28 (2): 92–96.

Matocq A. 2019b. Un nouveau *Psallus* Fieber, 1858 de Turquie. *Revue de l'Association roussillonnaise d'Entomologie* 28 (4): 223–225.

Matocq A. & Özgen İ. 2010. A preliminary list of Heteroptera collected in Mardin and Siirt provinces from South-Eastern Anatolia of Turkey (Hemiptera). *Munis Entomology & Zoology* 5 (Suppl.): 1011–1019.

Matocq A. & Pluot-Sigwalt D. 2001. Une nouvelle et remarquable espèce d'*Orthonotus* Stephens de Turquie et notes sur le genre (Heteroptera, Miridae, Phylinae). *Revue française d'Entomologie* (*nouvelle Série*) 23: 71–78.

Matocq A. & Pluot-Sigwalt D. 2011. Une nouvelle espèce de *Psallus* de Turquie associée à *Fraxinus* sp. (Oleaceae) (Hemiptera, Heteroptera, Miridae, Phylinae). *Nouvelle Revue d'Entomologie (nouvelle Série)* 27: 163–172.

Matocq A., Pluot-Sigwalt D. & Özgen İ. 2014. Terrestrial Hemiptera (Heteroptera) collected in South-East Anatolia (Diyarbakır, Mardin and Elazığ provinces) (Turkey): second list. *Munis Entomology & Zoology* 9: 884–930.

Metzger M.J., Bunce R.G.H., Jongman R.H.G., Sayre R., Trabucco A. & Zomer R. 2013. A high-resolution bioclimate map of the world: a unifying framework for global biodiversity research and monitoring Marc. *Global Ecology and Biogeography* 22: 630–638. https://doi.org/10.1111/geb.12022

Moulet P. 2020. *Reduvius nigritus* sp. nov. (Hemiptera, Heteroptera, Reduviidae, Reduviinae) from Turkish Anatolia. *Journal of the Heteroptera of Turkey* 2 (2): 75–80. https://doi.org/10.5281/zenodo.4289201

Önder F. 1974. A new species of *Mecomma* Fieber (Heteroptera: Miridae) from Turkey. *Journal of Entomology, Seris B Taxonomy* 43: 115–119. https://doi.org/10.1111/j.1365-3113.1974.tb00096.x

Önder F. 1976. *Turkey Miridae (Hemiptera) Faunası Üzerinde Sistematik Çalışmalar*. Habilitation Thesis, Ege University, Turkey.

Önder F. 1980. The first list of Family Reduviidae (Heteroptera) of Turkey. *Ege Üniversitesi Ziraat Fakültesi Dergisi* 17 (1): 1–20.

Önder F. 1981. Türkiye Isometopidae (Heteroptera) Faunası. *Ege Üniversitesi Ziraat Fakültesi Dergisi* 18 (1–3): 105–112.

Önder F. 1982. Türkiye Anthocoridae (Heteroptera) Faunası Üzerinde Taksonomik ve Faunistik Araştırmalar. *Ege Üniversitesi: Ziraat Fakültesi Yayınları* 459: 159.

Önder F. & Adıgüzel N. 1979. Some Heteroptera collected by light trap in Diyarbakır (Turkey). *Turkey Bitki Koruma Dergisi* 3 (1): 25–34.

Önder F. & Lodos N. 1983. Preliminary list of Tingidae with notes on distribution and importance of species in Turkey. *Ege Üniversitesi: Ziraat Fakültesi Yayınları* 449: 51.

Önder F., Ünal A. & Ünal E. 1981. Heteroptera fauna collected by light traps in some districts of Northwestern part of Anatolia. *Turkey Bitki Koruma Dergisi* 5: 151–169.

Önder F., Ünal A. & Ünal E. 1984. Heteropterous insects collected by light traps in Edirne (Turkey). *Turkey Bitki Koruma Dergisi* 8: 215–224.

Önder F., Karsavuran Y. & Örümlü A.E. 1995a. Güneydoğu Anadolu Projesi (GAP) uygulama alanında saptanan Cimicoidea ve Tingoidea (Heteroptera) türlerinin durumu ve gelecek için düşündürdükleri. *In*: *GAP Bölgesi Bitki Koruma Sorunları ve Çözüm Önerileri Sempozyumu*: 149–158.

Önder F., Karsavuran Y., Pehlivan E. & Turanlı F. 1995b. Güneydoğu Anadolu Projesi (GAP) uygulama alanında saptanan Pentatomoidea (Heteroptera) türleriyle ilgili bir değerlendirme. *In*: *GAP Bölgesi Bitki Koruma Sorunları ve Çözüm Önerileri Sempozyumu*: 120–130.

Önder F., Karsavuran Y., Tezcan S. & Fent M. 2006. *Heteroptera* (*Insecta*) *Catalogue of Turkey*. META Basım Matbaacılık, İzmir.

Özesmi U. & Önder F. 1988. Sultan Sazlığı (Kayseri)'nın sucul Heteroptera ve Coleoptera türleri üzerine faunistik bir çalışma. *In*: *IX. Ulusal Biyoloji Kongresi*: 177–186.

Özhatay F., Kültür Ş. & Gürdal Abamor B. 2022. Check-list of additional taxa to the supplement of flora of Turkey X. *İstanbul Journal of Pharmacy* 52 (2): 227–250.
https://doi.org/10.26650/istanbuljpharm.2022.1096223

Özsaraç Ö. 2004. *Çiçekdağı (Kırşehir) Heteropterleri*. PhD thesis, Gazi University, Ankara.

Özsaraç H., Kıyak S. & Özsaraç Ö. 2001a. A study on the fauna of Heteroptera of Gökçeada (Çanakkale)-II. *Journal of the Institute of Science and Technology of Gazi University* 14 (4): 1167–1182.

Özsaraç H., Kıyak S. & Özsaraç Ö. 2001b. A study on the fauna of Heteroptera of Gökçeada (Çanakkale)-I. *Journal of the Institute of Science and Technology of Gazi University* 14 (3): 841–855.

Pagola-Carte S. 2017. *Psallus* (*Psallus*) *anashanti* n. sp. from the Basque Country, northern Iberian Peninsula (Hemiptera: Heteroptera: Miridae). *Heteropterus Revista de Entomología* 17 (1): 9–20.

Pagola-Carte S. 2018. *Psallus* (*Psallus*) *enejokosu* n. sp. from the Basque Country, northern Iberian Peninsula (Hemiptera: Heteroptera: Miridae). *Heteropterus Revista de Entomología* 18 (2): 181–191.

Pagola-Carte S. & Matocq A. 2020. Remarks on the complex *Orthotylus* (*Parapachylops*) *junipericola* Linnavuori, 1965, with description of two new subspecies from Morocco (Hemiptera: Heteroptera: Miridae). *Heteropterus Revista de Entomología* 20 (2): 155–166.

Pagola-Carte S. & Rieger C. 2021. Description of a new species of *Phytocoris* from Crete (Hemiptera: Heteroptera: Miridae). *Heteropterus Revista de Entomología* 21 (2): 103–117.

Péricart J. 1972. *Hémiptères Anthocoridae, Cimicidae et Microphysidae de l'Ouest-Paléarctique. Faune de l'Europe et du Bassin méditerranéen 7*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 1983. *Hémiptères Tingidae euro-méditerranéens. Faune de France. Vol. 69*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 1984. *Hémiptères Berytidae. Faune de France. Vol. 70*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 1998a. *Hémiptères Lygaeidae euro-méditerranéens, Volume 1. Faune de France. Vol. 84*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 1998b. *Hémiptères Lygaeidae euro-méditerranéens, Volume 2. Faune de France. Vol. 84*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 1998c. *Hémiptères Lygaeidae euro-méditerranéens, Volume 3. Faune de France. Vol. 84*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Péricart J. 2001. Family Lygaeidae. *In*: Aukema B. & Rieger C. (eds) *Catalogue of the Heteroptera of the Palaearctic Region. Vol. 4*: 35–220. The Netherlands Entomological Society, Amsterdam.

Péricart J. & Golub V.B. 1996. Family Tingidae Laporte, 1832 - lacebugs. *In*: Aukema B. & Rieger C. (eds) *Catalogue of the Heteroptera of the Palaearctic Region. Vol 2: Cimicomorpha I*: 3–78. The Netherlands Entomological Society, Amsterdam.

Péricart J. & Önder F. 1982. Une espèce nouvelle de Tingidae d'Anatolie [Hemiptera]. *L'Entomologiste* 38 (2): 71–73.

Poisson R. 1925. Hémiptères aquatiques d'Asie Mineure recueillis par M. H. Gadeau de Kerville en 1912. Remarques sur les Notonectes. *Bulletin de la Société entomologique de France* 30 (20): 327–330. https://doi.org/10.3406/bsef.1925.27593

Puton A. 1892. Hémiptères d'Akbès, Région de l'Amanus (Syrie septentrionale) récoltés par M. Delagrange. *Revue d'entomologie* 11: 34–36.

Puton A. & Noualhier M. 1895. Supplément à la liste des Hémiptères d'Akbès. *Revue d'Entomologie* 14: 170–177.

Putshkov P.V. & Putshkov V.G. 1996. Family Reduviidae Latreille, 1807. *In*: Aukema B. & Rieger C. (eds) *Catalogue of the Heteroptera of the Palaearctic Region Vol. 2*: 148–265. The Netherlands Entomological Society, Amsterdam.

Putshkov V.G. 1970. Two new species of the tribe Orthotylini (Heteroptera, Miridae) from the West Caucasus. *Dopovidi Akademii Nauk Ukrains'koi RSR, Ser. B* 1970 (7): 653–656.

Putshkov V.G. & Moulet P. 2010. *Hémiptères Reduviidae d'Europe Occidentale. Faune de France. Vol. 92*. Fédération Française des Sociétés de Sciences Naturelles, Paris.

Reuter O.M. 1890. Notes geographiques sur les Héteropteres paléarctiques. *Revue d'Entomologie* 9: 237–245.

Reuter O.M. 1896. *Hemiptera Gymnocerata Europae. Hémiptères Gymnocérates d'Europe, du Bassin de la Méditerranée et de l'Asie Russe. V*. Finska vetenskapssocieteten, Helsingfors. https://doi.org/10.5962/bhl.title.8546

Rieger C. 1985. Ein neuer *Orthonotus* aus Griechenland (Heteroptera, Miridae). *Nachrichtenblatt der Bayerischen Entomologen* 34: 136–138.

Rizzotti Vlach M. 2000. Sulla validita di *Psallus* (*Mesopsallus*) *pseudoambiguus* (Heteroptera Miridae). *Bollettino della Societa Entomologica Italiana* 132: 17–21.

Schuh R.T. & Weirauch C. 2020. *True Bugs of the World* (*Hemiptera: Heteroptera*) *Classification and Natural History*. Second Edition. Siri Scientific Press.

Seidenstücker G. 1954a. Ein neuer *Reduviolus* aus der ferus-Gruppe: *Nabis* (*R.*) *palifer* n. sp. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 125–129.

Seidenstücker G. 1954b. *Monanthia triconula* n. sp. und einige Tingiden aus der südlichen Türkei. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 231–236.

Seidenstücker G. 1954c. *Dichrooscytus tauricus* n. sp. aus dem Bulgar-Dagh (Hem., Het., Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 223–226.

Seidenstücker G. 1954d. *Cyphodema cilicicum* n. sp. (Hem. Het., Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 223–226.

Seidenstücker G. 1956a. Ein neuer *Dicyphus* aus Kleinasien (Heteroptera-Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 21: 145–148.

Seidenstücker G. 1956b. *Heterocordylus carbonellus* sp. n. (Heteroptera, Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 21: 231–235.

Seidenstücker G. 1956c. Eine neue palaearktische Miriden mit Membrane-Pubeszenz (Hemiptera-Heteroptera). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 21: 65–70.

Seidenstücker G. 1957a. Heteroptera aus Anatolien I. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 22: 179–189.

Seidenstücker G. 1957b. Ein neuer und ein verkannter *Thermocoris* Put. (Heteroptera - Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 22: 279–288.

Seidenstücker G. 1957c. Eine neue anatolische Miriden-Art aus der *Lygus*-Verwandschaft. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 22: 171–177.

Seidenstücker G. 1958. Heteropteren aus Anatolien II. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 23: 119–129.

Seidenstücker G. 1959a. *Sigara emesa* n.sp. and some Corixidae from Turkey and Syria. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 24: 33–38.

Seidenstücker G. 1959b. Zwei neue *Macrotylus*-Arten aus der Turkei (Hem., Het., Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 24: 25–31.

Seidenstücker G. 1960a. Heteropteren aus Anatolien III. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 25: 145–154.

Seidenstücker G. 1960b. Ein neuer *Arenocoris* aus der Türkei. *Opuscula Zoologica.* 41: 1–4.

Seidenstücker G. 1960c. Über die Formen der Gattung *Lygaeosoma* Spin. (Hem. Het.). *Opuscula Zoologica* 40: 1–8.

Seidenstücker G. 1961. Zwei neue Miriden-Arten aus Anatolien. *Abhandlungen und Berichte aus dem Staatlichen Museum für Tierkunde in Dresden* 26: 47–51.

Seidenstücker G. 1962a. Zwei neue *Dimorphocoris*-Arten aus Anatolien (Heteroptera, Miridae). *Reichenbachia* 1: 21–31.

Seidenstücker G. 1962b. Über einige Miriden aus Kleinasien mit Beschreibung von zwei neuen Halticinen (Heteroptera). *Reichenbachia* 1: 129–143.

Shorthouse D.P. 2010. SimpleMappr, an online tool to produce publication-quality point maps. Available from https://www.simplemappr.net [Accessed 27 Jul. 2023].

Stichel W. 1956. *Illustrierte Bestimmungstabellen der Wanzen. II. Europa.* (*Hemiptera-Heteroptera Europae*) *2*. Stichel, Berlin-Hermsdorf.

Streito J.C. & Matocq A. 2006. *Orthopidea fusciceps* Reuter, 1899, genre et espèce nouveaux por la faune de France et notes sur deux rares Hétéroptères récoltés dans l'Hérault (Hemiptera Heteroptera). *L'Entomologiste* 62: 73–74.

Štusák J.M. & Önder F. 1982. A new species of *Dictyonota* Curtes, 1827 from Turkey (Heteroptera: Tingidae). *Türkiye Bitki Koruma Dergisi* 6: 67–74.

Tezcan S. 2020. Analysis of the insect fauna of Turkey and suggestions for future studies. *Munis Entomology & Zoology* 15 (2): 690–710.

Vigna Taglianti A., Audisio P.A., Biondi M., Bologna M.A., Carpaneto G.M., De Biase A., Fattorini S., Piattella E., Sindaco R., Venchi A. & Zapparoli M. 1999. A proposal for a chorotype classification of the Near East fauna, in the framework of the Western Palearctic region. *Biogeographia – The Journal of Integrative Biogeography* 20 (1). https://doi.org/10.21426/B6110172

Wagner E. 1954a. *Macrotylus seidenstückeri* nov. spec. (Hem. Het. Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 237–239.

Wagner E. 1954b. *Oncotylus viridiflavus longipes* nov. subspec. (Hem. Het. Miridae). *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 19: 241–243.

Wagner E. 1955. 3 neue *Phytocoris*-Arten aus der Turkei und aus Syrien. *Revue de la Faculté des Sciences de l'Université d'Istanbul* (*B*) 20: 161–168.

Wagner E. 1959. Beitrag zur Heteropterenfauna Anatoliens. *Zeitschrift für Angewandte Entomologie* 49: 102–113.

Wagner E. 1960. Eine neue *Atractotomus*-Art aus der Türkei (Hem. Het. Miridae) 90: 168-169. *Bollettino della Società Entomologica Italiana* 90: 168–169.

Wagner E. 1966. Eine Heteropterenausbeute aus der Türkei (Hemiptera, Heteroptera). *Bulletin des Recherches Agronomiques de Gembloux* 1 (4): 646–654.

Wagner E. 1974. Die Miridae Hahn, 1831, des Mittelmeerraumes und der Makaronesischen Inseln (Hemiptera, Heteroptera). Vol. 2. *Entomologische Abhandlungen Museum für Tierkunde Dresden* 39 (Suppl.): 1–421.

Wagner E. 1975. Die Miridae Hahn, 1831, des Mitelmeerraumes und der Makaronesischen Inseln (Hemiptera, Heteroptera). Vol. 3. *Entomologische Abhandlungen* 40 (Suppl.): 1–483. https://doi.org/10.1515/9783112653241

Wagner E. 1976. Über einige neue Miridae aus der Türkei (Hemiptera, Heteroptera). *Reichenbachia* 16: 121–128.

Wyniger D. 2004. *Central European Species of the Phyline Bug Genus Psallus (Hemiptera, Heteroptera, Miridae): Phylogeny and Taxonomy*. PhD Thesis, University of Basel, Switzerland.

Yasunaga T. & Vinokurov N.N. 2000. The phyline plant bug genus *Psallus* Fieber in Japan (Heteroptera: Miridae: Phylinae). *Entomological Science* 3: 653–668.

Yayla A. 1984. *Antalya ve Çevresi Zeytinağaçlarında Rastlanan Faydalı Heteropter'lerin Tanınmaları, Konukçuları ve Etkinlikleri Üzerinde Araştırmalar*. Zirai Mücadele ve Zirai Karantina Genel Müdürlüğü, Ankara.

Yazıcı G. & Yıldırım E. 2016a. Contribution to the knowledge of the Bryocorinae and Deraeocorinae (Hemiptera: Heteroptera: Miridae) fauna of Turkey. *Linzer Biologische Beiträge* 48 (1): 887–896.

Yazıcı G. & Yıldırım E. 2016b. Distributional data on Mirini (Hemiptera: Heteroptera: Miridae: Mirinae) fauna of Turkey. *Linzer Biologische Beiträge* 48 (1): 859–886.

Yazıcı G. & Yıldırım E. 2016c. Contribution to the knowledge of Phylinae (Hemiptera: Heteroptera: Miridae) from Turkey. *Bitki Koruma Bülteni* 56 (3): 327–348.

Yazıcı G. & Yıldırım E. 2017a. New and interesting records of *Orthops* Fieber,1858 (Hemiptera: Heteroptera: Miridae) in Turkey. *Acta Entomologica Serbica* 22: 1–14.

Yazıcı G. & Yıldırım E. 2017b. Contribution to the knowledge of the Herdoniini and Stenodemini (Hemiptera: Heteroptera: Miridae: Mirinae) fauna of Turkey. *Entomofauna* 38 (9): 177–192.

Yazıcı G. & Yıldırım E. 2017c. A new record of a genus *Hoplomachus* Fieber, 1858 and species *Hoplomachus thunbergii* (Fallen, 1807) (Hemiptera: Heteroptera: Miridae: Phylinae) from Turkey. *Turkish Journal of Zoology* 41: 749–751. https://doi.org/10.3906/zoo-1605-7

Yazıcı G. & Yıldırım E. 2018. Three new records from Phylinae (Hemiptera: Heteroptera: Miridae) for the Turkish fauna. *Turkish Journal of Zoology* 42: 508–512. https://doi.org/10.3906/zoo-1801-18

Yazıcı G., Yıldırım E. & Moulet P. 2014. Contribution to the knowledge of the Pentatomidae and Plataspidae (Hemiptera, Heteroptera, Pentatomomorpha) fauna of Turkey. *Linzer Biologische Beitraege* 46 (2): 1819–1842.

Yazıcı G., Avar Y. & Yıldırım E. 2015a. Contribution to the knowledge of the Cydnidae (Hemiptera, heteroptera, pentatomoidea) fauna of Turkey. *Turkish Journal of Zoology* 39 (4): 604–609. https://doi.org/10.3906/zoo-1404-59

Yazıcı G., Yıldırım E. & Moulet P. 2015b. Contribution to the knowledge of the Lygaeoidea (Hemiptera, Heteroptera) fauna of Turkey. *Linzer Biologische Beitraege* 47 (1): 969–990.

Yazıcı G., Bal N. & Kıyak S. 2022. Contribution to the knowledge of the fauna of the Alydidae, Anthocoridae, Berytidae, Coreidae, Cydnidae, Lygaeidae, Nabidae, Plataspidae, Pyrrhocoridae, Reduviidae, Rhopalidae, Scutelleridae, Stenocephalidae, Tingidae (Hemiptera: Heteroptera) with a new record of Çankırı Province in Turkey. *Journal of the Heteroptera of Turkey* 4 (2): 184–204. https://doi.org/10.5281/zenodo.7358964

Yiğit A. & Uygun N. 1982. Adana, İçel Ve Kahramanmaraş İlleri Elma Bahçelerinde Zararlı Ve Yararlı Faunanın Saptanması Üzerinde Çalışmalar. *Bitki Koruma Bülteni* 22 (4): 163–178.

Yıldırım E., Moulet P., Külekçi G. & Bulak Y. 2010. Contribution to the knowledge of Reduviidae (Hemiptera) fauna of Turkey. *Linzer Biologische Beiträge* 42 (1): 825–831.

Yıldırım E., Yazıcı G. & Linnavuori R.E. 2011. Contribution to the knowledge of Alydidae, Coreidae, Rhopalidae and Stenocephalidae (Coreoidea: Heteroptera: Hemiptera) fauna of Turkey. *Linzer Biologische Beiträge* 43 (2): 1625–1639.

Yıldırım E., Yazıcı G. & Moulet P. 2013b. Contribution To the Knowledge of the Gerridae, Coreoidea, Piesmatidae, Saldidae, Corixoidea, Nepoidea and Notonectidae (Hemiptera, Heteroptera) Fauna of Turkey. *Linzer Biologische Beiträge* 45 (1): 995–1010.

Yıldırım E., Yazıcı G., Kul R. & Moulet P. 2013a. Contribution to the knowledge of the Anthocoridae, Lyctocoridae, Nabidae, Reduviidae and Tingidae (Hemiptera, Heteroptera) fauna of Turkey. *Journal of the Entomological Research Society* 15 (3): 53–66.

Yıldırım E., Yazıcı G. & Karakurt N. 2014. Contribution to the knowledge of the Scutelleridae (Hemiptera, Heteroptera) fauna of Turkey. *Turkish Journal of Zoology* 38 (5): 544–551. https://doi.org/10.3906/zoo-1307-23

Zaitzeva I.F. 1968. A survey of species of the genus *Psallus* Fieb. (Heteroptera Miridae) from the Caucasus. *Entomologicheskoe Obozrenie* 47: 865–877.

Zengin P. & Dursun A. 2019. A study on the Coreoidea (Hemiptera: Heteroptera) fauna of Amasya. *Acta Biologica Turcica* 32 (3): 160–167.

Manuscript received: 8 August 2023
Manuscript accepted: 24 November 2023
Published on: 17 June 2024
Topic editor: Tony Robillard
Section editor: Christopher Dietrich
Desk editor: Natacha Beau

Printed versions of all papers are also deposited in the libraries of the institutes that are members of the *EJT* consortium: Muséum national d'histoire naturelle, Paris, France; Meise Botanic Garden, Belgium; Royal Museum for Central Africa, Tervuren, Belgium; Royal Belgian Institute of Natural Sciences, Brussels, Belgium; Natural History Museum of Denmark, Copenhagen, Denmark; Naturalis Biodiversity Center, Leiden, the Netherlands; Museo Nacional de Ciencias Naturales-CSIC, Madrid, Spain; Leibniz Institute for the Analysis of Biodiversity Change, Bonn – Hamburg, Germany; National Museum of the Czech Republic, Prague, Czech Republic.

Supplementary files

Supp. file 1. Analytic data for the checklist of Heteroptera of Turkey, including species distributions at the provincial level.
https://doi.org/10.5852/ejt.2024.937.2571.11675

Supp. file 2. Data of the research-grade iNaturalist records of Heteroptera from Turkey.
https://doi.org/10.5852/ejt.2024.937.2571.11677

Appendix 1. The checklist of the Heteroptera of Turkey

Cimicomorpha: Cimicoidea: Anthocoridae: Anthocorinae: Anthocorini

1. *Acompocoris pygmaeus* (Fallén, 1807)
2. *Anthocoris confusus* Reuter, 1884
3. *Anthocoris gallarumulmi* (De Geer, 1773)
4. *Anthocoris minki pistaciae* Wagner, 1957
5. *Anthocoris nemoralis* (Fabricius, 1794)
6. *Anthocoris nemorum* (Linnaeus, 1761)
7. *Anthocoris pilosus* (Jakovlev, 1877)
8. *Anthocoris simulans* Reuter, 1884
9. *Anthocoris visci* Douglas, 1889
10. *Elatophilus* (*Elatophilus*) *nigricornis* (Zetterstedt, 1838)
11. *Elatophilus* (*Euhadrocerus*) *hebraicus* Péricart, 1967
12. *Elatophilus* (*Euhadrocerus*) *pachycnemis* Horváth, 1907
13. *Temnostethus* (*Ectemnus*) *reduvinus reduvinus* (Herrich-Schaeffer, 1850)
14. *Temnostethus* (*Montandoniella*) *dacicus* (Puton, 1888)
15. *Temnostethus* (*Temnostethus*) *gracilis* Horváth, 1907
16. *Temnostethus* (*Temnostethus*) *longirostris* (Horváth, 1907)
17. *Temnostethus* (*Temnostethus*) *pusillus* (Herrich-Schaeffer, 1835)
18. *Temnostethus* (*Temnostethus*) *tibialis* Reuter, 1888
19. *Temnostethus* (*Temnostethus*) *wichmanni* Wagner, 1961

Cimicomorpha: Cimicoidea: Anthocoridae: Anthocorinae: Dufouriellini

20. *Brachysteles parvicornis* (A. Costa, 1847)
21. *Buchananiella continua* (White, 1880)
22. *Cardiastethus nazarenus* Reuter, 1884
23. *Dufouriellus ater* (Dufour, 1833)
24. *Dysepicritus rufescens* (A. Costa, 1847)
25. *Amphiareus constrictus* (Stål, 1860)
26. *Amphiareus obscuriceps* (Poppius, 1909)

Cimicomorpha: Cimicoidea: Anthocoridae: Anthocorinae: Oriini

27. *Montandoniola moraguesi* (Puton, 1896)
28. *Orius* (*Heterorius*) *horvathi* (Reuter, 1884)
29. *Orius* (*Heterorius*) *laticollis* (Reuter, 1884)
30. *Orius* (*Heterorius*) *majusculus* (Reuter, 1879)
31. *Orius* (*Heterorius*) *minutus* (Linnaeus, 1758)
32. *Orius* (*Heterorius*) *vicinus* (Ribaut, 1923)
33. *Orius* (*Orius*) *laevigatus laevigatus* (Fieber, 1860)
34. *Orius* (*Orius*) *niger* (Wolff, 1811)
35. *Orius* (*Orius*) *pallidicornis* (Reuter, 1884)
36. *Xylocoris* (*Arrostelus*) *flavipes* (Reuter, 1875)
37. *Xylocoris* (*Proxylocoris*) *galactinus* (Fieber, 1836)

38. *Xylocoris* (*Stictosynechia*) *lativentris* (J. Sahlberg, 1870)
39. *Xylocoris* (*Stictosynechia*) *maculipennis* Baerensprung, 1858
40. *Xylocoris* (*Xylocoris*) *cursitans* (Fallén, 1807)
41. *Xylocoris* (*Xylocoris*) *obliquus* A. Costa, 1853

Cimicomorpha: Cimicoidea: Cimicidae: Cacodminae

42. *Cacodmus vicinus* Horváth, 1934

Cimicomorpha: Cimicoidea: Cimicidae: Cimicinae

43. *Cimex columbarius* Jenyns, 1839
44. *Cimex hirundinis* Lamarck, 1816
45. *Cimex lectularius* Linnaeus, 1758
46. *Cimex pipistrelli* Jenyns, 1839

Cimicomorpha: Cimicoidea: Lyctocoridae

47. *Lyctocoris* (*Lyctocoris*) *campestris* (Fabricius, 1794)
48. *Lyctocoris* (*Lyctocoris*) *dimidiatus* (Spinola, 1837)

Cimicomorpha: Microphysoidea: Microphysidae

49. *Loricula* (*Loricula*) *bipunctata* (Perris, 1857)
50. *Loricula* (*Loricula*) *pselaphiformis* Curtis, 1833

Cimicomorpha: Miroidea: Miridae: Bryocorinae: Bryocorini

51. *Monalocoris* (*Monalocoris*) *filicis* (Linnaeus, 1758)

Cimicomorpha: Miroidea: Miridae: Bryocorinae: Dicyphini

52. *Campyloneura virgula* (Herrich-Schaeffer, 1835)
53. *Dicyphus* (*Brachyceroea*) *albonasutus* Wagner, 1951
54. *Dicyphus* (*Brachyceroea*) *annulatus* (Wolff, 1804)
55. *Dicyphus* (*Brachyceroea*) *digitalidis* Josifov, 1958
56. *Dicyphus* (*Brachyceroea*) *geniculatus* (Fieber, 1858)
57. *Dicyphus* (*Brachyceroea*) *montandoni* Reuter, 1888
58. *Dicyphus* (*Brachyceroea*) *seleucus* Seidenstücker, 1969
59. *Dicyphus* (*Dicyphus*) *alkannae* Seidenstücker, 1956
60. *Dicyphus* (*Dicyphus*) *caycumensis* Sanchez & Cassis, 2018
61. *Dicyphus* (*Dicyphus*) *cerastii* Wagner, 1951
62. *Dicyphus* (*Dicyphus*) *eckerleini* Wagner, 1963
63. *Dicyphus* (*Dicyphus*) *errans* (Wolff, 1804)
64. *Dicyphus* (*Dicyphus*) *hyalinipennis* (Burmeister, 1835)
65. *Dicyphus* (*Dicyphus*) *josifovi* Rieger, 1995
66. *Dicyphus* (*Dicyphus*) *lindbergi* Wagner, 1951
67. *Dicyphus* (*Mesodicyphus*) *martinoi* Josifov, 1958
68. *Macrolophus costalis* Fieber, 1858
69. *Macrolophus epilobii* V.G. Putshkov, 1978
70. *Macrolophus glaucescens* Fieber, 1858
71. *Macrolophus melanotoma* (A. Costa, 1853)
72. *Macrolophus pygmaeus* (Rambur, 1839)

73. *Nesidiocoris tenuis* (Reuter, 1895)
74. *Singhalesia turcica* (Seidenstücker, 1959)

Cimicomorpha: Miroidea: Miridae: Cylapinae: Fulviini

75. *Fulvius anatolicus* Çerçi & Gorczyca, 2021
76. *Fulvius oxycarenoides* (Reuter, 1878)

Cimicomorpha: Miroidea: Miridae: Deraeocorinae: Clivinemini

77. *Bothynotus pilosus* (Boheman, 1852)

Cimicomorpha: Miroidea: Miridae: Deraeocorinae: Deraeocorini

78. *Alloeotomus cyprius* (Wagner, 1953)
79. *Alloeotomus germanicus* Wagner, 1939
80. *Alloeotomus gothicus* (Fallén, 1807)
81. *Cranocapsus* (*Cranocapsus*) *turcicus* Kıyak, 1990
82. *Deraeocoris* (*Camptobrochis*) *pallens pallens* (Reuter, 1904)
83. *Deraeocoris* (*Camptobrochis*) *punctulatus* (Fallén, 1807)
84. *Deraeocoris* (*Camptobrochis*) *serenus* (Douglas & Scott, 1868)
85. *Deraeocoris* (*Deraeocoris*) *delagrangei* (Puton, 1892)
86. *Deraeocoris* (*Deraeocoris*) *flavilinea* (A. Costa, 1862)
87. *Deraeocoris* (*Deraeocoris*) *punctum* (Rambur, 1839)
88. *Deraeocoris* (*Deraeocoris*) *ruber* (Linnaeus, 1758)
89. *Deraeocoris* (*Deraeocoris*) *rutilus* (Herrich-Schaeffer, 1838)
90. *Deraeocoris* (*Deraeocoris*) *schach* (Fabricius, 1781)
91. *Deraeocoris* (*Deraeocoris*) *scutellaris* (Fabricius, 1794)
92. *Deraeocoris* (*Deraeocoris*) *trifasciatus* (Linnaeus, 1767)
93. *Deraeocoris* (*Deraeocoris*) *ventralis ventralis* Reuter, 1904
94. *Deraeocoris* (*Knightocapsus*) *lutescens* (Schilling, 1837)
95. *Deraeocoris* (*Knightocapsus*) *putoni* (Montandon, 1885)

Cimicomorpha: Miroidea: Miridae: Deraeocorinae: Hyaliodini

96. *Stethoconus pyri* (Mella, 1869)

Cimicomorpha: Miroidea: Miridae: Isometopinae: Isometopini

97. *Isometopus* (*Isometopus*) *anlasi* Çerçi & Dursun, 2017
98. *Isometopus* (*Isometopus*) *diversiceps* Linnavuori, 1962
99. *Isometopus* (*Isometopus*) *intrusus* Herrich-Schaeffer, 1835
100. *Isometopus* (*Isometopus*) *mirificus* Mulsant & Rey, 1879

Cimicomorpha: Miroidea: Miridae: Mirinae: Herdoniini

101. *Camponotidea fieberi* Reuter, 1879
102. *Camponotidea saundersi* (Puton, 1874)

Cimicomorpha: Miroidea: Miridae: Mirinae: Mirini

103. *Adelphocoris bimaculicollis* Lindberg, 1948
104. *Adelphocoris detritus* (Fieber, 1861)
105. *Adelphocoris insignis* Horváth, 1898

106. *Adelphocoris lineolatus* (Goeze, 1778)
107. *Adelphocoris quadripunctatus* (Fabricius, 1794)
108. *Adelphocoris seticornis* (Fabricius, 1775)
109. *Adelphocoris ticinensis* (Meyer-Dür, 1843)
110. *Adelphocoris vandalicus* (Rossi, 1790)
111. *Agnocoris reclairei* (Wagner, 1949)
112. *Agnocoris rubicundus* (Fallén, 1807)
113. *Alloeonotus egregius* Fieber, 1864
114. *Alloeonotus fulvipes* (Scopoli, 1763)
115. *Alloeonotus obtusus* Wagner, 1968
116. *Aphanosoma italicum* A. Costa, 1842
117. *Apolygus lucorum* (Meyer-Dür, 1843)
118. *Brachycoleus bolivari* Horváth, 1901
119. *Brachycoleus decolor* Reuter, 1887
120. *Brachycoleus lineellus* Jakovlev, 1884
121. *Brachycoleus pilicornis pilicornis* (Panzer, 1805)
122. *Brachycoleus steini* Reuter, 1877
123. *Brachycoleus thoracicus* Puton, 1892
124. *Calocoris affinis* (Herrich-Schaeffer, 1835)
125. *Calocoris nemoralis* (Fabricius, 1787)
126. *Calocoris porphyropterus* Reuter, 1894
127. *Calocoris roseomaculatus angularis* (Fieber, 1864)
128. *Calocoris roseomaculatus saucius* Linnavuori, 1951
129. *Calocoris rubicundus* Reuter, 1904
130. *Camptozygum aequale* (Villers, 1789)
131. *Capsodes bicolor* (Fieber, 1864)
132. *Capsodes gothicus gothicus* (Linnaeus, 1758)
133. *Capsus ater* (Linnaeus, 1758)
134. *Capsus cinctus* (Kolenati, 1845)
135. *Charagochilus* (*Charagochilus*) *gyllenhalii* (Fallén, 1807)
136. *Closterotomus annulus* (Brullé, 1832)
137. *Closterotomus costae* (Reuter, 1888)
138. *Closterotomus fulvomaculatus* (De Geer, 1773)
139. *Closterotomus hedenborgi* (Fieber, 1870)
140. *Closterotomus histrio histrio* (Reuter, 1877)
141. *Closterotomus kroesus* (Seidenstücker, 1977)
142. *Closterotomus krueperi* (Reuter, 1880)
143. *Closterotomus norwegicus* (Gmelin, 1790)
144. *Closterotomus picturatus* (Reuter, 1896)
145. *Closterotomus putoni* (Horváth, 1888)
146. *Closterotomus reuteri* (Horváth, 1882)

147. *Closterotomus trivialis* (A. Costa, 1853)
148. *Creontiades pallidus* (Rambur, 1839)
149. *Cyphodema cilicica* Seidenstücker, 1954
150. *Cyphodema humbaba* Linnavuori, 1984
151. *Cyphodema instabilis* (Lucas, 1849)
152. *Cyphodema mendosa* Montandon, 1887
153. *Cyphodema pernix* Horváth, 1906
154. *Cyphodema rubrica* Seidenstücker, 1954
155. *Dichrooscytus cyprius* Lindberg, 1948
156. *Dichrooscytus rufipennis* (Fallén, 1807)
157. *Dichrooscytus seidenstueckeri* Josifov, 1974
158. *Dichrooscytus tauricus* Seidenstücker, 1954
159. *Dionconotus confluens confluens* Hoberlandt, 1945
160. *Dionconotus neglectus neglectus* (Fabricius, 1798)
161. *Dionconotus parnisanus* Hoberlandt, 1945
162. *Eurystylus bellevoyei* (Reuter, 1879)
163. *Grypocoris* (*Grypocoris*) *fieberi* Douglas & Scott, 1868
164. *Grypocoris* (*Grypocoris*) *melanopygus* Horváth, 1906
165. *Grypocoris* (*Turciocoris*) *amoenus* (Douglas & Scott, 1868)
166. *Grypocoris* (*Turciocoris*) *heinzi* Wagner, 1966
167. *Grypocoris* (*Turciocoris*) *meyeri* (Kolenati, 1845)
168. *Grypocoris* (*Turciocoris*) *syriacus* Reuter, 1896
169. *Horistus* (*Horistus*) *bimaculatus* (Jakovlev, 1884)
170. *Horistus* (*Horistus*) *infuscatus* (Brullé, 1832)
171. *Horistus* (*Horistus*) *turcomanus* (Horváth, 1889)
172. *Horistus* (*Primihoristus*) *orientalis* (Gmelin, 1790)
173. *Ischnoscelicoris rubrinervis* (Reuter, 1880)
174. *Liocoris tripustulatus* (Fabricius, 1781)
175. *Lygocoris pabulinus* (Linnaeus, 1761)
176. *Lygocoris pernicoides* Seidenstücker, 1957
177. *Lygus gemellatus* (Herrich-Schaeffer, 1835)
178. *Lygus israelensis* Linnavuori, 1962
179. *Lygus italicus* Wagner, 1950
180. *Lygus pratensis* (Linnaeus, 1758)
181. *Lygus rugulipennis* Poppius, 1911
182. *Lygus wagneri* Remane, 1955
183. *Megacoelum brevirostre* Reuter, 1879
184. *Megacoelum infusum* (Herrich-Schaeffer, 1837)
185. *Megacoelum myrti* Linnavuori, 1965
186. *Megaloceroea recticornis* (Geoffroy, 1785)
187. *Mermitelocerus schmidtii* (Fieber, 1836)

188. *Miridius pallidus* Horváth, 1887
189. *Miridius quadrivirgatus* (A. Costa, 1853)
190. *Miris striatus* (Linnaeus, 1758)
191. *Odontoplatys bidentulus* (Herrich-Schaeffer, 1842)
192. *Odontoplatys suturalis* (Jakovlev, 1883)
193. *Orthops* (*Montanorthops*) *forelii* Fieber, 1858
194. *Orthops* (*Montanorthops*) *montanus* (Schilling, 1837)
195. *Orthops* (*Montanorthops*) *pilosulus* Jakovlev, 1877
196. *Orthops* (*Orthops*) *basalis* (A. Costa, 1853)
197. *Orthops* (*Orthops*) *campestris* (Linnaeus, 1758)
198. *Orthops* (*Orthops*) *frenatus* (Horváth, 1894)
199. *Orthops* (*Orthops*) *kalmii* (Linnaeus, 1758)
200. *Pachypterna fieberi* Fieber, 1858
201. *Pantilius* (*Pantilius*) *tunicatus* (Fabricius, 1781)
202. *Phytocoris* (*Compsocerocoris*) *cyprius* Wagner, 1967
203. *Phytocoris* (*Compsocerocoris*) *falcatus* Linnavuori, 1984
204. *Phytocoris* (*Compsocerocoris*) *iyribozi* Çerçi, Özgen & Tezcan, 2021
205. *Phytocoris* (*Compsocerocoris*) *sanctipetri* Carapezza, 1985
206. *Phytocoris* (*Eckerleinius*) *niveatus* Horváth, 1891
207. *Phytocoris* (*Eckerleinius*) *salsolae* Puton, 1874
208. *Phytocoris* (*Eriamiris*) *humeralis* Wagner, 1976
209. *Phytocoris* (*Exophytocoris*) *carapezzai* Çerçi, Koçak & Tezcan, 2019
210. *Phytocoris* (*Exophytocoris*) *loralis* Wagner, 1976
211. *Phytocoris* (*Exophytocoris*) *matocqi* Pagola-Carte, 2019
212. *Phytocoris* (*Exophytocoris*) *oleae* Linnavuori, 1962
213. *Phytocoris* (*Exophytocoris*) *parvulus* Reuter, 1880
214. *Phytocoris* (*Exophytocoris*) *pinihalepensis* Lindberg, 1948
215. *Phytocoris* (*Exophytocoris*) *pluotae* Pagola-Carte, 2019
216. *Phytocoris* (*Exophytocoris*) *scitulus scitulus* Reuter, 1908
217. *Phytocoris* (*Exophytocoris*) *tauricola* Linnavuori, 1965
218. *Phytocoris* (*Ktenocoris*) *austriacus* Wagner, 1954
219. *Phytocoris* (*Ktenocoris*) *crux* Wagner, 1959
220. *Phytocoris* (*Ktenocoris*) *exoletus* A. Costa, 1853
221. *Phytocoris* (*Ktenocoris*) *flammula* Reuter, 1875
222. *Phytocoris* (*Ktenocoris*) *insignis* Reuter, 1876
223. *Phytocoris* (*Ktenocoris*) *obliquoides* Wagner, 1959
224. *Phytocoris* (*Ktenocoris*) *phrygicus* Wagner, 1955
225. *Phytocoris* (*Ktenocoris*) *raunoi* Kerzhner & Schuh, 1995
226. *Phytocoris* (*Ktenocoris*) *seidenstueckeri* Wagner, 1955
227. *Phytocoris* (*Ktenocoris*) *tridens* Wagner, 1954
228. *Phytocoris* (*Ktenocoris*) *ulmi* (Linnaeus, 1758)

229. *Phytocoris* (*Ktenocoris*) *varipes* Boheman, 1852
230. *Phytocoris* (*Ktenocoris*) *weidneri* Wagner, 1975
231. *Phytocoris* (*Leptophytocoris*) *bivittatus* Reuter, 1904
232. *Phytocoris* (*Leptophytocoris*) *extensus* Reuter, 1904
233. *Phytocoris* (*Leptophytocoris*) *miridioides* Lethierry, 1877
234. *Phytocoris* (*Leptophytocoris*) *ustulatus* Herrich-Schaeffer, 1835
235. *Phytocoris* (*Phytocoris*) *confusus* Reuter, 1896
236. *Phytocoris* (*Phytocoris*) *pilifer* Reuter, 1880
237. *Phytocoris* (*Phytocoris*) *pini* Kirschbaum, 1856
238. *Phytocoris* (*Phytocoris*) *setiger* Reuter, 1896
239. *Phytocoris* (*Phytocoris*) *tiliae tiliae* (Fabricius, 1777)
240. *Phytocoris* (*Stictophytocoris*) *linnavuorii* Kerzhner & Schuh, 1998
241. *Phytocoris* (*Stictophytocoris*) *meridionalis* Herrich-Schaeffer, 1835
242. *Pinalitus atomarius* (Meyer-Dür, 1843)
243. *Pinalitus cervinus* (Herrich-Schaeffer, 1841)
244. *Pinalitus conspurcatus* (Reuter, 1875)
245. *Pinalitus viscicola* (Puton, 1888)
246. *Polymerus* (*Poeciloscytus*) *asperulae* (Fieber, 1861)
247. *Polymerus* (*Poeciloscytus*) *brevicornis* (Reuter, 1879)
248. *Polymerus* (*Poeciloscytus*) *cognatus* (Fieber, 1858)
249. *Polymerus* (*Poeciloscytus*) *microphthalmus* (Wagner, 1951)
250. *Polymerus* (*Poeciloscytus*) *palustris* (Reuter, 1907)
251. *Polymerus* (*Poeciloscytus*) *unifasciatus* (Fabricius, 1794)
252. *Polymerus* (*Poeciloscytus*) *vulneratus* (Panzer, 1806)
253. *Polymerus* (*Polymerus*) *holosericeus* Hahn, 1831
254. *Pseudomegacoelum beckeri* (Fieber, 1870)
255. *Pseudomegacoelum quercicola* (Linnavuori, 1965)
256. *Rauniella ishtar* (Linnavuori, 1984)
257. *Reuterista caucasica* (Poppius, 1912)
258. *Reuterista instabilis* (Fieber, 1861)
259. *Rhabdomiris striatellus* (Fabricius, 1794)
260. *Saundersiella hirta* Wagner, 1968
261. *Saundersiella moerens* (Reuter, 1876)
262. *Stenotus binotatus* (Fabricius, 1794)
263. *Taurocalocoris samai* Carapezza, 1998
264. *Taylorilygus apicalis* (Fieber, 1861)
265. *Ulumiris olympicus* Seidenstücker, 1965

Cimicomorpha: Miroidea: Miridae: Mirinae: Stenodemini

266. *Acetropis* (*Acetropis*) *carinata* (Herrich-Schaeffer, 1841)
267. *Acetropis* (*Acetropis*) *sinuata* Wagner, 1951
268. *Leptopterna dolabrata* (Linnaeus, 1758)

269. *Leptopterna euxina* Vinokurov, 1982
270. *Leptopterna ferrugata* (Fallén, 1807)
271. *Myrmecoris gracilis* (R.F. Sahlberg, 1848)
272. *Notostira elongata* (Geoffroy, 1785)
273. *Notostira erratica* (Linnaeus, 1758)
274. *Notostira poppiusi* Reuter, 1911
275. *Pithanus marshalli* Douglas & Scott, 1868
276. *Stenodema* (*Brachystira*) *calcarata* (Fallén, 1807)
277. *Stenodema* (*Brachystira*) *pilosa* (Jakovlev, 1889)
278. *Stenodema* (*Brachystira*) *trispinosa* Reuter, 1904
279. *Stenodema* (*Stenodema*) *holsata* (Fabricius, 1787)
280. *Stenodema* (*Stenodema*) *laevigata* (Linnaeus, 1758)
281. *Stenodema* (*Stenodema*) *sericans* (Fieber, 1861)
282. *Stenodema* (*Stenodema*) *turanica* Reuter, 1904
283. *Stenodema* (*Stenodema*) *virens* (Linnaeus, 1767)
284. *Teratocoris antennatus* (Boheman, 1852)
285. *Trigonotylus brevipes* Jakovlev, 1880
286. *Trigonotylus pulchellus* (Hahn, 1834)
287. *Trigonotylus ruficornis* (Geoffroy, 1785)
288. *Trigonotylus tenuis* Reuter, 1893

Cimicomorpha: Miroidea: Miridae: Orthotylinae: Halticini

289. *Anapus dorsalis* (Reuter, 1890)
290. *Anapus kirschbaumi* Stål, 1858
291. *Barbarosia decalvata* (Seidenstücker, 1962)
292. *Chorosomella jakowleffi* Horváth, 1906
293. *Dasyscytus sordidus* Fieber, 1864
294. *Dimorphocoris* (*Dimorphocoris*) *argaeicus* Hoberlandt, 1956
295. *Dimorphocoris* (*Dimorphocoris*) *cilix* Seidenstücker, 1962
296. *Dimorphocoris* (*Dimorphocoris*) *debilis debilis* (Reuter, 1880)
297. *Dimorphocoris* (*Dimorphocoris*) *distylus* Seidenstücker, 1964
298. *Dimorphocoris* (*Dimorphocoris*) *mariae* Linnavuori, 1952
299. *Dimorphocoris* (*Dimorphocoris*) *seidenstueckeri* Linnavuori, 1984
300. *Dimorphocoris* (*Dimorphocoris*) *tauricus* (Horváth, 1880)
301. *Dimorphocoris* (*Dimorphocoris*) *toros* Seidenstücker, 1962
302. *Dimorphocoris* (*Dimorphocoris*) *tristis* (Fieber, 1861)
303. *Euryopicoris nitidus* (Meyer-Dür, 1843)
304. *Halticus apterus apterus* (Linnaeus, 1758)
305. *Halticus asperulus* Horváth, 1898
306. *Halticus luteicollis* (Panzer, 1804)
307. *Halticus macrocephalus* Fieber, 1858
308. *Halticus pusillus* (Herrich-Schaeffer, 1835)

309. *Halticus saltator* (Geoffroy, 1785)
310. *Myrmecophyes* (*Myrmecophyes*) *variabilis* Drapolyuk, 1989
311. *Myrmecophyes* (*Plumiger*) *armeniacus* Drapolyuk, 1989
312. *Myrmecophyes* (*Plumiger*) *heterocerus* Horváth, 1926
313. *Orthocephalus bivittatus* Fieber, 1864
314. *Orthocephalus brevis* (Panzer, 1798)
315. *Orthocephalus fulvipes* Reuter, 1904
316. *Orthocephalus melas* Seidenstücker, 1962
317. *Orthocephalus proserpinae* (Mulsant & Rey, 1852)
318. *Orthocephalus rhyparopus* Fieber, 1864
319. *Orthocephalus saltator* (Hahn, 1835)
320. *Orthocephalus solidus* (Seidenstücker, 1971)
321. *Orthocephalus vittipennis* (Herrich-Schaeffer, 1835)
322. *Pachytomella passerinii* (A. Costa, 1842)
323. *Pachytomella phoenicea* (Horváth, 1884)
324. *Piezocranum corvinum* Puton, 1895
325. *Piezocranum simulans* Horváth, 1877
326. *Plagiotylus dispar* Reuter, 1899
327. *Scirtetellus vittatus* Kiritshenko, 1951
328. *Strongylocoris amabilis* (Douglas & Scott, 1868)
329. *Strongylocoris cicadifrons* A. Costa, 1853
330. *Strongylocoris leucocephalus* (Linnaeus, 1758)
331. *Strongylocoris niger* (Herrich-Schaeffer, 1835)

Cimicomorpha: Miroidea: Miridae: Orthotylinae: Orthotylini

332. *Blepharidopterus angulatus* (Fallén, 1807)
333. *Blepharidopterus diaphanus* (Kirschbaum, 1856)
334. *Blepharidopterus dubius* Wagner, 1954
335. *Brachynotocoris cyprius cyprius* Wagner, 1961
336. *Brachynotocoris puncticornis* Reuter, 1880
337. *Brachynotocoris viticinus* Seidenstücker, 1954
338. *Cyllecoris histrionius* (Linnaeus, 1767)
339. *Dryophilocoris* (*Camarocyphus*) *persimilis* (Puton, 1895)
340. *Dryophilocoris* (*Dryophilocoris*) *flavoquadrimaculatus* (De Geer, 1773)
341. *Excentricus planicornis* (Herrich-Schaeffer, 1836)
342. *Globiceps* (*Globiceps*) *coryli* V.G. Putshkov, 1970
343. *Globiceps* (*Globiceps*) *sphaegiformis* (Rossi, 1790)
344. *Globiceps* (*Kelidocoris*) *astragali* Seidenstücker, 1964
345. *Globiceps* (*Kelidocoris*) *caucasicus* Poppius, 1912
346. *Globiceps* (*Kelidocoris*) *flavomaculatus* (Fabricius, 1794)
347. *Globiceps* (*Kelidocoris*) *fulvicollis* Jakovlev, 1877
348. *Globiceps* (*Kelidocoris*) *genistae* Seidenstücker, 1971

349. *Globiceps* (*Kelidocoris*) *horvathi* Reuter, 1912
350. *Globiceps* (*Kelidocoris*) *sordidus sordidus* Reuter, 1876
351. *Globiceps* (*Kelidocoris*) *syriacus syriacus* Wagner, 1969
352. *Globiceps* (*Kelidocoris*) *thymi* Seidenstücker, 1964
353. *Heterocordylus* (*Bothocranum*) *erythropthalmus erythropthalmus* Hahn, 1833
354. *Heterocordylus* (*Bothrocranum*) *carbonellus* Seidenstücker, 1956
355. *Heterocordylus* (*Heterocordylus*) *cytisi* Josifov, 1958
356. *Heterocordylus* (*Heterocordylus*) *genistae* (Scopoli, 1763)
357. *Heterocordylus* (*Heterocordylus*) *leptocerus* (Kirschbaum, 1856)
358. *Heterocordylus* (*Heterocordylus*) *tibialis* (Hahn, 1833)
359. *Heterocordylus* (*Heterocordylus*) *tumidicornis* (Herrich-Schaeffer, 1835)
360. *Heterotoma merioptera* (Scopoli, 1763)
361. *Hyoidea kerzhneri* Hoberlandt, 1963
362. *Malacocoris chlorizans* (Panzer, 1794)
363. *Mecomma* (*Mecomma*) *pervinius* Önder, 1974
364. *Melanotrichus dumosus* Seidenstücker, 1971
365. *Melanotrichus flavosparsus* (C.R. Sahlberg, 1841)
366. *Melanotrichus minutus* Jakovlev, 1877
367. *Melanotrichus moncreaffi* (Douglas & Scott, 1874)
368. *Melanotrichus palustris* Reuter, 1888
369. *Melanotrichus parvulus* Reuter, 1879
370. *Melanotrichus pusillus* Reuter, 1883
371. *Melanotrichus rubidus* (Puton, 1874)
372. *Orthotylus* (*Litocoris*) *ericetorum arboreae* Wagner, 1970
373. *Orthotylus* (*Orthotylus*) *attali* Morkel & Wyniger, 2009
374. *Orthotylus* (*Orthotylus*) *eleagni* Jakovlev, 1881
375. *Orthotylus* (*Orthotylus*) *marginalis* Reuter, 1883
376. *Orthotylus* (*Orthotylus*) *nassatus* (Fabricius, 1787)
377. *Orthotylus* (*Orthotylus*) *obscurus* Reuter, 1875
378. *Orthotylus* (*Orthotylus*) *prasinus* (Fallén, 1826)
379. *Orthotylus* (*Orthotylus*) *tenellus tenellus* (Fallén, 1807)
380. *Orthotylus* (*Orthotylus*) *viridinervis* (Kirschbaum, 1856)
381. *Orthotylus* (*Pachylops*) *beieri* Wagner, 1942
382. *Orthotylus* (*Pachylops*) *concolor* (Kirschbaum, 1856)
383. *Orthotylus* (*Pachylops*) *virescens* (Douglas & Scott, 1865)
384. *Orthotylus* (*Parapachylops*) *caprai* Wagner, 1955
385. *Orthotylus* (*Parapachylops*) *hodiernus* Linnavuori, 1961
386. *Orthotylus* (*Parapachylops*) *junipericola terminalis* Linnavuori, 1965
387. *Orthotylus* (*Parapachylops*) *oenderi* Çerçi, Tezcan & Koçak sp. nov.
388. *Orthotylus* (*Pinocapsus*) *cupressi* Reuter, 1883
389. *Orthotylus* (*Pinocapsus*) *girayi* Çerçi & Tezcan sp. nov.

390. *Orthotylus* (*Pinocapsus*) *kmenti* Çerçi & Koçak, 2021
391. *Orthotylus* (*Pseudorthotylus*) *bilineatus* (Fallén, 1807)
392. *Platycranus* (*Genistocapsus*) *alkestis* Linnavuori, 1999
393. *Platycranus* (*Genistocapsus*) *genistae* Lindberg, 1948
394. *Platycranus* (*Genistocapsus*) *remanei* Wagner, 1955
395. *Platycranus* (*Platycranus*) *erberi* Fieber, 1870
396. *Pseudoloxops coccineus* (Meyer-Dür, 1843)
397. *Pseudoloxops sangrudanus* Linnavuori, 2006
398. *Reuteria atalayi* Çerçi, Tezcan & Özgen, 2020
399. *Reuteria marqueti* Puton, 1875
400. *Reuteria riegeri torosensis* Çerçi, Tezcan & Özgen, 2020
401. *Reuteria serratis* Çerçi, Tezcan & Özgen, 2020
402. *Reuteria winkelmanni* Günther & Strauss, 2018
403. *Zanchius alatanus* Hoberlandt, 1956
404. *Zanchius breviceps* (Wagner, 1951)

Cimicomorpha: Miroidea: Miridae: Phylinae: Cremnorrhini: Coatonocapsina

405. *Heterocapillus genistae* (Lindberg, 1948)
406. *Heterocapillus tigripes* (Mulsant & Rey, 1852)

Cimicomorpha: Miroidea: Miridae: Phylinae: Cremnorrhini: Cremnorrhina

407. *Amblytylus concolor* Jakovlev, 1877
408. *Amblytylus nasutus* (Kirschbaum, 1856)
409. *Cremnorrhinus basalis* Reuter, 1880
410. *Excentricoris oophorus* (Horváth, 1888)
411. *Harpocera hellenica* Reuter, 1876
412. *Harpocera thoracica* (Fallén, 1807)
413. *Lopus decolor* (Fallén, 1807)
414. *Lopus longiceps* (Flor, 1860)
415. *Macrotylus* (*Alloeonycha*) *ancyranus* Seidenstücker, 1969
416. *Macrotylus* (*Alloeonycha*) *atricapillus* (Scott, 1872)
417. *Macrotylus* (*Alloeonycha*) *attenuatus* Jakovlev, 1882
418. *Macrotylus* (*Alloeonycha*) *bipunctatus* Reuter, 1879
419. *Macrotylus* (*Alloeonycha*) *dentifer* Wagner, 1969
420. *Macrotylus* (*Alloeonycha*) *elevatus* (Fieber, 1858)
421. *Macrotylus* (*Alloeonycha*) *horvathi* (Reuter, 1876)
422. *Macrotylus* (*Alloeonycha*) *paykullii* (Fallén, 1807)
423. *Macrotylus* (*Alloeonycha*) *solitarius* (Meyer-Dür, 1843)
424. *Macrotylus* (*Alloeonycha*) *weberi* Wagner, 1976
425. *Macrotylus* (*Macrotylus*) *anahtaris* Seidenstücker, 1959
426. *Macrotylus* (*Macrotylus*) *ancoratus* Seidenstücker, 1959
427. *Macrotylus* (*Macrotylus*) *antennalis* Horváth, 1906
428. *Macrotylus* (*Macrotylus*) *galatinus* Seidenstücker, 1968

429. *Macrotylus* (*Macrotylus*) *hamatus* Seidenstücker, 1963
430. *Macrotylus* (*Macrotylus*) *herrichi* (Reuter, 1873)
431. *Macrotylus* (*Macrotylus*) *perdictus* Kiritshenko, 1938
432. *Macrotylus* (*Macrotylus*) *seidenstueckeri* Wagner, 1954
433. *Macrotylus* (*Macrotylus*) *soosi* Josifov, 1962
434. *Macrotylus* (*Macrotylus*) *syriacus* Wagner, 1963
435. *Macrotylus* (*Pontodemus*) *ponticus* Seidenstücker, 1967
436. *Pachyxyphus lineellus* (Mulsant & Rey, 1852)
437. *Utopnia torquata* (Puton, 1881)

Cimicomorpha: Miroidea: Miridae: Phylinae: Exaeretini

438. *Anonychiella brevicornis* (Reuter, 1879)
439. *Auchenocrepis reuteri* Jakovlev, 1876
440. *Camptotylus linae* (Puton, 1881)
441. *Camptotylus reuteri* Jakovlev, 1881
442. *Camptotylus yersini* (Mulsant & Rey, 1856)
443. *Eumecotarsus milidius* Seidenstücker, 1980
444. *Hadrophyes sulphurella* Puton, 1874
445. *Psallopsis kirgisica* (Becker, 1864)
446. *Psallopsis longicornis* (Jakovlev, 1902)
447. *Tuponia* (*Chlorotuponia*) *anatolica* Linnavuori, 1965
448. *Tuponia* (*Chlorotuponia*) *brevirostris* Reuter, 1883
449. *Tuponia* (*Chlorotuponia*) *concinna* (Reuter, 1875)
450. *Tuponia* (*Chlorotuponia*) *coruhica* Wagner, 1976
451. *Tuponia* (*Chlorotuponia*) *dalmatina* Wagner, 1955
452. *Tuponia* (*Chlorotuponia*) *hippophaes* (Fieber, 1861)
453. *Tuponia* (*Chlorotuponia*) *prasina* (Fieber, 1864)
454. *Tuponia* (*Tuponia*) *arcufera* Reuter, 1879
455. *Tuponia* (*Tuponia*) *ayasensis* Wagner, 1963
456. *Tuponia* (*Tuponia*) *elegans* (Jakovlev, 1867)
457. *Tuponia* (*Tuponia*) *mixticolor* (A. Costa, 1862)
458. *Tuponia* (*Tuponia*) *montandoni* Reuter, 1899
459. *Tuponia* (*Tuponia*) *tamarisci* (Perris, 1857)
460. *Yotvata* (*Godataira*) *pulcherrima* Linnavuori, 1984
461. *Yotvata* (*Yotvata*) *nergal* Linnavuori, 1984

Cimicomorpha: Miroidea: Miridae: Phylinae: Hallodapini

462. *Acrorrhinium atricorne* Linnavuori, 2006
463. *Acrorrhinium conspersum* Noualhier, 1895
464. *Alloeomimus kurdus* Hoberlandt, 1953
465. *Ribautocapsus tezcani* Çerçi sp. nov.
466. *Glaphyrocoris ebikh* Linnavuori, 1984
467. *Glaphyrocoris luniger* (Horváth, 1913)

468. *Hallodapus concolor* (Reuter, 1890)
469. *Hallodapus costae* (Reuter, 1890)
470. *Hallodapus pseudoconcolor* (Linnavuori, 1984)
471. *Hallodapus rufescens* (Burmeister, 1835)
472. *Hallodapus suturalis* (Herrich-Schaeffer, 1837)
473. *Mimocoris coarctatus* (Mulsant & Rey, 1852)
474. *Mimocoris rugicollis* (A. Costa, 1853)
475. *Systellonotus thymi* (Signoret, 1859)
476. *Systellonotus triguttatus* (Linnaeus, 1767)

Cimicomorpha: Miroidea: Miridae: Phylinae: Leucophoropterini: Tuxedoina

477. *Ephippiocoris lunatus* Poppius, 1912

Cimicomorpha: Miroidea: Miridae: Phylinae: Nasocorini

478. *Atomoscelis onusta* (Fieber, 1861)
479. *Atractotomus magnicornis* (Fallén, 1807)
480. *Atractotomus persquamosus* Seidenstücker, 1961
481. *Badezorus signaticornis* (Reuter, 1904)
482. *Badezorus tauricus* (Wagner, 1976)
483. *Campylomma annulicorne* (Signoret, 1865)
484. *Campylomma diversicorne* Reuter, 1878
485. *Campylomma lindbergi* Hoberlandt, 1953
486. *Campylomma miyamotoi* Yasunaga, 2001
487. *Campylomma nigronasutum* Reuter, 1878
488. *Campylomma oertzenii* Reuter, 1888
489. *Campylomma simillimum* Jakovlev, 1882
490. *Campylomma unicolor* Poppius, 1914
491. *Campylomma vendicarinum* Carapezza, 1991
492. *Campylomma verbasci* (Meyer-Dür, 1843)
493. *Campylomma viticis* Lindberg, 1948
494. *Chlamydatus* (*Euattus*) *pullus* (Reuter, 1870)
495. *Glaucopterum kareli* Wagner, 1963
496. *Maurodactylus albidus* (Kolenati, 1845)
497. *Maurodactylus kukuensis* V.G. Putshkov, 1978
498. *Maurodactylus nigrigenis* (Reuter, 1890)
499. *Monosynamma bohemanni* (Fallén, 1829)
500. *Monosynamma sabulicola* (Wagner, 1947)
501. *Orthopidea platani* (Lindberg, 1948)
502. *Phoenicocoris obscurellus* (Fallén, 1829)
503. *Salicarus* (*Salicarus*) *roseri* (Herrich-Schaeffer, 1838)
504. *Salicarus* (*Salicarus*) *urnammu* Linnavuori, 1984
505. *Solenoxyphus alkani* Önder, 1975
506. *Solenoxyphus fuscovenosus* (Fieber, 1864)

507. *Solenoxyphus punctipennis* (Reuter, 1879)

Cimicomorpha: Miroidea: Miridae: Phylinae: Phylini: Oncotylina

508. *Acrotelus abbaricus* Linnavuori, 2010
509. *Acrotelus caspicus* (Reuter, 1879)
510. *Antepia guttalis* Seidenstücker, 1962
511. *Chlorillus pictoides* Wagner, 1963
512. *Chlorillus pictus* (Fieber, 1864)
513. *Compsidolon* (*Apsinthophylus*) *absinthii* (Scott, 1870)
514. *Compsidolon* (*Apsinthophylus*) *pumilum* (Jakovlev, 1876)
515. *Compsidolon* (*Compsidolon*) *elegantulum* Reuter, 1899
516. *Compsidolon* (*Coniortodes*) *salicellum* (Herrich-Schaeffer, 1841)
517. *Europiella albipennis* (Fallén, 1829)
518. *Europiella alpina* (Reuter, 1875)
519. *Europiella artemisiae* (Becker, 1864)
520. *Eurycolpus annulatus* Wagner, 1976
521. *Eurycolpus aureolus* Seidenstücker, 1961
522. *Eurycolpus enslini* Seidenstücker, 1959
523. *Eurycolpus flaveolus* (Stål, 1858)
524. *Hoplomachus thunbergii* (Fallén, 1807)
525. *Leucodellus amygdali* (Linnavuori, 1965)
526. *Leucodellus zagdani* (V.G. Putshkov, 1970)
527. *Litoxenus tenellus* Reuter, 1885
528. *Megalocoleus aurantiacus* (Fieber, 1858)
529. *Megalocoleus delicatus* (Perris, 1857)
530. *Megalocoleus dissimilis* (Reuter, 1876)
531. *Megalocoleus exsanguis* (Herrich-Schaeffer, 1835)
532. *Megalocoleus krueperi* (Reuter, 1879)
533. *Megalocoleus lunula* (Fieber, 1861)
534. *Megalocoleus molliculus* (Fallén, 1807)
535. *Megalocoleus naso* (Reuter, 1879)
536. *Megalocoleus tanaceti* (Fallén, 1807)
537. *Nanopsallus carduellus* (Horváth, 1888)
538. *Oncotylidea amplipilis* Wagner, 1965
539. *Oncotylus* (*Cylindromelus*) *setulosus* (Herrich-Schaeffer, 1837)
540. *Oncotylus* (*Oncotylus*) *affinis* Jakovlev, 1882
541. *Oncotylus* (*Oncotylus*) *anatolicus* Wagner, 1969
542. *Oncotylus* (*Oncotylus*) *basicornis* Horváth, 1901
543. *Oncotylus* (*Oncotylus*) *nigdensis* Linnavuori, 1961
544. *Oncotylus* (*Oncotylus*) *nigricornis* Saunders, 1876
545. *Oncotylus* (*Oncotylus*) *punctipes* Reuter, 1875
546. *Oncotylus* (*Oncotylus*) *pyrethri* (Becker, 1864)

547. *Oncotylus* (*Oncotylus*) *viridiflavus* (Goeze, 1778)
548. *Opisthotaenia* (*Opisthotaenia*) *fulvipes* Reuter, 1901
549. *Opisthotaenia* (*Opisthotaenia*) *glauca* Seidenstücker, 1968
550. *Paredrocoris pectoralis* Reuter, 1878
551. *Paredrocoris seidenstueckeri* Josifov, 1965
552. *Placochilus seladonicus* (Fallén, 1807)
553. *Plagiognathus arbustorum arbustorum* (Fabricius, 1794)
554. *Plagiognathus bipunctatus albicans* Reuter, 1901
555. *Plagiognathus bipunctatus bipunctatus* Reuter, 1883
556. *Plagiognathus chrysanthemi* Wolff, 1804
557. *Plagiognathus fulvipennis* Kirschbaum, 1856
558. *Plagiognathus marivanensis* Linnavuori, 2010
559. *Plagiognathus ozgurkocaki* Çerçi, 2022
560. *Plagiognathus raphani* Wagner, 1963
561. *Plagiognathus reuterellus* Schuh, 2001
562. *Plesiodema pinetella* (Zetterstedt, 1828)
563. *Pleuroxonotus longicornis* (Reuter, 1900)
564. *Stenoparia putoni* Fieber, 1870
565. *Thermocoris discolor* Seidenstücker, 1957
566. *Thermocoris munieri* Puton, 1875
567. *Thermocoris rivalis rivalis* (Horváth, 1894)
568. *Thermocoris rivalis suctor* Seidenstücker, 1957
569. *Tinicephalus* (*Tinicephalus*) *discrepans* Fieber, 1858
570. *Tinicephalus* (*Tinicephalus*) *hortulanus* (Meyer-Dür, 1843)
571. *Tinicephalus* (*Tinicephalus*) *picticornis* Wagner, 1966
572. *Tinicephalus* (*Tinicephalus*) *streitoi* Matocq, 2007
573. *Tragiscocoris fieberi* (Fieber, 1858)

Cimicomorpha: Miroidea: Miridae: Phylinae: Phylini: Phylina

574. *Adelphophylus oenderi* Çerçi, Koçak & Tezcan, 2019
575. *Adelphophylus pericarti* Matocq & Magnien, 2009
576. *Conostethus angustus* Wagner, 1963
577. *Conostethus roseus* (Fallén, 1807)
578. *Conostethus venustus venustus* (Fieber, 1858)
579. *Conostethus viridis* Seidenstücker, 1964
580. *Ectagela guttata* Schmidt, 1939
581. *Icodema infuscata* (Fieber, 1861)
582. *Juniperia rubescens* Linnavuori, 1965
583. *Lepidargyrus ancorifer* (Fieber, 1858)
584. *Lepidargyrus pollinosus* (Horváth, 1906)
585. *Lepidargyrus seidenstueckeri* (Wagner, 1956)
586. *Lepidargyrus syriacus* (Wagner, 1956)

587. *Mesopsallus amygdali* (Wagner, 1960)
588. *Mesopsallus fagi* (Drapolyuk, 1990)
589. *Mesopsallus mali* (Meyer-Dür, 1843)
590. *Orthonotus cylindricollis* (A. Costa, 1853)
591. *Orthonotus efei* Çerçi & Koçak sp. nov.
592. *Orthonotus fraudatrix* (Reuter, 1904)
593. *Orthonotus humilis* Seidenstücker, 1970
594. *Orthonotus matilei* Matocq & Pluot-Sigwalt, 2001
595. *Orthonotus ponticus* (Horváth, 1888)
596. *Orthonotus rossicus* (Reuter, 1878)
597. *Orthonotus rufifrons* (Fallén, 1807)
598. *Orthonotus syriacus* (Puton, 1881)
599. *Paravoruchia dentata* Wagner, 1959
600. *Phylus* (*Phylus*) *coryli* (Linnaeus, 1758)
601. *Phylus* (*Phylus*) *melanocephalus* (Linnaeus, 1767)
602. *Phylus* (*Teratoscopus*) *breviceps* Reuter, 1899
603. *Psallus* (*Apocremnus*) *anatolicus* Wagner, 1963
604. *Psallus* (*Apocremnus*) *anticus* (Reuter, 1876)
605. *Psallus* (*Apocremnus*) *skylla* Linnavuori, 1994
606. *Psallus* (*Hylopsallus*) *perrisi* (Mulsant & Rey, 1852)
607. *Psallus* (*Hylopsallus*) *variabilis* (Fallén, 1807)
608. *Psallus* (*Phylidea*) *cerridis* Wagner, 1971
609. *Psallus* (*Phylidea*) *collaris* (Wagner, 1975)
610. *Psallus* (*Phylidea*) *henschii* Reuter, 1888
611. *Psallus* (*Phylidea*) *karakardes* Seidenstücker, 1959
612. *Psallus* (*Phylidea*) *nigripilis* (Reuter, 1888)
613. *Psallus* (*Phylidea*) *quercicola* (Reuter, 1904)
614. *Psallus* (*Phylidea*) *quercus* (Kirschbaum, 1856)
615. *Psallus* (*Phylidea*) *syriacus* (Reuter, 1883)
616. *Psallus* (*Pityopsallus*) *piceae* Reuter, 1878
617. *Psallus* (*Pityopsallus*) *pinicola* Reuter, 1875
618. *Psallus* (*Psallus*) *anaemicus* Seidenstücker, 1966
619. *Psallus* (*Psallus*) *apoplecticus* Seidenstücker, 1966
620. *Psallus* (*Psallus*) *asthenicus* Seidenstücker, 1966
621. *Psallus* (*Psallus*) *brachycerus* Reuter, 1904
622. *Psallus* (*Psallus*) *corsicus* Puton, 1875
623. *Psallus* (*Psallus*) *cruentatus* (Mulsant & Rey, 1852)
624. *Psallus* (*Psallus*) *eceae* Çerçi & Koçak sp. nov.
625. *Psallus* (*Psallus*) *flavellus* Stichel, 1933
626. *Psallus* (*Psallus*) *helenae* Josifov, 1969
627. *Psallus* (*Psallus*) *inancozgeni* Matocq & Pluot-Sigwalt, 2011

628. *Psallus* (*Psallus*) *konyanensis* Matocq, 2019
629. *Psallus* (*Psallus*) *lentigo* Seidenstücker, 1972
630. *Psallus* (*Psallus*) *lepidus* Fieber, 1858
631. *Psallus* (*Psallus*) *lucanicus* Wagner, 1968
632. *Psallus* (*Psallus*) *milenae* Josifov, 1974
633. *Psallus* (*Psallus*) *oleae* Wagner, 1963
634. *Psallus* (*Psallus*) *pardalis* Seidenstücker, 1966
635. *Psallus* (*Psallus*) *pehlivani* Çerçi & Tezcan sp. nov.
636. *Psallus* (*Psallus*) *pseudopunctulatus* Linnavuori, 1984
637. *Psallus* (*Psallus*) *rubinicterus* Seidenstücker, 1966
638. *Psallus* (*Psallus*) *rufomaculosus* Matocq, 2019
639. *Psallus* (*Psallus*) *thomashenryi* Carapezza & Kment, 2018
640. *Psallus* (*Psallus*) *turcicus* Wagner, 1971
641. *Psallus* (*Psallus*) *varians varians* (Herrich-Schaeffer, 1841)
642. *Sthenarus rotermundi* (Scholtz, 1847)

Cimicomorpha: Miroidea: Miridae: Phylinae: Phylini: incertae sedis

643. *Damioscea komaroffii* (Jakovlev, 1879)

Cimicomorpha: Miroidea: Miridae: Phylinae: Pilophorini

644. *Hypseloecus visci* (Puton, 1888)
645. *Pilophorus angustulus* Reuter, 1888
646. *Pilophorus cinnamopterus* (Kirschbaum, 1856)
647. *Pilophorus clavatus* (Linnaeus, 1767)
648. *Pilophorus confusus* (Kirschbaum, 1856)
649. *Pilophorus perplexus* Douglas & Scott, 1875
650. *Pilophorus simulans* Josifov, 1989

Cimicomorpha: Miroidea: Miridae: Phylinae: Semiini: Semiina

651. *Criocoris contrastus* Seidenstücker, 1970
652. *Criocoris crassicornis* (Hahn, 1834)
653. *Criocoris sulcicornis* (Kirschbaum, 1856)
654. *Criocoris variegatus* Stichel, 1934
655. *Tytthus parviceps* (Reuter, 1890)

Cimicomorpha: Miroidea: Tingidae: Cantacaderinae: Cantacaderini

656. *Cantacader quadricornis* (Lepeletier & Serville, 1828)

Cimicomorpha: Miroidea: Tingidae: Tinginae: Acalyptaini

657. *Acalypta gracilis gracilis* (Fieber, 1844)
658. *Acalypta hellenica* Reuter, 1888
659. *Acalypta marginata* (Wolff, 1804)
660. *Acalypta nigrina* (Fallén, 1807)
661. *Acalypta sejuncta* Horváth, 1905
662. *Acalypta uniseriata* (Puton, 1879)
663. *Derephysia* (*Derephysia*) *foliacea foliacea* (Fallén, 1807)

664. *Dictyonota astragali* Štusák & Önder, 1982
665. *Dictyonota phoenicea* Seidenstücker, 1963
666. *Dictyonota sareptana* Jakovlev, 1874
667. *Dictyonota strichnocera* Fieber, 1844
668. *Kalama aethiops* (Horváth, 1905)
669. *Kalama lugubris* (Fieber, 1861)
670. *Kalama tricornis* (Schrank, 1801)

Cimicomorpha: Miroidea: Tingidae: Tinginae: Tingini

671. *Agramma* (*Agramma*) *atricapillum* (Spinola, 1837)
672. *Agramma* (*Agramma*) *blandulum* (Horváth, 1905)
673. *Agramma* (*Agramma*) *confusum* (Puton, 1879)
674. *Agramma* (*Agramma*) *laetum* (Fallén, 1807)
675. *Campylosteira bosnica* Horváth, 1892
676. *Campylosteira ciliata* Fieber, 1844
677. *Campylosteira orientalis* Horváth, 1881
678. *Catoplatus anticus* (Reuter, 1880)
679. *Catoplatus brevicornis* Akramovskaja & Golub, 1973
680. *Catoplatus carthusianus* (Goeze, 1778)
681. *Catoplatus citrinus* Horváth, 1897
682. *Catoplatus crassipes* (Fieber, 1861)
683. *Catoplatus distinctus* Montandon, 1895
684. *Catoplatus fulvicornis* (Jakovlev, 1889)
685. *Catoplatus hilaris* Horváth, 1906
686. *Catoplatus horvathi* (Puton, 1878)
687. *Catoplatus minor* Štusák, 1975
688. *Catoplatus nigriceps* Horváth, 1905
689. *Copium adumbratum* (Horváth, 1891)
690. *Copium brevicorne* (Jakovlev, 1879)
691. *Copium clavicorne clavicorne* (Linnaeus, 1758)
692. *Copium teucrii teucrii* (Host, 1788)
693. *Corythucha arcuata* (Say, 1832)
694. *Corythucha ciliata* (Say, 1832)
695. *Dictyla echii* (Schrank, 1782)
696. *Dictyla humuli* (Fabricius, 1794)
697. *Dictyla lupuli* (Herrich-Schaeffer, 1837)
698. *Dictyla nassata nassata* Puton, 1874
699. *Dictyla platyoma* (Fieber, 1861)
700. *Dictyla rotundata* (Herrich-Schaeffer, 1835)
701. *Dictyla sima* Seidenstücker, 1975
702. *Dictyla triconula* (Seidenstücker, 1954)
703. *Elasmotropis testacea selecta* (Horváth, 1891)

704. *Elasmotropis testacea testacea* (Herrich-Schaeffer, 1833)
705. *Galeatus cellularis* Jakovlev, 1884
706. *Galeatus scrophicus* Saunders, 1876
707. *Hyalochiton komaroffii* (Jakovlev, 1880)
708. *Hyalochiton multiseriatus* (Reuter, 1888)
709. *Lasiacantha capucina capucina* (Germar, 1837)
710. *Lasiacantha capucina piligera* (Garbiglietti, 1869)
711. *Lasiacantha gracilis* (Herrich-Schaeffer, 1833)
712. *Lasiacantha hedenborgii* (Stål, 1873)
713. *Lasiacantha karamanensis* Çerçi & Koçak, 2021
714. *Monosteira lobulifera* Reuter, 1888
715. *Monosteira unicostata* (Mulsant & Rey, 1852)
716. *Physatocheila confinis* Horváth, 1905
717. *Physatocheila dumetorum* (Herrich-Schaeffer, 1838)
718. *Physatocheila municeps* Horváth, 1903
719. *Stephanitis* (*Stephanitis*) *caucasica* Kiritshenko, 1951
720. *Stephanitis* (*Stephanitis*) *oschanini* Vasiliev, 1935
721. *Stephanitis* (*Stephanitis*) *pyri* (Fabricius, 1775)
722. *Tingis* (*Neolasiotropis*) *ballotae* Seidenstücker, 1972
723. *Tingis* (*Neolasiotropis*) *marrubii* Vallot, 1829
724. *Tingis* (*Neolasiotropis*) *ottomana* Péricart & Önder, 1982
725. *Tingis* (*Neolasiotropis*) *pauperata* (Puton, 1879)
726. *Tingis* (*Neolasiotropis*) *pilosa* Hummel, 1825
727. *Tingis* (*Neolasiotropis*) *reuteri* Horváth, 1906
728. *Tingis* (*Neolasiotropis*) *valida* (Puton, 1878)
729. *Tingis* (*Tingis*) *angustata* (Herrich-Schaeffer, 1838)
730. *Tingis* (*Tingis*) *auriculata* (A. Costa, 1847)
731. *Tingis* (*Tingis*) *cardui* (Linnaeus, 1758)
732. *Tingis* (*Tingis*) *demissa* Horváth, 1906
733. *Tingis* (*Tingis*) *elongata* (Fieber, 1861)
734. *Tingis* (*Tingis*) *grisea* Germar, 1835
735. *Tingis* (*Tingis*) *sinuaticollis* (Jakovlev, 1883)
736. *Tingis* (*Tingis*) *stepposa* Golub, 1977
737. *Tingis* (*Tingis*) *stupidula* Horváth, 1906
738. *Tingis* (*Tropidocheila*) *cappadocica* Horváth, 1906
739. *Tingis* (*Tropidocheila*) *caucasica* (Jakovlev, 1880)
740. *Tingis* (*Tropidocheila*) *ciliaris* (Puton, 1879)
741. *Tingis* (*Tropidocheila*) *geniculata* (Fieber, 1844)
742. *Tingis* (*Tropidocheila*) *griseola* (Puton, 1879)
743. *Tingis* (*Tropidocheila*) *hellenica hellenica* (Puton, 1877)
744. *Tingis* (*Tropidocheila*) *ragusana* (Fieber, 1861)

745. *Tingis* (*Tropidocheila*) *reticulata* Herrich-Schaeffer, 1835
746. *Tingis* (*Tropidocheila*) *seidenstueckeri* Péricart, 1981
747. *Tingis* (*Tropidocheila*) *sideritis* Štusák, 1973
748. *Urentius euonymus* Distant, 1909

Cimicomorpha: Naboidea: Nabidae: Nabinae

749. *Himacerus* (*Anaptus*) *major* (A. Costa, 1842)
750. *Himacerus* (*Aptus*) *mirmicoides* (O. Costa, 1834)
751. *Himacerus* (*Aptus*) *transcaucasicus* (Kerzhner, 1981)
752. *Himacerus* (*Himacerus*) *apterus* (Fabricius, 1798)
753. *Himacerus* (*Stalia*) *dauricus* (Kiritshenko, 1911)
754. *Nabis* (*Aspilaspis*) *viridulus* Spinola, 1837
755. *Nabis* (*Halonabis*) *sareptanus* Dohrn, 1862
756. *Nabis* (*Nabicula*) *flavomarginatus* Scholtz, 1847
757. *Nabis* (*Nabis*) *brevis brevis* Scholtz, 1847
758. *Nabis* (*Nabis*) *ferus* (Linnaeus, 1758)
759. *Nabis* (*Nabis*) *meridionalis meridionalis* Kerzhner, 1963
760. *Nabis* (*Nabis*) *meridionalis tauricus* Kerzhner, 1963
761. *Nabis* (*Nabis*) *palifer* Seidenstücker, 1954
762. *Nabis* (*Nabis*) *pseudoferus orientarius* Remane, 1962
763. *Nabis* (*Nabis*) *pseudoferus pseudoferus* Remane, 1949
764. *Nabis* (*Nabis*) *punctatus punctatus* A. Costa, 1847
765. *Nabis* (*Nabis*) *rugosus* (Linnaeus, 1758)
766. *Nabis* (*Tropiconabis*) *capsiformis* Germar, 1838

Cimicomorpha: Naboidea: Nabidae: Prostemmatinae

767. *Alloeorhynchus* (*Alloeorhynchus*) *flavipes* (Fieber, 1836)
768. *Phorticus velutinus velutinus* Puton, 1895
769. *Prostemma* (*Prostemma*) *aeneicolle* Stein, 1857
770. *Prostemma* (*Prostemma*) *guttula asiaticum* Kerzhner, 1968
771. *Prostemma* (*Prostemma*) *guttula guttula* (Fabricius, 1787)
772. *Prostemma* (*Prostemma*) *sanguineum* (Rossi, 1790)

Cimicomorpha: Reduvioidea: Pachynomidae: Pachynominae

773. *Pachynomus lethierryi* Puton, 1874

Cimicomorpha: Reduvioidea: Reduviidae: Emesinae: Emesini

774. *Stenolemus bogdanovii* Oshanin, 1871
775. *Stenolemus novaki* Horváth, 1888

Cimicomorpha: Reduvioidea: Reduviidae: Emesinae: Leistrachini

776. *Ploiaria domestica* Scopoli, 1786

Cimicomorpha: Reduvioidea: Reduviidae: Emesinae: Metapterini

777. *Metapterus linearis* A. Costa, 1862

Cimicomorpha: Reduvioidea: Reduviidae: Emesinae: Ploiariolini

778. *Empicoris mediterraneus* Hoberlandt, 1956

Cimicomorpha: Reduvioidea: Reduviidae: Harpactorinae: Harpactorini

779. *Callistodema fasciata* (Kolenati, 1857)
780. *Coranus* (*Coranus*) *angulatus* Stål, 1874
781. *Coranus* (*Coranus*) *contrarius* Reuter, 1881
782. *Coranus* (*Coranus*) *griseus* (Rossi, 1790)
783. *Coranus* (*Coranus*) *kerzhneri* P.V. Putshkov, 1982
784. *Coranus* (*Coranus*) *subapterus* (De Geer, 1773)
785. *Coranus* (*Coranus*) *tuberculifer* Reuter, 1881
786. *Nagusta goedelii* (Kolenati, 1857)
787. *Rhynocoris* (*Rhynocoris*) *annulatus* (Linnaeus, 1758)
788. *Rhynocoris* (*Rhynocoris*) *bipustulatus* (Fieber, 1861)
789. *Rhynocoris* (*Rhynocoris*) *flavolimbatus* (Jakovlev, 1889)
790. *Rhynocoris* (*Rhynocoris*) *ibericus* Kolenati, 1857
791. *Rhynocoris* (*Rhynocoris*) *iracundus* (Poda, 1761)
792. *Rhynocoris* (*Rhynocoris*) *niger* (Herrich-Schaeffer, 1842)
793. *Rhynocoris* (*Rhynocoris*) *persicus* (Jakovlev, 1877)
794. *Rhynocoris* (*Rhynocoris*) *punctiventris* (Herrich-Schaeffer, 1846)
795. *Rhynocoris* (*Rhynocoris*) *rubrogularis* (Horváth, 1880)
796. *Rhynocoris* (*Rhynocoris*) *transitus* Hoberlandt, 1952
797. *Sphedanolestes* (*Sphedanolestes*) *lividigaster* (Mulsant & Rey, 1852)
798. *Sphedanolestes* (*Sphedanolestes*) *pulchellus* (Klug, 1830)
799. *Sphedanolestes* (*Sphedanolestes*) *sanguineus* (Fabricius, 1794)
800. *Vachiria deserta* (Becker, 1867)
801. *Vachiria natolica* Stål, 1859
802. *Zelus* (*Diplocodus*) *renardii* Kolenati, 1857

Cimicomorpha: Reduvioidea: Reduviidae: Peiratinae

803. *Ectomocoris* (*Ectomocoris*) *caucasicus* Linnavuori, 1972
804. *Ectomocoris* (*Ectomocoris*) *ululans* (Rossi, 1790)
805. *Peirates hybridus* (Scopoli, 1763)
806. *Peirates strepitans* Rambur, 1839

Cimicomorpha: Reduvioidea: Reduviidae: Phymatinae: Phymatini

807. *Phymata* (*Phymata*) *crassipes* (Fabricius, 1775)

Cimicomorpha: Reduvioidea: Reduviidae: Reduviinae

808. *Holotrichius apterus* Jakovlev, 1879
809. *Holotrichius denudatus* A. Costa, 1842
810. *Holotrichius ochraceus* Reuter, 1891
811. *Holotrichius putoni* Reuter, 1909
812. *Holotrichius rotundatus* Stål, 1874
813. *Holotrichius spinicollis* Reuter, 1891

814. *Holotrichius tenebrosus* Burmeister, 1835
815. *Pasira basiptera* Stål, 1859
816. *Pasira marinadolina* P.V. Putshkov & Moulet, 2004
817. *Reduvius ciliatus* Jakovlev, 1879
818. *Reduvius festae* Giglio-Tos, 1894
819. *Reduvius insularis* Linnavuori, 1964
820. *Reduvius nigritus* Moulet, 2020
821. *Reduvius pallipes* Klug, 1830
822. *Reduvius personatus* (Linnaeus, 1758)
823. *Reduvius tabidus* Klug, 1830
824. *Reduvius testaceus* (Herrich-Schaeffer, 1845)

Cimicomorpha: Reduvioidea: Reduviidae: Stenopodinae

825. *Oncocephalus acutangulus* Reuter, 1882
826. *Oncocephalus aspericollis* Reuter, 1882
827. *Oncocephalus biguttula* Horváth, 1901
828. *Oncocephalus brachymerus* Reuter, 1882
829. *Oncocephalus notatus* Klug, 1830
830. *Oncocephalus obsoletus* Klug, 1830
831. *Oncocephalus ocularis* Horváth, 1898
832. *Oncocephalus pilicornis* Reuter, 1882
833. *Oncocephalus plumicornis* (Germar, 1822)
834. *Oncocephalus squalidus* (Rossi, 1790)
835. *Oncocephalus thoracicus* Fieber, 1861
836. *Oncocephalus vescerae* Dispons, 1965
837. *Pygolampis bidentata* (Goeze, 1778)
838. *Sastrapada baerensprungi* (Stål, 1859)

Dipsocoromorpha: Ceratocombidae: Ceratocombinae

839. *Ceratocombus* (*Ceratocombus*) *coleoptratus* (Zetterstedt, 1819)

Dipsocoromorpha: Dipsocoridae

840. *Alpagut castaneovitreum* (Linnavuori, 1951)
841. *Cryptostemma* (*Cryptostemma*) *remanei* Josifov, 1964

Enicocephalomorpha: Enicocephalidae: Enicocephalinae

842. *Henschiella* (*Henschiella*) *pellucida* Horváth, 1888

Gerromorpha: Gerroidea: Gerridae: Gerrinae: Gerrini

843. *Aquarius paludum paludum* (Fabricius, 1794)
844. *Aquarius ventralis* (Fieber, 1860)
845. *Gerris* (*Gerris*) *argentatus* Schummel, 1832
846. *Gerris* (*Gerris*) *caucasicus* Kanyukova, 1982
847. *Gerris* (*Gerris*) *costae fieberi* Stichel, 1938
848. *Gerris* (*Gerris*) *kabaishanus* Linnavuori, 1998
849. *Gerris* (*Gerris*) *lacustris* (Linnaeus, 1758)

850. *Gerris* (*Gerris*) *maculatus* Tamanini, 1946
851. *Gerris* (*Gerris*) *thoracicus* Schummel, 1832
852. *Gerris* (*Gerriselloides*) *asper* (Fieber, 1860)
853. *Limnoporus rufoscutellatus* (Latreille, 1807)

Gerromorpha: Gerroidea: Veliidae: Microveliinae

854. *Microvelia* (*Microvelia*) *reticulata* (Burmeister, 1835)
855. *Microvelia* (*Picaultia*) *hozari* Hoberlandt, 1952
856. *Microvelia* (*Picaultia*) *pygmaea* (Dufour, 1833)

Gerromorpha: Gerroidea: Veliidae: Rhagoveliinae

857. *Rhagovelia* (*Rhagovelia*) *nigricans nigricans* (Burmeister, 1835)

Gerromorpha: Gerroidea: Veliidae: Veliinae

858. *Velia* (*Plesiovelia*) *affinis affinis* Kolenati, 1857
859. *Velia* (*Plesiovelia*) *affinis filippii* Tamanini, 1947
860. *Velia* (*Plesiovelia*) *kiritshenkoi* Tamanini, 1958
861. *Velia* (*Plesiovelia*) *mancinii lyciae* Tamanini, 1955
862. *Velia* (*Plesiovelia*) *mancinii mancinii* Tamanini, 1947
863. *Velia* (*Plesiovelia*) *mariae* Tamanini, 1971
864. *Velia* (*Plesiovelia*) *saulii* Tamanini, 1947

Gerromorpha: Hebroidea: Hebridae: Hebrinae

865. *Hebrus* (*Hebrus*) *montanus* Kolenati, 1857
866. *Hebrus* (*Hebrus*) *pilipes* Kanyukova, 1997
867. *Hebrus* (*Hebrus*) *pusillus pusillus* Fallén, 1807
868. *Hebrus* (*Hebrusella*) *ruficeps* Thomson, 1871

Gerromorpha: Hydrometroidea: Hydrometridae:

869. *Hydrometra gracilenta* Horváth, 1899
870. *Hydrometra stagnorum* (Linnaeus, 1758)

Gerromorpha: Mesoveloidea: Mesoveliidae: Mesoveliinae

871. *Mesovelia furcata* Mulsant & Rey, 1852
872. *Mesovelia vittigera* Horváth, 1895

Leptopodomorpha: Leptopodoidea: Leptopodidae:

873. *Erianotus lanosus* (Dufour, 1834)
874. *Leptopus hispanus* Rambur, 1840
875. *Leptopus marmoratus* (Goeze, 1778)
876. *Patapius spinosus* (Rossi, 1790)

Leptopodomorpha: Saldoidea: Saldidae: Saldinae: Saldini

877. *Salda littoralis* (Linnaeus, 1758)

Leptopodomorpha: Saldoidea: Saldidae: Saldinae: Saldoidini

878. *Chartoscirta cincta cincta* (Herrich-Schaeffer, 1841)
879. *Chartoscirta cocksii* (Curtis, 1835)
880. *Halosalda lateralis* (Fallén, 1807)

881. *Macrosaldula scotica* (Curtis, 1835)
882. *Macrosaldula variabilis* (Herrich-Schaeffer, 1835)
883. *Saldula amplicollis* (Reuter, 1891)
884. *Saldula arenicola arenicola* (Scholtz, 1847)
885. *Saldula c-album* (Fieber, 1859)
886. *Saldula lindbergi* Lindskog, 1975
887. *Saldula melanoscela* (Fieber, 1859)
888. *Saldula misis* Seidenstücker, 1964
889. *Saldula nitidula* (Puton, 1880)
890. *Saldula opacula* (Zetterstedt, 1838)
891. *Saldula orthochila* (Fieber, 1859)
892. *Saldula pallipes* (Fabricius, 1794)
893. *Saldula palustris* (Douglas, 1874)
894. *Saldula pilosella pilosella* (Thomson, 1871)
895. *Saldula saltatoria* (Linnaeus, 1758)
896. *Saldula xanthochila* (Fieber, 1859)

Nepomorpha: Corixoidea: Corixidae: Corixinae: Corixini

897. *Callicorixa raddei* (Kiritshenko & Jaczewski, 1960)
898. *Corixa affinis* Leach, 1817
899. *Corixa dentipes* Thomson, 1869
900. *Corixa jakowleffi* Horváth, 1880
901. *Corixa panzeri* Fieber, 1848
902. *Corixa punctata* (Illiger, 1807)
903. *Hesperocorixa linnaei* (Fieber, 1848)
904. *Hesperocorixa parallela* (Fieber, 1860)
905. *Hesperocorixa sahlbergi* (Fieber, 1848)
906. *Paracorixa concinna concinna* (Fieber, 1848)
907. *Sigara* (*Eremocorixa*) *iranica* Lindberg, 1964
908. *Sigara* (*Halicorixa*) *mayri* (Fieber, 1860)
909. *Sigara* (*Halicorixa*) *stagnalis stagnalis* (Leach, 1817)
910. *Sigara* (*Pseudovermicorixa*) *nigrolineata nigrolineata* (Fieber, 1848)
911. *Sigara* (*Retrocorixa*) *limitata limitata* (Fieber, 1848)
912. *Sigara* (*Sigara*) *albiventris* (Horváth, 1911)
913. *Sigara* (*Sigara*) *assimilis* (Fieber, 1848)
914. *Sigara* (*Sigara*) *striata* (Linnaeus, 1758)
915. *Sigara* (*Subsigara*) *daghestanica* Jansson, 1983
916. *Sigara* (*Subsigara*) *falleni* (Fieber, 1848)
917. *Sigara* (*Subsigara*) *iactans* Jansson, 1983
918. *Sigara* (*Subsigara*) *kervillei* (Poisson, 1927)
919. *Sigara* (*Subsigara*) *samani samani* Hoberlandt, 1952
920. *Sigara* (*Subsigara*) *samani tigranes* Jansson, 1986

921. *Sigara* (*Tropocorixa*) *confluens* (Fieber, 1851)
922. *Sigara* (*Vermicorixa*) *lateralis* (Leach, 1817)
923. *Sigara* (*Vermicorixa*) *scripta* (Rambur, 1840)

Nepomorpha: Corixoidea: Corixidae: Corixinae: Glaenocorisini

924. *Monticorixa armeniaca* (Štys, 1975)

Nepomorpha: Corixoidea: Corixidae: Cymatiainae

925. *Cymatia coleoptrata* (Fabricius, 1777)
926. *Cymatia rogenhoferi* (Fieber, 1864)

Nepomorpha: Corixoidea: Micronectidae

927. *Micronecta* (*Dichaetonecta*) *pusilla* (Horváth, 1895)
928. *Micronecta* (*Dichaetonecta*) *scholtzi* (Fieber, 1860)
929. *Micronecta* (*Micronecta*) *anatolica anatolica* Lindberg, 1922
930. *Micronecta* (*Micronecta*) *griseola* Horváth, 1899
931. *Micronecta* (*Micronecta*) *minutissima* (Linnaeus, 1758)
932. *Micronecta* (*Micronecta*) *poweri poweri* (Douglas & Scott, 1869)
933. *Micronecta* (*Micronecta*) *wui alkani* Hoberlandt, 1952

Nepomorpha: Naucoroidea: Aphelocheiridae

934. *Aphelocheirus* (*Aphelocheirus*) *aestivalis* (Fabricius, 1794)
935. *Aphelocheirus* (*Aphelocheirus*) *kolenatii* Kiritshenko, 1925

Nepomorpha: Naucoroidea: Naucoridae: Naucorinae

936. *Ilyocoris cimicoides cimicoides* (Linnaeus, 1758)
937. *Naucoris maculatus maculatus* Fabricius, 1798

Nepomorpha: Nepoidea: Belostomatidae: Lethocerinae

938. *Lethocerus patruelis* (Stål, 1854)

Nepomorpha: Nepoidea: Nepidae: Nepinae

939. *Nepa cinerea* Linnaeus, 1758

Nepomorpha: Nepoidea: Nepidae: Ranatrinae

940. *Ranatra* (*Ranatra*) *linearis* (Linnaeus, 1758)

Nepomorpha: Notonectoidea: Notonectidae: Anisopinae

941. *Anisops debilis perplexus* Poisson, 1929
942. *Anisops sardeus sardeus* Herrich-Schaeffer, 1849

Nepomorpha: Notonectoidea: Notonectidae: Notonectinae: Notonectini

943. *Notonecta* (*Notonecta*) *glauca glauca* Linnaeus, 1758
944. *Notonecta* (*Notonecta*) *glauca poissoni* Hungerford, 1934
945. *Notonecta* (*Notonecta*) *maculata* Fabricius, 1794
946. *Notonecta* (*Notonecta*) *meridionalis* Poisson, 1926
947. *Notonecta* (*Notonecta*) *obliqua* Thunberg, 1787
948. *Notonecta* (*Notonecta*) *reuteri reuteri* Hungerford, 1928
949. *Notonecta* (*Notonecta*) *viridis* Delcourt, 1909

Nepomorpha: Notonectoidea: Pleidae

950. *Plea minutissima minutissima* Leach, 1817

Nepomorpha: Ochteroidea: Ochteridae

951. *Ochterus* (*Ochterus*) *marginatus marginatus* (Latreille, 1804)

Pentatomomorpha: Aradoidea: Aradidae: Aneurinae

952. *Aneurus* (*Aneurodes*) *avenius* (Dufour, 1833)

953. *Aneurus* (*Aneurus*) *laevis* (Fabricius, 1775)

Pentatomomorpha: Aradoidea: Aradidae: Aradinae

954. *Aradus* (*Aradus*) *betulae* (Linnaeus, 1758)

955. *Aradus* (*Aradus*) *brenskei* Reuter, 1884

956. *Aradus* (*Aradus*) *caucasicus* Kolenati, 1857

957. *Aradus* (*Aradus*) *cilicicus* Heiss, 1990

958. *Aradus* (*Aradus*) *cinnamomeus* Panzer, 1806

959. *Aradus* (*Aradus*) *conspicuus* Herrich-Schaeffer, 1835

960. *Aradus* (*Aradus*) *corticalis* (Linnaeus, 1758)

961. *Aradus* (*Aradus*) *depressus depressus* (Fabricius, 1794)

962. *Aradus* (*Aradus*) *flavicornis* Dalman, 1823

963. *Aradus* (*Aradus*) *inopinus* Kiritshenko, 1955

964. *Aradus* (*Aradus*) *krueperi* Reuter, 1884

965. *Aradus* (*Aradus*) *reuterianus* Puton, 1875

966. *Aradus* (*Aradus*) *seidenstueckeri* Heiss, 1989

967. *Aradus* (*Aradus*) *versicolor* Herrich-Schaeffer, 1835

968. *Quilnus cedri* (Puton, 1873)

969. *Quilnus parvicollis* (Stål, 1873)

Pentatomomorpha: Aradoidea: Aradidae: Calisiinae

970. *Aradosyrtis salicis* (Horváth, 1913)

Pentatomomorpha: Coreoidea: Alydidae: Alydinae

971. *Alydus calcaratus* (Linnaeus, 1758)

972. *Camptopus bifasciatus* Fieber, 1864

973. *Camptopus illustris* Horváth, 1899

974. *Camptopus lateralis* (Germar, 1817)

975. *Camptopus tragacanthae* (Kolenati, 1845)

976. *Heegeria tangirica* (Saunders, 1877)

977. *Megalotomus ornaticeps* (Stål, 1858)

978. *Nemausus sordidatus* (Stål, 1858)

Pentatomomorpha: Coreoidea: Coreidae: Coreinae

979. *Centrocoris degener* (Puton, 1874)

980. *Centrocoris spiniger* (Fabricius, 1781)

981. *Centrocoris variegatus* Kolenati, 1845

982. *Centrocoris volxemi* (Puton, 1878)

983. *Cercinthus griseus* (Fieber, 1861)

984. *Coreus marginatus marginatus* (Linnaeus, 1758)

985. *Enoplops disciger* (Kolenati, 1845)

986. *Enoplops scapha* (Fabricius, 1794)
987. *Gonocerus acuteangulatus* (Goeze, 1778)
988. *Gonocerus insidiator* (Fabricius, 1787)
989. *Gonocerus juniperi* Herrich-Schaeffer, 1839
990. *Gonocerus patellatus* Kiritshenko, 1916
991. *Haploprocta sulcicornis* (Fabricius, 1794)
992. *Haploprocta umbrina* Jakovlev, 1883
993. *Leptoglossus occidentalis* Heidemann, 1910
994. *Phyllomorpha lacerata* Herrich-Schaeffer, 1835
995. *Phyllomorpha laciniata* (Villers, 1789)
996. *Plinachtus imitator* (Reuter, 1891)
997. *Prionotylus brevicornis* (Mulsant & Rey, 1852)
998. *Spathocera dalmanii* (Schilling, 1829)
999. *Spathocera laticornis* (Schilling, 1829)
1000. *Spathocera lobata* (Herrich-Schaeffer, 1840)
1001. *Spathocera tenuicornis* Jakovlev, 1883
1002. *Spathocera tuberculata* Horváth, 1882
1003. *Syromastus rhombeus* (Linnaeus, 1767)

Pentatomomorpha: Coreoidea: Coreidae: Pseudophloeinae

1004. *Coriomeris affinis* (Herrich-Schaeffer, 1839)
1005. *Coriomeris alpinus* (Horváth, 1895)
1006. *Coriomeris armeniacus* Tshernova, 1978
1007. *Coriomeris bergevini* (Poppius, 1912)
1008. *Coriomeris brevicornis* Lindberg, 1923
1009. *Coriomeris denticulatus* (Scopoli, 1763)
1010. *Coriomeris hirticornis* (Fabricius, 1794)
1011. *Coriomeris pallidus* Reuter, 1900
1012. *Coriomeris scabricornis scabricornis* (Panzer, 1805)
1013. *Coriomeris subglaber* Horváth, 1917
1014. *Coriomeris validicornis* Jakovlev, 1904
1015. *Coriomeris vitticollis* Reuter, 1900
1016. *Loxocnemis dentator* (Fabricius, 1794)
1017. *Nemocoris fallenii* Sahlberg, 1848
1018. *Strobilotoma typhaecornis* (Fabricius, 1803)
1019. *Urartucoris ermolenkoi* P.V. Putshkov, 1979
1020. *Anoplocerus elevatus* (Fieber, 1861)
1021. *Anoplocerus luteus* (Fieber, 1861)
1022. *Arenocoris fallenii* (Schilling, 1829)
1023. *Arenocoris intermedius* (Jakovlev, 1883)
1024. *Arenocoris latissimus* Seidenstücker, 1960
1025. *Arenocoris waltlii* (Herrich-Schaeffer, 1835)

1026. *Bathysolen nubilus* (Fallén, 1807)
1027. *Bothrostethus annulipes* (Herrich-Schaeffer, 1835)
1028. *Ceraleptus gracilicornis* (Herrich-Schaeffer, 1835)
1029. *Ceraleptus lividus* Stein, 1858
1030. *Ceraleptus obtusus* (Brullé, 1839)
1031. *Ceraleptus sartus* Kiritshenko, 1912

Pentatomomorpha: Coreoidea: Rhopalidae: Rhopalinae: Chorosomatini

1032. *Agraphopus lethierryi* Stål, 1872
1033. *Agraphopus suturalis* Reuter, 1900
1034. *Chorosoma gracile* Josifov, 1968
1035. *Chorosoma schillingii* (Schilling, 1829)
1036. *Myrmus miriformis miriformis* (Fallén, 1807)

Pentatomomorpha: Coreoidea: Rhopalidae: Rhopalinae: Corizomorphini

1037. *Corizomorpha janowskyi* Jakovlev, 1883

Pentatomomorpha: Coreoidea: Rhopalidae: Rhopalinae: Rhopalini

1038. *Brachycarenus languidus* (Horváth, 1891)
1039. *Brachycarenus tigrinus* (Schilling, 1829)
1040. *Corizus brevicornis* Horváth, 1917
1041. *Corizus fenestella fenestella* Horváth, 1917
1042. *Corizus hyoscyami hyoscyami* (Linnaeus, 1758)
1043. *Leptoceraea viridis* Jakovlev, 1873
1044. *Limacocarenus curtulus* Kiritshenko, 1914
1045. *Liorhyssus hyalinus* (Fabricius, 1794)
1046. *Maccevethus caucasicus* (Kolenati, 1845)
1047. *Maccevethus corsicus corsicus* Signoret, 1862
1048. *Maccevethus errans* (Fabricius, 1794)
1049. *Rhopalus* (*Aeschyntelus*) *maculatus* (Fieber, 1837)
1050. *Rhopalus* (*Rhopalus*) *conspersus* (Fieber, 1837)
1051. *Rhopalus* (*Rhopalus*) *distinctus* (Signoret, 1859)
1052. *Rhopalus* (*Rhopalus*) *lepidus* Fieber, 1861
1053. *Rhopalus* (*Rhopalus*) *parumpunctatus* Schilling, 1829
1054. *Rhopalus* (*Rhopalus*) *rufus* Schilling, 1829
1055. *Rhopalus* (*Rhopalus*) *subrufus* (Gmelin, 1790)
1056. *Stictopleurus abutilon* (Rossi, 1790)
1057. *Stictopleurus angustus* Reuter, 1900
1058. *Stictopleurus crassicornis* (Linnaeus, 1758)
1059. *Stictopleurus pictus* (Fieber, 1861)
1060. *Stictopleurus punctatonervosus* (Goeze, 1778)
1061. *Stictopleurus subtomentosus* (Rey, 1888)
1062. *Stictopleurus unicolor* (Jakovlev, 1873)

Pentatomomorpha: Coreoidea: Stenocephalidae

1063. *Dicranocephalus agilis* (Scopoli, 1763)
1064. *Dicranocephalus albipes* (Fabricius, 1781)
1065. *Dicranocephalus marginatus* (Ferrari, 1874)
1066. *Dicranocephalus medius* (Mulsant & Rey, 1870)
1067. *Dicranocephalus pallidus* (Signoret, 1879)
1068. *Dicranocephalus putoni* (Horváth, 1897)
1069. *Dicranocephalus setulosus* (Ferrari, 1874)

Pentatomomorpha: Lygaeoidea: Artheneidae: Artheneinae

1070. *Artheneis aegyptiaca* Lindberg, 1939
1071. *Artheneis alutacea* Fieber, 1861
1072. *Artheneis balcanica* (Kormilev, 1938)
1073. *Artheneis foveolata* Spinola, 1837
1074. *Artheneis hyrcanica* (Kolenati, 1845)
1075. *Artheneis intricata* V.G. Putshkov, 1969
1076. *Artheneis wagneri* Ribes, 1972
1077. *Holcocranum saturejae* (Kolenati, 1845)

Pentatomomorpha: Lygaeoidea: Berytidae: Berytinae

1078. *Apoplymus pectoralis* Fieber, 1859
1079. *Berytinus* (*Berytinus*) *clavipes* (Fabricius, 1775)
1080. *Berytinus* (*Berytinus*) *hirticornis nigrolineatus* (Jakovlev, 1903)
1081. *Berytinus* (*Berytinus*) *hirticornis pilipes* (Puton, 1875)
1082. *Berytinus* (*Berytinus*) *minor minor* (Herrich-Schaeffer, 1835)
1083. *Berytinus* (*Lizinus*) *consimilis* (Horváth, 1885)
1084. *Berytinus* (*Lizinus*) *distinguendus* (Ferrari, 1874)
1085. *Berytinus* (*Lizinus*) *geniculatus* (Horváth, 1885)
1086. *Berytinus* (*Lizinus*) *montivagus* (Meyer-Dür, 1841)
1087. *Berytinus* (*Lizinus*) *setipennis* (Saunders, 1876)
1088. *Berytinus* (*Lizinus*) *signoreti* (Fieber, 1859)
1089. *Berytinus* (*Lizinus*) *striola* (Ferrari, 1874)
1090. *Neides aduncus* Fieber, 1859
1091. *Neides afghanus* Seidenstücker, 1968
1092. *Neides brevipennis* Puton, 1895
1093. *Neides tipularius* (Linnaeus, 1758)

Pentatomomorpha: Lygaeoidea: Berytidae: Gampsocorinae

1094. *Gampsocoris culicinus culicinus* Seidenstücker, 1948
1095. *Gampsocoris culicinus melitenus* Seidenstücker, 1965
1096. *Gampsocoris enslini* Seidenstücker, 1953
1097. *Gampsocoris punctipes pallidus* Hoberlandt, 1951
1098. *Gampsocoris punctipes punctipes* (Germar, 1822)

Pentatomomorpha: Lygaeoidea: Berytidae: Metacanthinae

1099. *Metacanthus* (*Cardopostethus*) *annulosus* (Fieber, 1859)

1100. *Metacanthus* (*Metacanthus*) *meridionalis* (A. Costa, 1843)

1101. *Metatropis rufescens* (Herrich-Schaeffer, 1835)

Pentatomomorpha: Lygaeoidea: Blissidae

1102. *Blissus hirtulus* Burmeister, 1835

1103. *Blissus putoni* Jakovlev, 1875

1104. *Dimorphopterus blissoides* (Baerensprung, 1859)

1105. *Dimorphopterus doriae* (Ferrari, 1874)

1106. *Dimorphopterus spinolae* (Signoret, 1857)

1107. *Ischnodemus caspius* Jakovlev, 1871

1108. *Ischnodemus genei* (Spinola, 1837)

1109. *Ischnodemus sabuleti* (Fallén, 1826)

1110. *Ischnodemus suturalis* Horváth, 1883

Pentatomomorpha: Lygaeoidea: Cymidae: Cyminae

1111. *Cymodema tabida tabida* Spinola, 1837

1112. *Cymus aurescens* Distant, 1883

1113. *Cymus claviculus* (Fallén, 1807)

1114. *Cymus glandicolor* Hahn, 1832

1115. *Cymus gracilicornis* Vidal, 1940

1116. *Cymus melanocephalus* Fieber, 1861

1117. *Cymus simplex* Horváth, 1882

1118. *Cymus turcicus* Matocq, 2000

Pentatomomorpha: Lygaeoidea: Geocoridae: Bledionotinae

1119. *Bledionotus systellonotoides* Reuter, 1878

Pentatomomorpha: Lygaeoidea: Geocoridae: Geocorinae

1120. *Geocoris* (*Eilatus*) *chloroticus* Puton, 1888

1121. *Geocoris* (*Geocoris*) *arenarius* (Jakovlev, 1867)

1122. *Geocoris* (*Geocoris*) *ater* (Fabricius, 1787)

1123. *Geocoris* (*Geocoris*) *grylloides* (Linnaeus, 1761)

1124. *Geocoris* (*Geocoris*) *lapponicus* Zetterstedt, 1838

1125. *Geocoris* (*Geocoris*) *lineola lineola* (Rambur, 1839)

1126. *Geocoris* (*Geocoris*) *megacephalus* (Rossi, 1790)

1127. *Geocoris* (*Geocoris*) *pallidipennis pallidipennis* (A. Costa, 1843)

1128. *Geocoris* (*Geocoris*) *phaeopterus* (Germar, 1838)

1129. *Geocoris* (*Geocoris*) *pubescens* (Jakovlev, 1871)

1130. *Geocoris* (*Piocoris*) *erythrocephalus erythrocephalus* (Lepeletier & Serville, 1825)

1131. *Geocoris* (*Piocoris*) *luridus* (Fieber, 1844)

1132. *Geocoris* (*Piocoris*) *nebulosus* (Montandon, 1907)

1133. *Geocoris* (*Piocoris*) *putonianus* Bergroth, 1892

Pentatomomorpha: Lygaeoidea: Geocoridae: Henestarinae

1134. *Engistus exsanguis exsanguis* Stål, 1872
1135. *Engistus salinus* (Jakovlev, 1874)
1136. *Henestaris halophilus* (Burmeister, 1835)
1137. *Henestaris kareli* Hoberlandt, 1956
1138. *Henestaris laticeps laticeps* (Curtis, 1836)

Pentatomomorpha: Lygaeoidea: Heterogasteridae

1139. *Heterogaster affinis* Herrich-Schaeffer, 1835
1140. *Heterogaster artemisiae* Schilling, 1829
1141. *Heterogaster cathariae* (Geoffroy, 1785)
1142. *Heterogaster urticae* (Fabricius, 1775)
1143. *Platyplax inermis* (Rambur, 1839)
1144. *Platyplax salviae* (Schilling, 1829)

Pentatomomorpha: Lygaeoidea: Lygaeidae: Ischnorhynchinae

1145. *Kleidocerys ericae* (Horváth, 1908)
1146. *Kleidocerys resedae resedae* (Panzer, 1797)

Pentatomomorpha: Lygaeoidea: Lygaeidae: Lygaeinae

1147. *Apterola* (*Apterola*) *kuenckeli kuenckeli* Mulsant & Rey, 1866
1148. *Apterola* (*Apterola*) *kuenckeli rubicunda* (Stål, 1872)
1149. *Apterola* (*Apterola*) *lownii* (Saunders, 1876)
1150. *Arocatus longiceps* Stål, 1872
1151. *Arocatus melanocephalus* (Fabricius, 1798)
1152. *Arocatus roeselii* (Schilling, 1829)
1153. *Caenocoris nerii* (Germar, 1847)
1154. *Graptostethus servus servus* (Fabricius, 1787)
1155. *Horvathiolus fulvescens* (Puton, 1874)
1156. *Horvathiolus kiritshenkoi kiritshenkoi* Josifov, 1965
1157. *Horvathiolus superbus* (Pollich, 1781)
1158. *Horvathiolus syriacus* (Reuter, 1885)
1159. *Lygaeosoma anatolicum* Seidenstücker, 1960
1160. *Lygaeosoma angulare* Reuter, 1885
1161. *Lygaeosoma sardeum* Spinola, 1837
1162. *Lygaeosoma sibiricum* Seidenstücker, 1962
1163. *Lygaeus creticus* Lucas, 1853
1164. *Lygaeus equestris* (Linnaeus, 1758)
1165. *Lygaeus melanostolus* (Kiritshenko, 1931)
1166. *Lygaeus simulans* Deckert, 1985
1167. *Melanocoryphus albomaculatus* (Goeze, 1778)
1168. *Melanocoryphus tristrami* (Douglas & Scott, 1868)
1169. *Paranysius fraterculus fraterculus* Horváth, 1895
1170. *Spilostethus pandurus* (Scopoli, 1763)

1171. *Spilostethus saxatilis* (Scopoli, 1763)
1172. *Tropidothorax leucopterus* (Goeze, 1778)

Pentatomomorpha: Lygaeoidea: Lygaeidae: Orsillinae: Nysiini

1173. *Nysius cymoides* (Spinola, 1837)
1174. *Nysius ericae ericae* (Schilling, 1829)
1175. *Nysius graminicola graminicola* (Kolenati, 1845)
1176. *Nysius helveticus* (Herrich-Schaeffer, 1850)
1177. *Nysius immunis* (Walker, 1872)
1178. *Nysius senecionis senecionis* (Schilling, 1829)
1179. *Nysius thymi thymi* (Wolff, 1804)

Pentatomomorpha: Lygaeoidea: Lygaeidae: Orsillinae: Orsillini

1180. *Belonochilus numenius* (Say, 1831)
1181. *Camptocoris longicornis* (Puton, 1874)
1182. *Orsillus depressus* (Mulsant & Rey, 1852)
1183. *Orsillus maculatus* (Fieber, 1861)
1184. *Orsillus reyi* Puton, 1871
1185. *Ortholomus carinatus* (Lindberg, 1932)
1186. *Ortholomus jordani* Hoberlandt, 1953
1187. *Ortholomus punctipennis* (Herrich-Schaeffer, 1838)

Pentatomomorpha: Lygaeoidea: Oxycarenidae

1188. *Auchenodes capito* Horváth, 1891
1189. *Auchenodes costalis* (Lethierry, 1877)
1190. *Brachyplax tenuis* (Mulsant & Rey, 1852)
1191. *Camptotelus lineolatus lineolatus* (Schilling, 1829)
1192. *Camptotelus parallelus* Horváth, 1894
1193. *Leptodemus minutus* (Jakovlev, 1874)
1194. *Macroplax fasciata fasciata* (Herrich-Schaeffer, 1835)
1195. *Macroplax preyssleri* (Fieber, 1837)
1196. *Macropternella inermis* (Fieber, 1851)
1197. *Metopoplax fuscinervis* Stål, 1872
1198. *Metopoplax origani* (Kolenati, 1845)
1199. *Microplax albofasciata* (A. Costa, 1847)
1200. *Microplax interrupta* (Fieber, 1837)
1201. *Microplax limbata* Fieber, 1864
1202. *Oxycarenus* (*Euoxycarenus*) *pallens* (Herrich-Schaeffer, 1850)
1203. *Oxycarenus* (*Oxycarenus*) *hyalinipennis* (A. Costa, 1843)
1204. *Oxycarenus* (*Oxycarenus*) *lavaterae* (Fabricius, 1787)
1205. *Oxycarenus* (*Pseudoxycarenus*) *modestus* (Fallén, 1829)
1206. *Tropidophlebia costalis* (Herrich-Schaeffer, 1850)

Pentatomomorpha: Lygaeoidea: Pachygronthidae

1207. *Cymophyes* (*Cymophyes*) *ochroleuca* Fieber, 1870

Pentatomomorpha: Lygaeoidea: Piesmatidae: Piesmatinae

1208. *Parapiesma atriplicis* (Frey-Gessner, 1863)
1209. *Parapiesma kolenatii* (Fieber, 1861)
1210. *Parapiesma quadratum* (Fieber, 1844)
1211. *Parapiesma salsolae* (Becker, 1867)
1212. *Parapiesma silenes* (Horváth, 1888)
1213. *Piesma capitatum* (Wolff, 1804)
1214. *Piesma maculatum* (Laporte, 1833)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Plinthisinae

1215. *Plinthisus* (*Isioscytus*) *minutissimus* Fieber, 1864
1216. *Plinthisus* (*Isioscytus*) *ptilioides* Puton, 1874
1217. *Plinthisus* (*Isioscytus*) *reyi* Puton, 1882
1218. *Plinthisus* (*Plinthisomus*) *pusillus* (Scholtz, 1847)
1219. *Plinthisus* (*Plinthisus*) *angulatus* Horváth, 1876
1220. *Plinthisus* (*Plinthisus*) *brevipennis* (Latreille, 1807)
1221. *Plinthisus* (*Plinthisus*) *convexus* Fieber, 1864
1222. *Plinthisus* (*Plinthisus*) *coracinus* Horváth, 1876
1223. *Plinthisus* (*Plinthisus*) *longicollis* Fieber, 1861
1224. *Plinthisus* (*Plinthisus*) *major* Horváth, 1876
1225. *Plinthisus* (*Plinthisus*) *marginatus* Ferrari, 1874
1226. *Plinthisus* (*Plinthisus*) *mehadiensis* Horváth, 1881
1227. *Plinthisus* (*Plinthisus*) *obsoletus* Horváth, 1886

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Antillocorini

1228. *Homoscelis ruficollis* Horváth, 1884
1229. *Tropistethus fasciatus* Ferrari, 1874
1230. *Tropistethus holosericus* (Scholtz, 1846)
1231. *Tropistethus lanternae* Linnavuori, 1960

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Drymini

1232. *Drymus* (*Drymus*) *pilicornis* (Mulsant & Rey, 1852)
1233. *Drymus* (*Drymus*) *pilipes* Fieber, 1861
1234. *Drymus* (*Sylvadrymus*) *brunneus brunneus* (R.F. Sahlberg, 1848)
1235. *Drymus* (*Sylvadrymus*) *brunneus confinis* Reuter, 1893
1236. *Drymus* (*Sylvadrymus*) *ryeii* Douglas & Scott, 1865
1237. *Drymus* (*Sylvadrymus*) *sylvaticus* (Fabricius, 1775)
1238. *Eremocoris abietis abietis* (Linnaeus, 1758)
1239. *Eremocoris fenestratus* (Herrich-Schaeffer, 1839)
1240. *Eremocoris pellitus* Seidenstücker, 1965
1241. *Eremocoris plebejus plebejus* (Fallén, 1807)
1242. *Eremocoris podagricus* (Fabricius, 1775)
1243. *Eremocoris praenotatus* Seidenstücker, 1965
1244. *Gastrodes grossipes grossipes* (De Geer, 1773)

1245. *Ischnocoris bureschi* Josifov, 1976
1246. *Ischnocoris flavipes* Signoret, 1865
1247. *Ischnocoris hemipterus* (Schilling, 1829)
1248. *Ischnocoris punctulatus* Fieber, 1861
1249. *Orsillodes longirostris* (Puton, 1884)
1250. *Scolopostethus affinis* (Schilling, 1829)
1251. *Scolopostethus cognatus* Fieber, 1861
1252. *Scolopostethus decoratus* (Hahn, 1833)
1253. *Scolopostethus grandis* Horváth, 1880
1254. *Scolopostethus pictus* (Schilling, 1829)
1255. *Scolopostethus thomsoni* Reuter, 1875
1256. *Taphropeltus contractus* (Herrich-Schaeffer, 1835)
1257. *Taphropeltus hamulatus* (Thomson, 1870)
1258. *Taphropeltus intermedius* (Puton, 1881)
1259. *Taphropeltus nervosus* (Fieber, 1861)
1260. *Thaumastopus cinnamomeus* (Horváth, 1884)
1261. *Thaumastopus marginicollis* (Lucas, 1849)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Gonianotini

1262. *Alampes nanulus* Seidenstücker, 1966
1263. *Aoploscelis bivirgata* (A. Costa, 1853)
1264. *Aphanus rolandri* (Linnaeus, 1758)
1265. *Diomphalus hispidulus* Fieber, 1864
1266. *Emblethis amplus* Seidenstücker, 1987
1267. *Emblethis angustus* Montandon, 1890
1268. *Emblethis brachynotus* Horváth, 1897
1269. *Emblethis ciliatus* Horváth, 1875
1270. *Emblethis denticollis* Horváth, 1878
1271. *Emblethis dilaticollis* (Jakovlev, 1874)
1272. *Emblethis duplicatus* Seidenstücker, 1963
1273. *Emblethis griseus* (Wolff, 1802)
1274. *Emblethis karamanus* Seidenstücker, 1963
1275. *Emblethis latus* Seidenstücker, 1966
1276. *Emblethis major* Montandon, 1890
1277. *Emblethis minutus* Kiritshenko, 1911
1278. *Emblethis nox* Kiritshenko, 1912
1279. *Emblethis osmanus* Seidenstücker, 1963
1280. *Emblethis sabulosus* Seidenstücker, 1963
1281. *Emblethis setifer* Seidenstücker, 1966
1282. *Emblethis solitarius* Jakovlev, 1881
1283. *Emblethis verbasci* (Fabricius, 1803)
1284. *Gonianotus galactodermus* Fieber, 1861

1285. *Gonianotus marginepunctatus* (Wolff, 1804)
1286. *Ischnopeza hirticornis* (Herrich-Schaeffer, 1850)
1287. *Ischnopeza pallipes* Puton, 1892
1288. *Neurocladus brachiidens* (Dufour, 1851)
1289. *Pionosomus engizekicus* Kıyak, 1995
1290. *Pionosomus heterotrichus* Horváth, 1884
1291. *Pionosomus opacellus* Horváth, 1895
1292. *Pionosomus persimilis* Horváth, 1895
1293. *Pionosomus varius* (Wolff, 1804)
1294. *Pterotmetus staphyliniformis* (Schilling, 1829)
1295. *Trapezonotus* (*Trapezonotus*) *arenarius arenarius* (Linnaeus, 1758)
1296. *Trapezonotus* (*Trapezonotus*) *breviceps* Jakovlev, 1881
1297. *Trapezonotus* (*Trapezonotus*) *desertus* Seidenstücker, 1951
1298. *Trapezonotus* (*Trapezonotus*) *dispar* Stål, 1872
1299. *Trapezonotus* (*Trapezonotus*) *ullrichi* (Fieber, 1837)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Lethaeini

1300. *Camptocera glaberrima* (Walker, 1872)
1301. *Lethaeus cribratissimus* (Stål, 1858)
1302. *Lethaeus fulvovarius* Puton, 1884
1303. *Lethaeus lethierryi* (Puton, 1869)
1304. *Lethaeus nitidus* (Douglas & Scott, 1868)
1305. *Lethaeus picipes* (Herrich-Schaeffer, 1850)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Megalonotini

1306. *Hadrocnemis diversipes* (Kiritshenko, 1922)
1307. *Icus angularis* Fieber, 1861
1308. *Lamprodema maura* (Fabricius, 1803)
1309. *Lasiocoris anomalus* (Kolenati, 1845)
1310. *Lasiocoris crassicornis* (Lucas, 1849)
1311. *Megalonotus brevicornis* (Puton, 1883)
1312. *Megalonotus chiragra* (Fabricius, 1794)
1313. *Megalonotus colon* Puton, 1874
1314. *Megalonotus dilatatus* (Herrich-Schaeffer, 1840)
1315. *Megalonotus emarginatus* (Rey, 1888)
1316. *Megalonotus hirsutus* Fieber, 1861
1317. *Megalonotus longipilis* (Puton, 1884)
1318. *Megalonotus maximus* (Puton, 1895)
1319. *Megalonotus merus* Seidenstücker, 1979
1320. *Megalonotus praetextatus* (Herrich-Schaeffer, 1835)
1321. *Megalonotus puncticollis* (Lucas, 1849)
1322. *Megalonotus rugulosus* (Linnavuori, 1954)
1323. *Megalonotus sabulicola* (Thomson, 1870)

1324. *Megalonotus scaurus* Seidenstücker, 1973
1325. *Megalonotus seidenstueckeri* Péricart, 1995
1326. *Megalonotus setosus* Puton, 1874
1327. *Megalonotus sophenus* Seidenstücker, 1973
1328. *Megalonotus tricolor* (Horváth, 1895)
1329. *Pezocoris apicimacula* (A. Costa, 1853)
1330. *Piezoscelis staphylinus* (Rambur, 1839)
1331. *Proderus bellevoyei* Puton, 1874
1332. *Sphragisticus nebulosus* (Fallén, 1807)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Myodochini

1333. *Pachybrachius capitatus* (Horváth, 1882)
1334. *Paraparomius leptopoides* (Baerensprung, 1859)
1335. *Paromius gracilis* (Rambur, 1839)
1336. *Remaudiereana annulipes* (Baerensprung, 1859)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Rhyparochromini

1337. *Aellopideus nigritus* (Seidenstücker, 1963)
1338. *Aellopus atratus* (Goeze, 1778)
1339. *Beosus maritimus* (Scopoli, 1763)
1340. *Beosus quadripunctatus* (Müller, 1766)
1341. *Callistonotus nigroruber* (Stål, 1858)
1342. *Dieuches syriacus* Dohrn, 1860
1343. *Graptopeltus lynceus* (Fabricius, 1775)
1344. *Graptopeltus validus* (Horváth, 1875)
1345. *Liolobus walkeri* (Saunders, 1876)
1346. *Microtomideus armenicus* Seidenstücker, 1963
1347. *Microtomideus seidenstuckeri* J.A. Slater, 1964
1348. *Peritrechus angusticollis* (R.F. Sahlberg, 1848)
1349. *Peritrechus flavicornis* Jakovlev, 1877
1350. *Peritrechus geniculatus* (Hahn, 1832)
1351. *Peritrechus gracilicornis* Puton, 1877
1352. *Peritrechus lundii* (Gmelin, 1790)
1353. *Peritrechus meridionalis* Puton, 1877
1354. *Peritrechus nubilus* (Fallén, 1807)
1355. *Peritrechus pusillus* Horváth, 1884
1356. *Peritrechus rhomboidalis* Puton, 1877
1357. *Raglius alboacuminatus alboacuminatus* (Goeze, 1778)
1358. *Raglius confusus* (Reuter, 1886)
1359. *Raglius pineti* (Herrich-Schaeffer, 1835)
1360. *Raglius tristis* (Fieber, 1861)
1361. *Raglius zarudnyi* (Jakovlev, 1905)
1362. *Rhyparochromus phoeniceus* (Rossi, 1794)

1363. *Rhyparochromus pini* (Linnaeus, 1758)
1364. *Rhyparochromus sanguineus* (Douglas & Scott, 1868)
1365. *Rhyparochromus tisifone* Linnavuori, 1990
1366. *Rhyparochromus vulgaris* (Schilling, 1829)
1367. *Trichaphanus fuentei* (Puton, 1894)
1368. *Xanthochilus minusculus* (Reuter, 1885)
1369. *Xanthochilus omissus* (Horváth, 1911)
1370. *Xanthochilus quadratus* (Fabricius, 1798)
1371. *Xanthochilus saturnius* (Rossi, 1790)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Stygnocorini

1372. *Acompus pallipes* (Herrich-Schaeffer, 1834)
1373. *Acompus rufipes* (Wolff, 1804)
1374. *Hyalochilus dolosus* Horváth, 1897
1375. *Hyalochilus ovatulus* (A. Costa, 1853)
1376. *Stygnocoris faustus* Horváth, 1888
1377. *Stygnocoris fuligineus* (Geoffroy, 1785)
1378. *Stygnocoris hellenicus* Péricart, 1996
1379. *Stygnocoris matocqi* Péricart, 1993
1380. *Stygnocoris rusticus* (Fallén, 1807)
1381. *Stygnocoris sabulosus* (Schilling, 1829)
1382. *Stygnocoris similis* Wagner, 1953
1383. *Stygnocorisella mayeti* (Puton, 1879)

Pentatomomorpha: Lygaeoidea: Rhyparochromidae: Rhyparochrominae: Udeocorini

1384. *Tempyra biguttula* Stål, 1874

Pentatomomorpha: Pentatomoidea: Acanthosomatidae: Acanthosomatinae

1385. *Acanthosoma haemorrhoidale haemorrhoidale* (Linnaeus, 1758)
1386. *Cyphostethus tristriatus* (Fabricius, 1787)
1387. *Elasmostethus interstinctus* (Linnaeus, 1758)
1388. *Elasmostethus minor* Horváth, 1899
1389. *Elasmucha grisea cypria* Josifov, 1971
1390. *Elasmucha grisea grisea* (Linnaeus, 1758)

Pentatomomorpha: Pentatomoidea: Cydnidae: Amnestinae

1391. *Amnestus pusillus* Uhler, 1876

Pentatomomorpha: Pentatomoidea: Cydnidae: Amaurocorinae

1392. *Amaurocoris curtus* (Brullé, 1839)

Pentatomomorpha: Pentatomoidea: Cydnidae: Cydninae

1393. *Aethus hispidulus* (Klug, 1845)
1394. *Aethus pilosus* (Herrich-Schaeffer, 1834)
1395. *Byrsinus flavicornis* (Fabricius, 1794)
1396. *Byrsinus pilosulus* (Klug, 1845)
1397. *Cydnus aterrimus* (Forster, 1771)

1398. *Fromundus pygmaeus* (Dallas, 1851)
1399. *Geotomus angustus* Wagner, 1953
1400. *Geotomus antennatus* Signoret, 1883
1401. *Geotomus brunnipennis* Wagner, 1953
1402. *Geotomus ciliatitylus* Signoret, 1881
1403. *Geotomus elongatus* (Herrich-Schaeffer, 1840)
1404. *Geotomus punctulatus* (A. Costa, 1847)
1405. *Macroscytus brunneus* (Fabricius, 1803)
1406. *Microporus nigrita* (Fabricius, 1794)

Pentatomomorpha: Pentatomoidea: Cydnidae: Sehirinae

1407. *Adomerus congener* (Jakovlev, 1879)
1408. *Adomerus maculipes* (Mulsant & Rey, 1852)
1409. *Canthophorus dubius dubius* (Scopoli, 1763)
1410. *Canthophorus impressus hajastanicus* Gapon, 2018
1411. *Canthophorus melanopterus melanopterus* (Herrich-Schaeffer, 1835)
1412. *Canthophorus mixtus mixtus* Asanova, 1964
1413. *Canthophorus wagneri wagneri* Asanova, 1964
1414. *Crocistethus basalis* (Fieber, 1861)
1415. *Crocistethus waltlianus* (Fieber, 1837)
1416. *Exosehirus marginatus* (Signoret, 1881)
1417. *Legnotus fumigatus* (A. Costa, 1853)
1418. *Legnotus limbosus* (Geoffroy, 1785)
1419. *Legnotus pericarti* Magnien, 1999
1420. *Legnotus picipes* (Fallén, 1807)
1421. *Ochetostethus balcanicus* Wagner, 1940
1422. *Ochetostethus heissi* Magnien, 2006
1423. *Ochetostethus opacus* (Scholtz, 1847)
1424. *Ochetostethus sahlbergi* Wagner, 1952
1425. *Sehirus cypriacus* Dohrn, 1860
1426. *Sehirus dissimilis* Horváth, 1919
1427. *Sehirus luctuosus* Mulsant & Rey, 1866
1428. *Sehirus morio* (Linnaeus, 1761)
1429. *Sehirus ovatus* (Herrich-Schaeffer, 1840)
1430. *Sehirus robustus* Horváth, 1895
1431. *Tritomegas bicolor* (Linnaeus, 1758)
1432. *Tritomegas delagrangei* (Puton, 1888)
1433. *Tritomegas sexmaculatus* (Rambur, 1839)

Pentatomomorpha: Pentatomoidea: Dinidoridae: Dinidorinae

1434. *Coridius viduatus* (Fabricius, 1794)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Asopinae

1435. *Andrallus spinidens* (Fabricius, 1787)

1436. *Arma custos* (Fabricius, 1794)
1437. *Arma insperata* Horváth, 1899
1438. *Jalla anthracina* Jakovlev, 1885
1439. *Jalla dumosa* (Linnaeus, 1758)
1440. *Perillus bioculatus* (Fabricius, 1775)
1441. *Picromerus bidens* (Linnaeus, 1758)
1442. *Picromerus brachypterus* Ahmad & Önder, 1990
1443. *Picromerus conformis* (Herrich-Schaeffer, 1841)
1444. *Picromerus nigridens* (Fabricius, 1803)
1445. *Picromerus pseudobidens* Ahmad & Önder, 1990
1446. *Pinthaeus sanguinipes* (Fabricius, 1781)
1447. *Rhacognathus punctatus* (Linnaeus, 1758)
1448. *Troilus luridus* (Fabricius, 1775)
1449. *Zicrona caerulea* (Linnaeus, 1758)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Aeliini

1450. *Aelia acuminata* (Linnaeus, 1758)
1451. *Aelia albovittata* Fieber, 1868
1452. *Aelia alticola* Kiritshenko, 1914
1453. *Aelia furcula* Fieber, 1868
1454. *Aelia germari* Küster, 1852
1455. *Aelia klugii* Hahn, 1833
1456. *Aelia melanota* Fieber, 1868
1457. *Aelia notata* Rey, 1887
1458. *Aelia rostrata* Boheman, 1852
1459. *Aelia sibirica* Reuter, 1884
1460. *Aelia virgata* (Herrich-Schaeffer, 1841)
1461. *Neottiglossa bifida* (A. Costa, 1847)
1462. *Neottiglossa flavomarginata* (Lucas, 1849)
1463. *Neottiglossa leporina* (Herrich-Schaeffer, 1830)
1464. *Neottiglossa lineolata* (Mulsant & Rey, 1852)
1465. *Neottiglossa pusilla* (Gmelin, 1790)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Cappaeini

1466. *Halyomorpha halys* (Stål, 1855)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Carpocorini

1467. *Agatharchus* (*Agatharchus*) *escalerae* Horváth, 1901
1468. *Agatharchus* (*Agatharchus*) *herrichii* (Kolenati, 1846)
1469. *Agatharchus* (*Agatharchus*) *linea* (Klug, 1845)
1470. *Agatharchus* (*Agatharchus*) *ponticus* Belousova, 1999
1471. *Agatharchus* (*Agatharchus*) *tritaenia* Horváth, 1897
1472. *Antheminia lunulata* (Goeze, 1778)
1473. *Antheminia pusio pusio* (Kolenati, 1846)

1474. *Antheminia varicornis* (Jakovlev, 1874)
1475. *Carpocoris* (*Carpocoris*) *coreanus* Distant, 1899
1476. *Carpocoris* (*Carpocoris*) *fuscispinus* (Boheman, 1851)
1477. *Carpocoris* (*Carpocoris*) *mediterraneus mediterraneus* Tamanini, 1958
1478. *Carpocoris* (*Carpocoris*) *melanocerus* (Mulsant & Rey, 1852)
1479. *Carpocoris* (*Carpocoris*) *pudicus* (Poda, 1761)
1480. *Carpocoris* (*Carpocoris*) *purpureipennis* (De Geer, 1773)
1481. *Chroantha ornatula* (Herrich-Schaeffer, 1842)
1482. *Cnephosa flavomarginata* Jakovlev, 1880
1483. *Codophila maculicollis* (Dallas, 1851)
1484. *Codophila varia* (Fabricius, 1787)
1485. *Dolycoris baccarum* (Linnaeus, 1758)
1486. *Enigmocoris fissiceps* (Horváth, 1906)
1487. *Holcogaster fibulata* (Germar, 1831)
1488. *Holcostethus* (*Holcostethus*) *albipes* (Fabricius, 1781)
1489. *Holcostethus* (*Holcostethus*) *sphacelatus* (Fabricius, 1794)
1490. *Peribalus* (*Asioperibalus*) *hoberlandti* (Lodos & Önder, 1980)
1491. *Peribalus* (*Asioperibalus*) *inclusus* (Dohrn, 1860)
1492. *Peribalus* (*Peribalus*) *strictus strictus* (Fabricius, 1803)
1493. *Peribalus* (*Peribalus*) *strictus vernalis* (Wolff, 1804)
1494. *Rhombocoris regularis* (Herrich-Schaeffer, 1851)
1495. *Risibia christophi* (Jakovlev, 1886)
1496. *Risibia verbasci* Lodos & Önder, 1980
1497. *Staria lunata* (Hahn, 1835)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Eysarcorini

1498. *Eysarcoris aeneus* (Scopoli, 1763)
1499. *Eysarcoris ventralis* (Westwood, 1837)
1500. *Stagonomus amoenus* Brullé, 1832
1501. *Stagonomus bipunctatus bipunctatus* Linnaeus, 1758
1502. *Stagonomus bipunctatus pusillus* (Herrich-Schaeffer, 1833)
1503. *Stagonomus devius* Seidenstücker, 1965
1504. *Stagonomus venustissimus* (Schrank, 1776)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Hyalini

1505. *Apodiphus amygdali* (Germar, 1817)
1506. *Apodiphus integriceps* Horváth, 1888
1507. *Carenoplistus acutus* (Signoret, 1880)
1508. *Mustha izmirensis* Memon & Ahmad, 2008
1509. *Mustha longispinis* Reuter, 1890
1510. *Mustha spinosula* (Lefebvre, 1831)
1511. *Mustha vicina* Hoberlandt, 1997

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Mecideini

1512. *Mecidea lindbergi* Wagner, 1954

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Myrocheini

1513. *Phaeocoris ellipticus ellipticus* (Herrich-Schaeffer, 1840)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Nezarini

1514. *Acrosternum breviceps* (Jakovlev, 1889)
1515. *Acrosternum heegeri* Fieber, 1861
1516. *Acrosternum millierei* (Mulsant & Rey, 1866)
1517. *Brachynema cinctum* (Fabricius, 1775)
1518. *Brachynema germarii* (Kolenati, 1846)
1519. *Brachynema signatum* Jakovlev, 1879
1520. *Chlorochroa* (*Rhytidolomia*) *juniperina juniperina* (Linnaeus, 1758)
1521. *Chlorochroa* (*Rhytidolomia*) *pinicola* (Mulsant & Rey, 1852)
1522. *Nezara viridula* (Linnaeus, 1758)
1523. *Palomena mursili* Linnavuori, 1984
1524. *Palomena prasina* (Linnaeus, 1761)
1525. *Palomena viridissima* (Poda, 1761)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Pentatomini

1526. *Pentatoma* (*Pentatoma*) *rufipes* (Linnaeus, 1758)
1527. *Rhaphigaster nebulosa* (Poda, 1761)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Piezodorini

1528. *Pausias* (*Pausias*) *martini* (Puton, 1890)
1529. *Piezodorus lituratus* (Fabricius, 1794)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Sciocorini

1530. *Dyroderes umbraculatus* (Fabricius, 1775)
1531. *Menaccarus* (*Oploscelis*) *arenicola* (Scholtz, 1847)
1532. *Menaccarus* (*Orocephalus*) *dohrnianus* (Mulsant & Rey, 1866)
1533. *Sciocoris* (*Aposciocoris*) *atifi* Lodos & Önder, 1982
1534. *Sciocoris* (*Aposciocoris*) *homalonotus* Fieber, 1851
1535. *Sciocoris* (*Aposciocoris*) *luteolus* Fieber, 1861
1536. *Sciocoris* (*Aposciocoris*) *macrocephalus* Fieber, 1851
1537. *Sciocoris* (*Aposciocoris*) *microphthalmus* Flor, 1860
1538. *Sciocoris* (*Aposciocoris*) *pictus* Wagner, 1959
1539. *Sciocoris* (*Aposciocoris*) *umbrinus* (Wolff, 1804)
1540. *Sciocoris* (*Neosciocoris*) *maculatus* Fieber, 1851
1541. *Sciocoris* (*Neosciocoris*) *orientalis* Linnavuori, 1960
1542. *Sciocoris* (*Neosciocoris*) *pallens* Klug, 1845
1543. *Sciocoris* (*Neosciocoris*) *persimilis* Wagner, 1965
1544. *Sciocoris* (*Parasciocoris*) *capitatus* Jakovlev, 1882
1545. *Sciocoris* (*Parasciocoris*) *convexiusculus* Puton, 1874
1546. *Sciocoris* (*Sciocoris*) *cursitans cursitans* (Fabricius, 1794)

1547. *Sciocoris* (*Sciocoris*) *deltocephalus* Fieber, 1861
1548. *Sciocoris* (*Sciocoris*) *distinctus* Fieber, 1851
1549. *Sciocoris* (*Sciocoris*) *helferii* Fieber, 1851
1550. *Sciocoris* (*Sciocoris*) *hoberlandti* Wagner, 1954
1551. *Sciocoris* (*Sciocoris*) *ochraceus* Fieber, 1861
1552. *Sciocoris* (*Sciocoris*) *ogivus* Jakovlev, 1894
1553. *Sciocoris* (*Sciocoris*) *ressli* Wagner, 1966
1554. *Sciocoris* (*Sciocoris*) *sulcatus* Fieber, 1851

Pentatomomorpha: Pentatomoidea: Pentatomidae: Pentatominae: Strachiini

1555. *Bagrada* (*Nitilia*) *abeillei* Puton, 1881
1556. *Bagrada* (*Nitilia*) *amoenula* (Walker, 1870)
1557. *Bagrada* (*Nitilia*) *concinna* Horváth, 1936
1558. *Bagrada* (*Nitilia*) *funerea* Horváth, 1901
1559. *Bagrada* (*Nitilia*) *kaufmanni* (Oshanin, 1871)
1560. *Bagrada* (*Nitilia*) *stolida* (Herrich-Schaeffer, 1839)
1561. *Bagrada* (*Nitilia*) *turcica* Horváth, 1936
1562. *Eurydema* (*Eurydema*) *eckerleini* Josifov, 1961
1563. *Eurydema* (*Eurydema*) *laticollis* Horváth, 1907
1564. *Eurydema* (*Eurydema*) *oleracea* (Linnaeus, 1758)
1565. *Eurydema* (*Eurydema*) *ornata* (Linnaeus, 1758)
1566. *Eurydema* (*Eurydema*) *putoni* (Jakovlev, 1877)
1567. *Eurydema* (*Horvatheurydema*) *caligata* Horváth, 1901
1568. *Eurydema* (*Horvatheurydema*) *fieberi* Schummel, 1837
1569. *Eurydema* (*Horvatheurydema*) *rugulosa* (Dohrn, 1860)
1570. *Eurydema* (*Rubrodorsalium*) *blanda* Horváth, 1903
1571. *Eurydema* (*Rubrodorsalium*) *dominulus* (Scopoli, 1763)
1572. *Eurydema* (*Rubrodorsalium*) *spectabilis* Horváth, 1882
1573. *Eurydema* (*Rubrodorsalium*) *ventralis* Kolenati, 1846
1574. *Stenozygum* (*Stenozygum*) *coloratum* (Klug, 1845)
1575. *Trochiscocoris hemipterus* (Jakovlev, 1879)
1576. *Trochiscocoris rotundatus rotundatus* Horváth, 1895

Pentatomomorpha: Pentatomoidea: Pentatomidae: Phyllocephalinae

1577. *Schyzops aegyptiaca aegyptiaca* (Lefebvre, 1831)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Podopinae: Graphosomatini

1578. *Ancyrosoma leucogrammes* (Gmelin, 1790)
1579. *Derula delagrangei* Puton, 1892
1580. *Derula flavoguttata* Mulsant & Rey, 1856
1581. *Graphosoma* (*Graphosoma*) *alkani* Lodos, 1959
1582. *Graphosoma* (*Graphosoma*) *consimile* Horváth, 1903
1583. *Graphosoma* (*Graphosoma*) *italicum italicum* (O.F. Müller, 1766)
1584. *Graphosoma* (*Graphosoma*) *melanoxanthum* Horváth, 1903

1585. *Graphosoma* (*Graphosoma*) *semipunctatum* (Fabricius, 1775)
1586. *Graphosoma* (*Graphosoma*) *stali* Horváth, 1881
1587. *Graphosoma* (*Graphosomella*) *inexpectatum* Carapezza & Jindra, 2008
1588. *Leprosoma inconspicuum* Baerensprung, 1859
1589. *Leprosoma reticulatum* (Herrich-Schaeffer, 1851)
1590. *Leprosoma stali* Douglas & Scott, 1868
1591. *Leprosoma tuberculatum* Jakovlev, 1874
1592. *Putonia asiatica* Jakovlev, 1885
1593. *Sternodontus ampliatus* Jakovlev, 1887
1594. *Tholagmus flavolineatus* (Fabricius, 1798)
1595. *Tshingisella bella* Kiritshenko, 1913
1596. *Ventocoris* (*Astirocoris*) *achivus* (Horváth, 1889)
1597. *Ventocoris* (*Astirocoris*) *armeniacus* (Kiritshenko, 1938)
1598. *Ventocoris* (*Astirocoris*) *bulbifer* Seidenstücker, 1964
1599. *Ventocoris* (*Astirocoris*) *fischeri* (Herrich-Schaeffer, 1851)
1600. *Ventocoris* (*Astirocoris*) *halophilus* (Jakovlev, 1874)
1601. *Ventocoris* (*Astirocoris*) *oblongus* (Horváth, 1889)
1602. *Ventocoris* (*Ventocoris*) *horvathi* (Puton, 1896)
1603. *Ventocoris* (*Ventocoris*) *rusticus* (Fabricius, 1781)
1604. *Vilpianus galii* (Wolff, 1802)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Podopinae: Podopini

1605. *Podops* (*Opocrates*) *rectidens* Horváth, 1883
1606. *Podops* (*Podops*) *inunctus* (Fabricius, 1775)

Pentatomomorpha: Pentatomoidea: Pentatomidae: Podopinae: Tarisini

1607. *Tarisa elevata* Reuter, 1901
1608. *Tarisa igdirensis* Lodos & Önder, 1978
1609. *Tarisa osmanica* Hoberlandt, 1956
1610. *Tarisa subspinosa subspinosa* (Germar, 1839)
1611. *Tarisa virescens* Herrich-Schaeffer, 1851

Pentatomomorpha: Pentatomoidea: Plataspidae: Coptosomatinae

1612. *Coptosoma costale* Stål, 1854
1613. *Coptosoma lodosi* Doğanlar, Karsavuran & Demirel, 2007
1614. *Coptosoma maura seidenstueckeri* Davidová-Vilímová & Štys, 1980
1615. *Coptosoma mucronatum* Seidenstücker, 1963
1616. *Coptosoma oenderi* Doğanlar, Karsavuran & Demirel, 2007
1617. *Coptosoma putoni* Montandon, 1898
1618. *Coptosoma scutellatum* (Geoffroy, 1785)

Pentatomomorpha: Pentatomoidea: Scutelleridae: Elvisurinae

1619. *Solenosthedium bilunatum* (Lefebvre, 1827)

Pentatomomorpha: Pentatomoidea: Scutelleridae: Eurygasterinae

1620. *Ceratocranum caucasicum* (Jakovlev, 1879)

1621. *Eurygaster austriaca* (Schrank, 1776)
1622. *Eurygaster chinai* Lodos, 1963
1623. *Eurygaster dilaticollis* Dohrn, 1860
1624. *Eurygaster hottentotta* (Fabricius, 1775)
1625. *Eurygaster integriceps* Puton, 1881
1626. *Eurygaster maura* (Linnaeus, 1758)
1627. *Eurygaster testudinaria* (Geoffroy, 1785)
1628. *Promecocoris* (*Emphylocoris*) *testaceus* (Reuter, 1900)
1629. *Psacasta* (*Cryptodontus*) *neglecta* (Herrich-Schaeffer, 1837)
1630. *Psacasta* (*Cryptodontus*) *tuberculata* (Fabricius, 1781)
1631. *Psacasta* (*Psacasta*) *cypria* Puton, 1881
1632. *Psacasta* (*Psacasta*) *exanthematica conspersa* Germar, 1839
1633. *Psacasta* (*Psacasta*) *exanthematica exanthematica* (Scopoli, 1763)
1634. *Psacasta* (*Psacasta*) *granulata* (A. Costa, 1847)

Pentatomomorpha: Pentatomoidea: Scutelleridae: Odontoscelinae

1635. *Irochrotus lanatus* (Pallas, 1773)
1636. *Irochrotus maculiventris* (Germar, 1839)
1637. *Irochrotus majusculus* Kerzhner, 1976
1638. *Odontoscelis* (*Obscuromorpha*) *hispidula* Jakovlev, 1874
1639. *Odontoscelis* (*Odontoscelis*) *byrrhus* Seidenstücker, 1972
1640. *Odontoscelis* (*Odontoscelis*) *dorsalis* (Fabricius, 1798)
1641. *Odontoscelis* (*Odontoscelis*) *fuliginosa* (Linnaeus, 1761)
1642. *Odontoscelis* (*Odontoscelis*) *lineola* Rambur, 1839
1643. *Odontoscelis* (*Odontoscelis*) *litura* (Fabricius, 1775)
1644. *Odontoscelis* (*Odontoscelis*) *minuta* Jakovlev, 1882

Pentatomomorpha: Pentatomoidea: Scutelleridae: Odontotarsinea

1645. *Ellipsocoris kalashiani* Carapezza, 2009
1646. *Ellipsocoris trilineatus* Mayr, 1864
1647. *Odontotarsus angustatus* Jakovlev, 1884
1648. *Odontotarsus armiger* Kiritshenko, 1914
1649. *Odontotarsus caudatus* (Burmeister, 1835)
1650. *Odontotarsus crassus* Kiritshenko, 1966
1651. *Odontotarsus freyi* Puton, 1882
1652. *Odontotarsus impictus* Jakovlev, 1886
1653. *Odontotarsus obsoletus obsoletus* Horváth, 1906
1654. *Odontotarsus oculatus* Horváth, 1882
1655. *Odontotarsus plicatulus* Horváth, 1906
1656. *Odontotarsus purpureolineatus* (Rossi, 1790)
1657. *Odontotarsus robustus* Jakovlev, 1884
1658. *Odontotarsus rufescens* Fieber, 1861
1659. *Phimodera amblygonia* Fieber, 1863

1660. *Phimodera flori* Fieber, 1863
1661. *Phimodera fumosa* Fieber, 1863
1662. *Phimodera tuberculata* Jakovlev, 1874

Pentatomomorpha: Pentatomoidea: Thyreocoridae: Thyreocorinae

1663. *Thyreocoris fulvipennis* (Dallas, 1851)
1664. *Thyreocoris scarabaeoides* (Linnaeus, 1758)

Pentatomomorpha: Pyrrhocoroidea: Pyrrhocoridae

1665. *Pyrrhocoris apterus* (Linnaeus, 1758)
1666. *Pyrrhocoris marginatus* (Kolenati, 1845)
1667. *Scantius aegyptius aegyptius* (Linnaeus, 1758)
1668. *Scantius aegyptius rossii* Carapezza, Kerzhner & Rieger, 1999