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Contribution to the knowledge of the Gerridae, Coreoidea, Piesmatidae, Saldidae, Corixoidea, Nepoidea and Notonectidae (Hemiptera, Heteroptera) fauna of Turkey

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A b s t r a c t : This study is based upon material of families Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae and Notonectidae collected from different localities of Turkey between 1978 and 2012. In this study, 4 species of 2 genera from Gerridae, 3 species of 2 genera from Alydidae, 14 species of 11 genera from Coreidae, 15 species of 8 genera from Rhopalidae, 2 species of 1 genus from Stenocephalidae, 3 species of 2 genera from Piesmatidae, 3 species of 1 genus from Saldidae, 5 species of 2 genera from Corixidae, 1 species of 1 genus from Belostomatidae, 1 species of 1 genus from Nepidae and 3 species of 1 genus from Notonectidae were recorded. In total, 54 species from 32 genera of these families were recorded from Turkey. Among them, *Camptopus lateralis* (GERMAR 1817) (Alydidae), *Coreus marginatus* (LINNEAUS 1758) (Coreidae) *Corizus hyoscyami* (LINNAEUS 1758), *Stictopleurus punctatonervosus* (GOEZE 1778) (Rhopalidae), *Dicranoccephalus agilis* (SCOPOLI 1763) (Stenocephalidae) and *Piesma maculatum* (LAPORTE, 1833) (Piesmatidae) have been found the most abundant and widespread species. New localities are added for some species previously reported for Turkey.

K e y w o r d s : Hemiptera, Heteroptera, Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae, Notonectidae, Fauna, new records, Turkey.

Introduction

Gerridae are well known bugs as pound skaters or water striders. These Gerromorpha "walk", "run" or skate upon fresh water and some (Halobatidae) on seas and oceans of warm regions (ANDERSEN 1982) thanks to hydrophobic comb or fan of setae on intermediate and hind tarsi. They vary from 1.5 to more than 35 mm in length. The body is elongate or more or less globular and generally dull (blackish to brownish). The mid and hind legs are thin and long, the fore – raptorial. Gerridae are predators or necrophagous. They live on calm waters or streams as well. Micropteran and apteran forms are not rare among the populations. Male genitalia are symmetric, female ones are laciniate or platelike (ANDERSEN 1982). Worldwide are recognized eight subfamilies, about 60 genera and more than 500 species (SCHUH & SLATER 1995).

Coreoidea (or leaf-footed, squash or pod bugs) includes families Coreidae, Rhopalidae,

and Alydidae. Family Stenocephalidae is often attached to this superfamily (SCHAEFER 1965; MOULET 1995; AUKEMA & RIEGER 2006; YANG et al. 2012). Coreoidea represent a group of phytophagous Pentatomomorpha but some of them occasionally are necrophagous, coprophagous or oophagous (SCHUH & SLATER 1995; MOULET 1995; MITCHELL 2000; YILDIRIM et al. 2011). They sometimes cause significant loose of grain, crops, fruits or nuts. The group is cosmopolitan and in the Palaearctics is represented by more than 100 genera and nearly 500 species. LETHIERRY & SÉVERIN (1894) and PUTON (1875) catalogued world and European Coreidae respectively. However, these works are out of date; STICHEL (1957-59) listed Palaearctic fauna.

Piesmatidae or ash-grey leaf bugs are a small group of Geocorisae which comprises only 2 genera and 14 species in the Palaearctics. They resemble Tingidae but are closer to Lygaeoidea. Their biology is scarcely known (YILDIRIM & ÖZBEK 1990). The West Palaearctic fauna is revised by HEISS & PÉRICART (2007).

Saldidae or shore bugs are 2 to 8 mm long bugs which live on shores of rivers (ripicolous). These predators constitute a rather small group of 11 genera and 38 species in Europe and the Mediterranean basin (PÉRICART 1990). Being in general dark or dark brown, the species are difficult to separate and the identification often requires dissection of genitalia. The West European fauna is revised by PÉRICART (1990) and the world fauna is studied by COBBEN.

Corixoidea or water boatmen are minute aquatic bugs which generally live in massin rivers, ponds or lakes where they feed upon vegetation or as predators. Both alate and apterous forms could be found in one and the same species. Corixids stridulate particularly in the search of opposite sex. There are 15 genera and about 160 species in the Palaearctics (AUKEMA & RIEGER 1995). The European fauna is revised by JANSSON (1986).

Nepoidea or water scorpions are generally large in size species (up to 70 mm in length in some Belostomatidae). These predators live in lentic habitats or in calm parts of streams, sometimes in the silt or the mud at the bottom. In the Palaearctic Region there are 8 genera and 35 species only.

Notonectoidea are well known backswimmers, a rather compact small group of medium sized bugs (around 12-15 mm long) of 5 genera and 55 species in the Palaearctics. These predators live in the vegetation in all types of water particularly calm waters.

The aim of this paper is to bring new collect and biological data on Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae and Notonectidae in Turkey. In this study, 4 species of 2 genera from Gerridae, 3 species of 2 genera from Alydidae, 14 species of 11 genera from Coreidae, 15 species of 8 genera from Rhopalidae, 2 species of 1 genus from Stenocephalidae, 3 species of 2 genera from Piesmatidae, 3 species of 1 genus from Saldidae, 5 species of 2 genera from Corixidae, 1 species of 1 genus from Belostomatidae, 1 species of 1 genus from Nepidae and 3 species of 1 genus from Notonectidae were recorded. In total, 54 species from 32 genera of these families were recorded from Turkey.

Materials and Methods

The material of the Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae and Notonectidae was collected from different localities of Turkey from 1978 to 2012. Provinces of the collected specimens are given in alphabetical order in the list. The material is deposited in the Entomology Museum, Erzurum, Turkey (EMET).

Results

In this study, 4 species of 2 genera from Gerridae, 3 species of 2 genera from Alydidae, 14 species of 11 genera from Coreidae, 15 species of 8 genera from Rhopalidae, 2 species of 1 genus from Stenocephalidae, 3 species of 2 genera from Piesmatidae, 3 species of 1 genus from Saldidae, 5 species of 2 genera from Corixidae, 1 species of 1 genus from Belostomatidae, 1 species of 1 genus from Nepidae and 3 species of 1 genus from Notonectidae were recorded. In total, 54 species from 32 genera of these families were recorded from Turkey.

Infraorder Gerrromorpha

Superfamily Gerridoidea

Family Gerridae

Subfamily Gerrinae

Tribe Gerrini

Aquarius paludum (FABRICIUS 1794)

Material examined: Konya: Beyşehir, Gökçimen, 21.VII.1997, 2♂♂, 26.VII.1997, 2♂♂; Osmaniye: 17.VII.1997, 2♀♀, 15.VIII.1998, ♂.

Aquarius ventralis (FIEBER 1860)

Material examined: Antalya: 7.VII.1984, ♂, 6.IX.1995, 3♂♂; Elazığ: 1067 m, 2.VIII.1995, ♂; Erzurum: 1.VI.1983, ♂; Osmaniye: 15.VII.1997, 2♂♂, 2.VIII.1992, 4♂♂; Rize: 2.VIII.1992, ♂; Trabzon: 8.VIII.1998, 4♀♀, 20♂♂.

Gerris (Gerris) argentatus SCHUMMEL 1832

Material examined: Erzurum: 1.VI.1983, 3♀♀, 5♂♂, Pasinler, 10.VI.1983, ♂; Kütahya: 22.VII.1983, ♂; Muğla: 2.VIII.1983, ♀.

Gerris (Gerriselloides) lateralis SCHUMMEL 1832

Material examined: Adana: Havuzlubahçe, 23 m, 21.VIII.2012, 2♂♂; Cankırı: Eskipazar, 31.VIII.1984, ♂; Denizli: Çameli, 15.IX.1984, ♀; Erzurum: Aziziye, Rizekent, 30.VII.1998, ♀, Pasinler, 25.VII.1983, ♂, Şenkaya, Ormanlı, 20.V.1994, 2♀♀, ♂, Turnalı, 1461 m, 31.VII.2010, ♂; Gümüşhane: 28.VIII.1992, ♂; Konya: Derebucak, 10.VII.1986, ♂; Kütahya: 22.VII.1983, ♂; Osmaniye: 15.VIII.1998, 2♂♂.

Infraorder Pentatomomorpha**Superfamily Coreoidea****Family Alydidae****Subfamily Alydinae*****Alydus calcaratus* (LINNAEUS 1758)**

M a t e r i a l e x a m i n e d : Bayburt: Kopdağı, 2380 m, 5.IX.2012, ♂; Erzurum: Aşkale, Kopdağı, 1430 m, 4.IX.2012, ♂, Çat, 1913 m, 23.VII.2011, ♂, Horasan, Çayırözü, 1794 m, 21.VIII.2011, ♀, ♂, Hacıahmet, 1823 m, 17.VIII.2012, ♂, Muratbağı, 1859 m, 21.VIII.2011, ♀, Narman, Samikale, 1541 m, 30.VII.2011, ♂, Oltu, Sarisaz, 1300 m, 30.VIII.2012, ♀, Pasinler, Açı, 1905 m, 22.VII.2012, ♂, Pazaryolu, 1430 m, 4.VIII.2012, 3♀♀, 2♂♂, Tortum, 1650 m, 3.IX.2011, ♀.

***Camptopus lateralis* (GERMAR 1817)**

M a t e r i a l e x a m i n e d : Ankara: Kızılcahamam, Sipahiler, 975 m, 14.VIII.2011, ♀; Antalya: Aksu, 15 m, 1.VII.2012, ♂, 2.VII.2012, ♀, Kepez, Odabaşı, 305 m, 29.VII.2012, 2♀♀; Ardahan: Posof, Baykent, 1804 m, 25.VIII.2012, ♂; Bingöl: Ekinyolu, 24.IX.2012, 2♀♀; Erzincan: 850 m, 15.VIII.2012, 3♀♀, Kemah, 5.VIII.2011, ♀; Erzurum: Aşkale, Demirkiran, 1699 m, 11.VIII.2012, 2♀♀, 1712 m, 12.VIII.2012, ♀, Aziziye, Çatak, 2119 m, 28.VIII.2012, ♀, Çat, 1913 m, 23.VII.2011, ♀, Horasan, Aşağı Çamlıkale, 2242 m, 13.VIII.2012, ♀, Değirmenli, 1643 m, 13.VIII.2011, ♀, Muratbağı, 1859 m, 21.VIII.2011, ♂, İspir, Kirazlı, 1207 m, 24.VII.2011, ♂, Madenköprübaşı, 1245 m, 4.VIII.2012, ♀, ♂, Öztoprak, 1724 m, 15.VII.2012, ♂, Yukarı Özbağ, 1190 m, 20.VII.2011, ♀, ♂, Köprüköy, Marifet, 1685 m, 16.VI.2012, 3♀♀, Narman, Mahmutçavuş, 1560 m, 16.VII.2012, ♀, 1546 m, 13.VIII.2012, ♀, Kamışözü, 1835 m, 23.VI.2011, 2♂♂, Kılımlı, 1716 m, 13.VIII.2012, ♀, ♂, Samikale, 1541 m, 30.VII.2011, ♀, Şehitler, 1850 m, 8.VI.2012, 3♂♂, Oltu, 1455 m, 10.VI.2012, ♀, 2♂♂, Çamlıbel, 1658 m, 30.VI.2012, ♂, Güzelsu, 1221 m, 30.VI.2012, ♀, İğdeli, 1660 m, 30.VI.2012, 2♀♀, 2♂♂, İnanmış, 1812 m, 31.VII.2011, ♀, Sarisaz, 1388 m, 5.VIII.2012, 2♂♂, 1421 m, 30.VIII.2012, 2♀♀, ♂, Toklu, 1300 m, 10.VI.2012, ♀, 3♂♂, Tutmaç, 1720 m, 16.VII.2012, ♂, Yolboyu, 1135 m, 10.VI.2012, 2♀♀, 2♂♂, Olur, 1225 m, 10.VI.2012, ♀, 3♂♂, Aşağı Karacasu, 1324 m, 19.VII.2012, 2♂♂, Boğazören, 1155 m, 23.VI.2011, ♀, 1168 m, 19.VII.2012, ♀, Coşkunlar, 1054 m, 10.VI.2012, ♀, 999 m, 19.VII.2012, ♂, Kaban, 1215 m, 19.VII.2012, ♀, ♂, Kaledibi, 1040 m, 23.VI.2011, ♀, ♂, Köprübaşı, 994 m, 19.VII.2012, ♀, 2♂♂, 973 m, 30.VII.2012, ♀, ♂, Olurdere, 1050 m, 10.VI.2012, 2♀♀, Ormanbaşı, 951 m, 6.VII.2012, ♂, 955 m, 10.VII.2011, 2♀♀, 960 m, 5.VIII.2012, 4♂♂, Taşlıköy, 885 m, 6.VII.2012, ♀, Yeşilbağlar, 987 m, 10.VII.2011, ♂, ♀, Yukarı Karacasu, 1521 m, 19.VII.2012, ♂, Pasinler, Büyükdere, 1759 m, 12.VIII.2012, ♀, Pazaryolu, 1430 m, 4.VIII.2012, 5♀♀, ♂, Gülçimen, 1562 m, 15.VII.2012, ♀, 1663 m, 20.VII.2011, ♀, KumAŞkaya, 1800 m, 23.VII.2011, ♂, Kümbettepe, 1366 m, 24.VI.2012, 2♂♂, Şenkaya, Çatalelma, 1583 m, 14.VII.2012, ♀, Deliktaş, 1219 m, 13.VII.2011, ♀, Gözebaşı, 1794 m, 14.VII.2012, ♀, ♂, Hoş, 1193 m, 10.VI.2012, ♂, Paşalı, 1586 m, 10.VI.2012, ♀, ♂, Penek, 1145 m, 10.VI.2012, ♀, Taht, 1283 m, 10.VI.2012, ♀, ♂, ♂, Timurkışla, 1314 m, 14.VII.2012, 2♀♀, Tortum, 1660 m, 31.VII.2011, ♀, Aksukapı, 1648 m, 2.VII.2012, ♂, 07.VII.2011, ♀, Aşağı Sivri, 1546 m, 16.VII.2012, ♂, Bagbaşı, 1191 m, 14.VIII.2012, ♀, ♂, Derekapı, 1247 m, 13.VII.2011, ♀, ♂, Pehlivanhı, 1158 m, 21.VII.2012, ♀, 1179 m, 14.VIII.2012, ♂, Suyatağı, 1236 m, 21.VII.2012, ♀, Şenyurt, 1265 m, 21.VII.2012, 2♀♀, ♂, Yukarı Sivri, 1500 m, 8.VI.2012, ♀, 2♂♂, 1909 m, 16.VII.2012, ♀, Uzundere, 1053 m, 16.VII.2011, ♀, 1052 m, 21.VII.2012, 2♂♂, Altınçanak, 1132 m, 21.VII.2012, 2♀♀, ♂, Çağlayanlı, 967 m, 27.V.2011, 2♀♀, 970 m, 27.V.2011, ♂, 2♂♂, 1010 m, 7.VI.2012, 2♀♀, ♂, Dikyar, 1133 m, 14.VIII.2012, 2♀♀, ♂, Gölbaba, 1150 m, 14.VIII.2012, ♀, 2♂♂, Sapaca, 1082 m, 21.VII.2012, 3♂♂, Şelale, 985 m, 27.V.2011, ♂, 1012 m, 27.V.2011, 2♀♀; Isparta: Ayazmana, 1100, 06.VIII.2011, ♀; Mersin: Erdemli, Üçtepe, 120 m, 10.VIII.2012, ♀, 2♂♂; Tunceli: Pütümür, Dereköy, 1431 m, 9.VIII.2011, ♂, Sağlamtaş, 1701 m, 13.VIII.2011, ♀, Sarigül, 1900 m, 8.VII.2011, ♂.

***Camptopus tragacanthae* (KOLENATI 1845)**

M a t e r i a l e x a m i n e d : Erzurum: Horasan, Dönertaş, 1907 m, 13.VIII.2012, ♀, Olur, Coşkunlar, 1054 m, 10.VI.2012, ♂, Tortum, Yukarı Sivri, 1909 m, 16.VII.2012, ♂, Uzundere, Çağlayanlı, 1010 m, 7.VI.2012, ♀; Tunceli: Pültümür, Sağlamtaş, 1701 m, 13.VIII.2011, ♀.

Family Coreidae

Subfamily Coreinae

Tribe Anisoscelini

***Leptoglossus occidentalis* HEIDEMANN 1910**

M a t e r i a l e x a m i n e d : Ankara: Atatürk Orman Çiftliği, 938 m, 29.VI.2011, 2♀♀, Kızılcahamam, Sipahiler, 975 m, 27.VI.2011, ♀; İstanbul: Zeytinburnu, 3 m, 11.VIII.2011, ♀.

Tribe Coreini

***Centrocoris spiniger* (FABRICIUS 1781)**

M a t e r i a l e x a m i n e d : Antalya: Kepez, Odabaşı, 305 m, 29.VII.2012, ♂; Balıkesir: Çoban Çeşmesi, 200 m, 16.VII.2011, 2♀♀; Erzurum: Tortum, Çamlıca, 1674 m, 16.VII.2012, 3♀♀, ♂, Uzundere, Altınçanak, 1132 m, 21.VII.2012, ♀; Mersin: Erdemli, Esenpinar, 850 m, 2.IX.2011, ♀; Sanlıurfa: Bozova, Yaylak, 435 m, 30.VII.2012, ♀; Tunceli: Ovacık, Gözelen, 1352 m, 3.VIII.2012, ♀.

***Centrocoris variegatus* KOLENATI 1845**

M a t e r i a l e x a m i n e d : Adana: Üniversity field, 20.VII.2011, ♀; Ankara: Kızılcahamam, Sipahiler, 957 m, 16.VII.2011, ♀, ♂; Antalya: Kepez, 112 m, 21.VI.2012, 2♀♀, Odabaşı, 305 m, 29.VII.2012, ♀, Serik, Kayaburnu, 36 m, 29.VII.2012, ♂; Burdur: 1025 m, 25.VII.2012, ♂; Erzurum: Köprüköy, Eyyüpler, 26.VI.2011, ♂, Olur, Ormanağızı, 955 m, 10.VII.2011, ♂, Şenkaya, İçmesu, 1656 m, 14.VIII.2012, ♂, Uzundere, Çağlayanlı, 1010 m, 7.VI.2012, 3♀♀; Manisa: Salihli, Kabazlı, 20.VII.2011, ♀.

***Coreus marginatus* (LINNEAUS 1758)**

M a t e r i a l e x a m i n e d : Adana: Tufanbeyli, Polatpinar, 21.VI.2011, 4♀♀, ♂; Ankara: Kızılcahamam, Işık Mountain, 650 m, 18.IX.2011, ♀; Antalya: Kepez, Odabaşı, 305 m, 25.VII.2012, ♂, Serik, Kocayatak, 10 m, 30.VII.2012, ♀; Ardahan: Posof, Baykent, 25.VIII.2012, ♂; Bingöl: Ekinyolu, 7.VII.2012, 2♀♀; Burdur: 1025 m, 21.VI.2012, ♂, 22.VI.2012, ♂; Bursa: Karacabey, Çiftlikler, 8.VIII.2011, ♀; Erzurum: Akyazı, 1.VIII.2011, ♀, Aşkale, Athikonak, 1757 m, 5.VII.2012, ♂, Kopdağı, 2380 m, 5.IX.2012, ♂, Tazegül, 1773 m, 19.VI.2012, ♂, Yeniköy, 1905 m, 19.VI.2012, ♀, 1935 m, 5.VII.2012, ♂, Çat, Aşağı Çat, 2089 m, 16.VII.2012, ♀, Güzelyurt, 2117 m, 9.VII.2011, ♂, Kom, 2206 m, 5.VII.2012, ♀, Horasan, Çayırözü, 1794 m, 25.VIII.2011, ♂, Dönertaş, 1907 m, 13.VIII.2012, 2♀♀, Hacıahmet, 1823 m, 13.VIII.2012, ♀, Muratbağı, 1852 m, 22.VI.2012, ♀, ♂, 1859 m, 21.VIII.2011, 3♀♀, İspir, Akseki, 2190 m, 20.VII.2011, ♂, Çayırözü, 1947 m, 4.VIII.2012, 3♂♂, Kirazlı, 1580 m, 6.VII.2012, ♀, 1206 m, 20.VII.2011, ♂, Karayazı, Çatalören, 2313 m, 17.VI.2012, ♂, Köprüköy, İlicasu, 2111 m, 30.VII.2011, ♀, Marifet, 1685 m, 26.VI.2011, ♀, Narman, Göllü, 1842 m, 30.VI.2012, ♀, Şehitler, 1884 m, 16.VII.2012, ♀, 2♂♂, Oltu, Güzelsu, 1221 m, 30.VI.2012, ♀, Orcuk, 1556 m, 10.VI.2012, ♀, Sarisaz, 1388 m, 5.VIII.2012, ♂, Tutmaç, 1719 m, 16.VII.2012, ♀, Olur, Coşkunlar, 1054 m, 10.VI.2012, ♂, Kaban, 1215 m, 19.VII.2012, ♀, Yukarı Karacasu, 1521 m, 19.VII.2012, ♀, Pasinler, Ovaköy,

1000

1785 m, 12.VIII.2012, ♂, Şenkaya, Penek, 1145 m, 10.VII.2011, ♂, Tekman, Güzeldere, 1948 m, 16.VII.2011, ♀, 2♂♂, Tekman, Güzeldere, 1948 m, 16.VII.2012, ♀, Tortum, Arılı, 1650 m, 30.VIII.2012, ♀, Aşağı Sivri, 1546 m, 16.VII.2012, ♀, Taşbaşı, 1816 m, 09.VII.2011, ♂, Uzungere, 1053 m, 16.VII.2011, ♀, Çağlayanlı, 1010 m, 7.VI.2012, ♂, Çamlıyamaç, 1290 m, 07.VIII.2011, 2♀♀, Kirazlı, 1231 m, 21.VII.2012, ♀, Şelale, 1012 m, 26.V.2012, 2♀♀; İstanbul: Beykoz, 70 m, 15.VII.2011, ♀, ♂; İzmir: Bornova, 2 m, 20.VII.2012, ♂; Kars: Susuz, 1680 m, 25.VII.2011, ♀; Samsun: Havza, Kamlık, 500 m, 8.IX.2011, 2♀♀, ♂, 10.IX.2011, 2♂♂, 14.IX.2011, 2♀♀, 2♂♂.

***Enoplops disciger* (KOLENATI 1845)**

Material examined: Erzurum: Horasan, Dönertaş, 1907 m, 13.VIII.2012, ♂, Pasinler, Yigitpinarı, 1815 m, 22.VII.2012, ♂.

***Gonocerus acuteangulatus* (GOEZE 1778)**

Material examined: Erzurum: Uzungere, Çağlayanlı, 1010 m, 7.VI.2012, ♀.

***Spathocera lobata* (HERRICH-SCHÄFFER 1840)**

Material examined: Erzurum: Aşkale, Kavurmaçukur, 2233 m, 5.VII.2012, ♂, Narman, Yanıktaş, 1612 m, 30.VI.2012, ♀.

***Syromastus rhombeus* (LINNÉ 1767)**

Material examined: Burdur, 1025 m, 20.VII.2012, ♂; Erzurum: Palandöken, 2155 m, 22.VII.2012, ♀, Horasan, Hacı Ahmet, 1823 m, 17.VIII.2012, ♀, Muratbağı, 1859 m, 21.VIII.2011, ♀, Şenkaya, Hoş, 1193 m, 10.VI.2012, ♂; İstanbul: Bayrampaşa, 77 m, 10.VII.2012, ♂.

Subfamily Psuedophloeinae

Tribe Psuedophloeini

***Arenocoris waltlii* (HERRICH-SCHÄFFER 1834)**

Material examined: Erzurum: Aziziye, Alaca, 1751 m, 5.VII.2012, ♀, ♂.

***Bathysolen nubilus* (FALLÉN 1807)**

Material examined: Mersin: Erdemli, Kocahasanalı, 13.VII.2012, ♀.

***Ceraleptus gracilicornis* (HERRICH-SCHÄFFER 1835)**

Material examined: Erzincan: Üzümlü, 1518 m, 10.VI.2010, ♀; Erzurum: Narman, Ünlükaya, 1700 m, 8.VI.2012, ♀, Oltu, Yayla, 2005 m, 10.VI.2012, ♀, Pazaryolu, 1445 m, 20.VII.2011, ♀, Uzungere, Çağlayanlı, 967 m, 27.V.2011, ♂.

***Coriomeris affinis* (HERRICH-SCHÄFFER 1839)**

Material examined: Erzurum: Palandöken, 2155 m, 22.VII.2012, ♂, University field, 1880 m, 22.VII.2011, ♂, 21.IX.2012, ♂, Aşkale, Çatören, 1814 m, 11.VIII.2012, ♀, Aziziye, Eskiropolat, 1847 m, 24.VI.2012, ♂, Çat, Değirmenli, 1955 m, 11.VIII.2012, ♂, Güzelyurt, 2117 m, 9.VIII.2011, ♂, Yayasuyu, 2203 m, 5.VII.2012, ♂, Horasan, Kirkgöze, 1864 m, 7.VI.2012, ♂, Muratbağı, 1852 m, 22.VI.2012, ♀, Karayazı, Alemdağ, 2022 m, 16.VI.2012, ♂, Çatalören, 2113 m, 16.VI.2012, 2♂♂, Köprüköy, Geyikli, 2144 m, 17.VII.2012, ♂, Narman, Beyler, 1710 m, 8.VI.2012, ♂, Kilimli, 1716 m, 13.VIII.2012, ♂, Ünlükaya, 1700 m, 8.VI.2012, ♂, Oltu, Özdere,

1822 m, 6.VII.2012, ♂, Yarbaşı, 1784 m, 6.VII.2012, ♀, Olur, 1225 m, 10.VI.2012, ♂, Süngübayırlı, 1650 m, 10.VI.2012, ♂, Şenkaya, Gözebaşı, 1794 m, 14.VII.2012, ♂, Hoş, 1193 m, 10.VI.2012, ♀, ♂, İğmesu, 1656 m, 14.VII.2012, ♂, Taht, 1283 m, 10.VI.2012, ♂, Tekman, Kili Mezra, 1940 m, 16.VI.2012, ♀, Tortum, Aşağı Sivri, 1546 m, 16.VII.2012, ♂, Derekapı, 1010 m, 7.VI.2012, ♂, Yukarı Sivri, 1500 m, 8.VI.2012, ♂, Uzundere, Çağlayanlı, 1010 m, 7.VI.2012, ♂.

***Coriomeris denticulatus* (SCOPOLI 1763)**

M a t e r i a l e x a m i n e d : Erzurum: Palandöken, 2155 m, 22.VII.2012, ♂, Aşkale, 1661 m, 19.VI.2012, ♂, İspir, Yeşilvadi, 2285 m, 24.VI.2012, ♂, Olur, 1225 m, 10.VI.2012, ♂, Süngübayırlı, 1650 m, 10.VI.2012, ♂, Şenkaya, Gözebaşı, 1794 m, 14.VII.2012, ♂, Paşalı, 1586 m, 10.VI.2012, ♂, Tortum, Şenyurt, 1265 m, 21.VII.2012, ♂.

***Coriomeris hirticornis* (FABRICIUS 1794)**

M a t e r i a l e x a m i n e d : Erzurum: Narman, Kilimli, 1716 m, 13.VIII.2012, ♂, Oltu, Toklu, 1300 m, 10.VI.2012, ♂, Yolboyu, 1135 m, 10.VI.2012, ♀, Şenkaya, Paşalı, 1586 m, 10.VI.2012, ♀, Timurkişla, 1317 m, 14.VII.2012, 2♂ ♂, Uzundere, Şelale, 1012 m, 27.V.2011, ♂.

Family R h o p a l i d a e

Subfamily R h o p a l i n a e

Tribe C h o r o s o m a t i n i

***Chorosoma schillingii* (SCHILLING 1829)**

M a t e r i a l e x a m i n e d : Erzincan: 850 m, 15.VIII.2012, ♂; Erzurum: Şenkaya, Hoş, 1193 m, 31.VII.2011, 3♀ ♀, 2♂ ♂.

Tribe C o r i z o m o r p h a t i n i

***Corizomorpha janowskyi* JAKOVLEV 1883**

M a t e r i a l e x a m i n e d : Erzurum: Köprüköy, Ataköy, 1788 m, 17.VI.2012, ♀.

Tribe R h o p a l i n i

***Brachycarenus tigrinus* (SCHILLING 1829)**

M a t e r i a l e x a m i n e d : Erzurum: Dadaşköy, 1806 m, 4.VIII.2011, ♀, Karagöbek, 2033 m, 7.VI.2012, ♀, Üniversity field, 1880 m, 22.VII.2011, ♀, Aşkale, Gökçebük, 1699 m, 23.VII.2011, ♂, Aziziye, Başçakmak, 1860 m, 20.VII.2011, ♀, Özbek, 1930 m, 5.VIII.2011, ♀, Hınıs, Akören, 1828 m, 16.VII.2011, ♂, Horasan, Çayırözü, 1794 m, 21.VIII.2011, 2♀ ♀, Kızlarkale, 1953 m, 22.VI.2012, ♀, ♂, Muratbağı, 1859 m, 21.VIII.2011, ♀, İspir, 1236 m, 22.VI.2011, ♂, Elmalı, 1328 m, 20.VII.2011, ♂, Karaçoban, Maruf, 1550 m, 26.VI.2011, ♂, Köprüköy, Ataköy, 1788 m, 26.VI.2011, ♀, İlicasu, 2111 m, 30.VII.2011, ♀, Marifet, 1685 m, 16.VI.2012, ♀, Örentaş, 2106 m, 30.VI.2012, ♀, Tepeköy, 1873 m, 05.VIII.2011, ♀, Narman, Araköy, 1472 m, 23.VI.2011, ♀, Beyler, 1710 m, 8.VI.2012, 2♂ ♂, Kışlaköy, 1892 m, 13.VIII.2012, ♀, ♂, Samikale, 1541 m, 30.VII.2011, ♀, ♂, Ünlükaya, 1700 m, 8.VI.2012, ♀, 2♂ ♂, Oltu, Demirtaş, 1888 m, 6.VII.2012, ♂, Yarbaşı, 1784 m, 6.VII.2012, ♀, Yayla, 2005 m, 6.VII.2012, ♀, Olur, Süngübayırlı, 1650 m, 10.VI.2012, ♀, Pasinler, Büyükdere, 1759 m, 12.VIII.2012, ♀, Büyüktütüy, 1819 m, 30.VII.2011,

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♂, Şenkaya, Hoş, 1193 m, 10.VI.2012, ♂, İkizpinar, 1589 m, 31.VII.2011, ♀, Paşalı, 1586 m, 10.VI.2012, ♀, Taht, 1283 m, 10.VI.2012, ♂, Timurkuşla, 1314 m, 14.VII.2012, ♂, Tortum, Aktaş, 1765 m, 31.VII.2011, ♂, Derekapı, 1247 m, 9.VII.2011, ♀, Uzundere, Çağlayanlı, 967 m, 27.V.2011, ♀, 1010 m, 7.VI.2012, ♂.

***Corixus hyoscyami* (LINNAEUS 1758)**

M a t e r i a l e x a m i n e d : Antalya: Kepez, Odabaşı, 305 m, 7.VIII.2012, ♂; Ardahan: Çamlıçatak, 24.VIII.2012, ♂, Çegili, 1834 m, 11.VIII.2012, ♂; Balıkesir: Çoban Çeşmesi, 200 m, 17.VII.2011, ♀; Burdur: 1025 m, 25.VII.2012, ♂; Erzincan: 850 m, 15.VIII.2012, ♀; Erzurum: Dadaşköy, 1806 m, 4.VIII.2011, 2♂♂, Karagöbek, 2033 m, 7.VI.2012, ♂, Üniversity field, 1890 m, 23.VIII.2011, ♂, 21.IX.2012, ♂, Yağmurcuk, 2010 m, 9.VIII.2011, ♂, Aşkale, 1661 m, 19.VI.2012, ♀, Çayköy, 1580 m, 27.VII.2012, ♂, Demirkiran, 1699 m, 11.VIII.2012, ♀, Gökçebük, 1699 m, 23.VIII.2011, ♀, Kandilli, 1754 m, 19.VI.2012, ♀, 1710 m, 21.VI.2011, ♀, Kopdağı, 2380 m, 5.IX.2012, ♀, Küçükgeçit, 1709 m, 23.VIII.2011, ♂, Aziziye, Gelinkaya, 1796 m, 24.VI.2012, ♀, Tebricik, 1750 m, 5.VIII.2012, ♂, Toprakkale, 2151 m, 22.VI.2011, ♂, Çat, 1913 m, 23.VII.2011, ♀, Güzelyurt, 2099 m, 5.VIII.2011, ♀, Yarmak, 1876 m, 11.VIII.2012, ♀, ♂, Horasan, Akçataş, 1659 m, 13.VIII.2012, 2♂♂, Değirmenli, 1643 m, 13.VIII.2011, ♂, Dönertaş, 1907 m, 13.VIII.2012, 2♀♀, Kırkgözeler, 1584 m, 13.VIII.2011, ♀, Yeşildere, 1698 m, 22.VI.2012, ♀, 1648 m, 28.VIII.2011, ♀, İspır, Çayırözü, 1947 m, 4.VIII.2012, ♀, Elmalı, 1328 m, 20.VII.2011, ♂, Madenkörprübaşı, 1245 m, 4.VIII.2012, ♀, 1307 m, 20.VIII.2011, ♂, Yukarı Özbağ, 1190 m, 20.VII.2011, 2♂♂, Karaçoban, Durman, 1560 m, 26.VI.2011, ♀, Maruf, 1550 m, 26.VI.2011, ♀, Karayazı, Çatalören, 2313 m, 16.VIII.2011, ♀, Köprüköy, Marifet, 1685 m, 26.X.2011, ♂, Pekecik, 1722 m, 26.VI.2011, ♂, Narman, Göllü, 1842 m, 30.VI.2012, ♀, Yanıktaş, 1628 m, 30.VII.2011, ♀, Oltu, Başbağlar, 1925 m, 13.VIII.2011, ♂, Çamlıbel, 1775 m, 13.VII.2011, ♂, İğdeli, 1660 m, 30.VI.2012, ♂, Sarisaz, 1421 m, 30.VIII.2012, ♀, ♂, Toklu, 1300 m, 10.VI.2012, ♂, Olur, Coşkunlar, 1054 m, 10.VI.2012, ♂, Yeşilbağlar, 987 m, 10.VIII.2011, ♂, Pasinler, Açı, 1905 m, 22.VII.2012, ♀, Kurbançayı, 1762 m, 12.VII.2012, ♂, Ovaköy, 1803 m, 30.VII.2011, ♀, 1785 m, 12.VIII.2012, ♀, Pazaryolu, 1430 m, 4.VIII.2012, 2♀♀, 1445 m, 20.VIII.2011, ♀, 1450 m, 24.VIII.2011, ♀, Şenkaya, Hoş, 1193 m, 10.VI.2012, ♀, Gözebaşı, 1794 m, 14.VII.2012, ♀, ♂, İkizpinar, 1589 m, 31.VIII.2011, ♀, Paşalı, 1106 m, 10.VIII.2011, ♂, Taht, 1283 m, 31.VIII.2011, 2♀♀, Tekman, Çeçekdağı, 1846 m, 26.VI.2011, ♀, Tortum, Aksukapı, 1648 m, 7.VIII.2011, ♀, Arılı, 1728 m, 15.VIII.2012, ♀, 3♂♂, Derekapı, 1247 m, 13.VIII.2011, ♀, ♂, Suyatağı, 1245 m, 27.V.2011, ♀, ♂, 1660 m, 31.VII.2011, ♀, Şenyurt, 1265 m, 21.VII.2012, ♀, ♂, Yukarı Sivri, 1962 m, 16.VII.2012, ♀, ♂, Uzundere, Altınçanak, 967 m, 09.VIII.2011, ♀, 1048 m, 09.VII.2011, ♀, Çağlayanlı, 967 m, 27.V.2011, 2♀♀, ♂, Çamliyamaç, 1282 m, 14.VIII.2012, ♀, Dikyar, 1133 m, 14.VIII.2012, 2♂♂, Gölbaşı, 1260 m, 7.VIII.2011, ♂, Kirazlı, 1203 m, 9.VIII.2011, ♂, Şelale, 985 m, 27.V.2011, ♂, 1012 m, 27.V.2011, 2♂♂; İstanbul: Kemerburgaz, 145 m, 31.VII.2011, ♂; Mersin: Erdemli, Üçtepe, 120 m, 17.IX.2012, ♂ 25.IX.2012, ♀.

***Liorhyssus hyalinus* (FABRICIUS 1794)**

M a t e r i a l e x a m i n e d : Erzincan: 850 m, 15.VII.2012, ♂; Erzurum: Karagöbek, 2033 m, 7.VI.2012, ♀, Palandöken, 2155 m, 22.VII.2012, ♀, Üniversity field, 1850 m, 21.IX.2012, ♂, Aşkale, Çayköy, 1876 m, 23.VII.2011, ♀, ♂, Kandilli, Athikonak, 1760 m, 9.VIII.2011, ♂, Aziziye, Gelinkaya, 1796 m, 24.VI.2012, ♀, Rizekent, 2088 m, 24.VI.2012, ♂, Tebricik, 1750 m, 5.VII.2012, 2♂♂, Çat, 1913 m, 23.VII.2011, ♀, 2♂♂, Güzelyurt, 2099 m, 5.VIII.2011, ♂, Köseler, 1942 m, 18.VI.2012, ♂, Yukarıçat, 2162 m, 23.VII.2011, ♂, Dadaşköy, 1806 m, 4.VIII.2011, ♀, Horasan, Çayırüstü, 1799 m, 22.VI.2012, ♀, Dalbaşı, 1601 m, 17.VII.2011, ♀, Değirmenli, 1643 m, 13.VIII.2011, ♂, Dönertaş, 1907 m, 13.VIII.2012, 2♀♀, Kırkdikme, 1561 m, 13.VIII.2011, ♂, Kırkgözeler, 1584 m, 13.VIII.2011, ♂, Muratbağı, 1850 m, 21.VIII.2011, ♀, Yeşildere, 1684 m, 28.VIII.2011, 2♀♀, İspır, Elmalı, 1328 m, 20.VII.2011, ♀, Madenkörprübaşı, 1307 m, 20.VII.2011, ♂, Yukarıözbağ, 1190 m, 20.VII.2011, ♀, Zeyrek, 2073 m, 22.VI.2011, ♀, ♂, Köprüköy, 1621 m, 13.VII.2011, ♀, ♂, Ataköy, 1788 m, 17.VI.2012, ♀, Eğirmez, 1670 m, 13.VIII.2011, ♀, Eyüpeler, 1745 m, 16.VI.2012, ♀, 2♂♂, Narman, Ünlükaya, 1700 m, 8.VI.2012, ♀, Yanıktaş, 1628 m, 30.VII.2011, ♀, Oltu, Çamlıbel, 1775 m, 10.VI.2012, 2♀♀, 1661 m, 30.VI.2012, ♀, Orcuk, 1556 m, 10.VI.2012, ♀, ♂, Sarisaz, 1388 m, 5.VIII.2012, 2♀♀, 1421 m,

30.VIII.2012, ♀, ♂, Yayla, 2005 m, 10.VI.2012, 2♂ ♂, Olur, Ormanağızı, 955 m, 10.VII.2011, ♂, Pasinler, Büyükdere, 1759 m, 12.VIII.2012, 2♀ ♀, Espence, 1666 m, 21.VIII.2011, ♀, ♂, Kurbançayı, 1762 m, 12.VIII.2012, ♂, Pazaryolu, 1430 m, 4.VIII.2012, ♂, Gülçimen, 1663 m, 20.VII.2011, ♀, Şenkaya, Hoş, 1193 m, 31.VII.2011, ♀, ♂, İkizpinar, 1589 m, 31.VII.2011, ♂, Taht, 1283 m, 10.VI.2012, ♀, Tekman, Çiçekdağı, 1846 m, 26.VI.2011, ♀, Körser, 1901 m, 16.VII.2011, 2♀ ♀, Tortum, Aksukapı, 1648 m, 7.VII.2011, ♂, Arılı, 1728 m, 30.VIII.2012, 3♂ ♂, Derekapı, 1247 m, 9.VII.2011, ♀, Uzungere, Altınçanak, 1048 m, 9.VII.2011, ♀, Çamlıyamaç, 1290 m, 7.VIII.2011, ♂, Gölbaşı, 1260 m, 7.VII.2011, ♀, 1150 m, 14.VIII.2012, ♂; Samsun: Havza, Kamlık köyü, 500 m, 27.VIII.2011, ♀; Tunceli: Mazgirt, Kalayıcı, 950 m, 20.VII.2011, ♀.

***Maccevethus caucasicus* (KOLENATI 1845)**

M a t e r i a l e x a m i n e d : Erzurum: Aşkale, Demirkırın, 1699 m, 11.VIII.2012, ♂, İspir, Yeşilvadi, 2285 m, 24.VI.2012, ♀, Karaçoban, Duman, 1560 m, 26.VI.2011, ♂, Köprüköy, Marifet, 1685 m, 16.VI.2012, ♀, ♂, Pekcik, 1722 m, 26.VI.2011, ♀, Oltu, İğdelen, 1660 m, 30.VI.2012, 2♀ ♀, Özdere, 1927 m, 16.VII.2012, ♀, Yolboyu, 1135 m, 10.VI.2012, ♀, Olur, Coşkunlar, 1054 m, 10.VI.2012, ♀, ♂, Olurdere, 1050 m, 10.VI.2012, ♂, Şenkaya, Hoş, 1193 m, 31.VII.2011, ♀, Uzungere, Çağlayanlı, 967 m, 27.V.2011, ♂.

***Maccevethus corsicus* SIGNORET 1862**

M a t e r i a l e x a m i n e d : Çanakkale: Biga, Bozlar, 20 m, 2.IX.2011, ♂; Erzurum: Narman, Kılımlı, 1716 m, 13.VIII.2012, ♂, Oltu, İğdelen, 1660 m, 30.VI.2012, ♀, Yolboyu, 1135 m, 10.VI.2012, ♀, Pazaryolu, Esenyurt, 1400 m, 4.VIII.2012, ♂, Şenkaya, Taht, 1283 m, 10.VI.2012, ♂.

***Rhopalus (Aeschynotelus) maculatus* (FIEBER 1837)**

M a t e r i a l e x a m i n e d : Erzurum: İspir, Özlüce, 1736 m, 4.VIII.2012, 4♀ ♀, 2♂ ♂, Pazaryolu, 1495, 24.VII.2011, ♂, Tortum, 1661 m, 23.VI.2011, ♂.

***Rhopalus (Rhopalus) conspersus* (FIEBER 1837)**

M a t e r i a l e x a m i n e d : Erzurum: Horasan, Dalbaşı, 1577 m, 22.VI.2012, ♀, Tortum, Derekapı, 1010 m, 7.VI.2012, ♀.

***Rhopalus (Rhopalus) parumpunctatus* SCHILLING 1829**

M a t e r i a l e x a m i n e d : Erzurum: Aşkale, Küçükgeçit, 1709 m, 23.VII.2011, ♂, Horasan, Dönertas, 1907 m, 13.VII.2012, ♀, Pazaryolu, 1430 m, 4.VIII.2012, 2♀ ♀, Şenkaya, İkizpinar, 1589 m, 31.VII.2011, ♀.

***Rhopalus (Rhopalus) subrufus* (GMELIN 1790)**

M a t e r i a l e x a m i n e d : Erzurum: Çat, Bayındır, 1978 m, 18.VI.2012, ♀, Karayazı, Alemdağ, 2022 m, 16.VII.2011, ♂, Narman, Kılımlı, 1726 m, 16.VII.2012, ♂, Oltu, Çamlıbel, 1775 m, 10.VI.2012, ♂, 1682 m, 31.VII.2011, ♂, Sarısaz, 1421 m, 30.VIII.2012, ♀, Tutmaç, 1720 m, 16.VII.2012, 2♀ ♀, Olur, Süngübeyir, 1650 m, 10.VI.2012, ♂, Şenkaya, Gözebaşı, 1794 m, 14.VII.2012, ♂, Hoş, 1193 m, 10.VI.2012, ♂, Tortum, Pehlivانlı, 1179 m, 14.VIII.2012, ♀, Suyatağı, 1245 m, 27.V.2011, ♂, 1236 m, 21.VII.2012, ♀, Uzungere, Altınçanak, 1132 m, 21.VII.2012, ♀, Gölbaşı, 1260 m, 7.VIII.2011, Kirazlı, 1203 m, 9.VII.2011, ♂.

***Stictopleurus abutilon* (ROSSI 1790)**

M a t e r i a l e x a m i n e d : Erzurum: Abdurrahmangazi, 2170 m, 22.VII.2012, ♀, Karagöbek, 2033 m, 7.VI.2012, ♀, Palandöken, 2155 m, 22.VII.2012, ♂, Aşkale, Kopdağı, 2380 m, 5.IX.2012, ♀, Aziziye, Rizekent, 2088 m, 24.VI.2012, ♀, Çat, Başköy, 2129 m, 18.VII.2012, ♀, Çıraklı, 2198 m, 18.VI.2012, ♀, Güzelyurt, 2117 m, 9.VIII.2011, ♀, Tuzlaköy, 1926 m, 21.VI.2011, ♂, Horasan, Çayırduzu, 1799 m, 22.VI.2012, ♀, Dalbaşı, 1577 m, 22.VI.2012, ♀,

Yukarı Horon, 1957 m, 14.VII.2012, ♂, Köprüköy, Eyüpler, 1745 m, 16.VI.2012, ♂, Marifet, 1685 m, 16.VII.2012, ♀, Narman, Demirdağ, 2028 m, 16.VII.2012, ♀, Şehitler, 1850 m, 8.VI.2012, 2♀ ♀, Oltu Başbağlar, 1925 m, 13.VII.2011, ♂, Çamlıbel, 1661 m, 30.VI.2012, ♀, İğdeli, 1660 m, 30.VI.2012, ♀, İnanmış, 1812 m, 31.VII.2011, ♀, Orcuk, 1556 m, 10.VI.2012, ♀, Yayla, 2005 m, 10.VI.2012, ♀, Olur, Boğazgören, 1168 m, 19.VII.2012, ♀, Coşkunlar, 1054 m, 30.VII.2011, ♀, Yeşilbağlar, 987 m, 10.VII.2011, 2♂ ♂, Pasinler, Yiğitpinarı, 1815 m, 22.VII.2012, ♂, Pazaryolu, 1430 m, 4.VIII.2012, 2♀ ♀, Şenkaya, İçmesu, 1656 m, 14.VII.2012, ♀, Taht, 1283 m, 31.VII.2011, ♀, Tekman, Körusu, 1984 m, 26.VI.2011, ♀, ♂, Tortum, 1660 m, 31.VII.2011, ♂, Pehlivanhı, 1158 m, 21.VII.2012, ♀, 1179 m, 14.VIII.2012, ♂, Uzundere, Çağlayanlı, 967 m, 27.V.2011, ♀.

***Stictopleurus punctatonervosus* (GOEZE 1778)**

M a t e r i a l e x a m i n e d : Ardahan: Çıldır, Kotanlı, 1690 m, 2.IX.2012, ♀; Bayburt: Kopdağı, 2380 m, 5.IX.2012, 2♀ ♀; Erzurum: Dadaşköy, 1806 m, 4.VIII.2011, ♀, Karagöbek, 1961 m, 16.VII.2012, ♀, Palandöken, 2155 m, 22.VII.2012, 2♀ ♀, 2♂ ♂, Üniversity field, 1850 m, 21.IX.2012, ♂, Aşkale, 1661 m, 19.VI.2012, ♀, ♂, Büyükköçet, 1730 m, 18.VII.2012, ♀, Çayköy, 1700 m, 19.VI.2012, ♂, 1876 m, 23.VII.2011, ♂, Gölçebük, 1699 m, 23.VII.2011, ♂, Kopdağı, 2380 m, 5.IX.2012, 2♀ ♀, 2♂ ♂, Tepsicik, 2300 m, 5.VII.2012, ♂, Yeniköy, 1905 m, 19.VI.2012, ♂, Aziziye, Gelinkaya, 1796 m, 24.VI.2012, ♀, ♂, Ortatabaçe, 1763 m, 5.VII.2012, 2♂ ♂, Toprakkale, 2151 m, 22.VI.2011, 2♂ ♂, Çat, Bayındır, 1978 m, 18.VI.2012, ♂, Çirişli, 2198 m, 18.VI.2012, ♂, Yukarı Çat, 1904 m, 18.VI.2012, ♂, Hinis, Akören, 1828 m, 16.VII.2011, ♂, Yolüstü, 1664 m, 17.VI.2012, ♂, Horasan, Akçataş, 1659 m, 13.VIII.2012, ♂, Aşağı Çamlıkale, 2242 m, 13.VIII.2012, ♀, Dalbaşı, 1601 m, 17.VII.2011, 2♀ ♀, Değirmenli, 1608 m, 22.VI.2012, ♀, Hacıahmet, 1823 m, 13.VIII.2012, ♀, 2♂ ♂, Muratbağı, 1859 m, 21.VIII.2011, ♀, Tavşancık, 1518 m, 17.VII.2011, ♂, Yeşildere, 1698 m, 22.VI.2012, ♂, İspir, Aşağı Özbağ, 1177 m, 15.VII.2012, ♀, ♂, Güneyköy, 2024 m, 24.VII.2011, ♂, Kirazlı, 1207 m, 24.VII.2011, ♀, Madenköprübaşı, 1744 m, 24.VI.2012, ♀, Yeşilvadi, 2285 m, 24.VI.2012, ♀, Yukarı Özbağ, 1190 m, 20.VII.2011, ♀, Karayazı, Çatalören, 2313 m, 16.VI.2012, ♀, ♂, Köprüköy, 1135 m, 24.VII.2011, ♀, Eyüpler, 1745 m, 16.VI.2012, ♀, Marifet, 1685 m, 16.VI.2012, 2♂ ♂, Narman, Demirdağ, 2028 m, 16.VII.2012, ♀, ♂, Göllü, 1842 m, 30.VI.2012, ♀, Şehitler, 1850 m, 8.VI.2012, 2♀ ♀, Yanıktaş, 1628 m, 30.VII.2011, ♀, Oltu, Çamlıbel, 1775 m, 10.VI.2012, ♂, İnanmış, 1812 m, 31.VII.2011, 2♀ ♀, Orcuk, 1556 m, 10.VI.2012, ♂, Tekeli, 1320 m, 10.VI.2012, ♀, Toklu, 1300 m, 10.VI.2012, ♀, Tuzählaköy, 1109 m, 30.VII.2011, ♀, Tutlu, 1240 m, 23.VI.2011, ♀, Olur, Coşkunlar, 1054 m, 10.VI.2012, ♀, 30.VII.2011, ♀, Olgun, 1600 m, 10.VI.2012, ♀, ♂, Ormanazlı, 951 m, 6.VII.2012, ♀, ♂, 955 m, 10.VII.2011, ♂, 935 m, 5.VIII.2012, 2♂ ♂, Taşlıköy, 860 m, 10.VII.2011, ♂, Yeşilbağlar, 987 m, 10.VII.2011, ♀, Pasinler, Büyükdere, 12.VIII.2012, ♀, Ovaköy, 1803 m, 30.VII.2011, ♀, Pazaryolu, 1430 m, 24.VI.2012, ♂, 1452 m, 15.VII.2012, ♂, 4.VIII.2012, ♀, ♂, Kümbettepe, 1427 m, 24.VII.2011, ♀, Şenkaya, Hoş, 1193 m, 10.VI.2012, ♀, 31.VII.2011, ♀, İçmesu, 1656 m, 14.VII.2012, ♂, İkizpinar, 1589 m, 31.VII.2011, 2♀ ♀, ♂, Taht, 1283 m, 31.VII.2011, ♂, Tortum, 1661 m, 23.VI.2011, 2♀ ♀, ♂, Aksukapı, 1648 m, 10.VI.2012, 2♀ ♀, ♂, Arılı, 1650 m, 15.VIII.2012, ♀, Aşağı Sivri, 1546 m, 16.VII.2012, ♂, Pehlivanhı, 1158 m, 21.VII.2012, ♂, Suyatağı, 1245 m, 27.V.2011, ♂, 1236 m, 21.VII.2012, ♀, ♂, Şenyurt, 1265 m, 21.VII.2012, ♀, ♂, Taşbaşı, 1816 m, 9.VII.2011, 2♀ ♀, Yukarı Sivri, 1909 m, 16.VII.2012, ♂, 1962 m, 16.VII.2012, ♂, Uzundere, Altınçanak, 1048 m, 9.VII.2011, ♀, ♂, Çağlayanlı, 967 m, 27.V.2011, ♀, Dikyar, 1133 m, 14.VIII.2012, ♀, Gölbaşı, 1260 m, 7.VIII.2011, ♀, 1150 m, 14.VIII.2012, ♀, ♂, Kirazlı, 1203 m, 9.VII.2011, ♀, 1231 m, 21.VII.2012, ♀, Sapaca, 1082 m, 21.VII.2012, ♂.

***Stictopleurus subtomentosus* (REY 1888)**

M a t e r i a l e x a m i n e d : Erzurum: Köprüköy, Kepecik, 1722 m, 26.VI.2011, ♂, Tortum, Arılı, 1728 m, 30.VIII.2012, ♀, Uzundere, Çağlayanlı, 967 m, 27.V.2011, ♀.

***Stictopleurus unicolor* (JAKOVLEV 1873)**

M a t e r i a l e x a m i n e d : Erzurum: Aşkale Yeniköy, 1905 m, 19.VI.2012, ♀.

Family Stenoccephalidae

Dicranoccephalus agilis (SCOPOLI 1763)

Material examined: Ankara: Kalecik, Emeklikent, 725 m, 1.IX.2011, ♂; Erzincan: Kemah, 5.VIII.2011, ♂, 2♀♀; Erzurum: 1650 m, 3.IX.2011, ♀; İspir, Kirazlı, 1206 m, 20.VII.2011, ♂, Yeşilvadi, 2285 m, 24.VI.2012, ♀, Köprüköy, 1135 m, 24.VII.2011, ♂, ♀, Güzelhisar, 1955 m, 16.VI.2012, ♀, Oltu, Duralar, 1421 m, 30.VII.2011, 2♂♂, Tuzlaköy, 1109 m, 30.VII.2011, ♀, ♂, Olur, Coşkunlar, 1054 m, 30.VII.2011, ♀, Taşlıköy, 860 m, 10.VII.2011, ♀, Pazaryolu, 1495 m, 24.VII.2011, ♂, Şenkaya, İkizpinar, 1589 m, 31.VII.2011, ♂, Paşalı, 1106 m, 10.VII.2011, 2♀♀, Penek, 1145 m, 10.VII.2011, ♂, Taht, 1283 m, 31.VII.2011, 2♀♀, Tortum, Derekapı, 1247 m, 9.VII.2011, 2♂♂, Uzundere, 1147 m, 7.VIII.2011, ♂, Çağlayanlı, 967 m, 27.V.2011, ♂, Çamlıyamaç, 1290 m, 7.VIII.2011, ♀, Gümüşhane: Köse, Akbabası, 1710 m, 3.IX.2011, ♀; Isparta: Ayazmana, 1100 m, 30.VII.2011, ♂; İstanbul: Kemerburgaz, 145 m, 31.VII.2011, ♂; Samsun: Havza, Kamilk, 500 m, 3.IX.2011, ♀; Tunceli: Pülümür, Sağlamtaş, 1701 m, 13.VIII.2011, ♀.

Dicranoccephalus albipes (FABRICIUS 1781)

Material examined: Erzurum: Aziziye, Alaca, 1751 m, 5.VI.2012, ♀, Horasan, Muratbağı, 1852 m, 22.VI.2012, ♂, İspir, Öztoprak, 1724 m, 15.VII.2012, ♂, Yukarı Özbağ, 1190 m, 20.VII.2011, 2♀♀, Köprüköy, İlicasu, 2111 m, 30.VII.2011, ♂, Narman, Göllü, 1842 m, 30.VI.2012, ♂, 1083 m, 30.VII.2011, ♂, Samikale, 1541 m, 30.VII.2011, ♀, Ünlükaya, 1700 m, 8.VI.2012, ♀, 2♂♂, Oltu, Çamlıbel, 1661 m, 30.VI.2012, ♀, ♂, Demirtaş, 1888 m, 6.VII.2012, ♀, 2♂♂, İğdeli, 1660 m, 30.VI.2012, ♀, Olur, Süngübayırlı, 1650 m, 10.VI.2012, ♀, ♂, Tortum, 1533 m, 7.VI.2012, 2♀♀, ♂, Aksukapı, 1650 m, 10.VI.2012, ♀, 1648 m, 7.VII.2011, ♂, Çamlıca, 1674 m, 16.VII.2012, ♂, Derekapı, 1247 m, 13.VII.2011, ♂.

Superfamily Piesmatoidae

Family Piesmatidae

Piesma maculatum (LAPORTE 1833)

Material examined: Erzurum: Narman, 1550 m, 25.V.1989, 2♀♀, 12.VI.1988, 3♀♀, 29.VI.1988, 3♀♀, 3♂♂, 30.VI.1989, 3♀♀, 2♂♂, 8.VII.1988, 11.VII.1989, ♂, 12.VII.1988, 4♀♀, 6♂♂, 29.VII.1988, 2♂♂, 30.VII.1989, ♀, Kışlaköy, 1892 m, 13.VIII.2012, ♂, Ünlükaya, 1700 m, 8.VI.2012, ♀, Oltu, 1300 m, 25.V.1989, 6♀♀, 7♂♂, 1.VI.1989, 3♀♀, 2.VI.1989, 2♂♂, 3.VI.1988, 2♀♀, 2♂♂, 7.VI.1989, 3♀♀, 2♂♂, 8.VI.1988, 4♀♀, 2♂♂, 9.VI.1988, 2♂♂, 11.VI.1988, 3♀♀, 3♂♂, 12.VI.1988, ♀, 16.VI.1989, 8♀♀, 4♂♂, 17.VI.1989, 3♀♀, 3♂♂, 18.VI.1988, 3♀♀, 4♂♂, 20.VI.1989, ♀, 23.VI.1988, 4♀♀, 4♂♂, 25.VI.1989, 2♀♀, 2♂♂, 28.VI.1988, 6♀♀, 2♂♂, 30.VI.1988, 3♀♀, 30.VI.1989, 11♀♀, 2♂♂, 31.VI.1988, 2♂♂, 2.VII.1989, 3♀♀, 7.VII.1989, 3♀♀, 3♂♂, 8.VII.1988, 3♀♀, 10.VII.1989, 3♀♀, 2♂♂, 10.VII.1990, 2♀♀, 11.VII.1988, 3♀♀, 5♂♂, 12.VII.1988, 3♀♀, 16.VII.1989, 6♀♀, 4♂♂, 18.VII.1988, 3♀♀, 5♂♂, 20.VII.1988, 2♀♀, 2♂♂, 20.VII.1989, ♀, 21.VII.1988, 2♀♀, 2♂♂, 24.VII.1989, 6♀♀, 5♂♂, 28.VII.1988, 2♂♂, 30.VII.1989, 3♀♀, 31.VII.1988, 3♀♀, 4♂♂, 1.VIII.1989, 5♀♀, 4♂♂, 4.VIII.1990, 3♀♀, ♂, 5.VIII.1988, 2♀♀, 2♂♂, 6.VIII.1989, 2♀♀, 7.VIII.1989, ♀, 10.VIII.1989, 7♀♀, 2♂♂, 10.VIII.1978, 4♀♀, 3♂♂, 11.VIII.1988, 2♀♀, 3♂♂, 12.VIII.1989, 9♀♀, 7♂♂, 16.VIII.1989, 18♀♀, 14♂♂, 18.VIII.1988, 3♀♀, 20.VIII.1989, 2♀♀, ♂, 21.VIII.1988, 2♀♀, 2♂♂, 24.VIII.1989, 2♂♂, 28.VIII.1988, 2♀♀, 2♂♂, 2.IX.1988, 1♀♀, 9♂♂, Şenkaya, 1900 m, 2.VI.1989, 3♀♀, 9.VI.1988, 2♂♂, 16.VI.1988, ♀, 17.VI.1989, 6♀♀, 4♂♂, 20.VI.1989, 3♀♀, ♂, 21.VI.1989, ♂, 30.VI.1989, ♂, 1.VII.1989, 2♀♀, 8.VII.1988, 2♀♀, 2♂♂, 10.VII.1989, 15♀♀, 13♂♂, 19.VII.1988, 2♀♀, 2♂♂, 31.VII.1988, 3♀♀, 4♂♂, 5.VIII.1989, 4♀♀, 7♂♂, 6.VIII.1990, 3♀♀, 10.VIII.1989, 3♀♀, 2♂♂, Turnalı, 1850 m, 10.VII.1989, 5♀♀, 4♂♂, 6.VIII.1990, 7♀♀, 6♂♂.

***Parapiesma atriplicis* (FREY-GEßNER 1863)**

M a t e r i a l e x a m i n e d : Erzurum: 1850 m, 28.V.1980, ♀, ♂, University field, 1850 m, 7.VI.1996, ♂, Narman, Kışlaköy, 1892 m, 13.VIII.2012, 12♀ ♀, 5♂ ♂, Oltu, 4.VIII.2009, 7♀ ♀, ♂, Şenkaya, 1900 m, 16.VI.1988, ♂; Kars: Sarıkamış, Karakurt, 1500 m, 13.VII.2009, 3♀ ♀.

***Parapiesma salsolae* (BECKER 1867)**

M a t e r i a l e x a m i n e d : Erzincan: Mercan, 11.VII.1990, ♀, 3♂ ♂; Erzurum: Narman, 1550 m, 11.VII.1990, ♀, Oltu, Yolboyu, 1135 m, 31.VII.2010, 2♀ ♀.

Infraorder L e p t o p o d o m o r p h a

Superfamily S a l d o i d e a

Family S a l d i d a e

Subfamily S a l d i n a e

Tribe S a l d o i d i n i

***Saldula amplicollis* (REUTER 1891)**

M a t e r i a l e x a m i n e d : Erzurum: Aziziye, Yoncalık, 1900 m, 4.VIII.2009, ♀.

***Saldula arenicola* (SCHOLTZ 1847)**

M a t e r i a l e x a m i n e d : Erzincan: Geyikli, 11.VI.2010, ♀, 5♂ ♂; Erzurum: Şenkaya, Sindiran, 1491 m, 31.VII.2011, ♀.

***Saldula pallipes* (FABRICIUS 1794)**

M a t e r i a l e x a m i n e d : Erzurum: University field, 1850 m, 13.VIII.1988, ♀, Aşkale, 31.VII.1989, ♀, Pasinler, 1600 m, 14.VI.2009, ♂; Erzincan: Üzümlü, 1500 m, 22.IX.2009, ♀.

Infraorder N e p o m o r p h a

Superfamily C o r i x o i d e a

Family C o r i x i d a e

Subfamily C o r i x i n a e

Tribe C o r i x i n i

***Corixa affinis* LEACH 1817**

M a t e r i a l e x a m i n e d : Karaman: Sudağı, 13.VIII.1994, 3♀ ♀.

***Corixa panzeri* FIEBER 1848**

M a t e r i a l e x a m i n e d : Erzurum: University field, 1850 m, 7.VIII.1996, ♀.

***Corixa punctata* (ILLIGER 1807)**

M a t e r i a l e x a m i n e d : Ankara: Kızılıçahamam, Işık Mountain, 1650 m, 18.IX.2011, ♀, Sipahiler, 975 m, 27.VI.2011, ♂.

***Sigara (Pseudovermicorixa) nigrolineata* (FIEBER 1848)**

M a t e r i a l e x a m i n e d : Erzurum: University field, 1850 m, 1.VIII.1998, ♂.

***Sigara (Vermicorixa) lateralis* (LEACH 1817)**

M a t e r i a l e x a m i n e d : Erzurum: University field, 1850 m, 14.VII.1996, ♂, 15.VII.1996, ♂, 1.VIII.1998, ♂, 7.VIII.1996, ♀.

Superfamily N e p o i d e a

Family B e l o s t o m a t i d a e

Subfamily L e t h o c e r i n a e

***Lethocerus (Lethocerus) patruelis* (STÁL 1854)**

M a t e r i a l e x a m i n e d : Adana: 28.VII.1992, ♀; Balıkesir: İvrindi, Korucu, 26.VI.2010, ♂; Bursa: Karacabey, 145 m, 24.VII.2009, ♂; Çanakkale: Biga, Bozlar, 20 m, 6.IX.2011, 2♂♂; Hatay: Erzin, 21.IX.2002, ♀, ♂.

Family N e p i d a e

Subfamily N e p i n a e

Tribe N e p i n i

***Nepa cinerea* LINNAEUS 1758**

M a t e r i a l e x a m i n e d : Sivas: 7.IX.1992, 2♀ ♀.

Superfamily N o t o n e c t o i d e a

Family N o t o n e c t i d a e

Subfamily N o t o n e c t i n a e

Tribe N o t o n e c t i n i

***Notonecta maculata* FABRICIUS 1794**

M a t e r i a l e x a m i n e d : Antalya: Akseki, 30.VII.1993, 12♀ ♀, 8♂ ♂; Mersin: Silifke, 20.IX.1993, ♂; Sanlurfa: Viranşehir, Büyükgörümlü, 563 m, 8.VIII.2012, 2♀ ♀, ♂.

***Notonecta glauca* LINNAEUS 1758**

M a t e r i a l e x a m i n e d : Ankara: Kızılcahamam, Sipahiler, 975 m, 27.VI.2011, ♀, 14.VIII.2011, 2♀ ♀; Sanlurfa: Viranşehir, Büyükgörümlü, 563 m, 8.VIII.2012, ♀.

***Notonecta meridionalis* POISSON 1926**

M a t e r i a l e x a m i n e d : Ankara: Sereflikoçhisar, Kuşçular, 20.VII.2008, ♀; Erzurum: Oltu, Çamlıbel, 1750 m, 12.VIII.1998, ♀; Konya: Güneysünir, Gürğaç, 1017 m, 6.VI.1989, 2♀ ♀, ♂.

Discussion

In this study, 4 species of 2 genera from Gerridae, 3 species of 2 genera from Alydidae, 14 species of 11 genera from Coreidae, 15 species of 8 genera from Rhopalidae, 2 species of 1 genus from Stenocephalidae, 3 species of 2 genera from Piesmatidae, 3 species of 1 genus from Saldidae, 5 species of 2 genera from Corixidae, 1 species of 1 genus from Belostomatidae, 1 species of 1 genus from Nepidae and 3 species of 1 genus from Notonectidae were recorded. In total, 54 species from 32 genera of these families were recorded from Turkey. Among them, *Camptopus lateralis* (GERMAR 1817) (Alydidae), *Coreus marginatus* (LINNEAUS 1758) (Coreidae) *Corizus hyoscyami* (LINNAEUS 1758), *Stictopleurus punctatonervosus* (GOEZE 1778) (Rhopalidae), *Dicranoccephalus agilis* (SCOPOLI 1763) (Stenocephalidae) and *Piesma maculatum* (LAPORTE 1833) (Piesmatidae) have been found the most abundant and widespread species. In addition, new localities are added for some species previously reported for Turkey.

Regular collections of bugs between 1978 and 2012 in Turkey allowed the caught of a representative (though not complete) sample of the fauna of Heteroptera: 54 species from 32 genera belonging to families Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae and Notonectidae. The majority of the species belong to mediterranean or euro siberian faunal kingdoms.

The collect data are interesting for national or regional distribution of species (many new localities added to known distribution) and they allowed the discovery. They also give indications on the biology of the species (dates of the 1st or the last caught); the altitude of collect station is greatly indicative too.

All these data contribute to a better knowledge of turkish fauna and, second, of the ecology of Heteroptera in the north east of mediterranean basin, particularly the least common of them.

Zusammenfassung

Vorliegende Studie basiert auf Aufsammlungen der Familien Gerridae, Alydidae, Coreidae, Rhopalidae, Stenocephalidae, Piesmatidae, Saldidae, Corixidae, Belostomatidae, Nepidae and

Notonectidae, die im Zeitraum 1978 bis 2012 an verschiedenen Lokalitäten der Türkei aufgesammelt wurden. Insgesamt konnten 54 Arten aus 32 Gattungen nachgewiesen werden. Zu den häufigsten und weitverbreitesten Arten zählten *Coreus marginatus* (LINNEAUS 1758) (Coreidae), *Corizus hyoscyami* (LINNAEUS 1758), *Stictopleurus punctatonervosus* (GOEZE 1778) (Rhopalidae), *Dicranoccephalus agilis* (SCOPOLI 1763) (Stenocephalidae) und *Piesma maculatum* (LAPORTE 1833) (Piesmatidae).

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