

## Contribution to the Knowledge of the Anthocoridae, Lyctocoridae, Nabidae, Reduviidae and Tingidae (Hemiptera, Heteroptera) Fauna of Turkey

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### ABSTRACT

This study is based upon material of families Anthocoridae, Lyctocoridae, Nabidae, Reduviidae and Tingidae collected from different localities of Turkey between 1968 and 2012. In this study, 8 species and 4 genera to Anthocoridae, 1 species and 1 genus to Lyctocoridae, 6 species and 2 genera to Nabidae, 11 species and 6 genera to Reduviidae and 20 species and 11 genera to Tingidae are recorded which represent a total of 46 species and 24 genera from various regions of Turkey. Among them, *Anthocoris pilosus* (Jakovlev, 1877), *Temnostethus reduvinus* (Herrich-Schaeffer, 1850), *Orius minutus* (Linnaeus, 1758), *O. niger* (Wolff, 1811) (Anthocoridae), *Nabis pseudoferus* Remane, 1949 (Nabidae), *Rhynocoris punctiventris* (Herrich-Schaeffer, 1846) (Reduviidae) and *Dictyla echii* (Schrank, 1782) (Tingidae) have been found as the most numerous and widespread species. *Himacerus major* (A. Costa, 1842) (Nabidae), *Agramma (Agramma) laetum* (Fallen, 1807) and *Elasmotropis testacea selecta* (Horváth, 1891) (Tingidae) are new records for the Turkish fauna. In addition, new localities were found for some species which have already been reported in Turkey.

**Key words:** Hemiptera, Heteroptera, Anthocoridae, Lyctocoridae, Nabidae, Reduviidae, Tingidae, Fauna, new records, Turkey.

### INTRODUCTION

Anthocoridae and Lyctocoridae also known as minute pirate bugs are small representatives of the infraorder Cimicomorpha (1.5–5 mm long) and are no more than 475 species in the world (Henry, 2009). Usually Anthocoridae and Lyctocoridae are predators (Carayon, 1961; Péricart, 1972) but some are known (at least a part of their life) to be phytophagous (e.g., some *Orius* Wolff, 1811 eat pollen - Salas Aguilar and Ehler, 1977) some of them can facultatively suck blood of birds, rodents, or humans (Stys and Daniel, 1958). The antennae and rostrum are thin and more or less filiform. The fore wings bear a cuneus and fore tibiae an adhesive pad or “fossula spongiosa”. Male genitalia are asymmetric with only one paramere developed and female ovipositor is of laciniate type. Male practice “traumatic insemination”. Traumatic insemination is a particular way of fecundation known in some Cimicomorpha such as Anthocoridae,

Cimicidae, Prostemmaeinae. During mating, male drills females's body and inject the sperm directly in the abdomen outside genitalia. Spermatozoa then migrate, by blood way, towards oocytes and allow fecundation (translation of Carayon 1977 by PM) (Schuh and Slater, 1995). Formerly 3 subfamilies were recognized in Anthocoridae: Anthocorinae, Lasiochilinae and Lyctocorinae (e.g. Péricart, 1972), but Schuh and Stys (1991) and Schuh and Slater (1995) treated the last two as families Lasiochilidae and Lyctocoridae. The phylogeny of the Anthocoridae was recently studied by Jung *et al.*, (2010). Reuter (1884) revised the family at world scale, Péricart (1972) studied western Palaearctic fauna, Herring (1966) and Kelton (1963) the Nearctic fauna. The Palaearctic fauna was catalogued by Péricart (1996), with supplement by Aukema *et al.*, (2013).

Nabidae (damselfly bugs) have world scale distribution. This little to medium size predators (3–15 mm long) live on low vegetation or grass (Lattin, 1989) or on the ground where they disappear thank to their cryptic coloration (mainly yellowish or light brown). The antennae, rostrum and legs are thin; the fore wing does not have a cuneus. Front and intermediate tibiae bear an adhesive pad (the “fossula spongiosa”). Male genitalia are symmetric or not and female ovipositor is of lacinate type (Péricart, 1987). Carayon (1952, 1955) shown that “traumatic insemination” exists in Nabidae, a phenomenon also known in Anthocoridae (see above). At world scale there are 20 genera and about 400 species (Kerzhner, 1981, 1996; Kerzhner and Henry, 2008) distributed in 2 subfamilies only (Schuh and Slater, 1995). The Palaearctic fauna was revised and keyed by Kerzhner (1981) and Péricart (1987); catalogue was compiled by Kerzhner (1996), with supplement by Aukema *et al.*, (2013).

Reduviidae or assassin bugs are world scale distributed predators of 2 to more than 50 mm long. They are more common in tropical and subtropical zones and constitute a group of nearly 6900 species divided in 23 clear cut subfamilies (Weirauch and Munro 2009, Putshkov and Moulet 2009). The coloration of Reduviidae is more often cryptic (brown, brownish, yellowish) but some are red, yellow, orange and black colored (aposematic colors). The rostrum nearly always is short and strong in relation with the predation habits. Formerly, Reduviidae were considered generalist predators but this is not true for many species which are specialized to certain preys (e.g. millipeds, ants, termites) or a limited number of preys or hematophagous (Triatominae). The fore legs are raptorial (Phymatinae, Emesinae) or the front tibiae (and sometimes intermediate) bear an adhesive pad (the “fossula spongiosa”) for handling firmly the prey. Generally fully alate, apterous forms are not rare. The male genitalia are symmetric, and female ovipositor is of plate-like type. Reduviids live in different biotopes (forest, meadows), on the ground (Harpactorinae, Stenopodainae) as well as on the vegetation (Phymatinae, Harpactorinae). Some species, e.g. *Reduvius personatus* Linnaeus, 1758, live also in human houses or stables. Usually Reduviidae are univoltine but in some species the development takes more than one year. At world scale one count 1000 genera and around 7000 species (Putshkov and Moulet, 2009). Turkish fauna was studied by several workers as Horváth, Puton (in the 19th century), Hoberlandt, Linnavuori, Seidenstücker, Stichel, Wagner (around 1950–1965), Önder (1980), Yıldırım *et al.*, (2010), and Dursun and Salur (2013). European fauna

was monographed recently by Putshkov and Moulet (2009), World catalogue was provided by Maldonado Capriles (1990), and the Palaearctic catalogue by Putshkov and Putshkov (1996) with supplement by Aukema *et al.* (2013).

Tingidae are quite unique among the Heteroptera thanks to their habitus, the pronotum and fore wings having a delicate and minute network of little areoles that resemble a lace (lace bugs is their vernacular name) (Froeschner, 2001). Tingidae are group of Cimicomorpha with worldwide distribution and consisting of nearly 2600 species (Drake and Ruhoff, 1965; Montemayor and Coscarón, 2005; Zhang *et al.*, 2005). Tingidae are little to medium size bugs (1.5–10 mm) (Péricart, 1983) with thin appendices (except in *Copium* Thunberg, 1822 which possess strong antennae). The male genitalia are symmetric and female ovipositor is of the lacinate type. Larvae of the majority of species bear on their body very numerous pin-like, tooth-like or anastomosed spines or digitations. They are phytophagous and feed upon a restricted number of plants (some are nearly monophagous e.g. *Derephysia sinuatocollis* Puton, 1879 on *Clematis* see Dauphin 1986) though other have a greater trophic spectrum (e.g. *Dictyla* Stål, 1874 on Boraginaceae). Some Tingidae are agricultural pests when attacking orchards particularly pear-trees (*Stephanitis pyri* (Fabricius, 1774), Rosaceae (*Monosteira unicastata* (Mulsant and Rey, 1852) or *Platanus* (*Corythucha ciliata* (Say, 1832) Drake and Davis (1960) split the Tingidae into 3 subfamilies: Tinginae, Cantacaderinae, Vianaidinae, a systematic scheme generally adopted by workers though some have considered Vianaidinae as an independent family (Kormilev, 1955; Stys and Kerzhner, 1975; Froeschner, 1996; Lis, 1999; Montemayor and Carpintero, 2007; Schuh *et al.*, 2006, 2009). The West-Palaearctic fauna was monographed by Péricart (1983) and catalogued by Péricart and Golub (1996), with supplement by Aukema *et al.* (2013).

The aim of this paper is to bring new collect and biological data on Anthocoridae, Lyctocoridae, Nabidae, Reduviidae and Tingidae in Turkey. In this study, 8 species of 4 genera from Anthocoridae, 1 species of 1 genus from Lyctocoridae, 6 species of 2 genera from Nabidae, 11 species of 6 genera from Reduviidae and 20 species of 11 genera from Tingidae are recorded. In total, 46 species from 24 genera of these families are recorded from Turkey.

## MATERIALS AND METHODS

The material of the Anthocoridae, Lyctocoridae, Nabidae, Reduviidae, Tingidae and Cydnidae was collected from different localities of Turkey from 1968 to 2012. Provinces of the collected specimens are given in alphabetical order in the following list. The material is deposited in the Entomology Museum, Erzurum, Turkey (EMET).

## RESULTS

In this study, a total of 46 species from 24 genera are mentioned from Turkey which divide as follow: Anthocoridae 8 species, 4 genera, Lyctocoridae 1 species, 1 genus, Nabidae 6 sepecies, 2 genera, Reduviidae 11 species, 6 genera, Tingidae 20 species, 11 genera.

**Infraorder Cimicomorpha Leston, Pendergrast and Southwood, 1955****Superfamily Cimicoidea Latreille, 1802****Family Anthocoridae Fieber, 1836****Subfamily Anthocorinae Fieber, 1836****Tribe Anthocorini Fieber, 1836*****Anthocoris nemoralis* (Fabricius, 1794)**

Material examined: Antalya: 11.X.1984, 1 ♂; Erzincan: 30.VII.1991, 1 ♀; Erzurum: İspir, 24.VII.1991, 1 ♀, Olur, Yeşilbağlar, 1000 m, 16.VI.2010, ♂, Oltu, 11.VII.1991, 1 ♀, Çamlıbel, 1661 m, 30.VI.2012, 2 ♀♀, Pazaryolu, 23.VII.1991, 4 ♀♀, 3 ♂♂, Şenkaya, Gözalan, 30.V.1992, 1 ♂, Penek, 5.VII.1982, 1 ♀, Taht, 5.VII.1982, 1 ♂, Tortum, 13.VIII.1991, 2 ♂♂, Pehlivanlı, 13.VIII.1991, 3 ♀♀; Mersin: Tarsus, 8.VI.1984, 1 ♀.

***Anthocoris nemorum* (Linnaeus, 1761)**

Material examined: Antalya: 11.X.1984, 1 ♀, 1 ♂; Erzurum: Oltu, İnanmış, 1823 m, 6.VII.2012, 1 ♀, Yayla, 2005 m, 6.VII.2012, 1 ♂, Pasinler, 16.VII.1986, 2 ♀♀, 1 ♂, Pazaryolu, 23.VII.1991, 1 ♂.

***Anthocoris pilosus* (Jakovlev, 1877)**

Material examined: Antalya: 16.IX.1984, 1 ♀, Korkuteli, 27.V.1981, 1 ♂; Artvin: Yusufeli, Demirkent, 8.VII.1992, 1 ♀; Erzincan: Mercan, 1381 m, 10.VI.2010, 1 ♀, Tercan, 1408 m, 10.VI.2010, 1 ♀, Üzümlü, 1518 m, 10.VI.2010, 2 ♀♀, Bayırbağ, 31.VII.1991, 2 ♀♀, 1 ♂; Erzurum: 1900 m, 8.V.1983, 1 ♀, 15.VII.1982, 1 ♂, 14.VIII.1987, 1 ♂, Dumlubaba, 2400 m, 1.VII.2010, 1 ♂, Güngörmez, 2500 m, 1.VII.2010, 2 ♀♀, Karagöbek, 1977 m, 31.VII.2010, 3 ♀♀, 1903 m, 31.VII.2010, 1 ♀, Palandöken, 2400 m, 21.VII.2010, 1 ♀, Taşlıgüney, 9.VIII.2011, 1 ♀, Yeşilyayla, 1950 m, 1.VII.2010, 1 ♀, Aşkale, Kandilli, Merdiven, 1706 m, 24.VII.2011, 1 ♀, Yaylayolu, 2108 m, 5.VII.2012, 1 ♀, Aziziye, Toprakkale, 2157 m, 30.VII.2010, 1 ♀, Çat, Yarmak, 1876 m, 11.VIII.2012, 1 ♂, Hınıs, 1742 m, 2.VII.2010, 3 ♀♀, 2 ♂♂, Horasan, 1588 m, 2.VII.2010, 1 ♀, Dönertaş, 1907 m, 13.VIII.2012, 1 ♂, Kırkdikme, 1601 m, 29.VII.2010, 1 ♀, Yörükatlı, 1854 m, 29.VII.2010, 4 ♀♀, İspir, Özlüce, 1736 m, 4.VIII.2012, 1 ♀, Karayazı, Kırğindere, 2215 m, 2.VII.2010, 2 ♀♀, 1 ♂, Yukarı Söylemez, 1896 m, 2.VII.2010, 1 ♀, Köprüköy, Ilıcasu, Topyolu, 2380 m, 17.VII.2010, 2 ♀♀, Narman, Çimenli, 2311 m, 10.VII.2011, 1 ♀, İncedere, Demirdağ, Kireçli Pass, 1987 m, 21.VII.2010, 3 ♀♀, Toygarlı, 2123 m, 10.VII.2011, 4 ♀♀, 2 ♂♂, Oltu, 11.VII.1991, 1 ♀, 2 ♂♂, 21.VIII.1987, 1 ♀, 23.VIII.1987, 1 ♀, 1 ♂, 28.VIII.1987, 1 ♀, 1 ♂, Çamlıbel, 1135 m, 21.VII.2010, 1 ♀, İnanmış, 1823 m, 6.VII.2012, 3 ♀♀, Sarısaz, 1421 m, 30.VIII.2012, 1 ♀, Pasinler, 11.VII.1987, 2 ♀♀, 1 ♂, 16.VII.1986, 1 ♀, 29.VIII.1987, 3 ♀♀, Çöğender, 1737 m, 29.VII.2010, 1 ♀, Demirdöven, 1727 m, 29.VII.2010, 1 ♀, Ovaköy, 1782 m, 29.VII.2011, 1 ♀, Pazaryolu, 23.VII.1991, 1 ♀, 2 ♂♂, Şenkaya, 2.VI.1989, 1 ♀, İkizpınar, 1589 m, 31.VII.2011, 2 ♀♀, Sındıran, 1497 m, 10.VII.2011, 2 ♀♀, 1 ♂, Tekman, Körsu, 1940 m, 2.VII.2010, 1 ♂, Tortum, Akbaba, 2073 m, 31.VII.2011, 1 ♀; Kayseri: Güneşli, 18.VIII.1997, 1 ♀, Himmetsede, 2.IX.1997, 1 ♀.

***Temnostethus (Ectemnus) redivinus* (Herrich-Schaeffer, 1850)**

Material examined: Antalya: 8.VIII.1984, 1 ♀; Artvin: Yusufeli, 15.VII.1991, 2 ♂♂; Erzincan: Üzümlü, 31.VII.1991, 2 ♀♀; Erzurum: University field, 1850 m, 19.V.1996, 9 ♀♀, 2 ♂♂, 26.VI.1996, 2 ♀♀, 3.VII.1996, 1 ♀, 1 ♂, 4.VII.1997, 4 ♀♀, 2 ♂♂, 15.VII.1996, 6 ♀♀, 19.VII.1996, 1 ♂, 22.VII.1997, 1 ♂, 23.VII.1996, 1 ♂, 24.VII.1996, 1 ♀, 1 ♂, 29.VII.1996, 2 ♀♀, 1 ♂, 31.VII.1997, 1 ♀, 3.VIII.1996, 1 ♀, Tortum, Pehlivanlı, 13.VIII.1991, 2 ♀♀, 1 ♂; Kars: Kağızman, 19.VIII.1991, 3 ♀♀.

**Temnostethus (Montandoniella) dacicus (Puton, 1888)**

Material examined: Antalya: 8.VIII.1984, 1 ♀, 1 ♂, Korkuteli, 7.VII.1981, 1 ♂; Erzurum: Oltu, 11.VII.1991, 2 ♀♀, Pazaryolu, 23.VII.1971, 1 ♀.

**Tribe Oriini Carayon, 1958****Orius (Heterorius) minutus (Linnaeus, 1758)**

Material examined: Adiyaman: 28.VII.1994, 1 ♀, 29.VII.1994, 1 ♀, Besni, 26.VIII.1994, 1 ♂; Antalya: Elmali, 21.IV.1981, 1 ♀, Korkuteli, 15.IV.1984, 1 ♀, 9.VI.1981, 1 ♂; Artvin: Yusufeli, 7.VII.1992, 1 ♂, Morkaya, 6.VI.1991, 4 ♀♀, 1 ♂; Erzincan: 27.V.1991, 1 ♀, 30.VII.1991, 1 ♀, 1 ♂, 11.VIII.1992, 2 ♀♀, 1 ♂, 27.VIII.1991, 1 ♀, 1 ♂, Bahçeli, 28.V.1991, 2 ♀♀, Üzümlü, 29.V.1991, 1 ♀, 30.VII.1991, 1 ♀, 31.VII.1991, 1 ♂, 8.VIII.1991, 1 ♀, 28.VIII.1991, 1 ♀, Bayırbağ, 31.VII.1991, 1 ♀, 10.VIII.1992, 1 ♀; Erzurum: 24.VI.1987, 2 ♀♀, 1 ♂, 2.VII.1987, 1 ♀, 1 ♂, 15.VII.1987, 2 ♀♀, 10.VIII.1987, 1 ♂, 3.IX.1987, 1 ♀, Kümbet, 1832 m, 5.VIII.2011, 1 ♀, Yağmurcuk, 2010 m, 9.VIII.2011, 1 ♀, 1 ♂, Aşkale, 2.VII.1989, 1 ♀, Çat, Yukarı Çat, 2162 m, 23.VII.2011, 1 ♂, Horasan, Değirmenli, 1643 m, 13.VIII.2011, 1 ♀, İspir, 16.VII.1992, 1 ♀, 24.VII.1991, 1 ♀, Madenköprübaşı, 24.VII.1991, 2 ♀♀, 1 ♂, Oltu, 27.VI.1987, 1 ♀, 1 ♂, 2.VII.1987, 1 ♀, 1 ♂, 11.VII.1991, 1 ♂, 12.VII.1987, 1 ♂, 21.VII.1992, 1 ♀, Ayvalı, 22.VII.1992, 2 ♀♀, 1 ♂, Olur, Coşkunlar, 1036 m, 6.VII.2012, 1 ♀, 22.VII.1992, 2 ♀♀, Taşlıköy, 22.VII.1992, 1 ♀, 15.VIII.1991, 1 ♀, 20.VIII.1992, 1 ♀, Pasinler, 19.VI.1987, 3 ♀♀, 1 ♂, 11.VII.1987, 1 ♀, 3 ♂♂, 16.VII.1987, 1 ♀, 25.VII.1987, 1 ♀, 1 ♂, 1.VIII.1983, 2 ♀♀, 15.VIII.1987, 3 ♂♂, 5.IX.1987, 2 ♀♀, 1 ♂, Espemce, 1666 m, 21.VIII.2011, 1 ♀, Pazaryolu, 23.VII.1991, 4 ♀♀, Şenkaya, İkizpınar, 1589 m, 31.VII.2011, 2 ♀♀, Sındıran, 10.VII.2011, 1 ♂, Taht, 5.VII.1982, 1 ♀, 1 ♂, Tortum, 22.VII.1987, 3 ♀♀, 1 ♂, 12.VIII.1987, 1 ♀, Aşağı Meydanlar, 4.VII.1991, 3 ♀♀, 21.VII.1991, 1 ♀, Aşağı Sivri, 19.VIII.1992, 1 ♂, Suyatağı, 1236 m, 21.VII.2012, 1 ♀; İğdir: 17.VII.1991, 1 ♀, Akyumak, 18.VIII.1991, 1 ♀; Kars: Kağızman, 19.VII.1991, 3 ♀♀, 23.VIII.1991, 4 ♀♀, 1 ♂.

**Orius (Orius) niger (Wolff, 1811)**

Material examined: Adana: 20.VII.1995, 1 ♀; Adiyaman: 30.VII.1994, 1 ♀; Antalya: Aksu, Yurtpınar, 48 m, 5.VI.2012, 8 ♀♀, 9 ♂♂, Kepez, 66 m, 18.VII.2012, 1 ♀, Odabaşı, 305 m, 28.VII.2012, 1 ♀, 3 ♂♂; Artvin: Yusufeli, Demirkent, 14.VIII.1991, 1 ♂; Bayburt: Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 1 ♀, Çalidere, 1700 m, 17.VI.2010, 1 ♀, Demirözü, 1650 m, 17.VI.2010, 1 ♂; Erzincan: Bahçeli, 29.VIII.1991, ♀, Geyikli, 1160 m, 11.VI.2010, 1 ♀, 1 ♂, Kemaliye, 30.V.1991, 1 ♀, 1 ♂, Mercan, 1381 m, 10.VI.2010, 7 ♀♀, 3 ♂♂; Erzurum: 23.VI.1980, 2 ♂♂, 24.VI.1987, 1 ♀, 1 ♂, 2.VII.1987, 1 ♀, 17.VII.1980, 9 ♀♀, 10.VIII.1987, 2 ♂♂, 14.VIII.1987, 1 ♀, 3.IX.1987, 2 ♀♀, Kümbet, 1832 m, 5.VIII.2011, 1 ♀, 1 ♂, Yağmurcuk, 2010 m, 9.VIII.2011, 2 ♀♀, 1 ♂, Üniversty field, 1850 m, 22.VII.2009, 1 ♀, 1 ♂, Aşkale, Kandilli, Merdiven, 1706 m, 24.VII.2011, 1 ♀, 1 ♂, Çat, Yukarı Çat, 2162 m, 23.VII.2011, 1 ♀, Horasan, Değirmenli, 1643 m, 13.VIII.2011, 1 ♀, 2 ♂♂, İspir Pass, 1950 m, 20.VIII.2009, 1 ♀, 1 ♂, Köprüköy, Ataköy, 1788 m, 26.VI.2011, 1 ♀, 1 ♂, Eğirmez, 1670 m, 13.VIII.2011, 2 ♀♀, 2 ♂♂, Narman, Kamışözü, 1835 m, 23.VI.2011, 4 ♀♀, Oltu, 27.VI.1987, 2 ♂♂, 2.VII.1987, 3 ♀♀, 11.VII.1991, 1 ♀, Yayla, 2005 m, 6.VII.2012, 1 ♀, Olur, Boğazgören, 1168 m, 19.VII.2012, 1 ♀, Coşkunlar, 22.VII.1992, 1 ♂, 1054 m, 30.VII.2011, 2 ♀♀, 1 ♂, Köprübaşı, 994 m, 19.VII.2012, ♀, Taşlıköy, 15.VIII.1991, 1 ♀, Pasinler, 19.VI.1987, 2 ♂♂, 25.VII.1987, 1 ♂, 15.VIII.1987, 1 ♀, 1 ♂, 15.VIII.1989, 1 ♀, 19.VIII.1987, 1 ♂, 5.IX.1987, 1 ♀, 1 ♂, Espemce, 1666 m, 21.VIII.2011, 2 ♀♀, Şenkaya, İkizpınar, 1589 m, 31.VII.2011, 6 ♀♀, 3 ♂♂, Sındıran, 1497 m, 10.VII.2011, 5 ♀♀, 1 ♂, Tortum, 1653 m, 15.VI.2010, 1 ♀, 1661 m, 23.VI.2011, 1 ♀, 4 ♂♂, 22.VIII.1987, 1 ♀, Derekapı, 1300 m, 7.VI.2012, 3 ♂♂, 1247 m, 9.VII.2011, 1 ♀, 1 ♂, Suyatağı, 1236 m, 21.VII.2012, 3 ♂♂; İğdir: 17.V.1991, 1 ♂.

**Tribe Xylocorini Herrich-Schaeffer, 1850****Xylocoris (Xylocoris) ciliatus (Jakovlev, 1877)**

Material examined: Adana: 5.IX.1990, 2 ♀♀; Kars: Kağızman, 18.VII.1991, 1 ♂, 23.VIII.1991, 1 ♂.

**Family Lyctocoridae Reuter, 1884****Subfamily Lyctocorinae Reuter, 1884****Tribe Lyctocorini Reuter, 1884*****Lyctocoris dimidiatus* (Spinola, 1837)**

Material examined: Erzurum: Üzümlü, Bayırbağı, 31.VII.1991, 1 ♀, 10.VIII.1992, 1 ♀; Erzurum: 28.VI.1980, 1 ♀, 15.VII.1987, 1 ♀, İspir, Madenköprübaşı, 24.VII.1991, 1 ♀; Kars: Kağızman, 18.VII.1991, 1 ♂, 23.VIII.1991, 1 ♀, 1 ♂.

**Family Nabidae A. Costa, 1853****Subfamily Nabinae A. Costa, 1853****Tribe Nabini A. Costa, 1853*****Himacerus (Anaptus) major* (A. Costa, 1842)**

Material examined: Erzurum: Olur, Ormanağzı, 960 m, 5.VIII.2012, 1 ♂.

New for the Turkish fauna.

Distribution: Euro Siberian, Iran, Morocco, Canary Archipelago, Near East (Cyprus, Israel).

***Himacerus (Aptus) mirmicoides* (O. Costa, 1834)**

Material examined: Erzurum: Horasan, Muratbağı, 1859 m, 21.VIII.2011, 1 ♂, Olur, Taşlıköy, 885 m, 4.VIII.2009, 1 ♂, Pazaryolu, 1010 m, 7.VIII.2007, 1 ♀; Ordu: 2.IX.1991, 1 ♂.

***Nabis (Nabis) ferus* (Linnaeus, 1758)**

Material examined: Antalya: 6.IX.1995, 1 ♂; Diyarbakır: Pamukova, 31.VII.1980, 2 ♂♂, 7.VIII.1990, 1 ♀; Erzurum: Güzelova, 1760 m, 15.VI.2010, 1 ♀, University field, 1850 m, 30.V.2007, 1 ♀, 14.VIII.1998, 1 ♂, 18.VIII.2010, 1 ♀, Aziziye, Yoncalık, 1900 m, 4.VIII.2009, 1 ♀, Çat, 1898 m, 6.VIII.2010, 1 ♀, 2250 m, 6.VIII.2010, 1 ♂, Horasan, Değirmenli, 1643 m, 13.VIII.2011, 1 ♀, Köprüköy, İlicasu, Topyolu, 2380 m, 17.VII.2010, 1 ♀, Narman, Yanıktaş, 1628 m, 30.VII.2011, 1 ♀, Oltu, 24.VII.1989, 1 ♂, 12.VIII.1987, 1 ♂, Kaledibi, 1074 m, 17.VII.2010, 2 ♀♀, Olur, Coşkunlar, 1036 m, 6.VII.2012, 1 ♀, Ormanağzı, 955 m, 10.VII.2011, 1 ♀, 1 ♂, Pasinler, Çöğender, 1737 m, 29.VII.2010, 1 ♀, Şenkaya, Taht, 1232 m, 17.VII.2010, 1 ♀, Tortum, 8.VIII.1987, 1 ♂, Derekapı, 1285 m, 5.VIII.2010, 1 ♀, Pehlivanlı, 1158 m, 21.VII.2012, 1 ♀; Iğdır: Melekli, 850 m, 23.VI.2010, 1 ♀.

***Nabis (Nabis) pseudoferus* Remane, 1949**

Material examined: Adıyaman: 28.VII.1994, 1 ♀, 1 ♂; Ankara: Çiftlik, 15.VIII.1994, 1 ♀, 2 ♂♂, Haymana, 28.VII.1995, 1 ♂; Artvin: 650 m, 3.VIII.2009, 1 ♂; Bayburt: Kopdağı, Şehitler Çeşmesi, 2400 m, 17.VI.2010, 1 ♀, Çalidere, 1700 m, 17.VI.2010, 1 ♀, Demirözü, 1650 m, 17.VI.2010, 1 ♂; Bursa: Karacabey, 75 m, 18.VIII.2009, 1 ♀; Erzurum: 1185 m, 10.VI.2010, 1 ♀, Akyazı, 1202 m, 11.VI.2010, 1 ♀, Geyikli, 1160 m, 11.VI.2010, 1 ♀, Mercan, 1381 m, 10.VI.2010, 1 ♂, 11.VII.1990, 3 ♂♂, Üzümlü, 1518 m, 10.VI.2010, 1 ♀; Erzurum: 28.V.1980, 10 ♀♀, 6 ♂♂, 28.V.1987, 4 ♀♀, 2 ♂♂, 10.VIII.1987, 1 ♀, 1853 m, 17.VIII.2010, 1 ♀, 2.X.1993, 2 ♀♀, Abdurrahmangazi, 2190 m, 27.VII.2010, 1 ♀, 1 ♂, 2197 m, 1.VIII.2010, 1 ♀, 1 ♂, Dadaşköy, 1806 m, 4.VIII.2011, 1 ♀, Dereboğazı, 11.VII.1990, 2 ♀♀, Dumlubaba, Güngörmez, 2400 m, 1.VII.2010, 2 ♀♀, Duralar, 1421 m, 30.VII.2011, 1 ♀, Güzelova, 1760 m, 15.VI.2010, 1 ♀, Güzelyayla, 2200 m, 25.VI.2010,

*Contribution to the Knowledge of the Anthocoridae, Lyctocoridae, Nabidae*

2 ♀♀, 2 ♂♂, Karagöbek, 1977 m, 31.VII.2010, 2 ♂♂, Palandöken, 2400 m, 21.VII.2010, 1 ♀, 2140 m, 1.VIII.2010, 1 ♀, Söğütlü, 12.VIII.1989, 1 ♂, Tekederesi, 2009 m, 18.VI.2010, 1 ♂, University field, 1850 m, 13.V.2009, 1 ♂, 29.VI.1987, 1 ♀, 2.VII.2008, 1 ♀, 9.VII.2010, 1 ♀, 11.VII.2008, 1 ♀, 1 ♂, 26.VII.2010, 9 ♀♀, 3 ♂♂, 27.VII.2010, 1 ♂, 31.VII.2007, 2 ♀♀, 5.VIII.2010, 2 ♀♀, 8.VIII.2008, 1 ♀, 10.VIII.2010, 1 ♀, 11.VIII.1973, 1 ♂, 18.VIII.2010, 1 ♀, 1 ♂, 20.VIII.2010, 2 ♀♀, Yarımcı, 1950 m, 13.VI.2010, 1 ♀, Yeşilyayla, 1950 m, 1.VII.2010, 1 ♀, Aşkale, 23.VI.1990, 1 ♀, 1600 m, 8.VII.2009, 1 ♀, Çayköy, 1600 m, 3.VI.2010, 2 ♀♀, Çiftlik, 1620 m, 3.VI.2010, 5 ♀♀, 2 ♂♂, Gökçebük, 1699 m, 23.VII.2011, 1 ♀, Kandilli, 1737 m, 1.VIII.2010, 2 ♀♀, Abdalcık, 1756 m, 1.VIII.2010, 1 ♀, Aziziye, Başçakmak, 11.VII.1990, 2 ♂♂, Kayapa, 1750 m, 3.VI.2010, 2 ♀♀, Paşayurdu, 1710 m, 3.VI.2010, 1 ♀, Rizekent, 2070 m, 30.VII.2010, 1 ♀, Yoncalık, 1900 m, 4.VIII.2009, 1 ♀, Çat, 1710 m, 3.VI.2010, 2 ♀♀, 1810 m, 3.VI.2010, 2 ♀♀, 2200 m, 3.VI.2010, 1 ♂, 1898 m, 6.VIII.2010, 2 ♀♀, Aşağı Çat, 2065 m, 21.VI.2011, 1 ♂, 1950 m, 6.VIII.2010, 1 ♀, Tuzluca, 1910 m, 6.VIII.2010, 2 ♀♀, Yaylasuyu, 2322 m, 29.VI.2009, 1 ♀, Hınıs, 1955 m, 26.VI.2011, 1 ♀, Horasan, 1510 m, 22.VII.2010, 4 ♀♀, 1 ♂, Kırkgözeler, 1760 m, 15.VI.2010, 1 ♀, 1599 m, 29.VII.2010, 1 ♀, İspir, 1300 m, 7.VIII.2009, 3 ♀♀, 1 ♂, Güllübağ, 1725 m, 15.VII.2012, 1 ♀, Sütkans, 1.VII.1990, 2 ♀♀, 1 ♂, Karayazı, Yukarı Söylemez, 1896 m, 2.VII.2010, 1 ♂, Köprüköy, Güzelhisar, 1930 m, 2.VII.2010, 2 ♀♀, İlicasu, 2111 m, 30.VII.2011, 1 ♀, Narman, 25.VI.1990, 1 ♀, 30.VI.1989, 2 ♀♀, 1565 m, 21.VII.2010, 1 ♂, 8.VIII.1987, 1 ♀, Dikmetaş, 2665 m, 17.VII.2010, 2 ♀♀, İncedere, Kireçli Pass, 2400 m, 31.VII.2010, 1 ♂, Oltu, 11.VII.1991, 1 ♀, 18.VII.1988, 1 ♀, 20.VII.1988, 1 ♀, 22.VII.1987, 3 ♀♀, 1180 m, 24.VII.2009, 1 ♀, 1 ♂, 1750 m, 3.VIII.2009, 1 ♀, 12.VIII.1987, 1 ♀, 9.IX.1987, 1 ♀, 1 ♂, Durular, 1421 m, 30.VII.2011, 1 ♀, İğdeli, 1660 m, 30.VI.2012, 1 ♀, Özdere, 1822 m, 6.VII.2012, 1 ♀, Yarbaşı, 1784 m, 6.VII.2012, 1 ♀, Yolboyu, 1135 m, 31.VII.2010, 1 ♀, 1 ♂, Olur, Kaledibi, 1057 m, 4.VIII.2009, 1 ♀, Pasinler, 23.VI.1989, 1 ♂, 11.VII.1987, 3 ♀♀, 19.IX.1987, 1 ♀, Ağcalar, 1850 m, 22.VIII.2007, 1 ♀, Büyük Tüy, 1800 m, 2.VII.2010, 2 ♀♀, Demirdöven, 1727 m, 29.7.2010, 1 ♂, Korucuk, 1792 m, 29.VII.2010, 1 ♀, 1 ♂, Ovaköy, 1782 m, 29.VII.2010, 3 ♀♀, Pazaryolu, 1510 m, 2.VI.2011, 1 ♀, 1453 m, 30.VII.2010, 1 ♀, 2 ♂♂, 1010 m, 7.VIII.2009, 1 ♀, 2 ♂♂, Şenkaya, 10.VII.1989, 1 ♂, 1815 m, 31.VII.2010, 1 ♀, Gaziler, 1810 m, 14.VII.2012, 1 ♀, İkipınar, 1589 m, 31.VII.2011, 1 ♂, Paşalı, 1106 m, 10.VII.2011, 1 ♀, 1 ♂, 1173 m, 31.VII.2010, 1 ♀, Sındıran, 1491 m, 31.VII.2010, 1 ♀, 2 ♂♂, Taht, 1232 m, 17.VII.2010, 1 ♀, Turnalı, 1750 m, 25.VII.1996, 1 ♀, Tekman, Körsu, 1940 m, 2.VII.2010, 1 ♀, Tortum, 1245 m, 27.V.2011, 1 ♀, 1518 m, 31.VII.2010, 1 ♀, 8.VIII.1987, 2 ♂♂, 12.VIII.1987, 1 ♀, Aksukapı, 1648 m, 7.VII.2011, 1 ♀, 1750 m, 6.VIII.2010, 1 ♀, Pehlivanlı, 1158 m, 21.VII.2012, 1 ♂, Uzundere, 1000 m, 26.VI.2010, 1 ♀; Gümüşhane: Torul, 5.IX.1994, 1 ♀; İğdir: Bayraktar, 850 m, 23.VI.2010, 1 ♀, Tuzluca, Menderes, 1100 m, 23.VI.2010, 1 ♀; Kars: 5.X.1992, 1 ♀, Sarıkamış, Karakurt, TCK. Çeşmesi, 1470 m, 29.VII.2010, 1 ♀; Trabzon: Yeşilova, 150 m, 24.VIII.1995, 1 ♀.

***Nabis (Nabis) pseudoferus orientarius* Remane, 1963**

Material examined: Erzurum: Aşkale, Hatuncuk, 1869 m, 5.VII.2012, 1 ♀.

***Nabis (Nabis) punctatus* A. Costa, 1847**

Material examined: Erzincan: Mercan, 381 m, 10.VI.2010, 1 ♀; Erzurum: Dumlubaba, Güngörmez, 2400 m, 1.VII.2010, 1 ♀, Karagöbek, 1977 m, 31.VII.2010, 1 ♀, University field, 1850 m, 3.VI.2009, 1 ♀, 5.VIII.2010, 1 ♀, 18.VIII.2010, 1 ♀, 23.VIII.2011, 1 ♂, Aşkale, Çayköy, 1720 m, 21.VI.2011, 1 ♀, Çiftlik, 1620 m, 3.VI.2010, 2 ♀♀, 1 ♂, Hınıs, 1742 m, 2.VII.2010, 1 ♀, Horasan, 1510 m, 22.VII.2010, 2 ♀♀, Çayırözü, 1794 m, 21.VIII.2011, 1 ♀, Yörükaltı, 1854 m, 29.VII.2010, 1 ♀, İspir, Aşağı Özbağ, 1177 m, 15.VII.2012, 1 ♀, Güllübağ, 1725 m, 15.VII.2012, 1 ♂, Narman, 1565 m, 21.VII.2010, 1 ♂, Oltu, 1455 m, 17.VII.2010, 1 ♀, 1180 m, 24.VII.2010, 1 ♀, Şenkaya, Deliktaş, 1219 m, 13.VII.2011, 1 ♀, Taht, 1232 m, 17.VII.2010, 1 ♀, Tekman, Körsu, 1984 m, 26.VI.2011, 1 ♂, Tortum, Aksukapı, 1750 m, 6.VIII.2010, 1 ♀, 1 ♂; İğdir: Bayraktar, 850 m, 23.VI.2010, 1 ♀.

**Superfamily Reduvidae Latreille, 1807**

**Family Reduviidae Latreille, 1807**

**Subfamily Harpactorinae Amyot and Serville, 1843**

**Tribe Harpactorini Amyot and Serville, 1843*****Coranus (Coranus) griseus (Rossi, 1790)***

Material examined: Tunceli: Çemişgezek, Payamdüzü, 1238 m, 3.VIII.2012, 2 ♀♀.

***Coranus (Coranus) kerzhneri P.V. Putshkov, 1982***

Material examined: Çanakkale: Biga, Bozlar, 20 m, 6.IX.2011, ♀; Erzurum: Dutçu, 2000 m, 24.VII.2011, 1 ♂; Manisa: Kırkağaç, Boztoprak, 150 m, 24.IX.2011, 1 ♂; Tunceli: Mazgirt, Meşelik, 900 m, 12.VII.2011, 1 ♂.

***Nagusta goedelii (Kolenati, 1857)***

Material examined: İzmir: Bornova, 2 m, 30.VII.2012, 1 ♀.

***Rhynocoris (Rhynocoris) ibericus Kolenati, 1857***

Material examined: Erzurum: Tortum, Derekapı, 1285 m, 1.VIII.2010, 1 ♀; Kars: Sarıkamış, Akkurt, 1525 m, 22.VI.2010, 1 ♀, 1 ♂.

***Rhynocoris (Rhynocoris) iracundus (Poda, 1761)***

Material examined: Tunceli: Pülümür, Akdik, 1608 m, 8.VIII.2011, 1 ♂.

***Rhynocoris (Rhynocoris) punctiventris (Herrich-Schaeffer, 1846)***

Material examined: Antalya: Aksu, Kocayatak, 17 m, 18.VII.2011, 2 ♀♀, Kepez, Odabaşı, 305 m, 1.IX.2012, 1 ♀, 3 ♂♂, Serik, Kocayatak, 10 m, 30.VII.2012, 2 ♀♀, 2 ♂♂; Balıkesir: İvrindi, Korucu, 336 m, 3.VIII.2010, 1 ♂; Iğdır: Karakoyunlu, Taşburun, 830 m, 23.VI.2010, 1 ♂; Erzincan: Akyazı, 27.VII.2011, 2 ♂♂, Geyikli, 1160 m, 11.VI.2010, 1 ♂, Üzümlü, 1518 m, 10.VI.2010, 1 ♂; Erzurum: Çatıyolu, 2250 m, 6.VIII.2010, 2252 m, 2 ♀♀, 12.VII.2010, 1 ♀, Palandöken, 2155 m, 22.VII.2012, 1 ♂, 2300 m, 1.VIII.2010, 1 ♂, University field, 1850 m, 22.VII.2011, 1 ♂, Aşkale, Küçükova, 1896 m, 5.VII.2012, 1 ♀, 1 ♂, Çat, Yukarı Çat, 2138 m, 18.VII.2012, 1 ♀, Hınıs, Akören, 1939 m, 17.VII.2012, 2 ♀♀, 1 ♂, Horasan, Çamlıkale, 2242 m, 13.VIII.2012, 1 ♀, Dönertaş, 1907 m, 13.VIII.2012, 1 ♀, İspir, Duruköy, 1419 m, 15.VII.2012, 1 ♀, Tortum, Arılı, 1450 m, 5.VIII.2010, 2 ♀♀, Derekapı, 1300 m, 15.VI.2010, 1 ♂, Pazaryolu, Esenyurt, 1400 m, 4.VIII.2012, 1 ♀, Tekman, Geyikli, 2185 m, 16.VII.2011, 1 ♀, Uzundere, Şellale, 850 m, 27.V.2010, 1 ♂; Kars: Sarıkamış, Akkurt, 1525 m, 22.VI.2010, 2 ♂♂, Çifteşehitler, 1500 m, 22.VI.2010, 1 ♂, Karakurt, TCK. Çeşmesi, 1500 m, 22.VI.2010, 2 ♂♂; Manisa: Salihli, Bintepeler, 12.VII.2011, 1 ♀; Mersin: Erdemli, Esenpınar, 850 m, 15.VIII.2011, 1 ♀, 6.IX.2011, 1 ♀; Tunceli: Mazgirt, Kalaycı, 950 m, 25.V.2010, 1 ♀, 2 ♂♂, Pülümür, Akdik, 1608 m, 19.VI.2011, 1 ♀.

**Subfamily Peiratinae Amyot and Serville, 1843*****Ectomocoris caucasicus Linnavuori, 1972***

Material examined: Adıyaman: Kahta, Elbeyi, 650 m, 5.IX.2011, 2 ♀♀.

***Peirates hybridus (Scopoli, 1758)***

Material examined: Adıyaman: Kahta, Elbeyi, 650 m, 03.VII.2011, 1 ♀, 1 ♂; Erzurum: Tortum, Suyatağı, 1245 m, 27.V.2011, 1 ♂; Kars: Susuz, 1680 m, 18.VII.2011, 1 ♀.

***Peirates strepitans Rambur, 1839***

Material examined: Aydın: Çine, 700 m, 17.VII.2010, 1 ♂.



*Contribution to the Knowledge of the Anthocoridae, Lyctocoridae, Nabidae*

## **Subfamily Reduviinae Amyot and Serville, 1843**

### ***Reduvius personatus* Linnaeus, 1758**

Material examined: Antalya: Kepez, Odabaşı, 305 m, 7.VIII.2012, 1 ♀; İstanbul: Beykoz, 70 m, 15.VII.2011, 1 ♀.

### ***Reduvius pallipes* Klug, 1830**

Material examined: Erzincan: Işıkpınar, 16.VIII.2011, 1 ♂; Denizli: Serinhisar, 1000 m, 17.VII.2011, 1 ♀, 8.VIII.2011, 1 ♀; Konya: Ereğli, 1100 m, 18.VII.2010, 1 ♂, Selçuklu, 1016 m, 5.VIII.2011, 1 ♀.

## **Superfamily Tingioidea Laporte, 1832**

### **Family Tingidae Laporte, 1832**

#### **Subfamily Tinginae Laporte, 1832**

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

Material examined: Erzurum: Ilica, Paşayurdu, 1710 m, 3.VI.2010, 3 ♂♂, Köprüköy, Ilicasu, 2111 m, 30.VI.2011, 1 ♀, Oltu, 30.VI.1989, 1 ♂, Pasinler, 1983 m, 2.VI.1983, 1 ♀.

New for the Turkish fauna.

**Distribution:** Central and Western Europe, recently mentioned from Azores archipelago (Aukema and al. 2013), doubtful in Balkan region and Near East (Aukema and Rieger 1996).

### ***Catoplatus brevicornis* Akramovskaja and Golub, 1973**

Material examined: Erzurum: University field, 1850 m, 23.VIII.2011, 1 ♂.

### ***Catoplatus carthusianus* (Goeze, 1778)**

Material examined: Artvin: Yusufeli, Darıca, 670 m, 16.VI.2010, 1 ♂, Işhan, 600 m, 16.VI.2010, 1 ♂, Morkaya, 700 m, 15.VI.2010, 4 ♀♀, 3 ♂♂, Pamukçular, 700 m, 16.VI.2010, 3 ♂♂; Erzurum: Karaçoban, Akkavak, 2022 m, 16.VII.2011, 4 ♀♀, 14 ♂♂, Oltu, 1236 m, 24.VII.2009, 1 ♀, 1 ♂, 4.VIII.2009, 2 ♀♀, 1 ♂, Kaledibi, 1074 m, 17.VII.2010, 1 ♀, İğdeli, 1660 m, 30.VI.2012, 2 ♂♂, Olur, Olurdere, 1050 m, 23.VI.2011, 1 ♀, 1 ♂, Taşlıköy, 862 m, 16.VI.2010, 5 ♀♀, 7 ♂♂, Tekeli, 1079 m, 4.VII.2009, 1 ♂, Yeşilbağlar, 1000 m, 16.VI.2010, 4 ♀♀, 5 ♂♂, Şenkaya, 10.VII.1989, 1 ♀, Sındıran, 1497 m, 13.VII.2011, 1 ♂; İğdir: 850 m, 20.VI.2009, ♀, Melekli, 850 m, 23.VI.2010, 1 ♂; Kars: Akkurt, 1650 m, 13.VIII.2009, 1 ♀, 2 ♂♂ Karakurt, 1500 m, 13.VIII.2009, 1 ♀, 7 ♂♂, Sarıkamış, 1900 m, 13.VIII.2009, 7 ♀♀.

### ***Catoplatus hilaris* Horváth, 1906**

Material examined: Erzurum: Çat, Yukarı Çat, 2110 m, 21.VI.2011, 1 ♂.

### ***Catoplatus nigriceps* Horváth, 1905**

Material examined: Kars: Karakurt, 1500 m, 13.VIII.2009, 1 ♀.

### ***Copium adumbratum* (Horváth, 1891)**

Material examined: Erzurum: Aşkale, Çayköy, 1876 m, 23.VII.2011, 1 ♀, 2 ♂♂, Aziziye, Taşlıgüney, 1968 m, 9.VII.2011, 1 ♀, Hınıs, 1742 m, 2.VII.2010, 1 ♀.

***Copium clavicornе* (Linnaeus 1758)**

Material examined: Erzurum: Narman, Şehitler, 1050 m, 8.VI.2012, 1 ♀.

***Derephysia (Derephysia) sinuatocollis* Puton, 1879**

Material examined: Erzurum: Aşkale, Çatören, 1814 m, 11.VIII.2012, 1 ♂.

***Dictyla echii* (Schrank, 1782)**

Material examined: Bayburt: 1569 m, 22.VI.2009, 1 ♀, 1550 m, 17.VI.2010, 1 ♂, 12.VII.2009, 1 ♂, Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 1 ♂, Çalidere, 1700 m, 17.VI.2010, 3 ♀♀, 8 ♂♂, Demirözü, 1650 m, 17.VI.2010, ♀, Kop Dağı Pass, 2344 m, 12.VII.2009, ♂, 2 ♂♂; Erzincan: Akyazı, 1202 m, 11.VI.2010, 1 ♀, Mercan, 1381 m, 16.VII.2010, ♂; Erzurum: 14.VII.1987, 1 ♀, 2 ♂♂, Güngörmez, 2200 m, 19.VIII.2009, 1 ♂, Aziziye, Eskipolat, 1857 m, 30.VII.2010, 1 ♂, Horasan, Çiftlik, 1546 m, 17.VII.2011, 1 ♀, Köprüköy, Güzelhisar, 1948 m, 16.VII.2011, 6 ♀♀, 14 ♂♂, Örentaş, 1916 m, 29.VII.2010, ♀, 30.VII.2011, 3 ♂♂, Narman, 1557 m, 4.VII.2009, 3 ♀♀, 4 ♂♂, 1565 m, 21.VII.2010, 1 ♀, 21.VII.2012, 1 ♀, Dikmetaş, 2665 m, 17.VII.2010, 1 ♂, İncedere, 1987 m, 21.VII.2010, 2 ♀♀, Oltu, 3.V.1988, 2 ♀♀, 2 ♂♂, 3.VI.1988, 1 ♀, 1 ♂, 27.VI.1987, 1 ♂, 2.VII.1987, 5 ♀♀, 15 ♂♂, 26.VII.1987, 1 ♀, 1 ♂, 30.VII.1986, 2 ♂♂, Olur, Aşağı Karacasu, 1304 m, 19.VII.2012, 1 ♂, Taşlıköy, 885 m, 6.VII.2012, 1 ♂, Yeşilbağlar, 1000 m, 16.VI.2010, 1 ♂, Pasinler, 29.VI.1987, 1 ♀, 2 ♂♂, 1600 m, 25.VII.2009, 1 ♂, Kevenlik, 14.VII.2012, 2 ♀♀, Şenkaya, Esenyurt, 1622 m, 14.VII.2012, 1 ♀, 3 ♂♂, İçmesu, 1656 m, 14.VII.2012, 2 ♂♂, İkizpınar, 1589 m, 31.VI.2011, 48 ♀♀, 64 ♂♂, Sındıran, 1409 m, 17.VII.2010, 6 ♀♀, 3 ♂♂, Taht, 1283 m, 31.VI.2011, ♀♀, 5 ♂♂, Timurkişla, 1656 m, 14.VII.2012, 15 ♀♀, 17 ♂♂, Tortum, 1660 m, 23.VI.2011, 4 ♀♀, 4 ♂♂, 1573 m, 21.VII.2010, 1 ♂, Derekapı, 1300 m, 7.VI.2012, 1 ♂, 1300 m, 15.VI.2010, 2 ♂♂, 9.VII.2011, 1 ♂, Tekman, Güzeldere, 1948m, 16.VII.2010, 1 ♀, 2 ♂♂; Kars: Akkurt, 1650 m, 13.VII.2009, 1 ♀, Karakurt, 1500 m, 22.VI.2010, 1 ♀, 1 ♂, 13.VII.2009, 1 ♀, Sarıkamış, 13.VIII.2009, 1 ♀, 1 ♂; Kayseri: Himmetdede, 02.IX.1997, 1 ♂.

***Dictyla nassata* (Puton, 1874)**

Material examined: Erzurum: Çat, Yukarıçat, 1904 m 18.VI.2012, 1 ♀, 1 ♂, 2162 m, 23.VII.2011, 2 ♂♂, Köprüköy, Güzelhisar, 1948 m, 16.VII.2011, 1 ♀, Narman, Dikmetaş, 2665 m, 17.VII.2011, 1 ♂, Pasinler, Yayla, 1090 m, 17.VII.2011, 2 ♀♀, 2 ♂♂, Iğdır: Tuzluca, Menderes, 1100 m, 23.VI.2010, 1 ♂.

***Dictyla platyoma* (Fieber, 1861)**

Material examined: Erzurum: Aziziye, Taşlıgüney, 1968 m, 09.VII.2011, 1 ♂, Pasinler, Yayla, 1090 m, 17.VII.2011, 1 ♂.

***Dictyla rotundata* (Herrich-Schaeffer, 1835)**

Material examined: Erzincan: Avcılar, 1200m, 16.VI.2009, 6 ♀♀, 2 ♂♂.

***Elasmotropis testacea selecta* (Horváth, 1891)**

Material examined: Erzurum: Aziziye, Başçakmak, 1860 m, 20.VII.2011, 1 ♀, 2 ♂♂, Hınıs, 1742 m, 27.VII.2010, 1 ♀.

New for the Turkish fauna.

**Distribution:** Caucasus, Near East, Arabic Peninsula, Iran.

***Kalama tricornis* (Schrank, 1801)**

Material examined: Erzurum: University field, 1850 m, 25.VI.2009, ♀, Oltu, 26.VII.1987, ♂, 21.VIII.1988, 1 ♂.

**Monosteira unicostata (Mulsant and Rey, 1852)**

Material examined: Bingöl: 20.VI.1972, ♀, 3 ♂♂; Erzurum: 28.V.1980, 1 ♂, Aziziye, Başçakmak, 1860 m, 20.VII.2011, 1 ♀, Oltu, 5.VIII.1988, 6 ♂♂, 2.IX.1988, 1 ♀, Olur, Köprübaşı, 976 m, 30.VII.2011, 1 ♂, Olurdere, 1050 m, 23.VI.2011, 1 ♂; Iğdır: 22.VIII.1991, 1 ♂, Akyumak, 18.VII.1981, 1 ♂, Çalpala, 22.VIII.1991, 4 ♂♂, Küllük, 22.VIII.1991, 1 ♀.

**Physatocheila confinis (Horváth, 1905)**

Material examined: Erzurum: Oltu, Ayvalı, 12.VII.1991, 1 ♂; Iğdır: 17.VII.1992, 1 ♀.

**Physatocheila dumetorum (Herrich-Schaeffer, 1838)**

Material examined: Ankara: 11.VII.1994, 3 ♂♂; Erzincan: Cevizli, 8.VII.1991, 1 ♀, 3 ♂♂, Kemaliye, 20.V.1991, 1 ♂, Yukarı Çakırman, 28.VIII.1991, 1 ♂; Erzurum: İspir, Madenköprübaşı, 24.VII.1991, 1 ♂, Pazaryolu, 23.VII.1991, 1 ♂, Oltu, Ayvalı, 12.VII.1991, 1 ♀, Tortum, Aşağımeydanlar, 04.VII.1991, 1 ♀, 2 ♂♂, Pehlivanlı, 13.VII.1991, 1 ♂, Uzundere, Gölbaşı, 13.VII.1991, 1 ♂; Kars: Kağızman, 19.VII.1991, 1 ♀.

**Stephanitis (Stephanitis) pyri (Fabricius, 1775)**

Material examined: Adana: 22.V.1992, 1 ♂, 20.VII.1990, 1 ♂; Bartın: Çağlayan, 25 m, 9.IX.2011, 1 ♂; Bingöl: 20.IX.1992, 1 ♀; Erzurum: İspir, 19.V.1982, 1 ♂, Olur, Köprübaşı, 973 m, 30.VII.2011, 1 ♀, 2 ♂♂, Taşlıköy, 860 m, 30.VII.2011, 1 ♂, Yeşilbağlar, 987 m, 30.VII.2011, 4 ♀♀, 2 ♂♂; Eskişehir: Alpagut, 29.V.1991, 1 ♂; Kırıkkale: Lüleburgaz, 22.IX.2009, ♂.

**Tingis (Tingis) angustata (Herrich-Schaeffer, 1838)**

Material examined: Artvin: Şavşat, 400 m, 16.VI.2010, 1 ♂, Yusufeli, Sebzeçiler, 500 m, 16.VI.2010, 1 ♀; Erzincan: 1185 m, 10.VI.2010, ♀; Erzurum: Hınıs, 1742 m, 2.VII.2010, 4 ♀♀, 5 ♂♂, Oltu, 1750 m, 3.VIII.2009, 1 ♂, Olur, Olurdere, 1050 m, 23.VI.2011, 1 ♀.

**Tingis (Tingis) auriculata (A. Costa, 1847)**

Material examined: Artvin: Şavşat, 400 m, 16.VI.2010, 3 ♂♂, Yusufeli, Darıca, 670 m, 16.VI.2010, 1 ♂, Pamukçular, 700 m, 16.VI.2010, 1 ♂, Sebzeçiler, 500 m, 16.VI.2010, ♀; Erzincan: Üzümlü, 1518 m, 10.VI.2010, 1 ♀; Erzurum: 23.VI.1980, 1 ♂, Horasan, Yörükalti, 1854 m, 29.VII.2010, 1 ♂, Karaçoban, Akkavak, 2022 m, 16.VII.2011, 6 ♀♀, 15 ♂♂, Oltu, 2.IX.1988, ♂, Olurdere, 1050 m, 23.VI.2011, 5 ♀♀, 12 ♂♂, Yeşilbağlar, 987 m, 30.VII.2011, 1 ♂, Pazaryolu, Çiftepinar, 1742 m, 15.VII.2012, 1 ♂; Iğdır: Melekli, 850 m, 23.VI.2010, 1 ♀.

**DISCUSSION**

In this study, 8 species of 4 genera from Anthocoridae, 1 species of 1 genus from Lyctocoridae, 6 species of 2 genera from Nabidae, 11 species of 6 genera from Reduviidae and 20 species of 11 genera from Tingidae are recorded. In total, 46 species from 24 genera of these families are recorded from Turkey. Among them, *Anthocoris pilosus* (Jakovlev, 1877), *Temnostethus reduvinus* (Herrich-Schäffer, 1850), *Orius minutus* (Linnaeus, 1758), *O. niger* (Wolff, 1811) (Anthocoridae), *Nabis pseudoferus* Remane, 1949 (Nabidae), *Rhynocoris punctiventris* (Herrich-Schäffer, 1846) (Reduviidae) and *Dictyla echii* (Schrank, 1782) (Tingidae) have been found the most abundant and widespread species. Separately, *Himacerus major* (A. Costa, 1842) (Nabidae), *Agramma (Agramma) laetum* (Fallen, 1807) and *Elasmotropis testacea selecta* (Horváth, 1891) (Tingidae) are new records for the Turkish fauna. In addition, new localities were found for some species which have already been reported in Turkey

Regular collections of bugs between 1968 and 2012 in Turkey allowed the caught of a representative (though not complete) sample of the fauna of Heteroptera: 24 genera and 46 species belonging to families Anthocoridae, Lyctocoridae, Nabidae, Reduviidae and Tingidae. 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 of three new taxa for Turkey. They also give indications on the biology of the species (dates of the 1<sup>st</sup> 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.

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