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Contribution to the knowledge of the Bryocorinae and Deraeocorinae (Hemiptera: Heteroptera: Miridae) fauna of Turkey

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A b s t r a c t : This study is based upon material of the subfamilies Bryocorinae and Deraeocorinae of family Miridae collected from different localities of Turkey between 1972 and 2014, mostly 2006-2014. The study resulted in recording for Turkish fauna of two species from one genera of Bryocorinae and eight species from two genera of Deraeocorinae are recorded from Turkey. Among them, *Deraeocoris (Deraeocoris) rutilus* (HERRICH-SCHÄFFER, 1838), *Deraeocoris (Deraeocoris) ventralis* REUTER, 1904, *Deraeocoris (Camptobrochis) vallens* (REUTER, 1904), *Deraeocoris (Camptobrochis) punctulatus* (FALLÉN, 1807) and *Deraeocoris (Camptobrochis) serenus* (DOUGLAS & SCOTT, 1868) have been found the most abundant and widespread species. In addition, new localities are added for some species previously reported for Turkey.

K e y w o r d s : Hemiptera, Heteroptera, Miridae, Bryocorinae, Deraeocorinae, Fauna, Turkey.

Introduction

Miridae (or plant-bugs) is a group of Miroidea, which at world scale comprises eight subfamilies. In the World they are represented by nearly 10.040 species, 1507 genera (CASSIS et al. 2006). This family comprising eight subfamilies Isometopinae, Psallopinae Cylapinae, Orthotylinae, Bryocorinae, Deraeocorinae, Mirinae and Phylinae, which among them Bryocorinae subfamily is a heterogeneous subfamily with three tribes (CASSIS & SCHUH 2012). There is a very important predator species in the subfamily Bryocorinae and Deraeocorinae. Many species are opportunists that feed along a continuum between the extremes of strict phytophagy and strict zoophagy (WHEELER 2001). Predators include generalists that feed on a wide range of small arthropods and their eggs, as well as specialists on mites (Acari), planthoppers (especially Delphacidae), thrips (Thysanoptera), armored scale insects (Diaspididae), and lace bugs (Tingidae) (WHEELER & SKAFTASON 2010).

Bryocorinae is by far the most agriculturally important and morphologically diverse subfamily of Miridae. They can be identified using claw characters (BASNAGALA 2002). Species in this subfamily are either harmful or beneficial. The harmful bugs are those that suck the plant sap and injure the plant or damage the reproductive organ. Bryocorinae, by the often stout mouthparts and tarsi, frequently single-celled hemelytral

membrane, and fleshy pseudopulvilli on the claws; Deraeocorinae, by the basally toothed claws and generally punctate pronotum and hemelytra (WHEELER & HENRY 2004).

Turkey occupies Asia Minor between the Mediterranean Sea and the Black Sea and stretches into continental Europe. It is a mountainous country averaging about 1.000 meters in altitude. The topographic and climatic diversity of the region are important preconditions for the development of a rich and diverse fauna.

Turkey is biogeographically one of the most interesting countries in the West Palaearctic region. Some faunistic studies on this family in the Turkey have been made by HOBERLANDT (1955), ÖNDER (1976), BINGÖL (1978), LODOS et al. (1978), ALTINAYAR (1981), ÖNDER et al. (1981), YAYLA (1983), ÖZKAN (1984), KARAAT (1986), ÖNDER & LODOS (1987), ÖZDEMİR & ALAOĞLU (1987), ÇAM (1988), LODOS et al. (1989), ÖNDER et al. (1990; 1998), ÖNCÜER (1991), YILDIRIM & ÖZBEK (1992), GÜÇLÜ et al. (1995a, b), ÇEVIK (1996), YAŞARAKINCI & HINCAL (1997; 2000), TEZCAN & ÖNDER (1999; 2003), YILDIRIM et al. (1999), ATAKAN (2000), BEYAZ (2000), ÖZSARAÇ & KIYAK (2001), LODOS (2003), GENÇER (2004), KIYAK et al. (2004), ÇETİN & ALAOĞLU (2005), AYYILDIZ & ATLIHAN (2006) and ÖNDER et al. (2006).

The aim of this paper is to present new collection and biological data on Bryocorinae and Deraeocorinae in Turkey.

Materials and Methods

The material of the Bryocorinae and Deraeocorinae was collected from different localities of Turkey between 1972 and 2014. In addition, in previous years collected material from different localities of Turkey, Ataturk University, Faculty of Agriculture, Department of Plant Protection, the Entomology Museum, Erzurum, Turkey (EMET) preserved in the collection is also evaluated. 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, two species from one genera of Bryocorinae and eight species from two genera Deraeocorinae are recorded from Turkey.

Subfamily Bryocorinae CARVALHO, 1957

Tribe Dicyphini

Subtribe Dicyphina

Genus *Macrolophus* FIEBER, 1858

Macrolophus costalis FIEBER, 1858

Material examined: Erzurum: Karaçoban, Duman, N 39°18'22", E 041°55'5", 1560 m, 26.VI.2011, ♀; Yakutiye, Ataturk University field, 1850 m, 1.VIII.1998, ♀, 18.VIII.1997, ♀, 24.VIII.1998, 2♀ ♀, ♂; Iğdır: Karakoyunlu, 844 m, 2.X.2013, ♂.

Distribution in Turkey: Artvin, Bilecik, Bursa, Kütahya (ÖNDER 1976); Bolu, İstanbul, Kocaeli, Sakarya (ÖNDER et al. 1981); Aksaray, Antalya, Çankırı, Çorum, Eskişehir, Hatay, İçel, Kahramanmaraş, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Konya, Nevşehir, Niğde, Osmaniye, Sinop, Zonguldak (LODOS et al. 2003); Ankara (ÖNDER et al. 2006); İzmir (TEZCAN et al. 2010).

***Macrolophus melanotoma* (A. COSTA, 1853)**

Material examined: Erzurum: Çat, Yaylasuyu Geçidi, 2322m, 29.VI.2009, ♀.

Distribution in Turkey: Ankara (ÖNDER 1976; ÖNDER et al. 2006); Mardin (MATOCQ et al. 2014).

Subfamily Deraeocorinae

Tribe Deraeocorini

Genus *Alloeotomus* FIEBER, 1858

***Alloeotomus gothicus* (FALLÉN, 1807)**

Material examined: Erzurum: Yakutiye, Atatürk University field, 1850 m, 24.VII.1997, ♂, 2.VIII.1998, 2♂♂.

Distribution in Turkey: Kütahya (ÖNDER 1976); Artvin, Muğla (ÖNCÜER 1991); Kastamonu (LODOS et al. 2003); Bolu (ÖNDER et al. 2006).

Genus *Deraeocoris* KIRSCHBAUM, 1856

Subgenus *Deraeocoris* KIRSCHBAUM, 1856

***Deraeocoris* (*Deraeocoris*) *ruber* (LINNAEUS, 1758)**

Material examined: Antalya: 30.VIII.1984, ♀, 6.IX.1984, ♀; Erzurum: İspir, Madenköprübaşı, N 40°26'33.7", E 040°50'41.6", 1244 m, 24.VI.2012, ♀.

Distribution in Turkey: Ankara, Burdur, Denizli, İstanbul, Kütahya, Samsun (ÖNDER 1976); Bolu, Sakarya (ÖNDER et al. 1981); Antalya (ÖZKAN 1984); Bartın, Çankırı, Eskişehir, Karabük, Karaman, Kastamonu, Zonguldak (LODOS et al. 2003; ÖNDER et al. 2006); Bursa (GENÇER et al. 2004); İzmir (TEZCAN et al. 2010).

***Deraeocoris* (*Deraeocoris*) *rutilus* (HERRICH-SCHÄFFER, 1838)**

Material examined: Adiyaman: Nemrut, 1650 m, 2.VII.2008, ♀; Amasya: 14.VII.1993, 3♀♀; Ankara: Kızılcahamam, Sipahiler, 975 m, 16.VII.2011, ♀, ♂; Erzincan: 1185 m, 10.VI.2010, ♀, Mercan, 1381m, 10.VI.2010, ♀; Erzurum: Aziziye, Rizekent, 2070 m, 30.VII.2010, ♀, ♂; Hınıs, N 39°52'33", E 041°16'46", 1955 m, 26.VI.2011, ♂; İspir, Elmalı, N 40°25'31.9", E 040°50'13.6", 1328 m, 20.VII.2011, ♀, Madenköprübaşı, N 40°26'33.7", E 040°50'41.6", 1244 m, 24.VI.2012, 2♀♀, 2♂♂, Petekli, N 40°26'50.1", E 040°54'52.5", 1201m, 24.VI.2012, ♀, Yukarı Özbağ, N 40°26'45.1", E 040°54'24.8", 1190 m, 20.VII.2011, 2♀♀; Narman, Göllü, N 40°14'7.9", E 041°51'57.2", 1083m, 30.VII.2011, ♂; Oltu, Sütkans, 25.VI.1996, ♀; Palandöken, 2400 m, 1.VII.1996, ♂, 23.VII.1996, 2♀♀, ♂; Pazaryolu, N 40°25'13.1", E 040°46'13.9", 1445 m, 20.VII.2011, ♀, ♂, N 40°25'12.1", E 040°47'07.7", 1495 m, 24.VII.2011,

3♀♀, 3♂♂, 1453m, 30.VII.2010, ♀, 1010 m, 7.VIII.2009, 10♀♀; Şenkaya, 1815 m, 31.VII.2010, ♀, Tumali, 1461m, 31.VII.2010, ♀, 6.VIII.1988, 3♀♀, 2♂♂; Isparta: Ayazmana, 1100 m, 30.VII.2011, ♀.

Distribution in Turkey: Amasya, Aydin, Balikesir, Bilecik, Burdur, Denizli, Isparta, Kırklareli, Kütahya, Muğla, Muş, Siirt, Sinop, Tekirdağ, Uşak (ÖNDER 1976); İstanbul, Kocaeli, Sakarya (ÖNDER et al. 1981); Antalya (ÖZKAN 1984); Tokat (ÇAM 1988); Kahramanmaraş, Kayseri (KIYAK 1990); Gaziantep, Siirt (ÖNDER et al. 1995); Çanakkale (ÖZSARAÇ & KIYAK 2001); Adana, Bolu, Çankırı, Çorum, Eskişehir, Hatay, İçel, Karabük, Karaman, Kastamonu, Kırşehir, Kilis, Konya, Osmaniye (LODOS et al. 2003); Manisa (TEZCAN & ÖNDER 2003); Bursa (GENÇER et al. 2004); Nevşehir (KIYAK et al. 2004); Almost all regions (ÖNDER et al. 2006); Ankara (KIYAK & AKAR 2010); İzmir (TEZCAN et al. 2010); Diyarbakır, Elazığ, Mardin (MATOCQ et al. 2014).

***Deraeocoris (Deraeocoris) ventralis* REUTER, 1904**

Material examined: Bayburt: Kop Mountain Pass, 2344 m, 12.VIII.2009, ♂, Demirözü, 1650 m, 17.VI.2010, ♀; Erzincan: 1185 m, 10.VI.2010, 2♀♀, Refahiye, 1500 m, 20.VI.2009, ♀, 3♂♂; Erzurum: Aşkale, Gölören, N 40°01'28.9", E 040°47'55.1", 1897 m, 18.VII.2012, ♀, Hatuncuk, N 39°48'15.6", E 040°42'09.3", 1846 m, 5.VII.2012, ♀, Küçükgeçit, N 39°56'21.0", E 040°44'21.4", 1666 m, 19.VI.2012, ♀, 3♂♂, Merdiven, N 39°54'46.8", E 040°47'57.9", 1688 m, 19.VI.2012, ♂, Tazegül, N 39°55'40.4", E 040°51'58.3", 1773m, 19.VI.2012, ♀, ♂, Yeniköy, N 39°51'28.8", E 040°41'24.1", 1935 m, 5.VII.2012, ♂; Aziziye, Başçakmak, N 40°00'09.8", E 040°54'48.1", 1863m, 24.VI.2012, ♀, Ortatabahe, N 39°53'35.3", E 040°51'19.0", 1763m, 5.VII.2012, ♀, 3♂♂, Yoncalık, 1900 m, 16.VIII.2014, ♀; Çat, Yukarı Çat, N 39°39'46.3", E 041°00'56.2", 2162m, 23.VII.2011, ♀; Himis, N 39°52'33", E 041°16'46", 1955 m, 26.VI.2011, 3♂♂, 1742m, 2.VII.2010, ♂, Akören, N 39°27'47.9", E 041°42'14.3", 1828 m, 16.VII.2011, ♀, N 39°29'08.6", E 041°42'02.3", 1939 m, 17.VII.2012, ♀; Horasan, 1580 m, 22.VI.2014, ♂, Çayırdüzü, N 40°08'21.9", E 042°03'47.4", 1799 m, 22.VI.2012, 2♀♀, ♂; Çiftlik, N 40°44'43", E 042°19'7.4", 1546 m, 17.VII.2011, 2♀♀, Dönertas, N 40°13'33.4", E 042°06'58.5", 2009 m, 13.VIII.2012, ♀, Kızlarkale, N 40°09'57.8", E 042°01'47.0", 1953m, 22.VI.2012, ♀, Muratbağı, N 40°09'12.2", E 042°03'02.7", 1852m, 22.VI.2012, ♂, Yeşildere, N 40°07'04.9", E 042°05'29.5", 1698 m, 22.VI.2012, ♂; Köprüköy, İlicasu, 2380 m, 17.VII.2010, ♂, N 40°53'9.6", E 041°51'57.1", 2111m, 30.VII.2011, 3♀♀, Karataslar, N 39°50'54.7", E 041°58'11.3", 1848 m, 13.VIII.2011, ♀; Narman, 1565 m, 21.VII.2010, 2♀♀, 1900 m, 24.VII.2009, 5♀♀, Dikmetas, 2665 m, 17.VII.2010, 6♀♀, İncedere, 1987 m, 21.VII.2010, 3♀♀, 4♂♂, Samikale, N 40°21'57.5", E 041°55'20.6", 1541m, 30.VII.2011, ♀, Şehitler, N 40°19'54.9", E 041°46'39.2", 1884 m, 16.VII.2012, 2♀♀, Yanıktaş, 1638 m, 4.VIII.2009, ♀; Oltu, Çamlıbel, 1700 m, 14.VII.1996, 3♀♀, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, 3♀♀, İğdeli, N 40°32'44.8", E 041°50'27.6", 1660 m, 30.VI.2012, ♂, Sütkans, 25.VI.1996, ♀, Toprakkale, N 40°27'55.5", E 041°59'21.1", 1416 m, 23.VI.2011, ♀, Tutmaç, N 40°26'46.6", E 041°44'06.5", 1756 m, 6.VII.2012, ♀; Palandöken, Palandöken Mountain, 2300 m, 21.VII.2010, ♀, N 39°51'56.4", E 041°16'19.7", 2155 m, 22.VII.2012, ♀; Pasinler, Yayla, N 40°05'42.7", E 041°44'03.5", 1990 m, 17.VII.2011, ♀, ♂; Pazaryolu, N 40°25'12.6", E 040°46'13.9", 1430 m, 24.VI.2012, 4♀♀, Çiftepinar, N 40°22'05.3", E 041°43'07.4", 1742m, 15.VII.2012, 3♀♀, ♂, Gülcümen, N 40°24'55.8", E 040°47'29.9", 1617 m, 24.VI.2012, ♀, ♂, N 40°24'36.4", E 040°47'28.5", 1663m, 20.VII.2011, 2♀♀; Şenkaya, Başaklı, N 40°29'19.2", E 041°48'18.6", 1586 m, 13.VII.2011, ♀, Esenyurt, N 40°25'40.2", E 042°18'15.2", 1622m, 14.VII.2012, ♀, Gaziler, N 40°25'27.0", E 042°20'39.4", 1810 m, 14.VII.2012, 2♀♀, ♂, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1704 m, 14.VII.2012, ♂, İçmesu, N 40°25'27.0", E 042°18'32.1", 1656 m, 14.VII.2012, 2♀♀, 2♂♂; Tortum, 1653m, 15.VI.2010, ♀, 4♂♂, N 40°16'37.4", E 041°33'30", 1661m, 23.VI.2011, 2♂♂, N 40°16'38", E 041°33'29.9", 1660 m, 31.VII.2011, ♀, Aksukapı, N 40°25'59", E 041°35'30", 1750 m, 14.VII.2014, ♀, Aktaş, N 40°15'40.5", E 041°32'39.2", 1765 m, 31.VII.2011, 3♀♀, Aşağı Sivri, N 40°19'33.8", E 041°31'46.9", 1546 m, 16.VII.2012, ♀, Taşbaşı, N 40°15'26.6", E 041°32'13.8", 1816 m, 13.VII.2011, 2♀♀, 3♂♂, Yukarı Sivri, N 40°20'38.3", E 041°38'51.3", 1909 m, 16.VII.2012, ♀, N 40°20'27.5", E 041°39'01.1", 1962m, 16.VII.2012, ♀, ♂; Yakutiye, Atatürk University field, N 39°53'59.1", E 041°14'19.0", 1880 m, 22.VII.2011, ♀, Güzelyayla,

2000 m, 19.VIII.2009, 6♀ 2♂; Karagöbek, N 40°10'15.1", E 041°26'14.9", 2033m, 13.VII.2011, 1♀, 2♂; Uzunder, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 10.VI.2012, 2♂; N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, 1♀, 2♂; Kars: Sarıkamış, Karakurt, 1500 m, 22.VI.2010, 3♀ 2♂.

Distribution in Turkey: Kocaeli, Sakarya (ÖNDER et al. 1981); Bilecik, Isparta, Manisa (ÖNCÜER 1991); Bursa (GENÇER et al. 2004).

Subgenus *Camptobrochis* FIEBER, 1858

***Deraeocoris (Camptobrochis) pallens* (REUTER, 1904)**

Material examined: Antalya: 9.VIII.1984, ♀; Erzincan: 1185 m, 10.VI.2010, ♀, Akyazı, 1202m, 11.VI.2010, ♀, Mercan, 11.VII.1990, ♀; Erzurum: Askale, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, ♀, ♂; Aziziye, Yarımca, 1950 m, 20.VII.2010, ♀; Horasan, Çayırdüzü, N 40°8'34.8", E 042°3'23.5", 1794 m, 21.VIII.2011, ♀, Yeşildere, N 40°07'04.9", E 042°05'29.5", 1698 m, 22.VI.2012, ♀; İspir, 1259 m, 30.VII.2010, ♀, 1300 m, 7.VIII.2009, ♀, Madenköprübaşı, N 40°26'34.3", E 040°50'42.4", 1245 m, 4.VIII.2012, ♂; Olur, Coşkunlar, N 40°44'32.7", E 042°11'11.4", 1054 m, 30.VII.2011, ♀; Pasinler, 11.VII.1987, ♀, 25.VII.1987, ♀, 22.VIII.1987, ♀, ♂; Ovaköy, N 39°58'56", E 041°29'38", 1782m, 31.VII.2014, 2♀ ♀, Övener, N 39°59'17", E 041°34'43.9", 1710 m, 21.VIII.2011, ♂; Pazaryolu, 1450 m, 24.VII.2011, ♀; Şenkaya, Sindiran, N 40°37'20", E 042°21'34", 1409 m, 14.VII.2014, ♀, 1491m, 31.VII.2010, ♂; Tekman, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1498 m, 16.VII.2011, 2♀ ♀; Yakutiye, Atatürk University field, 1850, 16.VII.2008, ♀, 25.VIII.1998, ♀; Istanbul: Kartal, 2.VIII.1884, ♀; Kars: Sarıkamış, Akkurt, 1650 m, 13.VIII.2009, ♀; Keyseri: Yahyalı, 17.VII.1997, ♀.

Distribution in Turkey: Artvin, İçel (ÖNDER 1976); Antalya (ÖZKAN 1984; ÖNCÜER 1991); Diyarbakır, Gaziantep, Mardin, Şanlıurfa (ÖNDER et al. 1995); Mersin (ULUBİLİR & YABAŞ 1995); Adana (ATAKAN 2000); Kilis, Osmaniye (LODOS et al. 2003); Diyarbakır, Gaziantep, Hatay, Kilis, Mardin, Mersin, Muğla, Osmaniye (ÖNDER et al. 2006); Kahramanmaraş (ÖLMEZ 2008); İzmir (TEZCAN et al. 2010).

***Deraeocoris (Camptobrochis) punctulatus* (FALLÉN, 1807)**

Material examined: Erzincan: 1185 m, 10.VI.2010, ♂; Erzurum: Askale, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, 2♀ ♀; Aziziye, 1800 m, 8.X.2009, ♀, Dadaskent, N 39°55'09.3", E 041°12'20.7", 1806 m, 12.VII.2014, ♀, Kayapa, 1750 m, 3.VI.2010, ♂, 23.VI.1980, ♂, 25.VII.1987, ♂; Ortahâçe, N 39°53'35.3", E 040°51'19.0", 1763m, 5.VII.2012, ♀, Pasayurdu, N 39°59'42.3", E 041°00'18.3", 1836 m, 18.VII.2012, ♀; Çat, 1810 m, 3.VI.2010, ♂; Köprüköy, 1720 m, 2.VII.2010, 2♀ ♀, ♂; Marifet, N 39°50'03.1", E 041°47'38.2", 1685 m, 26.VI.2011, ♀, Örentaş, 2038 m, 29.VII.2010, ♂; Oltu, 27.VII.1987, ♂, 23.VIII.1987, ♂; Çamlıbel, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014, ♀; Olur, Yesilbağlar, 1000 m, 16.VI.2010, ♀; Palandöken, 2400 m, 21.VII.2010, ♀; Kümbet, N 39°48'59.7", E 041°4'32.8", 1832m, 5.VIII.2011, ♀; Pasinler, Ağçalar, 1900 m, 22.VIII.2007, 2♂ ♂; Dereboğazi, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♀; Ovaköy, N 39°58'56", E 041°29'38", 1782m, 31.VII.2014, ♀, ♂; N 39°58'56.1", E 041°29'31.7, 1785 m, 12.VIII.2012, ♀, 3♂ ♂; Serçebogazi, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♀; Pazaryolu, 23.VII.1991, ♀; Şenkaya, Taht, N 40°38'29", E 042°20'0.3", 1232m, 14.VII.2014, ♀; Tortum, Arılı, N 40°22'11.6", E 041°28'50.8", 1428 m, 30.VIII.2012, ♂; Yakutiye, Atatürk University field, 1850 m, 7.VII.2008, ♀, 1800 m, 20.VII.2010, ♂; N 39°53'59.1", E 041°14'19.0", 1880 m, 22.VII.2011, ♂, 1800 m, 27.VII.1991, ♀, 31.VII.2007, ♀, ♂, 1850 m, 8.IX.2009, 4♀ ♀, ♂; Dadaşköy, N 39°55'39.5", E 041°15'23.2", 1806 m, 4.VIII.2011, ♂.

Distribution in Turkey: Adana, Afyon, Ağrı, Ankara, Antalya, Artvin, Aydin, Balikesir, Burdur, Bursa, Çanakkale, Çorum, Denizli, Edirne, Erzurum,

Eskişehir, İçel, Isparta, Kayseri, Kırklareli, Kütahya, Muğla, Rize, Sakarya, Trabzon, Van (ÖNDER 1976); Diyarbakır (ÖNDER et al. 1995); Gaziantep, Hatay, Kahramanmaraş (LODOS et al. 2003); Almost all regions (ÖNDER et al. 2006); İzmir (TEZCAN et al. 2010); Mardin, Siirt (MATOCQ & ÖZGEN 2010); Elazığ (MATOCQ et al. 2014).

Deraeocoris (*Campylocoris*) serenus (DOUGLAS & SCOTT, 1868)

M a t e r i a l e x a m i n e d : Adana: Kozan, 23.VII.1984, 2♀♀; Antalya: 29.VII.1984, ♀, ♂; Artvin: 650 m, 3.VIII.2009, ♀, Savaş, 400 m, 16.VI.2010, ♀, Yusufeli, Morkaya, 700 m, 15.VI.2010, ♀, Pamukçular, 700 m, 16.VI.2010, ♂; Bayburt: Çalidere, 1700 m, 17.VI.2010, ♀, Demirözü, 1650 m, 17.VI.2010, ♀; Erzincan: Akyazı, 1408 m, 10.VI.2010, 2♀♀, Geyikli, 1160 m, 11.VI.2010, 2♀♀, ♂, Mercan, 23.VI.1990, ♀, 11.VII.1990, 2♀♀, 4♂♂, Tercan, 1408 m, 10.VI.2010, 4♀♀, 2♂♂, Üzümlü, 1518 m, 10.VI.2010, ♀, 31.VII.1991, ♀; Erzurum: Aşkale, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, ♀, 2♂♂, Merdiven, N 39°53'45.2", E 040°48'29.9", 1706 m, 9.VIII.2011, 2♀♀, 2♂♂; Aziziye, 1800 m, 8.IX.2009, ♀, Alabeyli, 11.VII.1990, ♀, Demirgeçit, N 39°56'40.0", E 041°01'09.0", 1747 m, 5.VII.2012, ♀, Ortabayçe, N 39°53'35.3", E 040°51'19.0", 1763m, 5.VII.2012, ♀, ♂, Paşayurdlu, N 39°59'42.3", E 041°00'18.3", 1836 m, 18.VII.2012, ♀, Sorkunlu, N 40°52'9", E 040°57'41.6", 1865 m, 24.VII.2011, ♀, Söğütlü, 12.VIII.1983, 8♀♀, 7♂♂; Çat, 1894 m, 29.VI.2009, ♀, N 39°35'42.4", E 040°57'59.6", 1913m, 23.VII.2011, 3♀♀, ♂, 2250 m, 6.VIII.2010, ♀, Yaylasuyu Geçidi, 2322m, 29.VI.2009, 2♀♀, Yukarı Çat, N 39°39'46.3", E 041°00'56.2", 2162m, 23.VII.2011, 3♀♀, 4♂♂; Hinis, Parmaksız, 1808 m, 2.VII.2009, ♀, Horasan, N 40°00'53", E 041°59'06", 1588 m, 22.VII.2014, ♀, Çaydır düzü, N 40°8'34.8", E 042°3'23.5", 1794 m, 21.VIII.2011, ♀, ♂, Değirmenli, N 40°05'10.7", E 042°07'01.0", 1643m, 13.VIII.2011, 2♂♂, Yesildere, N 40°07'04.9", E 042°05'29.5", 1698 m, 22.VI.2012, ♀; İspir, N 40°29'20.4", E 041°00'31", 1236 m, 22.VI.2011, ♂, 1259 m, 30.VII.2010, 2♀♀, 1300 m, 7.VIII.2009, ♀, Madenkörprübaşı, N 40°25'58.4", E 040°50'11.3", 1307 m, 20.VII.2011, 2♀♀, 2♂♂, N 40°26'34.3", E 040°50'42.4", 1245 m, 4.VIII.2012, ♂, Sütkans, 4.VI.1990, ♂, Yukarı Özbağ, N 40°26'45.1", E 040°54'24.8", 1190 m, 20.VII.2011, 2♂♂; Karayazı, Yukarı Söylemez, 1896 m, 2.VII.2010, ♀; Köprüköy, 1720 m, 2.VII.2010, ♀, N 39°57'55.2", E 041°51'02.3", 1621m, 13.VIII.2011, ♂, Marifet, N 39°50'03.1", E 041°47'38.2", 1685 m, 26.VI.2011, ♀, ♂; Narman, 30.VI.1989, ♂; Oltu, 27.VI.1987, 4♂♂, 23.VII.1987, 2♀♀, 27.VII.1987, 3♀♀, 2♂♂, 21.VIII.1987, ♂, Çamlıbel, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, 3♀♀, N 40°28'34.3", E 041°46'24.1", 1682m, 31.VII.2011, ♀, Duralar, N 40°28'31.5", E 041°58'42.4", 1421m, 30.VII.2011, ♂; Sarısaç, N 40°32'00.9", E 041°54'27.2", 1421m, 30.VIII.2012, 3♂♂; Olur, Coşkunlar, N 40°44'32.7", E 042°11'11.4", 1054 m, 30.VII.2011, ♂, Kaledibi, 1070 m, 4.VIII.2009, 2♀♀, Köprübaşı, N 40°47'19.0", E 042°08'32.0", 994 m, 19.VII.2012, 3♂♂, Ormanağzı, N 40°45'57.7", E 042°04'30.8", 955 m, 19.VII.2011, ♀, ♂; Palandöken, 2000 m, 8.VIII.2009, ♀, Kümbet, N 39°48'59.7", E 041°43'28.8", 1832m, 5.VIII.2011, 2♀♀, Taşlıgünü, 2032m, 26.VI.2009, ♀, N 39°47'46.7", E 041°64'1.1", 1968 m, 9.VIII.2011, ♀, ♂; Pasinler, 11.VII.1987, ♀, 4♂♂, 25.VII.1983, 5♂♂, 25.VII.1987, 3♀♀, 2♂♂, 1.VIII.1983, ♂, 9.VIII.1983, ♀, 22.VIII.1987, 2♀♀, 2♂♂, 11.IX.1987, ♂, Ağcalar, 1850 m, 22.VIII.2007, 2♀♀, Cögendorf, 1737 m, 29.VII.2010, ♀, Övenler, N 39°59'17", E 041°34'43.9", 1710 m, 21.VIII.2011, 2♂♂, Ovaköy, N 39°58'56", E 041°29'38", 1782m, 31.VII.2014, ♂, N 39°58'56.1", E 041°29'31.7", 1785 m, 12.VIII.2012, ♀, 3♂♂, Serçeboğazı, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♀, Yayla, N 40°05'42.7", E 041°44'03.5", 1990 m, 17.VII.2011, ♂, Pazaryolu, 23.VII.1991, ♀, N 40°25'12.8", E 040°46'13.5", 1450 m, 24.VII.2011, 2♀♀, ♂, Gülcimene, N 40°24'36.4", E 040°47'28.5", 1663m, 20.VII.2011, ♀, ♂; Şenkaya, İkizpinar, N 40°36'57.4", E 042°21'30.9", 1589 m, 31.VII.2011, 3♂♂, Penek, N 40°39'16.6", E 042°17'12.9", 1145 m, 19.VII.2011, ♂, Taht, N 40°37'59.4", E 042°20'39.7", 1283m, 31.VII.2011, ♂, Turnali, 1750 m, 25.VII.1996, 2♂♂; Tekman, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1948 m, 16.VII.2011, 3♀♀, ♂; Tortum, Akbabı, N 40°13'32.6", E 041°29'4.1", 2073m, 31.VII.2011, ♀, Aksukapi, N 40°23'58.8", E 041°32'46.4", 1648 m, 13.VII.2011, ♀, Arılı, N 40°22'11.6", E 041°28'50.8", 1428 m, 30.VIII.2012, ♀, Derekapı, N 40°24'47.2", E 041°29'19.4", 1247 m, 13.VII.2011, 2♀♀, 3♂♂; Yakutiye, Atatürk University field, 2.VII.1995, ♂, 1850 m, 7.VII.2008, 3♀♀, 11.VII.2008, ♀, 16.VII.2008, ♀, 18.VII.1972, ♂, 18.VII.1983, ♀, ♂, 18.VII.1997, ♂, 22.VII.2009, ♀, N 39°53'59.1", E 041°14'19.0", 1880 m, 22.VII.2011, ♂, 23.VII.1980, ♀, 25.VII.1987, ♀, ♂, 1850 m, 27.VII.1996,

♂, 1.VIII.2008, ♂, 8.VIII.1998, ♀, 8.VIII.2008, ♀, 10.VIII.1987, ♂, 10.VIII.1998, ♀, 20.VIII.2010, ♀, 25.VIII.1998, 3♀ ♀, 8.IX.2009, 4♀ ♀, 18.IX.1978, ♂, Dadaşköy, N 39°55'39.5", E 041°15'23.2", 1806 m, 4.VIII.2011, ♂, Karagöbek, 1977 m, 31.VII.2010, 4♀ ♀; Uzungere, Yedigölle, N 39°18'17.0", E 041°55'19.0", 855 m, 7.VI.2012, ♂; Giresun: 9.VIII.1990, ♂; İğdır: 850 m, 20.VI.2009, ♂, Tuzluca, 900 m, 19.VI.2009, ♀, Menderes, 1100 m, 23.VI.2010, ♂; İstanbul: Kartal, 2.VIII.1884, ♀; Kars: Kağızman, 23.VIII.1991, ♀, Sarıkamış, 1900 m, 13.VIII.2009, ♀, Akkurt, 1650 m, 13.VIII.2009, 2♀ ♀, Karakurt, 1500 m, 13.VIII.2009, ♀; Kayseri: Hımmetdede, 2.IX.1997, ♀, Yahyalı, 17.VII.1997, ♀; Mersin: Tarsus, 15.VII.1995, ♂; Tunceli: Pülümür, Armağan, 1689 m, 12.VIII.2011, ♀.

Distribution in Turkey: Afyon, Ağrı, Artvin, Aydin, Bilecik, Burdur, Çanakkale, Denizli, Edirne, Hakkâri, Kırklareli, Kütahya, Muğla, Tekirdağ, Uşak, Van, Yozgat (ÖNDER 1976); Bolu, İstanbul, Kocaeli, Sakarya (ÖNDER et al. 1981); Antalya (ÖZKAN 1984); Malatya (ÖNCÜER 1991); Diyarbakır, Gaziantep, Mardin (ÖNDER et al. 1995); Erzurum (YILDIRIM et al. 1999); Manisa (BEYAZ 2000; TEZCAN & ÖNDER 2003); İzmir (YAŞARAKINCI & HINCAL 2000; TEZCAN et al. 2010); Adana, Ankara, Çankırı, Çorum, Eskişehir, Hatay, İçel, Karabük, Karaman, Kastamonu, Kayseri, Kırşehir, Kilis, Konya, Nevşehir, Niğde, Sinop (LODOS et al. 2003); Bursa (GENÇER et al. 2004); Balıkesir (AYYILDIZ & ATLIHAN 2006); Almost all regions (ÖNDER et al. 2006); Kahramanmaraş (ÖLMEZ 2008); Elazığ (MATOCQ et al. 2014).

Subgenus *Knightocapsus* WAGNER, 1963

***Deraeocoris (Knightocapsus) lutescens* (SCHILLING, 1837)**

Material examined: Adana: Kozan, 28.VII.1984, ♀, ♂; Antalya: 29.VII.1984, ♀; Erzincan: Cevizli, 29.VIII.1991, ♂, Uzungere, Bayırbağ, 31.VII.1991, 3♀ ♀; Erzurum: Aşkale, Kop Mountain, N 40°01'57.1", E 040°31'0.8", 2380 m, 5.IX.2012, ♀; İspir, 24.VII.1991, ♀, Çayırozu, N 40°33'13.4", E 040°54'44.0", 1947 m, 4.IV.2012, ♂, Zeyrek, N 40°18'30", E 040°59'24", 2073m, 22.VI.2011, ♀; Oltu, 4.IX.1991, 2♀ ♀, Başbağlar, N 40°28'1.1", E 041°40'27.6, 1925 m, 13.VII.2011, ♀; Olur, Taşlıköy, 20.VIII.1992, ♀; Pazaryolu, 11.VII.1991, ♀, 23.VII.1991, 7♀ ♀, ♂, 1453m, 30.VII.2010, ♀; Şenkaya, Taht, N 40°37'59.4", E 042°20'39.7, 1283m, 31.VII.2011, ♀; Tortum, Pehlivanlı, 13.VIII.1991, ♂; İğdır: 7.VII.1992, ♀, 18.VII.1992, ♂, 7.VIII.1991, 2♀ ♀, Melekli, 18.VII.1992, ♂.

Distribution in Turkey: Afyon, Isparta, Kırklareli, Kocaeli, Ordu, Rize, Sinop, Trabzon, Uşak (ÖNDER 1976); Bursa, Kocaeli, Sakarya (ÖNDER et al. 1981); Antalya (ÖZKAN 1984; ÖNCÜER 1991); Tokat (ÇAM 1988); Kayseri (ÇEVİK 1996); Ankara, Artvin, Balıkesir, Bartın, Bilecik, Bolu, Bursa, Çankırı, Çorum, Eskişehir, Kahramanmaraş, Karabük, Karaman, Kastamonu, Konya, Kütahya, Niğde, Yozgat, Zonguldak (LODOS et al. 2003); Manisa (TEZCAN & ÖNDER 2003); Aegean, Marmara and Black Sea Regions (ÖNDER et al. 2006); İzmir (TEZCAN et al. 2010); Elazığ (MATOCQ et al. 2014).

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Zusammenfassung

Vorliegende Arbeit behandelt Wanzen (Heteroptera) der Familie Miridae basiernd auf verschiedenen Aufsammlungen in der Türkei im Zeitraum 1972 bis 2014, insbesondere 2006 bis 2014. Es konnten 2 Arten aus einer Gattung der Unterfamilie Bryocorinae sowie acht Arten aus 2 Gattungen der Unterfamilie Deraeocorinae für die Türkei nachgewiesen werden.

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