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**Contribution to the knowledge of the Herdoniini
and Stenodemini (Hemiptera: Heteroptera: Miridae: Mirinae)
fauna of Turkey**

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Abstract

This study is based upon material of the tribes Herdoniini and Stenodemini collected from different localities of Turkey between 1983 and 2014, mostly 2006-2014. In this study, one species from one genera of Herdoniini and fifteen species from six genera of Stenodemini are recorded from Turkey. In addition, new localities are added for some species previously reported for Turkey.

Zusammenfassung

Diese Studie basiert auf Material der Triben Herdoniini and Stenodemini, das zwischen 1983 und 2014 an verschiedenen Lokalitäten in der Türkei gesammelt wurde. Eine Art aus einer Gattung der Herdoniini und 15 Arten aus 6 Gattungen der Stenodemini werden neu für die Türkei nachgewiesen, ebenso neue Fundorte für bereits aus der Türkei bekannte Arten.

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 (CASSIS & SCHUH 2012). Species in the tribe of Stenodemini have usually narrow, elongate body; more commonly greenish or yellowish. They live on grasses and sedges and are phytophagous. They are macropterous or brachypterous. Hemelytra of brachypterous specimens (*Leptopterna*, *Actitocoris*) is not shorter than one-third of abdomen length; in macropterous or submacropterous specimens, either cuneus separated by distinct fracture and membrane with 2 cells, or (*Teratocoris*) body green, or (*Actitocoris*) pronotum partly yellow (SCHWARTZ 2008).

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), BINGÖL (1978), LODOS et al. (1978), ÖNDER (1976), ALTINAYAR (1981), ÖNDER et al. (1981), YAYLA (1983), ÖZKAN (1984), KARAAAT (1986), ÖNDER & LODOS (1987), ÇAM (1988), LODOS et al. (1989), ÖZBEK & ALAOĞLU (1987), ÖNDER et al. (1990; 1998), YILDIRIM & ÖZBEK (1992), GÜÇLÜ et al. (1995a, 1995b), ÇEVİK (1996), YAŞARAKINCI & HINCAL (1997, 2000), TEZCAN & ÖNDER (1999, 2003), YILDIRIM et al. (1999), ATAKAN (2000), BEYAZ (2000), ÖZSARAÇ & KIYAK (2001), LODOS et al. (2003), 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 Mirinae in Turkey.

Materials and Methods

The material of the Mirinae was collected from different localities of Turkey between 1983 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. Material was obtained by sweeping from meadow and pasture lands containing a variety of flowering plants. 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).

Result and Discussion

In this study, one species from one genera of Herdoniini and fifteen species from six genera of Stenodemini are recorded from Turkey.

Tribe Herdoniini CARVALHO, 1959

Genus *Camponotidea* REUTER, 1879

Camponotidea fieberi REUTER, 1879

Material examined: Adana: Yumurtalık, 22.V.1992, ♂.

Distribution in Turkey: Almost all regions (ÖNDER et al. 2006).

Tribe Stenodemini CHINA, 1943

Genus *Acetropis* FIEBER, 1858

Subgenus *Acetropis* FIEBER, 1858

Acetropis (Acetropis) carinata (HERRICH-SCHAEFFER, 1841)

Material examined: Bayburt: Kop Mountain Pass, 2344 m, 12.VIII.2009, ♀; Aydın-tepe, Arpalı, 1550 m, 17.VI.2010, ♀, Demirözü, 1650 m, 17.VI.2010, 4 ♀♀, ♂; Erzurum: Aşkale, 1600 m, 8.VII.2009, ♂, Hatuncuk, N 39°48'15.6", E 040°42'09.3", 1869 m, 5.VII.2012, ♂, Küçükgeçit, N 39°56'03.1", E 040°43'32.8", 1660 m, 19.VI.2012, ♀, 2 ♂♂; Çat, Yukarı Çat, N 39°39'36.1", E 041°02'34.1", 2138 m, 18.VII.2012, 4 ♀♀; Köprüköy, Güzelhisar, 1930 m, 2.VII.2010, ♀; Oltu, İğdeli, N 40°32'44.8", E 041°50'27.6", 1660 m, 30.VI.2012, 2 ♀♀; Palandöken, 2000 m, 8.VIII.2009, 2 ♀♀; Pasinler, Yayla, 1990 m, N 40°05'42.7", E 041°44'03.5", 17.VII.2011, 3 ♀♀, 25.VIII.1983, ♀; Pazaryolu, N 40°24'45.2", E 040°46'8.6", 1510 m, 22.VI.2011, ♂; Tortum, 1653 m, 15.VI.2010, ♀, Taşbaşı, 1816 m, N 40°15'26.6", E 041°32'13.8", 13.VII.2011, 2 ♀♀, ♂, Yakutiye, Güzelyayla, 2000 m, 19.VIII.2009, 4 ♀♀, ♂, Karagöbek, 2033 m, N 40°10'15.1", E 041°26'14.9", 13.VII.2011, ♀, ♂, N 40°09'28.9", E 041°25'58.5", 1961 m, 16.VII.2012, 2 ♀♀, ♂, University field, 1850 m, 2.VII.2008, ♀, 3.VII.2008, ♀, 7.VII.2008, ♀, 9.VII.2007, 6 ♀♀, 22.VII.2009, ♀, 23.VII.2007, ♀, 25.VII.2007, 5 ♀♀.

Distribution in Turkey: Kütahya (ÖNDER 1976); İçel (YARDIM 1990; LODOS et al. 2003); Ankara, Bursa, Kayseri, Kütahya (ÖNDER et al. 2006).

Genus *Leptopterna* FIEBER, 1858

Leptopterna ferrugata (FALLEN, 1807)

Material examined: Erzurum: Karayazi, Kırgındere, 2215 m, 2.VII.2010, ♂, Yeniköy, N 39°43'31.8", E 041°59'29.5", 2199 m, 17.VII.2012, 2 ♂♂; Palandöken, 2300 m, 1.VIII.2010, ♀; Tekman, Geyikli, N 39°47'48.5", E 042°4'31.4", 2185 m, 16.VII.2011, ♀, Yakutiye, University field, 1850 m, 26.VI.2008, 2 ♂♂, 3.VII.1996, ♂, 18.VII.1997, ♂, 5.VIII.1998, ♂, 9.VIII.2008, ♂, 18.VIII.1999, ♂.

Distribution in Turkey: Kayseri, Konya (ÖNDER 1976; ÖNDER et al. 2006); Edirne (YARDIM 1990).

Genus *Megaloceroea* FIEBER, 1858

Megaloceroea recticornis (GEOFFROY, 1785)

Material examined: Erzurum: Horasan, Kırkdikme, N 40°01'46.9", E 042°01'57.7", 1561 m, 13.VIII.2011, ♂.

Distribution in Turkey: İzmir (ÖNDER 1970); Aydın, Balıkesir, Bilecik, Bursa, Çanakkale, Edirne, İstanbul, Kırklareli, Kocaeli, Manisa, Sakarya, Tekirdağ (ÖNDER 1976); Antalya, Erzurum, İzmir, Kırşehir (YARDIM 1990); Bolu, Çankırı, Kırşehir (LODOS et al. 2003); Marmara and Aegean Regions (ÖNDER et al. 2006); Ankara (KIYAK & AKAR 2010).

Genus *Notostira* FIEBER, 1858

Notostira elongata (GEOFFROY, 1785)

Material examined: Erzurum: Aşkale, Gökçebük, N 39°56'55.8", E 040°48'22.6", 1699 m, 23.VII.2011, 2 ♀♀, ♂, Kandilli, Atlıkonak, N 39°55'36.5", E 040°56'16.9", 1757 m, 5.VII.2012, 2 ♀♀, Kop Mountain, N 40°01'57.1", E 040°31'0.8", 2380 m, 5.IX.2012, ♂, Koşapınar, N 40°00'55.4", E 040°47'39.3", 1866 m, 18.VII.2012, ♀, Küçükgeçit, N 39°56'432", E 040°47'12.1", 1709 m, 23.VII.2011, ♀, ♂, Yeniköy, N 39°51'28.8", E 040°41'24.1", 1935 m, 5.VII.2012, ♀, ♂; Aziziye, Yarımca, 1950 m, 20.VII.2010, ♀; Horasan, Hacrahmet, N 40°10'37.4", E 042°08'17.5", 1823 m, 13.VIII.2012, ♂, Muratbağı, N 40°09'12.2", E 042°03'02.7", 1852 m, 22.VI.2012, ♀, 2 ♂♂, Yeşildere, N 40°07'8.0", E 042°05'26.6", 1684 m, 21.VIII.2011, ♂, Yukarı Bademözü, N 40°09'13.9", E 042°10'15.9", 1907 m, 14.VII.2012, 3 ♀♀; İspir, Madenköprübaşı, N 40°26'33.7", E 46°50'41.6", 1244 m, 24.VI.1012, ♂, Öztoprak, N 40°31'05.9", E 041°03'15.8", 1724 m, 15.VII.2012, 2 ♀♀; Karayazı, Alemdağı, N 39°36'00.4", E 041°52'19.8", 2095 m, 17.VII.2012, ♀; Narman, N 40°21'09.9", E 041°55'02.0", 1543 m, 30.VI.2012, 2 ♀♀, Demirdağ, N 40°19'23.5", E 041°42'45.5", 2028 m, 16.VII.2012, 5 ♀♀, Mahmutçavuş, N 40°20'16.1", E 041°56'01.4", 1546 m, 13.VIII.2012, 4 ♀♀, Şehitler, N 40°19'54.9", E 041°46'39.2", 1884 m, 16.VII.2012, ♀, ♂, Yanıktaş, N 40°16'43.4", E 041°52'1.4", 1628 m, 30.VII.2011, ♀; Oltu, Çamlıbel, N 40°28'31.3", E 041°46'26.9", 1661 m, 30.VI.2012, ♀, N 40°29'36.1", E 041°45'45.2", 1775 m, 13.VII.2011, ♀, ♂, Duralar, N 40°28'31.5", E 041°58'42.4", 1421 m, 30.VII.2011, 2 ♀♀, Güzelsu, N 40°34'49.9", E 042°02'24.6", 1221 m, 30.VI.2012, ♀, Özdere, N 40°27'57.7", E 041°44'11.9", 1927 m, 16.VII.2012, 2 ♀♀, Sarısaz, N 40°31'56.1", E 041°54'36.9", 1388 m, 5.VIII.2012, ♂, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, 3 ♂♂; Pa-ländöken, N 39°51'56.4", E 041°16'19.7", 2155 m, 22.VII.2012, 3 ♀♀, 2 ♂♂; Taşlıgüney, N 39°48'41.2", E 041°07'10.0", 1875 m, 5.VII.2012, 4 ♀♀; 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, 4.VIII.2012, ♀, ♂; Şenkaya, Gaziler, N 40°25'27.0", E 042°20'39.4", 1810 m, 14.VII.2012, ♀, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, ♀, Paşalı, N 40°40'08.7", E 042°12'18.4", 1106 m, 19.VII.2011, ♀; Tortum, Pehlivanlı, N 40°29'37.1", E 041°30'17.6", 1158 m, 21.VII.2012, ♀, Suyatağı, N 40°27'20.2", E 041°30'14.0", 1236 m, 21.VII.2012, ♀, Şenyurt, N 40°26'22.0", E 041°28'39.5", 1265 m, 21.VII.2012, ♀, Taşbaşı, N 40°15'26.6", E 041°32'13.8", 1816 m, 13.VII.2011, ♀; Uzundere, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, ♀, Yakutiye, University field, 1800 m, 18.VIII.2010, 2 ♀♀; Mersin: Erdemli, Üçtepe, 120 m, 25.IX.2012, ♀.

Distribution in Turkey: Ankara, Kütahya (ÖNDER 1976); Kars, Kütahya (YARDIM 1990); Çankırı, Çorum, Kayseri, Nevşehir, Sinop, Yozgat (LODOS et al. 2003; ÖNDER et al. 2006).

***Notostira poppiusi* REUTER, 1911**

Material examined: Bayburt: Kop Mountain, 17.VI.2010, ♂, Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 2 ♂♂, Demirözü, 1650 m, 17.VI.2010, 2 ♂♂; Erzincan: 1185 m, 10.VI.2010, ♂, Akyazı, 1202 m, 11.VII.2010, 2 ♂♂; Erzurum: Aşkale, Abdalcık, 1756 m, 1.VIII.2010, ♂, Atlıkonak, N 39°55'36.5", E 040°56'16.9", 1757 m, 5.VII.2012, ♂, Çayköy, N 39°58'35.9", E 040°55'49.8", 1876 m, 23.VII.2011, ♂, Kop Mountain, N 40°01'57.1", E 040°31'0.8", 2380 m, 5.IX.2012, ♂, Küçükgeçit, N 39°56'43.2", E 040°47'12.1", 1709 m, 23.VII.2011, ♂; Aziziye, 1850 m, 8.VII.2009, ♀, Dadaşkent, N 39°55'09.3", E 041°12'20.7", 1806 m, 12.VII.2014, ♀, Yoncalık, 1900 m, 4.VIII.2009, ♂; Horasan, Çayırüzü, N 40°8'34.8", E 042°3'23.5", 1794 m, 21.VIII.2011, ♀, 2 ♂♂; İspir, Madenköprübaşı, 1292 m, 30.VII.2010, ♂; Karayazı, Karasu, N 39°42'51.1", E 042°00'00.5", 2186 m, 16.VII.2011, ♂; Köprüköy, 1720 m, 2.VII.2010, ♂, Soğuksu, N 39°53'17.4", E 041°57'34.8", 1756 m, 17.VII.2012, ♂; Narman, N 40°21'09.9", E 041°55'02.0", 1543 m, 30.VI.2012, ♂, 2.VII.1987, 2 ♂♂, Demirdağ, N 40°19'23.5", E 041°42'45.5", 2028 m, 16.VII.2012, ♂, Kilimli, N 40°19'50.9", E 041°58'50.3", 1726 m, 16.VII.2012, ♂, Mahmutçavuş, N 40°20'16.1", E 041°56'01.4", 1546 m, 13.VIII.2012, 2 ♂♂, Ünlükaya, N 39°18'36.0", E 041°55'19.2", 1700 m, 8.VI.2012, ♂; Oltu, 2.VII.1987, 5 ♂♂, 1750 m, 3.VIII.2009, ♂, Çamlıbel, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, 2 ♂♂, Özdere, N 40°25'19.5", E 041°43'25.1", 1822 m, 20.VII.2012, ♂, Sarısaz, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, ♂, Yolboyu, N 42°32'59", E 042°00'05", 1135 m, 10.VI.2012, ♂; Olur, Taşlıköy, 885 m, 4.VIII.2009, ♂; Palandöken, Abdurrahmangazi, N 39°52'36.0", E 041°18'35.2", 2170 m, 22.VII.2012, ♂, 2197 m, 1.VIII.2010, 2 ♂♂, Palandöken Mountain, N 39°51'56.4", E 041°16'19.7", 2155 m, 22.VII.2012, ♀, ♂, 2000 m, 8.VIII.2009, ♂, Taşlıgüney, N 39°48'41.2", E 041°07'10.0", 1875 m, 5.VII.2012, ♂; Pasinler, Övenler, N 39°59'17", E 041°34'43.9", 1710 m, 21.VIII.2011, ♂; Pazaryolu, N 40°25'12.6", E 040°46'13.9", 1430 m, 4.VIII.2012, ♂, Kümbettepe, N 40°25'48.7", E 040°45'51.8", 1376 m, 24.VI.2012, ♂; Şenkaya, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, 2 ♂♂, Hoş, N 40°38'50.0", E 042°19'26.0", 1193 m, 9.VI.2012, 2 ♂♂, Paşalı, N 40°29'19.2", E 041°48'18.6", 1586 m, 9.VI.2012, ♂, N 40°40'08.7", E 042°12'18.4", 1106 m, 19.VII.2011, ♂, Penek, N 40°39'16.6", E 042°17'12.9", 1145 m, 9.VI.2012, 2 ♂♂, Sındıran, 1491 m, 31.VII.2010, ♂, Taht, N 40°37'59.4", E 042°20'39.7", 1283 m, 9.VI.2012, ♂, N 40°38'29", E 042°20'0.3", 1232 m, 14.VII.2014, ♂; Tekman, Geyikli, N 39°47'48.5", E 042°4'31.4", 2185 m, 16.VII.2011, ♂; Tortum, N 40°18'35", E 041°31'33", 1518 m, 14.VII.2014, ♀, Pehlivanlı, N 40°29'37.1", E 041°30'17.6", 1158 m, 21.VII.2012, ♀, Taşbaşı, N 40°15'26.6", E 041°32'13.8", 1816 m, 13.VII.2011, ♂, Yukarı Sivri, N 40°20'27.5", E 041°39'01.1", 1962 m, 16.VII.2012, ♂; Uzundere, Çamlıyamaç, N 40°36'43.4", E 041°32'41", 1290 m, 7.VIII.2011, ♂, Şelale, N 40°39'40.9", E 041°40'03.0", 1012 m, 27.V.2011, ♀, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, ♂; Yakutiye, Akdağ, 1820 m, 1.VII.2010, ♂, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, 3 ♂♂, University field, N 39°53'59.1", E 041°14'19.0", 1880 m, 22.VII.2011, ♀, 2 ♂♂, 1850 m, 23.VII.2007, ♂, 1800 m, 26.VII.1983, ♂, 27.VII.2010, ♂, 5.VIII.2010, ♀, ♂, 12.VIII.2010, 2 ♀♀; İğdır: 25.VI.1971, ♂; Kars: Sarıkamış, Karakurt, 1500 m, 22.VI.2010, ♂; Konya: Beyşehir, Gökçimen, 26.VII.1997, ♀; Mersin: Erdemli, Üçtepe, 120 m, 10.VIII.2012, ♀.

Distribution in Turkey: No locality record (HOSSEINI 2013).

***Notostira erratica* (LINNAEUS, 1758)**

Material examined: Bayburt: Aydıntepe, Arpalı, 1550 m, 17.VI.2010, 2 ♀♀, ♂, Demirözü, 1650 m, 17.VI.2010, 3 ♀♀; Erzincan: 1185 m, 10.VI.2010, 3 ♀♀, Akyazı, 1202 m, 11.VI.2010, ♀, Geyikli, 1160 m, 11.VI.2010, ♀, Üzümlü, 1518 m, 10.VI.2010, ♀; Erzurum: Aşkale, Çayköy, 1691 m, 1.VIII.2010, ♂, N 36°56'50", E 040°47'49", 1700 m, 29.VII.2014, 2 ♀♀, Kandilli, 1707 m, 1.VIII.2010, ♀; Aziziye, 1900 m, 4.VIII.2009, 2 ♀♀, Abdalcık, 1756 m, 1.VIII.2010, 2 ♀♀, Dadaşkent, N 39°55'09.3", E 041°12'20.7", 1806 m, 12.VII.2014, 2 ♀♀, ♂, Eskipolat, N 40°04'30.8", E 040°56'45.1", 1847 m, 24.VI.2012, ♂, Yarımcı, 1950 m, 20.VII.2010, 3 ♀♀, 2 ♂♂; Horasan, 6.VII.1988, ♀, N 40°00'53", E 041°59'06", 1588 m,

22.VII.2014, ♂, Dönertas, N 40°12'54.6", E 042°08'07.7", 2009 m, 13.VIII.2012, ♀, Hacıahmet, N 40°10'37.4", E 042°08'17.5", 1823 m, 13.VIII.2012, ♀; İspir, 1300 m, 7.VIII.2009, 2 ♀♀, ♂, İspir Pass, 1950 m, 20.VIII.2009, ♀, Madenköprübaşı, N 40°26'33.7", E 040°50'41.6", 1244 m, 24.VI.2012, ♀, ♂, 1292 m, 30.VII.2010, ♂; Karayazı, Çatalören, N 39°46'32.1", E 042°01'43.1", 2313 m, 16.VII.2011, ♀; Köprüköy, Örentaş, 2038 m, 29.VII.2010, ♂; Narman, 21.VII.1987, 3 ♀♀, 3 ♂♂, 1565 m, 21.VII.2010, 2 ♀♀, ♂; Oltu, N 40°5'0.4", E 041°56'57", 1455 m, 14.VII.2014, 3 ♀♀, 22.VII.1987, 4 ♀♀, 4 ♂♂, 1750 m, 3.VIII.2009, ♀, 2 ♂♂, Çamlıbel, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, 3 ♀♀, İnanmış, N 40°27'44.4", E 041°42'42", 1812 m, 31.VII.2011, ♂, Sarısaz, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, ♂, Yolboyu, N 40°38'55", E 042°08'50", 1135 m, 14.VII.2014, ♀, ♂; Palandöken, Abdurrahmangazi, 2197 m, 1.VIII.2010, 6 ♀♀, Dutçu, 2000 m, 24.VII.2010, ♂, Palandöken Mountain, 2300 m, 21.VII.2010, 3 ♀♀, 1.VIII.2010, 2 ♀♀, ♂, 2000 m, 8.VIII.2009, ♂; Pasinler, 25.VII.1983, 11 ♀♀, ♂; Şenkaya, 1815 m, 31.VII.2010, ♂, Gözebaşı, N 40°24'39.9", 042°18'11.5", 1794 m, 14.VII.2012, ♀, 2 ♂♂, Taht, N 40°38'29", E 042°20'0.3", 1232 m, 14.VII.2014, ♀, Turnalı, 1700 m, 31.VII.2010, ♀, ♂; Tortum, 1653 m, 15.VI.2010, ♂; Uzundere, Yayla Pass, 2300 m, 21.VII.2010, ♀; Yakutiye, Akdağ, 1820, 1.VII.2010, ♀, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, ♀, University field, 1850 m, 18.V.2007, ♀, 25.VI.2009, ♀, 26.VI.2008, ♀, ♂, 3.VII.2008, 2 ♀♀, 7.VII.2008, ♀, 2 ♂♂, 9.VII.2008, ♀, 2 ♂♂, 16.VII.1996, ♀, 16.VII.2008, ♀, 22.VII.2009, ♀, 23.VII.2008, 3 ♂♂, 24.VII.2008, 3 ♀♀, 26.VII.1983, ♀, 27.VII.2010, ♀, 2 ♂♂, 29.VII.2009, 3 ♀♀, 1.VIII.2002, ♀, 3.VIII.2007, ♀, 4.VIII.2008, ♀, 5.VIII.2010, 2 ♀♀, ♂, 10.VIII.2010, 2 ♂♂, 12.VIII.2010, ♀, 18.VIII.2010, 2 ♀♀, 3 ♂♂, 14.IX.2007, ♀, ♂, 25.IX.2010, ♂; Iğdır: 25.VI.1971, ♀; Kars: Kağızman, 1750 m, 22.VI.2010, ♀, Sarıkamış, Karakurt, 1470 m, 29.VII.2010, 3 ♀♀, 1900 m, 13.VIII.2009, 2 ♀♀; Konya: Beyşehir, Gökçimen, 3.VII.1997, ♀, 5.VII.1997, 2 ♀♀; Muş: 21.VII.1971, ♂.

Distribution in Turkey: Artvin, Bilecik, Bursa (ÖNDER 1976); Erzurum (ÖZBEK & ALAOĞLU 1987); Bayburt, Bitlis, Erzurum, Sivas, Van (YARDIM 1990); Siirt (ÖNDER et al. 1995); Adana, Ağrı, Bartın, Çankırı, Karabük, Kastamonu, Kayseri, Konya, Yozgat (LODOS et al. 2003; ÖNDER et al. 2006); Ankara (KIYAK & AKAR 2010); İzmir (TEZCAN et al. 2010).

Genus *Stenodema* LAPORTE, 1833

Subgenus *Brachystira* FIEBER, 1858

Stenodema (Brachystira) calcarata (FALLEN, 1807)

Material examined: Erzurum: Aşkale, Kop Mountain, N 40°01'57.1", E 040°31'0.8", 2380 m, 5.IX.2012, ♂; Aziziye, Rizekent, N 40°09'56.2", E 040°59'53.1", 2081 m, 24.VI.2012, ♂; İspir, N 40°28'51.1", E 041°00'12.2", 1261 m, 22.VI.2011, ♂, Aşağı Özbağ, N 40°28'02.3", E 040°58'25.8", 1177 m, 15.VII.2012, ♂, Kân, N 40°28'11", E 040°59'5", 1316 m, 22.VI.2011, ♂, Kirazlı, N 40°26'53.4", E 040°53'07.6", 1219 m, 24.VI.2012, ♀, Yeşilvadi, N 40°15'53.9", E 040°59'21.4", 2285 m, 24.VI.2012, 5 ♀♀; Karayazı, Çatalören, N 39°46'32.1", E 042°01'43.1", 2313 m, 16.VII.2011, ♀; Köprüköy, Yeşilova, N 39°46'02.7", E 042°02'07.8", 2288 m, 17.VII.2012, ♀, ♂; Narman, Beyler, N 39°18'29", E 041°55'12", 1710 m, 8.VI.2012, ♀, Demirdağ, N 40°19'13.5", E 041°41'54.5", 2076 m, 23.VI.2011, 4 ♀♀; Oltu, İnanmış, N 40°27'44.4", E 041°42'42", 1812 m, 31.VII.2011, ♀.

Distribution in Turkey: İzmir (ÖNDER 1970; TEZCAN et al. 2010); Adana, Afyonkarahisar, Artvin, Balıkesir, Bitlis, Burdur, Kırklareli, Kütahya, Muğla, Rize, Samsun, Tekirdağ, Tokat, Trabzon, Uşak (ÖNDER 1976); Bursa, Sakarya (ÖNDER et

al. 1981); Aydın, Elazığ, Erzurum (YARDIM 1990); Gaziantep (ÖNDER et al. 1995); Ankara, Antalya, Hatay, İçel, Kahramanmaraş, Kilis, Konya, Niğde, Sinop, Yozgat (LODOS et al. 2003); Almost all regions (ÖNDER et al. 2006); Diyarbakır (MATOÇQ et al. 2014).

***Stenodema (Brachystira) trispinosa* REUTER, 1904**

Material examined: Erzurum: Aziziye, Yoncalık, N 40°0.3'6.6", E 040°55'34.7", 1800 m, 22.VI.2011, ♀; İspir, Aşağı Özbağ, N 40°28'02.3", E 040°58'25.8", 1177 m, 15.VII.2012, 5 ♂♂, Yeşilvadi, N 40°15'53.9", E 040°59'21.4", 2285 m, 24.VI.2012, ♀, Yakutiye, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, ♀

Distribution in Turkey: Ağrı, Ankara (ÖNDER 1976); Adana, Erzurum (YARDIM 1990); Kahramanmaraş, Kırşehir, Niğde (LODOS et al. 2003; ÖNDER et al. 2006).

Subgenus *Stenodema* LAPORTE, 1833

***Stenodema (Stenodema) holsata* (FABRICIUS, 1787)**

Material examined: Erzurum: Pazaryolu, 1453 m, 30.VII.2010, ♂, Tortum, Suyatağı, N 40°27'20.9", E 041°30'08.9", 1245 m, 27.V.2011, ♀.

Distribution in Turkey: Artvin, Trabzon (ÖNDER 1976); Gümüşhane (YARDIM 1990); Kars, Kocaeli (ÖNDER et al. 2006).

***Stenodema (Stenodema) laevigata* (LINNAEUS, 1758)**

Material examined: Erzurum: Aşkale, Abdalcık, 1756 m, 1.VIII.2010, 2 ♀♀; Çat, Tuzlataşı, 1910 m, 6.VIII.2010, ♀; Horasan, Akçataş, N 40°07'00.1", E 042°08'31.9", 1659 m, 13.VIII.2012, ♂; İspir, Aşağı Özbağ, N 40°28'02.3", E 040°58'25.8", 1177 m, 15.VII.2012, ♂, Köprüköy, N 40°27'30.9", E 040°57'21.2", 1135 m, 24.VII.2011, 3 ♀♀; Köprüköy, N 39°57'55.2", E 041°51'02.3", 1621 m, 13.VIII.2011, 2 ♂♂; Narman, 1565 m, 21.VII.2010, ♀, Demirdağ, 21.VII.2010, ♀, Kireçli Pass, 2400 m, 31.VII.2010, ♀, Oltu, Sütkans, 25.VI.1996, ♀; Palandöken, Abdurrahmangazi, 2197 m, 1.VIII.2010, ♀; Pasinler, 1.VI-II.1983, ♀, Epeyce, N 39°59'14.4", E 041°46'43.9", 1666 m, 21.VIII.2011, ♀, Pazaryolu, 1453 m, 30.VII.2010, ♀, 1010 m, 7.VIII.2009, 4 ♀♀, 2 ♂♂; Şenkaya, 8.VII.1988, ♂, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, ♀, Turnalı, 29.VI.1989, ♀; Tortum, 2.VII.1987, ♀, Suyatağı, N 40°27'20.2", E 041°30'14.0", 1236 m, 21.VII.2012, ♂; Uzundere, 2000 m, 27.V.2010, ♀, N 40°31'57.2", E 041°32'39.2", 1147 m, 7.VIII.2011, ♂, 20.VIII.1995, 2 ♂♂; Yakutiye, Dumlubaba, Güngörmez, 2200 m, 19.VIII.2009, ♂, University field, 26.VII.1983, ♀, 30.VII.1987, 2 ♀♀, 1800 m, 3.VIII.2007, ♀, 1850 m, 4.VIII.2008, ♂; Yeşildere, 2000 m, 19.VIII.2009, ♀; Çankırı: Eskipazar, 31.VIII.1984, ♀; Giresun: 11.I.1984, ♂; Iğdır: Tuzluca, 900 m, 18.VI.2009, ♀.

Distribution in Turkey: Ankara, Artvin, İstanbul, Trabzon (ÖNDER 1976); Bursa (ÖNDER et al. 1981; GENÇER et al. 2004); Bolu, Erzurum, İzmir, Ordu (YARDIM 1990); Diyarbakır (ÖNDER et al. 1995); Bolu, Çankırı, Çorum, Kayseri, Nevşehir, Zonguldak (LODOS et al. 2003); Antalya (ÖNDER et al. 2006).

***Stenodema (Stenodema) turanica* REUTER, 1904**

Material examined: Erzincan: Üzümlü, 1518 m, 10.VI.2010, ♀; Erzurum: Aziziye, Eskipolat, 1857 m, 30.VII.2010, 2 ♂♂, Toprakkale, N 40°14'27.9", E 040°59'01.1", 2151 m, 22.VI.2011, 2 ♂♂; Çat, Tuzlataşı, 1900 m, 6.VIII.2010, ♂; İspir, N 40°29'20.4", E 041°00'31", 1236 m, 22.VI.2011, ♂; Oltu, Sarısaz, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, ♂; Palandöken, Abdurrahmangazi, 2197 m, 1.VIII.2010, ♂; Şenkaya, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, ♀; Tortum, N 40°27'20.9", E 041°30'08.9", 1245 m, 27.V.2011, ♀; Uzundere, Çağlayanlı, N 40°39'34.4", E 041°40'32.6", 967 m, 27.V.2011, 2 ♀♀; Yakutiye, Güzelyayla, 2000 m, 19.VIII.2009, ♀, 2 ♂♂, University field, 1850 m, 26.VI.2008, ♂, 3.VII.2008, ♀, 25.VII.1986, ♀, 1800 m, 17.VIII.2010, ♂.

Distribution in Turkey: Adıyaman, Ankara, Artvin, Bingöl, Bursa, Denizli, Elazığ, Gümüşhane, Hakkâri, Kütahya, Mardin, Muğla, Muş, Trabzon, Van (ÖNDER 1976); Erzurum (ÖZBEK & ALAOĞLU 1987; YILDIRIM et al. 1999); Adana, Ağrı, Bitlis, Erzincan, Şanlıurfa (YARDIM 1990); Diyarbakır, Siirt, Şırnak (ÖNDER et al. 1995); Antalya, Çankırı, Çorum, İçel, Kahramanmaraş, Kayseri, Konya, Nevşehir, Niğde, Osmaniye, Yozgat (LODOS et al. 2003); Almost all regions (ÖNDER et al. 2006); İzmir (TEZCAN et al. 2010); Mardin (MATOÇ & ÖZGEN 2010); Siirt (MATOÇ et al. 2014).

***Stenodema (Stenodema) virens* (LINNAEUS, 1767)**

Material examined: Erzurum: Aziziye, Rizekent, N 40°0.9'49.1", E 041°00'03.5", 2097 m, 22.VI.2011, ♀; Horasan, Yeşildere, N 40°07'8.0", E 042°05'26.6", 1684 m, 21.VIII.2011, ♀; İspir, Yeşilvadi, N 40°15'53.9", E 040°59'21.4", 2285 m, 24.VI.2012, 2 ♀♀; Narman, Çimenli, N 40°8'47", E 041°53'22.5", 2311 m, 19.VII.2011, ♀; Olur, Ormanağzı, 955 m, N 40°45'57.7", E 042°04'30.8", 19.VII.2011, ♂; Palandöken, Taşlıgüney, N 39°47'46.7", E 041°6'41.1", 1968 m, 9.VIII.2011, ♂; Uzundere, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, ♀; Yakutiye, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, ♂.

Distribution in Turkey: Ankara, Aydın, Bilecik, Burdur, Çanakkale, Denizli, Erzurum, Kastamonu, Muğla (ÖNDER 1976); Bolu, Bursa, İstanbul, Kocaeli, Sakarya (ÖNDER et al. 1981); Afyon, Diyarbakır, Elazığ, Malatya, Şanlıurfa, Van (YARDIM 1990); Artvin (GÜÇLÜ et al. 1995b); Ağrı, Aksaray, Çankırı, Kars, Kayseri, Kocaeli, Nevşehir, Yozgat (LODOS et al. 2003; ÖNDER et al. 2006); İzmir (TEZCAN et al. 2010).

Genus *Trigonotylus* FIEBER, 1858

***Trigonotylus pulchellus* (HAHN, 1834)**

Material examined: Adıyaman: Besni, 22.VI.1990, ♀; Artvin: 650 m, 3.VIII.2009, ♂; Bayburt: Kop Mountain Pass, 2344 m, 12.VIII.2009, ♂; Erzincan: Üzümlü, 1500 m, 22.IX.2009, 3 ♀♀, 4 ♂♂; Erzurum: Aşkale, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, ♂; Aziziye, Kümbet, N 39°48'57.8", E 041°0.4'33", 1836 m, 9.VIII.2011, ♀; Yoncalık, 1800 m, 22.VI.2011, 2 ♂♂; Çat, Taşağıl, N 39°41'43.5", E 041°02'59.7", 2166 m, 18.VII.2012, ♂; Yaylasuyu, N 39°43'31.4", E 040°58'42.5", 2208 m, 18.VII.2012, 4 ♀♀, ♂; Horasan, N 40°00'53", E 041°59'06", 1588 m, 22.VII.2014, ♀; İspir, 1300 m, 7.VIII.2009, ♂, 22.IX.1986, 6 ♀♀; Karayazı, Alemdağı, N 39°38'24", E 041°56'14.8", 2022 m, 16.VII.2011, ♂, N 39°36'00.4", E 041°52'19.8", 2095 m, 17.VII.2012, ♀; Çatalören, N 39°46'32.1", E 042°01'43.1", 2313 m, 16.VII.2011, 2 ♀♀; Karasu, N 39°42'51.1", E 042°00'00.5", 2186 m, 16.VII.2011, ♀, ♂, Yeniköy, N 39°43'31.8", E 041°59'29.5", 2199 m, 17.VII.2012, 3 ♀♀, ♂; Köprüköy, Geyikli, N 39°48'02.1", E 042°04'05.4", 2144 m, 17.VII.2012, ♂, Ilıcasu,

2380 m, 17.VII.2010, ♂, Yücelik, N 39°46'02.7", E 042°02'07.8", 2288 m, 17.VII.2012, ♂; Narman, Mahmutçavuş, N 40°20'16.1", E 041°56'01.4", 1546 m, 13.VIII.2012, ♂, Yanıktaş, N 40°16'43.4", E 041°52'1.4", 1628 m, 30.VII.2011, 3 ♂♂; Oltu, 10.VII.1989, ♀, Sarıtaş, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, 5 ♀♀, 5 ♂♂; Olur, Boğazgören, N 40°49'19.2", E 042°12'42.6", 1168 m, 19.VII.2012, ♀, ♂, Coşkunlar, N 40°44'32.7", E 042°11'11.4", 1054 m, 30.VII.2011, ♂, Çataksu, N 40°45'58.0", E 042°01'39.7", 909 m, 6.VII.2012, ♂, Taşlıköy, N 40°45'59.6", E 042°01'35.6", 860 m, 19.VII.2011, ♀, ♂, 885 m, 4.VIII.2009, ♂; Pasinler, 1600 m, 30.VII.2010, 2 ♀♀, Demirdöven, 1727 m, 29.VII.2010, ♀, 10 ♂♂, Korucuk, 1792 m, 29.VII.2010, ♀, Serçeboğazi, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♂; Şenkaya, 31.VII.1988, ♂, Paşalı, 1173 m, 31.VII.2010, 2 ♂♂, Sındıran, 1491 m, 31.VII.2010, ♀, Taht, N 40°38'29", E 042°20'0.3", 1232 m, 14.VII.2014, ♂; Yakutiye, Güzelyayla, 2000 m, 19.VIII.2009, ♀, University field, 1850 m, 25.VIII.1998, 2 ♀♀; Giresun: 2.VIII.1990, ♀, ♂, 9.VIII.1984, ♀, ♂, 10.VIII.1990, 2 ♂♂, 11.VIII.1984, 2 ♀♀; Iğdır: 830 m, 23.VI.2010, ♀, 28.VIII.1990, ♀, Melekli, 850 m, 23.VI.2010, ♀, ♂, Aralık, 830 m, 23.VI.2010, 3 ♂♂, Karakoyunlu, Taşburun, 830 m, 23.VI.2010, ♂; Kars: Kağızman, 1750 m, 22.VI.2010, ♀.

Distribution in Turkey: İzmir (ÖNDER 1970; TEZCAN et al. 2010); Ağrı, Ankara, Artvin, Aydın, Balıkesir, Bilecik, Bursa, Çanakkale, Denizli, Edirne, Kırklareli, Muğla, Sakarya, Tekirdağ, Uşak, Zonguldak (ÖNDER 1976); Bolu, İstanbul (ÖNDER et al. 1981); Şanlıurfa (YARDIM 1990); Diyarbakır (ÖNDER et al. 1995); Manisa (BEYAZ 2000); Adana, Aksaray, Antalya, Bartın, Çankırı, Çorum, Eskişehir, Gaziantep, Hatay, İçel, Kahramanmaraş, Kayseri, Mersin, Nevşehir, Niğde, Osmaniye, Yozgat (LODOS et al. 2003); Aegean ve Marmara Regions (ÖNDER et al. 2006); Mardin (MATOQC & ÖZGEN 2010); Siirt (MATOQC et al. 2014).

***Trigonotylus ruficornis* (GEOFFROY, 1785)**

Material examined: Erzurum: İspir, 22.IX.1986, ♀; Oltu, Sarıtaş, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, ♂; Şenkaya, Paşalı, N 40°40'08.7", E 042°12'18.4", 1106 m, 10.VII.2011, ♂.

Distribution in Turkey: Artvin, Aydın, Bilecik, Çanakkale, Kars, Kütahya, Manisa, Rize, Trabzon, Uşak (ÖNDER 1976); Edirne (ÖNDER et al. 1984); Ağrı, Erzincan, Erzurum, İzmir, Kırklareli, Mardin, Samsun, Van (YARDIM, 1990); Diyarbakır (ÖNDER et al. 1995); İçel (LODOS et al. 2003); Adana, Ankara, Bartın, Çorum, Eskişehir, Gaziantep, Hatay, Kahramanmaraş, Kastamonu, Kırşehir, Konya, Mersin, Osmaniye, Zonguldak (ÖNDER et al. 2006); Mardin (MATOQC & ÖZGEN 2010); Diyarbakır, Siirt (MATOQC et al. 2014).

***Trigonotylus tenuis* REUTER, 1893**

Material examined: Giresun: 9.VI.1984, ♀, ♂; Iğdır: 23.VIII.1990, ♀, Melekli, 8.VII.1992, ♀.

Distribution in Turkey: Elazığ (MATOQC et al. 2014).

Discussion

As the result of present study one species from one genera of Herdoniini and fifteen species from six genera of Stenodemini are recorded from Turkey. Among them, *Leptopterna euxina* VINOKUROV, 1982, *Notostira elongata* (GEOFFROY, 1785), *Notostira poppiusi* REUTER, 1911, *Notostira erratica* (LINNAEUS 1758), *Stenodema (Stenodema) laevigata* (LINNAEUS, 1758) and *Trigonotylus pulchellus* (HAHN 1834) has been found the most abundant and widespread species. Separately, some new localities were added to known distribution aerea. All the recorded species are phytophagous.

As a result of the current study, the total number of species recorded from Turkey is raised to 580, belonging to 151 genera from Miridae and our knowledge on the distribution of previously known species has broadened. However, supplementary researches are necessary to know better the composition of the Turkish fauna of Miridae and monitor the expansion of these potential predators of cultures.

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