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Contribution to the Knowledge of Phylinae (Hemiptera: Heteroptera: Miridae) from Turkey

Gülten YAZICI¹ Erol YILDIRIM²

ÖZ

Türkiye Phylinae (Hemiptera: Heteroptera: Miridae) türlerine katkılar

Bu çalışma çoğunluğu 2006-2014 yıllarında olmak üzere, 1978 ve 2014 yılları arasında Türkiye'nin değişik lokalitelerinden toplanmış olan Miridae familyasının Phylinae altfamilyasına ait materyalden oluşmaktadır. Bu çalışmada Phylinae altfamilyasına ait 20 cinse bağlı 32 tür tespit edilmiştir. Bunlar arasından, *Chlamydatus* (*Euattus*) *pullus* (Reuter 1870), *Megalocoleus* *molliculus* (Fallén 1807), *Oncotylus* (*Oncotylus*) *punctipes* Reuter 1875, *Oncotylus* (*Oncotylus*) *viridiflavus* (Goeze 1778), *Opisthotaenia* (*Opisthotaenia*) *fulvipes* Reuter 1901, *Plagiognathus* (*Plagiognathus*) *bipunctatus* Reuter 1883 ve *Plagiognathus* *chrysanthemi* (Wolff 1804) türleri bol ve yaygın olarak bulunmuştur. Ayrıca, Türkiye'den daha önce bildirilen bazı türleri için yeni lokaliteler ilave edilmiştir.

Anahtar kelimeler: Hemiptera, Heteroptera, Miridae, Phylinae, Türkiye

ABSTRACT

This study is based upon material of subfamily Phylinae from family Miridae collected from different localities of Turkey between 1978 and 2014, mostly 2006-2014. In this study, 32 species from 20 genera of Phylinae species were determined. Among them, *Chlamydatus* (*Euattus*) *pullus* (Reuter 1870), *Megalocoleus* *molliculus* (Fallén 1807), *Oncotylus* (*Oncotylus*) *punctipes* Reuter 1875, *Oncotylus* (*Oncotylus*) *viridiflavus* (Goeze 1778), *Opisthotaenia* (*Opisthotaenia*) *fulvipes* Reuter 1901, *Plagiognathus* (*Plagiognathus*) *bipunctatus* Reuter 1883 and *Plagiognathus* *chrysanthemi* (Wolff 1804) have been found the most abundant and widespread species. In addition, new localities are added for some species previously reported for Turkey.

Keywords: Hemiptera, Heteroptera, Miridae, Phylinae, Turkey.

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INTRODUCTION

Miridae (or plant-bugs) is a group of Miroidea, which 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 and Schuh 2012). The subfamily Phylinae is small, rarely medium-sized, usually phytophagous, often with narrow food specialization; less commonly zoophytophagous or predacious, hibernating as eggs (with very rare exception) and the largest subfamily (Lehr 1988). 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), Altınayar (1981), Önder et al. (1981), Yayla (1983), Özkan (1984), Karaat (1986), Önder and Lodos (1987), Özbek and Alaoğlu (1987), Çam (1988), Lodos et al. (1989), Kıyak (1990), Önder et al. (1990; 1998), Yıldırım and Özbek (1992), Güçlü et al. (1995 a,b), Çevik (1996), Yaşarakıncı and Hıncal (1997;2000), Tezcan and Önder (1999; 2003), Yıldırım et al. (1999), Atakan (2000), Beyaz (2000), Yıldırım (2002), Lodos (2003), Kıyak et al. (2004), Çetin and Alaoğlu (2005), Ayyıldız and Atlıhan (2006), Önder et al. (2006).

The aim of this paper is to present new distributional and biological data on Phylinae in Turkey.

MATERIAL AND METHOD

The material of the Phylinae was collected from different localities of Turkey between 1978 and 2014. In addition, in previous years the material collected from different localities of Turkey, and preserved in the Entomology Museum, Erzurum, Turkey (EMET) 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 EMET. The species were identified by Dr. Rauno Linnavuori (Finland), Dr. Chérot Frédéric (Belgium) and Prof. Dr. Jacek Gorczyca (Poland).

RESULTS

In this study, 32 species and 20 genera belonging to subfamily Phylinae is recorded from Turkey.

Subfamily Phylinae

Amblytylus nasutus (Kirschbaum 1856)

Material examined: Erzurum: Yakutiye, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, ♀.

Distribution in Turkey: Edirne (Hoberlandt 1955); Afyonkarahisar, Ankara, Antalya, Çanakkale, Erzincan, Konya, Mersin (Önder 1976; Önder *et al.* 2006); Bursa, Kocaeli, Sakarya (Önder *et al.* 1981); İçel (Lodos *et al.* 2003); İzmir (Tezcan *et al.* 2010).

Atomoscelis onustus (Fieber 1861)

Material examined: **Erzincan:** 27.VIII.1991, ♀; **Erzurum:** Oltu, 5.VII.1988, ♀, 2 ♂♂, İnancımış, N 40°27'50.1", E 041°42'19.9", 1823 m, 6.VII.2012, ♂; Pasinler, 18.VII.1987, 2 ♀♀, 3 ♂♂; Yakutiye, Atatürk University field, 1850 m, 2.VIII.1988, ♀.

Distribution in Turkey: Ankara, Antalya, Çorum, Eskişehir, Gaziantep, Hatay, Kahramanmaraş, Karabük, Kayseri, Kırıkkale, Kırşehir, Konya, Mersin, Nevşehir, Niğde, Yozgat (Önder 1976; Önder *et al.* 2006); Bursa, Sakarya (Önder *et al.* 1981); Diyarbakır (Önder *et al.* 1995); İçel (Lodos *et al.* 2003).

Campylomma diversicornis Reuter 1878

Material examined: **Antalya:** 23.VII.1984, ♂, 18.VIII.1984, ♀, ♂; **Erzurum:** Pasinler, 18.VII.1987, 5 ♀♀, 8 ♂♂.

Distribution in Turkey: Adana, Iğdır (Hoberlandt 1955); Aydın, Çanakkale, Denizli, Diyarbakır, Elazığ, Mardin, Muğla (Önder 1976); İzmir (Giray 1980; Tezcan *et al.* 2010); Bursa, Kocaeli, Sakarya (Önder *et al.* 1981); İçel (Öncüler 1991); Adıyaman (Önder *et al.* 1995); Manisa (Beyaz 2000); Antalya, Gaziantep, Hatay (Lodos *et al.* 2003); West, Eastern, Southeast Anatolia Regions (Önder *et al.* 2006); Kahramanmaraş (Ölmez 2008).

Campylomma nicolasi Puton and Reuter, 1883

Material examined: **Antalya:** 23.VII.1984, 2 ♀♀; **Erzurum:** Yakutiye, Atatürk University field, 1850 m, 7.VIII.1996, 2 ♀♀.

Distribution in Turkey: Adana, Edirne (Hoberlandt 1955); Aydın, Bilecik, Burdur, Hatay, Isparta, Kırklareli, Manisa, Mardin, Muğla, Samsun, Sinop, Tekirdağ (Önder 1976); İzmir (Giray 1980; Yaşarakıncı and Hıncal 2000; Tezcan *et al.* 2010); Bursa, Kocaeli, Sakarya (Önder *et al.* 1981); Antalya (Öncüler 1991); Diyarbakır, Mardin (Önder *et al.* 1995); Adana, Ankara, Çankırı, Çorum, Eskişehir, Gaziantep, İçel, Kahramanmaraş, Kastamonu, Kayseri, Kırşehir, Konya, Nevşehir, Niğde (Lodos *et al.* 2003); Mediterranean, Southeast Anatolia, Aegean, Central Anatolia, Black Sea, Marmara regions (Önder *et al.* 2006).

Campylomma verbasci (Meyer-Dür 1843)

Material examined: **Bayburt:** Çalidere, 1700 m, 17.VI.2010, ♂; **Erzincan:** 27.VIII.1991, 5 ♀♀, 4 ♂♂, Mercan, 1381 m, 10.VI.2010, ♂, Yukarı Çakırman, 28.VIII.1991, ♀; **Erzurum:** Aziziye, Başçakmak, N 40°00'5.6", E 040°54'39.3", 1860 m, 20.VII.2011, ♂, 14.VIII.1987, ♀; Hınıs, 1742 m, 2.VII.2010, ♀; Köprüköy,

Örentaş, N 40°27'48.6", E 041°39'32.3", 1916 m, 30.VII.2011, ♀, 3 ♂♂; Oltu, 1750 m, 4.VIII.2009, 2 ♂♂, 4.IX.1991, 3 ♀♀, Sarısaz, N 40°32'00.9", E 041°54'27.2", 1421 m, 30.VIII.2012, ♀; Olur, Taşlıköy, 20.VIII.1992, 3 ♀♀, ♂; Pazaryolu, N 40°25'12.8", E 040°46'13.5", 1450 m, 24.VII.2011, ♀, Gülçimen, N 40°24'36.4", E 040°47'28.5", 1663 m, 20.VII.2011, ♀, ♂; Tekman, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1948 m, 16.VII.2011, ♂, Uzundere, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 6.VII.2012, ♂; **Iğdır:** 850 m, 20.VI.2009, ♀; **Kars:** Kağızman, 23.VII.1991, ♂, Sarıkamış, Karakurt, 1500 m, 13.VIII.2009, ♂.

Distribution in Turkey: Adana, Edirne (Hoberlandt 1955); Aydın, Burdur, Çanakkale, Denizli, Edirne, Isparta, İzmir, Mersin (Önder 1976); Bolu, Bursa, Sakarya (Önder et al. 1981); Antalya (Özkan 1984); Diyarbakır (Önder et al. 1995); İçel (Lodos et al. 2003); Balıkesir (Ayyıldız and Atlıhan 2006); Ankara, Aydın, Balıkesir, Burdur, Çanakkale, Çankırı, Denizli, Eskişehir, Gaziantep, Hatay, Isparta, İzmir, Kahramanmaraş, Karaman, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Konya, Mersin, Nevşehir, Niğde, Yozgat, Zonguldak (Önder et al. 2006); Mardin (Matocq and Özgen 2010); Siirt (Matocq et al. 2014).

Chlamydatus (Euattus) pullus (Reuter 1870)

Material examined: **Erzincan:** Akyazı, 1202 m, 11.VI.2010, ♂; **Erzurum:** Aşkale, Çayköy, 1600 m, 3.VI.2010, 11 ♂♂, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, 3 ♀♀, 8 ♂♂, Çiftlik, 1620 m, 3.VI.2010, ♂, Kandilli, N 39°54'38.5", E 040°51'19.9", 1710 m, 21.VI.2011, 2 ♀♀, Merdiven, N 39°53'45.2", E 040°48'29.9", 1706 m, 9.VIII.2011, 2 ♀♀; Aziziye, Dadaşkent, 1800 m, 3.VI.2010, 2 ♀♀, 2 ♂♂, Eğerti, N 40°06'13.6", E 040°58'44.5", 1906 m, 22.VI.2011, 2 ♂♂, Paşayurdu, 1710 m, 3.VI.2010, 3 ♂♂, Çat, 2200 m, 3.VI.2010, ♂; Horasan, Değirmenli, N 40°05'10.7", E 042°07'01.0", 1643 m, 13.VIII.2011, 3 ♀♀, ♂; İspir, Aşağı Özbağ, N 40°28'02.3", E 040°58'25.8", 1177 m, 15.VII.2012, ♀; Narman, 30.VI.1989, ♂, İncedere, 1987 m, 21.VII.2010, ♀, Kamışözü, N 40°20'23.3", E 041°47'29.2", 1835 m, 23.VI.2011, ♀, ♂, Ünlükaya, 1700 m, 8.VI.2012, ♀; Oltu, 12.VII.1987, 2 ♂♂, 22.VII.1987, 2 ♂♂, 23.VIII.1987, ♂, Çamlıbel, N 40°28'34.3", E 041°46'24.1", 1682 m, 31.VII.2011, 2 ♀♀; Olur, Coşkunlar, N 40°44'32.7", E 042°11'11.4", 1054 m, 30.VII.2011, 2 ♀♀, 2 ♂♂, Kaledibi, 1070 m, 4.VIII.2009, ♂; Palandöken, Kümbet, N 39°48'59.7", E 041°43'32.8", 1832 m, 5.VIII.2011, ♀, ♂; Pasinler, 2.VII.1983, 2 ♂♂, 11.VII.1987, ♂, 1.VIII.1983, ♂, Ovaköy, N 39°58'56", E 041°29'38", 1782 m, 31.VII.2014, 3 ♂♂; Şenkaya, Sındıran, N 40°37'14.2", E 042°22'09.3", 1497 m, 10.VII.2011, 2 ♀♀, 5 ♂♂, Timurkışla, N 40°33'43.8", E 042°16'58.0", 1314 m, 14.VII.2012, ♂; Tortum, N 40°16'38", E 041°33'29.9", 1660 m, 31.VII.2011, ♂, Derekapı, N 40°37'59.5", E 041°42'56.7", 1010 m, 7.VI.2012, ♀, 3 ♂♂, Şenyurt, N 40°26'22.0", E 041°28'39.5", 1265 m, 21.VII.2012, 2 ♀♀; Yakutiye, Atatürk University field, 1850 m, 20.VI.1996, ♀, 23.VI.1980, 2 ♀♀, 12 ♂♂, 29.VII.1987, 4 ♂♂, 14.VIII.1987, ♂, 24.VIII.1987, 3 ♂♂, Dadaşköy, 1806 m, N 39°55'39.5", E 041°15'23.2", 4.VIII.2011, ♀, ♂.

Distribution in Turkey: Bursa, Kocaeli (Hoberlandt 1955); Artvin, Kars, Manisa, Niğde (Önder 1976); Ağrı, Elazığ, Erzincan, Erzurum, Malatya, Muş, Tunceli Van (Bingöl 1978); Kahramanmaraş, Kayseri (Kıyak 1990); Aksaray, Çankırı, Karabük, Nevşehir (Lodos et al. 2003; Önder et al. 2006).

Chlorillus pictus (Fieber 1864)

Material examined: Erzurum: Karayazı, Kırğındere, 2215 m, 2.VII.2010, ♀; Oltu, Tutmaç, N 40°26'46.6", E 041°44'06.5", 1756 m, 6.VII.2012, ♂; Şenkaya, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, 2 ♀♀; Tortum, Y. Sivri, N 40°20'27.5", E 041°39'01.1", 1962 m, 16.VII.2012, ♀, ♂; Yakutiye, Akdağ, 1820 m, 1.VII.2010, ♀, ♂, Atatürk University field, 1850 m, 25.VI.2009, ♂.

Distribution in Turkey: No locality record (Wagner 1955).

Conostethus roseus (Fallén 1807)

Material examined: Erzurum: Aziziye, Paşayurdu, 1710 m, 3.VI.2010, ♀; Çat, 2200 m, 3.VI.2010, ♂.

Distribution in Turkey: Adana (Hoberlandt 1955); Afyonkarahisar, Ağrı, Antalya, Erzurum, Mersin, Uşak (Önder 1976); İçel (Lodos et al. 2003); Ankara, Eskişehir, Karaman, Konya (Önder et al. 2006).

Ephippicoris lunatus Poppius 1912

Material examined: Erzurum: Yakutiye, University field, 1850 m, 16.VII.1996, ♀, ♂; Pasinler, 1.VIII.1983, ♀.

Distribution in Turkey: Iğdır (Hoberlandt 1955).

Eurycolpus aureolus Seidenstucker 1961

Material examined: Erzurum: Tekman, Körsu, N 39°34'8.2", E 041°44'30.2", 1901 m, 16.VII.2011, 8 ♀♀, 11 ♂♂.

Distribution in Turkey: Adana, Ankara, Kırşehir, Mersin, Niğde (Önder 1976; Önder et al. 2006); Kahramanmaraş, Kayseri (Kıyak 1990); İçel (Lodos et al. 2003); Diyarbakır (Matocq et al. 2014).

Europiella alpina (Reuter 1875)

Material examined: Erzurum: Köprüköy, Eğirmez, N 39°58'09.9", E 041°49'20.7", 1670 m, 13.VIII.2011, 2 ♂♂; Oltu, Toprakkale, N 40°27'55.5", E 041°59'21.1", 1416 m, 23.VI.2011, ♂; Palandöken, Palandöken Mountain, 2300 m, 1.VIII.2010, ♀; Şenkaya, İkizpınar, N 40°36'57.4", E 042°21'30.9", 1589 m, 31.VII.2011, ♀; Yakutiye, Atatürk University field, 1850 m, 25.VI.2009, ♀.

Distribution in Turkey: Ankara (Hoberlandt 1955).

***Macrotylus herrichi* (Reuter 1873)**

Material examined: Erzurum: Aziziye, Başçakmak, N 40°00'05.6", E 040°54'39.3", 1860 m, 20.VII.2011, ♂; Çat, N 39°35'42.4", E 040°57'59.6", 1913 m, 23.VII.2011, ♀; Aşağı Çat, N 39°38'29.5", E 041°00'11.7", 2065 m, 9.VIII.2011, ♀; Narman, Toygarlı, N 40°12'42.9", E 041°53'17.8", 2123 m, 19.VII.2011, ♂; Uzundere, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, ♂; Yakutiye, Atatürk University field, 1850 m, 7.VIII.1996, ♂.

Distribution in Turkey: Ankara, Kayseri, Konya (Hoberlandt 1955; Önder 1976); Antalya, Gaziantep, Kahramanmaraş (Lodos et al. 2003; Önder et al. 2006).

***Megalocoleus molliculus* (Fallén 1807)**

Material examined: Bayburt: 1569 m, 22.VI.2009, ♂; **Erzurum:** Aşkale, 1600 m, 8.VII.2009, ♂, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, 3 ♀♀, 2 ♂♂, Küçükgeçit, N 39°56'43.2", E 040°47'12.1", 1709 m, 23.VII.2011, 2 ♂♂, Küçükova, N 39°47'36.8", E 040°42'53.3", 1896 m, 5.VII.2012, ♂; Aziziye, Dallıkavak Pass, N 40°10'33.55", E 040°58'16.1", 2349 m, 20.VII.2011, ♀, Rizekent, 2070 m, 30.VII.2010, 3 ♂♂; Çat, 1894 m, 29.VI.2009, ♂; Hınıs, 1742 m, 2.VII.2010, ♀; Horasan, Değirmenli, N 40°05'20.7", E 042°06'56.7", 1608 m, 22.VI.2012, 2 ♀♀, ♂, Dönertaş, N 40°13'33.4", E 042°06'58.5", 2009 m, 13.VIII.2012, ♂; Karaçoban, Duman, N 39°18'22", E 041°55'5", 1560 m, 26.VI.2011, 2 ♀♀, Maruf, N 39°18'42", E 041°55'5", 1550 m, 26.VI.2011, 2 ♂♂; Karayazı, Yukarı Söylemez, 1896 m, 2.VII.2010, ♂; Köprüköy, Geyikli, N 39°48'02.1", E 042°04'05.4", 2144 m, 17.VII.2012, ♂; Narman, Demirdağ, N 40°19'23.5", E 041°42'45.5", 2028 m, 16.VII.2012, ♂, İncedere, 1987 m, 21.VII.2010, ♂; Oltu, Çamlıbel, N 40°29'36.1", E 041°45'45.2", 1775 m, 13.VII.2011, ♂, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, ♂, Özdere, N 40°27'57.7", E 041°44'11.9", 1927 m, 16.VII.2012, ♀, ♂, Tutlu, N 40°36'53.3", E 040°53'39.4", 1240 m, 23.VI.2011, 2 ♀♀, Tutmaç, N 40°26'46.6", E 041°44'06.5", 1756 m, 6.VII.2012, ♂; Olur, Yeşilbağlar, 1000 m, 16.VI.2010, ♂; Palandöken, Taşlıgüney, 2032 m, 26.VI.2009, 2 ♂♂; Pasinler, Yayla, N 40°05'42.7", E 041°44'03.5", 1990 m, 17.VII.2011, 2 ♀♀; Şenkaya, Başaklı, N 40°29'19.2", E 041°48'18.6", 1586 m, 13.VII.2011, 2 ♀♀, İkizpınar, N 40°36'57.4", E 042°21'30.9", 1589 m, 31.VII.2011, ♀; Tekman, Çiçekdağı, N 39°34'40.8", E 041°44'26.8", 1846 m, 26.VI.2011, ♂, Geyikli, N 39°47'48.5", E 042°43'1.4", 2185 m, 16.VII.2011, ♂; Yakutiye, Atatürk University field, 1850 m, 3.VII.1996, ♂, 10.VII.1996, ♂, 16.VII.1996, ♂, 14.VIII.1998, ♂, Duşlubaba, Güngörmez, 2500 m, 1.VII.2010, ♂, Güzelyayla, 2000 m, 19.VIII.2009, ♂.

Distribution in Turkey: Ankara (Hoberlandt 1955); Balıkesir, Bilecik, Isparta, Kars, Kırklareli, Kütahya, Manisa, Muğla, Tekirdağ, (Önder 1976); Bolu, Bursa, İstanbul, Kocaeli, Sakarya (Önder et al. 1981); Şanlıurfa (Önder et al. 1995); Çankırı, Karaman, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Konya, Nevşehir (Lodos et al. 2003; Önder et al. 2006); İzmir (Tezcan et al. 2010); Diyarbakır (Matocq et al. 2014).

Monosynnum bohemanni* (Fallén 1829)*Material examined: Erzurum:** Pasinler, 10.VI.1983, ♀.**Distribution in Turkey:** Balıkesir, Kırklareli (Önder 1976; Önder et al. 2006); Diyarbakır (Önder et al. 1995); Konya (Lodos et al. 2003).***Nanopsallus carduellus* (Horvath 1888)****Material examined: Erzurum:** Çat, N 39°35'42.4", E 040°57'59.6", 1913 m, 23.VII.2011, 5 ♀♀, 2 ♂♂, Yukarı Çat, N 39°39'46.3", E 041°00'56.2", 2162 m, 23.VII.2011, 2 ♀♀; Oltu, İnanmış, N 40°27'50.1", E 041°42'19.9", 1823 m, 6.VII.2012, ♀; Yakutiye, Atatürk University field, 1850 m, 7.VIII.1996, ♂.**Distribution in Turkey:** Ankara, Mersin (Önder 1976); Bursa, İstanbul (Önder et al. 1981); Diyarbakır (Önder et al. 1995); İçel (Lodos et al. 2003); Antalya, Çorum, Gaziantep, Kahramanmaraş, Karaman, Kırşehir (Önder et al. 2006); İzmir (Tezcan et al. 2010); Mardin, Siirt (Matocq et al. 2014).***Oncotylus (Cylindromelus) setulosus* (Herrich-Schaeffer 1837)****Material examined: Erzurum:** Aziziye, Rizekent, 2070 m, 30.VII.2010, ♀, 2 ♂♂, Yoncalık, 1900 m, 16.VIII.2014, ♀, ♂; Çat, Yaylasuyu, N 39°43'31.4", E 040°58'42.5", 2208 m, 18.VII.2012, 2 ♂♂; Horasan, Dönertaş, N 40°13'33.4", E 042°06'58.5", 2009 m, 13.VIII.2012, ♀, 2 ♂♂; Narman, İncedere, 1987 m, 21.VII.2010, ♀, Samikale, N 40°21'57.5", E 041°55'20.6", 1541 m, 30.VII.2011, ♀; Oltu, Duralar, N 40°28'31.5", E 041°58'42.4", 1421 m, 30.VII.2011, ♀; Palandöken, 2400 m, 1.VIII.2010, ♀, Nenehatun, 1975 m, 29.VII.2010, ♀, Tepeköy, N 39°50'47.5", E 041°10'30.9", 1873 m, 5.VIII.2011, 6 ♀♀, 4 ♂♂; Pasinler, Ovaköy, N 39°58'56", E 041°29'38", 1782 m, 31.VII.2014, ♀; Pazaryolu, Gülçimen, N 40°24'36.4", E 040°47'28.5", 1663 m, 20.VII.2011, 2 ♂♂; Tortum, 1573 m, 21.VII.2010, 2 ♀♀, 3 ♂♂; Yakutiye, Atatürk University field, 1850 m, 22.VII.1997, 2 ♂♂; **Konya:** Selçuk University field, 18.VII.1997, 2 ♀♀, 23.VII.1997, ♀.**Distribution in Turkey:** Ankara (Hoberlandt 1955; Kıyak and Akar 2010); Elazığ, Isparta, Kars (Önder 1976); Sakarya (Önder et al. 1981); Diyarbakır (Önder et al. 1995); Eskişehir (Lodos et al. 2003); Nevşehir (Kıyak et al. 2004); Adana, Bartın, Çankırı, Çorum, Gaziantep, Kahramanmaraş, Karabük, Karaman, Kastamonu, Kayseri, Konya (Önder et al. 2006); Diyarbakır (Matocq et al. 2014).***Oncotylus (Oncotylus) pyrethri* (Becker 1864)****Material examined: Erzurum:** Oltu, Demirtaş, N 40°24'58.6", E 041°44'14.4", 1888 m, 6.VII.2012, 2 ♂♂, Özdere, 1927 m, 16.VII.2012, ♂, Yarpaşı, 1784 m, 6.VII.2012, ♂; Yakutiye, Atatürk University field, 1850 m, 20.VII.1997, 2 ♂♂.**Distribution in Turkey:** Ankara, Isparta (Önder 1976; Önder et al. 2006).

***Oncotylus (Oncotylus) punctipes* Reuter 1875**

Material examined: **Erzurum:** Aşkale, Çayköy, N 39°56'44.2", E 040°48'18.5", 1700 m, 19.VI.2012, ♀, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, ♀, Kandilli, N39°54'38.5", E 040°51'19.9", 1710 m, 21.VI.2011, ♂, Küçükgeçit, N 39°56'03.1", E 040°43'32.8", 1660 m, 19.VI.2012, ♀, ♂, Küçükova, N 39°47'36.8", E 040°42'53.3", 1896 m, 5.VII.2012, ♀, Yeniköy, N 39°52'50.3", E 040°42'10.0", 1905 m, 19.VI.2012, 2 ♂♂, 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", 1863 m, 24.VI.2012, ♀, Eğerti, N 40°06'13.6", E 040°58'44.5", 1906 m, 22.VI.2011, ♂, Rizekent, 2070 m, 30.VII.2010, 3 ♀♀, Toprakkale, 2157 m, 30.VII.2010, ♀; Çat, Çatköy, 2098 m, 29.VI.2009, ♂, Yaylasuyu Pass, 2322 m, 29.VI.2009, ♂; Hınıs, N 39°52'33", E 041°16'46", 1955 m, 26.VI.2011, ♀; Horasan, Muratbağı, N 40°09'12.2", E 042°03'02.7", 1852 m, 22.VI.2012, ♀, ♂, Yeşildere, N 40°07'04.9", E 042°05'29.5", 1698 m, 22.VI.2012, ♀; Karaçoban, Maruf, N 39°18'42", E 041°55'5", 1550 m, 26.VI.2011, 3 ♀♀, ♂; Karayazı, Karasu, N 39°42'51.1", E 042°00'00.5", 2186 m, 16.VII.2011, ♂, Kırğındere, 2215 m, 2.VII.2010, ♂; Köprüköy, Eyüpler, N 39°47'0.5", E 041°46'55.4", 1745 m, 26.VI.2011, 2 ♂♂, Güzelhisar, 1930 m, 2.VII.2010, ♀, Marifet, N 39°50'03.1", E 041°47'38.2", 1685 m, 26.VI.2011, ♀; Narman, Demirbağ, 2028 m, 16.VII.2012, ♀, ♂, Gölü, N 40°13'52.1", E 041°52'06.0", 1842 m, 30.VI.2012, ♀; Oltu, Tutmaç, N 40°26'46.6", E 041°44'06.5", 1756 m, 6.VII.2012, ♀; Palandöken, Taşlıgüney, 2032 m, 26.VI.2009, ♂; Şenkaya, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, ♀; Yakutiye, Dumlubaba, Güngörmez, 2200 m, 19.VIII.2009, 8 ♀♀, Güzelyayla, 2200 m, 19.VIII.2009, ♀, Karagöbek, N 40°09'28.9", E 041°25'58.5", 1961 m, 16.VII.2012, ♀.

Distribution in Turkey: Ağrı, Erzurum, Kütahya (Önder 1976; Önder et al. 2006).

***Oncotylus (Oncotylus) viridiflavus* (Goeze 1778)**

Material examined: **Bayburt:** 1550 m, 12.VIII.2009, 3 ♀♀, Örence, 2400 m, 12.VIII.2009, ♀; **Erzincan:** Mercan, 1381 m, 10.VI.2010, ♀; **Erzurum:** Aşkale, Abdalcık, 1756 m, 1.VIII.2010, 3 ♀♀, Büyükgeçit, N 39°57'32.3", E 040°46'17.1", 1730 m, 18.VII.2012, ♀, ♂, Çayköy, N 39°58'35.9", E 040°55'49.8", 1876 m, 23.VII.2011, 2 ♂♂, 1691 m, 1.VIII.2010, ♀, Demirkıran, N 39°56'30.2", E 040°41'18.8", 1699 m, 11.VIII.2012, ♂, Gökçebük, N 39°56'55.8", E 040°48'22.6", 1699 m, 23.VII.2011, ♀, ♂, Kandilli, 1707 m, 1.VIII.2010, ♀; Aziziye, Ağzıaçık Pass, 2300 m, 30.VII.2010, 3 ♀♀, 4 ♂♂, Başçakmak, N 40°00'05.6", E 040°54'39.3", 1860 m, 20.VII.2011, 3 ♂♂, Dallıkavak Pass, 2349 m, 30.VII.2010, 3 ♀♀, 2 ♂♂, Eskipolat, 1857 m, 30.VII.2010, 2 ♀♀, ♂, Toprakkale, 2157 m, 30.VII.2010, 5 ♀♀, 3 ♂♂; Çat, N 39°35'42.4", E 040°57'59.6", 1913 m, 23.VII.2011, 2 ♀♀, 1898 m, 6.VIII.2010, 2 ♀♀, Aşağı Çat, 1950 m, 6.VIII.2010, ♀, Değirmenli, N 39°38'51.1", E 040°47'38.6", 1955 m, 11.VIII.2012, 3 ♀♀, Güzelyurt, N 39°46'4.7", E 041°2'42.6", 2099 m, 5.VIII.2011, ♀, ♂, Sarıkaya, N 39°38'15.1", E 040°52'37.7", 1798 m, 11.VIII.2012, ♀, Tuzlataşı, 1910 m, 6.VIII.2010, ♀, Yaylasuyu, N 39°43'31.4", E

040°58'42.5", 2208 m, 18.VII.2012, ♂; Horasan, 1588 m, 2.VII.2010, 3 ♂♂, Aşağı Bademözü, N 40°07'07.7", E 042°10'49.1", 1665 m, 14.VII.2012, ♂, Dalbaşı, N 40°3'2.4", E 042°7'48.2", 1601 m, 17.VII.2011, 4 ♀♀, Kırkgözel, 1599 m, 29.VII.2010, 3 ♀♀, Kırkdikme, 1601 m, 29.VII.2010, 6 ♀♀, 2 ♂♂, Yörükatlı, 1854 m, 29.VII.2010, ♀, ♂; İspir, Madenköprübaşı, 7.VII.1996, ♀, ♂, N 40°25'58.4", E 040°50'11.3", 1307 m, 20.VII.2011, ♀; Karaçoban, Bozyar, N 39°16'24.9", E 042°00'35.5", 1615 m, 16.VII.2011, ♀, 3 ♂♂; Karayazı, Yukarı Söylemez, N 39°36'46.8", E 041°50'24.3", 1905 m, 17.VII.2012, ♂; Köprüköy, Güzelhisar, 1930 m, 2.VII.2010, ♀, 3 ♂♂; Narman, 1565 m, 21.VII.2010, 2 ♀♀, 1428 m, 4.VIII.2009, 2 ♀♀, 2 ♂♂, Çimenli, N 40°8'47", E 041°53'22.5", 2311 m, 19.VII.2011, ♀, Dikmetaş, 2065 m, 17.VII.2010, ♀, 3 ♂♂, Kışlaköy, N 40°19'20.7", E 042°02'08.3", 1892 m, 13.VIII.2012, ♀; Oltu, 2.VII.1987, ♂, 1750 m, 4.VIII.2009, 4 ♀♀; Olur, Kaledibi, 1074 m, 17.VII.2010, ♀, 1057 m, 4.VIII.2009, 3 ♀♀, 2 ♂♂; Palandöken, Tepeköy, N 39°50'47.5", E 041°10'30.9", 1873 m, 5.VIII.2011, 3 ♀♀, 2 ♂♂; Pasinler, 1600 m, 25.VII.2009, 2 ♀♀, 2 ♂♂, Acı, N 40°02'56.0", E 041°35'21.7", 1905 m, 22.VII.2012, ♂, Çögender, 1737 m, 29.VII.2010, 5 ♀♀, N 39°59'15.6", E 041°31'07.6", 1768 m, 30.VII.2011, 2 ♂♂, Demirdöven, 1727 m, 29.VII.2010, 2 ♀♀, Korucuk, 1792 m, 29.VII.2010, 2 ♀♀, 2 ♂♂, Ovaköy, N 39°58'57.7", E 041°29'40.8", 1803 m, 30.VII.2011, 2 ♀♀, N 39°58'56", E 041°29'38", 1782 m, 31.VII.2014, ♀, ♂, Serçeboğazı, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♀, Ügümü, N 40°00'39.9", E 041°43'57.0", 1724 m, 17.VII.2011, 2 ♂♂; Şenkaya, 1815 m, 31.VII.2010, ♀, Hoş, N 40°38'50.0", E 042°19'26.0", 1193 m, 31.VII.2011, ♀, Paşalı, N 40°40'08.7", E 042°12'18.4", 1106 m, 19.VII.2011, 2 ♀♀, Sarıyar, N 40°37'57.4", E 042°12'14.9", 1249 m, 13.VII.2011, ♀, ♂, Sındıran, N 40°37'20", E 042°21'34", 1409 m, 14.VII.2014, 2 ♂♂, 1491 m, 31.VII.2010, ♀; Tekman, Körsu, N 39°34'48.2", E 041°44'30.2", 1901 m, 16.VII.2011, ♂; Tortum, 1573 m, 21.VII.2010, 2 ♀♀, 2 ♂♂; Yakutiye, Atatürk University field, 1850 m, 11.VII.2008, ♂, 15.VII.1998, ♀, 23.VII.1986, ♂, 30.VII.1987, ♂♂, 30.VII.2008, ♂, N 39°48'59.7", E 041°04'32.8", 1880 m, 5.VIII.2011, 2 ♀♀, 14.VIII.1987, ♂, 1850 m, 17.VIII.1998, ♀, Güzelyayla, 2000 m, 19.VIII.2009, ♂; **Iğdır:** 850 m, 20.VI.2009, 4 ♂♂, Bayraktar, 850 m, 23.VI.2010, ♀, Aralık, 830 m, 23.VI.2010, ♀, Karakoyunlu, Alican, 850 m, 23.VI.2010, 3 ♀♀, 2 ♂♂, Tuzluca, 900 m, 18.VI.2009, ♂; **Kars:** Sarıkamış, Akkurt, 1650 m, 13.VIII.2009, ♀, Karakurt, 1470 m, 29.VII.2010, 2 ♀♀.

Distribution in Turkey: Bilecik, Burdur, Çanakkale, Denizli, Edirne, İzmir (Önder 1976); Bursa, Sakarya (Önder et al. 1981); Erzurum (Özbek and Alaoğlu 1987); Kahramanmaraş, Kayseri (Kıyak 1990); Diyarbakır, Siirt, Şanlıurfa (Önder et al. 1995); Adana, Aksaray, Ankara, Antalya, Bolu, Çankırı, Çorum, Eskişehir, İçel, Karaman, Kastamonu, Kırıkkale, Konya, Nevşehir, Niğde, Sinop (Lodos et al. 2003); Aegean, Marmara, Central Anatolia and Southeast Anatolia Regions (Önder et al. 2006).

***Opisthotaenia (Opisthotaenia) fulvipes* Reuter 1901**

Material examined: **Artvin:** Ardanoç, Ferhatlı, 573 m, 15.VI.2010, 2 ♀♀, ♂; **Bayburt:** 1650 m, 17.VI.2010, 4 ♀♀, ♂, Aydıntepe, Arpalı, 1550 m, 17.VI.2009, ♀, Çalidere, 1700 m, 17.VI.2010, ♀, ♂, Demirözü, 1650 m, 17.VI.2010, ♂, Kopdağı Pass, 2344 m, 12.VIII.2009, 4 ♀♀, 3 ♂♂; **Erzurum:** Aşkale, 1600 m, 8.VII.2009, ♀, Çayköy, 1691 m, 1.VIII.2010, ♀, Kandilli, N 39°54'15.3", E 040°50'40.7", 1754 m, 19.VI.2012, ♀, Yaylayolu, N 39°46'53.2", E 040°49'51.4", 2108 m, 5.VII.2012, ♀; Aziziye, Rizekent, N 40°09'56.2", E 040°59'53.1", 2088 m, 24.VI.2012, ♀, 2070 m, 30.VII.2010, ♀, Yoncalık, 1900 m, 16.VIII.2014, 5 ♀♀, ♂; Hınıs, N 39°52'33", E 041°16'46", 1955 m, 26.VI.2011, ♀, 1742 m, 2.VII.2010, 6 ♀♀, ♂, Akören, N 39°29'08.6", E 041°42'02.3", 1939 m, 17.VII.2012, ♂; Horasan, 1536 m, 22.VI.2014, ♀, N 40°00'53", E 041°59'06", 1588 m, 22.VII.2014, ♀, Muratbağı, N 40°09'12.2", E 042°03'02.7", 1852 m, 22.VI.2012, ♀; Karayazı, Kırğındere, 2215 m, 2.VII.2010, ♀, 3 ♂♂; Köprüköy, Eğirmez, N 39°58'09.9", E 041°49'20.7", 1670 m, 13.VIII.2011, 3 ♀♀, 2 ♂♂, Eyüpler, N 39°47'0.5", E 041°46'55.4", 1745 m, 26.VI.2011, ♀, 3 ♂♂, Ilıcasu, N 40°5'39.6", E 041°51'57.1", 2111 m, 30.VII.2011, 3 ♀♀, Örentaş, N 40°04'15.1", E 041°50'40.7", 1916 m, 30.VII.2011, ♀; Narman, 1900 m, 24.VII.2009, ♀, Dikmetaş, 2665 m, 17.VII.2010, ♀, İncedere, 1987 m, 21.VII.2010, ♀, 2 ♂♂, Kamışözü, N 40°20'23.3", E 041°47'29.2", 1835 m, 23.VI.2011, 2 ♂♂; Oltu, Başbağlar, N 40°27'56.1", E 041°41'37.4", 1868 m, 6.VII.2012, 3 ♀♀, 3 ♂♂, Çamlıbel, 1700 m, 14.VII.1996, ♀, Demirtaş, N 40°24'58.6", E 041°44'14.4", 1888 m, 6.VII.2012, 3 ♀♀, 2 ♂♂, Özdere, N 40°27'57.7", E 041°44'11.9", 1927 m, 16.VII.2012, 2 ♂♂; Palandöken, Taşlıgüney, 2032 m, 26.VI.2009, 2 ♀♀, N 39°48'41.2", E 041°07'10.0", 1875 m, 5.VII.2012, ♀; Pasinler, Korucuk, 1650 m, 7.VII.2009, ♀, Yayla, N 40°05'42.7", E 041°44'03.5", 1990 m, 17.VII.2011, 2 ♀♀; Pazaryolu, Çiftepinar, N 40°22'05.3", E 041°43'07.4", 1742 m, 15.VII.2012, ♀; Tekman, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1948 m, 16.VII.2011, ♀, ♂, Körsu, 1940 m, 2.VII.2010, ♂; Tortum, N 40°16'37.4", E 041°33'30", 1661 m, 23.VI.2011, 5 ♀♀, 3 ♂♂, Uzundere, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 6.VII.2012, ♀; Yakutiye, Atatürk University field, N 39°48'59.7", E 041°04'32.8", 1880 m, 20.VI.2012, ♂, 1850 m, 24.VI.2009, 7 ♀♀, 4 ♂♂, 25.VI.2009, 2 ♀♀, ♂, 2.VII.2008, ♀, 7.VII.2008, ♀, 8.VII.1986, ♀, 8.VII.1987, 2 ♂♂, 9.VII.1986, 4 ♀♀, 9.VII.1996, ♂, 10.VII.1996, ♂, 13.VII.2009, 5 ♀♀, 20.VII.2009, ♀, ♂, N 39°53'59.1", E 041°14'19.0", 1880 m, 22.VII.2011, ♀, 1850 m, 23.VII.2007, ♀, 4.VIII.2008, ♂, 14.VIII.1998, 2 ♂♂, 17.VIII.1998, ♂; **Kars:** Sarıkamış, Karakurt, 1500 m, 22.VI.2010, 3 ♀♀.

Distribution in Turkey: Amasya, Edirne (Hoberlandt 1955); Afyonkarahisar, Ankara, Çanakkale, Çankırı, Kayseri, Nevşehir (Önder 1976); Amasya, Edirne, Malatya, Niğde (Lodos et al. 2003; Önder et al. 2006); Diyarbakır (Matocq et al. 2014).

***Phoenicocoris obscurellus* (Fallén 1829)**

Material examined: **Erzurum:** Aziziye, Rizekent, N 40°0.9'49.1", E 041°00'03.5", 2097 m, 20.VII.2011, ♀; Şenkaya, Sındıran, N 40°37'14.2", E 042°22'09.3", 1497 m, 19.VII.2011, ♂; Yakutiye, Atatürk University field, 1850 m, 14.VII.1996, ♂, 15.VII.1998, 6 ♂♂, 16.VII.1996, ♀, ♂, 18.VII.1997, ♂, 31.VII.1998, 3 ♂♂, 1.VIII.1998, 3 ♂♂, 2.VIII.1998, ♀, 4 ♂♂, 3.VIII.1998, 3 ♂♂, 5.VIII.1998, 2 ♂♂, 23.VIII.1998, ♀, 7 ♂♂, 31.VIII.1996, 2 ♂♂.

Distribution in Turkey: Erzurum (Yıldırım 2002).

***Pilophorus cinnamopterus* (Kirschbaum 1856)**

Material examined: **Artvin:** Yusufeli, Demirkent, 5.VI.1991, ♀, Morkaya, 6.VI.1991, ♀; **Erzurum:** İspir, Madenköprübaşı, 24.VII.1991, ♀; Oltu, 11.VII.1991, 2 ♂♂; Tortum, Pehlivanlı, 13.VIII.1991, ♀; Yakutiye, Atatürk University field, 1850 m, 10.VII.1996, ♂, 18.VIII.1997, ♀, 23.VIII.1996, ♀; **Kars:** Kağızman, 19.VII.1991, ♀.

Distribution in Turkey: Artvin, Balıkesir, Bolu, Çanakkale, Kahramanmaraş (Önder 1976; Önder et al. 2006); İstanbul (Önder et al. 1981); İzmir (Tezcan et al. 2010).

***Pilophorus clavatus* (Linnaeus, 1767)**

Material examined: **Artvin:** Yusufeli, Morkaya, 6.VII.1991, ♀; **Erzurum:** Yakutiye, Atatürk University field, 1850 m, 26.VII.1997, ♀.

Distribution in Turkey: Tokat (Çam 1988); Adana, Ankara, Bartın, Çankırı, İçel, Kahramanmaraş, Kayseri, Konya, Nevşehir, Yozgat (Lodos et al. 2003); Nevşehir (Kıyak et al. 2004); Afyonkarahisar, Adana, Amasya, Ankara, Artvin, Balıkesir, Bartın, Bilecik, Bursa, Burdur, Çankırı, Gaziantep, İzmir, Kahramanmaraş, Kırklareli, Konya, Kütahya, Manisa, Nevşehir, Rize, Tekirdağ, Yozgat (Önder et al. 2006).

***Pilophorus pusillus* Reuter 1878**

Material examined: **Antalya:** 22.VIII.1984, ♀, ♂; **Artvin:** Yusufeli, Morkaya, 6.VI.1991, ♀; **Erzurum:** Pazaryolu, 23.VII.1991, ♀; Tortum, Pehlivanlı, 13.VIII.1991, ♀, 2 ♂♂; Yakutiye, Atatürk University field, 1850 m, 21.VIII.1998, ♀; **Iğdır:** Akyumak, 18.VI.1991, 2 ♀♀, Melekli, 18.VII.1991, ♀; **Kars:** Kağızman, 19.VII.1991, 2 ♀♀, ♂.

Distribution in Turkey: Iğdır (Hoberlandt 1955); Afyonkarahisar, Artvin, Aydın, Balıkesir, Bilecik, Burdur, Çanakkale, Denizli, Edirne, Isparta, Kırklareli, Kocaeli, Muğla, Sakarya, Samsun, Sinop, Tekirdağ, Trabzon, Uşak (Önder 1976); Bursa (Önder et al. 1981); Antalya (Yayla 1983; Özkan 1984); Tokat (Çam 1988); Adana, Ankara, Bolu, Çorum, Eskişehir, Hatay, İçel, Kahramanmaraş, Karabük, Kastamonu, Kayseri, Kırşehir, Konya, Nevşehir, Yozgat, Zonguldak (Lodos et al.

2003); West, Northwest, North and South Anatolia Regions (Önder et al. 2006); İzmir (Tezcan et al. 2010).

***Plagiognathus (Plagiognathus) bipunctatus* Reuter 1883**

Material examined: **Artvin:** Ardanuç, Ferhatlı, 573 m, 15.VI.2010, 2 ♀♀, Yusufeli, Sebzeciler, 500 m, 16.VI.2010, 2 ♀♀; **Bayburt:** 1650 m, 17.VI.2010, 2 ♂♂, 1550 m, 12.VIII.2009, 3 ♀♀, Kopdağı Pass, 2344 m, 12.VIII.2009, 3 ♀♀, Aydın-tepe, Arpalı, 1550 m, 17.VI.2010, 2 ♀♀, Çalidere, 1700 m, 17.VI.2010, 3 ♀♀, ♂, Demirözü, 1650 m, 17.VI.2009, 6 ♀♀; **Erzincan:** 1185 m, 10.VI.2010, ♀, ♂, Akyazı, 1202 m, 11.VI.2010, 4 ♀♀, ♂, Mercan, 11.VII.1990, 7 ♀♀, 3 ♂♂, Refahiye, 1500 m, 20.VI.2009, ♀, Tercan, 1408 m, 10.VI.2010, 3 ♀♀; **Erzurum:** Aşkale, Adaçay, 11.VII.1990, 3 ♀♀, ♂, Atlıkonak, N 39°55'36.5", E 040°56'16.9", 1757 m, 5.VII.2012, ♂, 1760 m, 9.VIII.2011, 4 ♀♀, 4 ♂♂, Büyükgeçit, N 39°57'32.3", E 040°46'17.1", 1730 m, 18.VII.2012, 2 ♀♀, Çayköy, N 39°56'46.6", E 040°48'27.4", 1720 m, 21.VI.2011, ♂, N 39°58'35.9", E 040°55'49.8", 1876 m, 23.VII.2011, ♀, Dereköy, N 39°47'33.3", E 040°43'57.8", 1929 m, 5.VII.2012, ♀, ♂, Gökçebük, N 39°56'55.8", E 040°48'22.6", 1699 m, 23.VII.2011, ♀, ♂, Gölören, N 40°01'28.9", E 040°47'55.1", 1897 m, 18.VII.2012, ♀, Gökçebük, 1699 m, 23.VII.2011, ♀, Hatuncuk, N 39°48'15.6", E 040°42'09.3", 1869 m, 5.VII.2012, ♀, ♂, Kandilli, N 39°54'38.5", E 040°51'19.9", 1710 m, 21.VI.2011, 3 ♀♀, 2 ♂♂, 1737 m, 1.VIII.2010, ♀, Kavurmaçukur, N 39°45'39.9", E 040°51'58.4", 2233 m, 5.VII.2012, 7 ♂♂, Koşapınar, N 40°00'55.4", E 040°47'39.3", 1886 m, 18.VII.2012, ♀, Küçükgeçit, N 39°56'43.2", E 040°47'12.1", 1709 m, 23.VII.2011, 4 ♀♀, 2 ♂♂, Tazegül, 26.VI.1990, ♂, Aziziye, Ağzıaçık Pass, 2300 m, 30.VII.2011, 2 ♀♀, ♂, Alaca, N 39°55'50.7", E 040°58'00.9", 1751 m, 5.VII.2012, 2 ♀♀, Başçakmak, N 40°00'05.6", E 040°54'39.3", 1860 m, 20.VII.2011, 3 ♀♀, ♂, Dallıkavak Pass, N 40°10'33.55", E 040°58'16.1", 2349 m, 20.VII.2011, ♀, Eskipolat, N 40°4'10", E 040°56'8.2", 1748 m, 20.VII.2011, ♂, 1857 m, 30.VII.2010, 3 ♀♀, ♂, Ortabahçe, N 39°53'35.3", E 040°51'19.0", 1763 m, 5.VII.2012, 2 ♂♂, Özbek, N 39°48'57.1", E 041°04'39.6", 1930 m, 5.VIII.2011, ♀, Paşayurdu, N 39°59'42.3", E 041°00'18.3", 1836 m, 18.VII.2012, ♀, Rizekent, N 40°09'56.2", E 040°59'53.1", 2088 m, 24.VI.2012, ♂, 2070 m, 30.VII.2010, 9 ♀♀, 2 ♂♂, Tebrizcik, N 39°56'24.6", E 040°59'46.7", 1750 m, 5.VII.2012, ♂, Toprakkale, 2157 m, 30.VII.2010, 8 ♀♀, Yoncalık, 1900 m, 16.VIII.2014, 7 ♀♀, 2 ♂♂; Çat, N 39°35'42.4", E 040°57'59.6", 1913 m, 23.VII.2011, 4 ♀♀, Aşağı Çat, N 39°38'29.5", E 041°00'11.7", 2065 m, 9.VIII.2011, 2 ♂♂, Güzelyurt, N 39°46'4.7", E 041°2'42.6", 2099 m, 5.VIII.2011, ♀, Kom, N 39°43'41.9", E 040°58'10.1", 2206 m, 5.VII.2012, ♂, Sarıkaya, N 39°38'15.1", E 040°52'37.7", 1798 m, 11.VIII.2012, ♀, Yaylasuyu, 2322 m, 29.VI.2009, ♂, N 39°43'45.0", E 040°56'34.0", 2203 m, 5.VII.2012, 2 ♀♀, ♂, Yukarı Çat, N 39°39'04.0", E 041°01'17.1", 2127 m, 18.VII.2012, 2 ♀♀, N 39°39'46.3", E 041°00'56.2", 2162 m, 23.VII.2011, 2 ♀♀; Hıms, N 39°52'33", E 041°16'46", 1955 m, 26.VI.2011, 2 ♂♂, 1742 m, 2.VII.2010, ♀, ♂, Yolüstü, N 39°19'37.2", E 041°44'37.7", 1664 m, 17.VI.2012, ♂; Horasan, Çayırdüzü, N 40°08'21.9", E 042°03'47.4", 1799 m, 22.VI.2012, 3 ♀♀, ♂, Dönertaş, N 40°13'33.4",

E 042°06'58.5", 2009 m, 13.VIII.2012, ♂; İspir, 1300 m, 7.VIII.2009, ♀, Akseki, N 40°17'15.7", E 041°00'23.6", 2190 m, 20.VII.2011, 2 ♀♀, 3 ♂♂, Elmalı, N 40°25'31.9", E 040°50'13.6", 1328 m, 20.VII.2011, 2 ♀♀, 3 ♂♂, Güneyköy, N 40°19'59.6", E 040°56'20.5", 2024 m, 24.VII.2011, ♀, İncesu, 2100 m, 20.VIII.2009, 2 ♀♀, İspir Pass, 1950 m, 20.VIII.2009, 3 ♀♀, Kirazlı, N 40°26'47.9", E 040°53'09.2", 1207 m, 24.VII.2011, ♀, Madenköprübaşı, N 40°25'58.4", E 040°50'11.3", 1307 m, 20.VII.2011, ♀, N 40°26'34.3", E 040°50'42.4", 1245 m, 4.VIII.2012, ♂, 1200 m, 20.VIII.2009, ♀, Yukarı Özbağ, 1175 m, 30.VII.2010; Karaçoban, Duman, N 39°18'22", E 041°55'5", 1560 m, 26.VI.2011, ♂; Karayazı, Aşağı İncesu, N 39°40'45.5", E 041°57'05.9", 2098 m, 17.VII.2012, ♀, Çatalören, N 39°46'32.1", E 042°01'43.1", 2313 m, 16.VII.2011, ♀, ♂, Kırgındere, 2215 m, 2.VII.2010, 2 ♀♀, Yukarı Söylemez, 1896 m, 2.VII.2010, 2 ♀♀, 2 ♂♂, N 39°36'46.8", E 041°50'24.3", 1905 m, 17.VII.2012, 2 ♀♀; Köprüköy, 1720 m, 2.VII.2010, ♂, Çatalören, N 39°46'36.1", E 042°01'49.2", 2310 m, 17.VII.2012, ♂, Eğirmez, N 39°58'09.9", E 041°49'20.7", 1670 m, 17.VI.2012, ♂, N 39°58'09.9", E 041°49'20.7", 1670 m, 13.VIII.2011, 6 ♀♀, 6 ♂♂, Eyüpler, N 39°47'0.5", E 041°46'55.4", 1745 m, 26.VI.2011, ♂, Güzelhisar, 1930 m, 2.VII.2010, 2 ♀♀, Ilıcasu, 2380 m, 17.VII.2010, 2 ♀♀, 2 ♂♂, N 40°5'39.6", E 041°51'57.1", 2111 m, 30.VII.2011, 3 ♀♀, ♂, Örentaş, 2038 m, 29.VII.2010, 3 ♀♀, Pekecik, N 39°53'12.9", E 041°53'08.3", 1722 m, 26.VI.2011, 4 ♂♂, Yücelik, N 39°46'02.7", E 042°02'07.8", 2288 m, 17.VII.2012, ♀; Narman, 2.VII.1987, ♀, 1900 m, 24.VII.2009, 3 ♀♀, 1428 m, 4.VIII.2009, 2 ♂♂, 1557 m, 4.VIII.2009, 3 ♀♀, Çimenli, N 40°09'31.3", E 041°53'50.5", 2326 m, 30.VI.2012, ♀, ♂, N 40°8'47", E 041°53'22.5", 2311 m, 19.VII.2011, 2 ♀♀, ♂, Demirdağ, N 40°19'23.5", E 041°42'45.5", 2028 m, 16.VII.2012, 2 ♂♂, Göllü, N 40°13'52.1", E 041°52'06.0", 1842 m, 30.VI.2012, ♀, ♂, N 40°14'7.9", E 041°51'57.2", 1083 m, 30.VII.2011, 2 ♀♀, İncedere, 1987 m, 21.VII.2010, 2 ♀♀, ♂, Kışlaköy, N 40°19'20.7", E 042°02'08.3", 1892 m, 13.VIII.2012, 2 ♀♀, ♂, Kilimli, N 40°19'50.9", E 041°58'50.3", 1726 m, 16.VII.2012, 4 ♀♀, Mahmutçavuş, N 40°20'18.8", E 041°55'36.3", 1560 m, 16.VII.2012, ♀, ♂, Samikale, N 40°21'57.5", E 041°55'20.6", 1541 m, 30.VII.2011, ♀, Şehitler, N 40°19'54.9", E 041°46'39.2", 1884 m, 16.VII.2012, ♀, Toygarlı, N 40°12'18.9", E 041°53'16.6", 2071 m, 30.VI.2012, 2 ♂♂, 2123 m, 10.VII.2011, ♀, N 40°12'42.9", E 041°53'17.8", 2123 m, 19.VII.2011, 3 ♀♀, ♂, Yanıktaş, N 40°16'52.7", E 041°52'18.1", 1612 m, 30.VI.2012, ♀, ♂; Oltu, 1180 m, 24.VII.2009, ♀, 1750 m, 4.VIII.2009, 4 ♀♀, 3 ♂♂, Ayvalı, 700 m, 16.VI.2010, ♀, Başbağlar, N 40°27'56.1", E 041°41'37.4", 1868 m, 6.VII.2012, 2 ♀♀, N 40°28'1.1", E 041°40'27.6", 1925 m, 13.VII.2011, 2 ♀♀, 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, ♀, ♂, 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", 1682 m, 31.VII.2011, ♀, ♂, Demirtaş, N 40°24'58.6", E 041°44'14.4", 1888 m, 6.VII.2012, ♀, İğdeli, N 40°32'44.8", E 041°50'27.6", 1660 m, 30.VI.2012, 4 ♀♀, Duralar, N 40°28'31.5", E 041°58'42.4", 1421 m, 30.VII.2011, ♀, ♂, İnancı, N 40°27'50.1", E 041°42'19.9", 1823 m, 6.VII.2012, ♀, 2 ♂♂, Orcuk, N 40°29'44.9", E 041°49'01.0", 1556 m, 6.VII.2012, ♂, Özdere, N 40°25'19.5", E 041°43'25.1", 1822 m,

6.VII.2012, ♂, N 40°27'57.7", E 041°44'11.9", 1927 m, 16.VII.2012, ♂, Sarısaz, N 40°31'56.1", E 041°54'36.9", 1388 m, 5.VIII.2012, ♀, Toprakkale, N 40°27'55.5", E 041°59'21.1", 1416 m, 23.VI.2011, 3 ♀♀, 3 ♂♂, Tutmaç, N 40°26'46.6", E 041°44'06.5", 1756 m, 6.VII.2012, 4 ♀♀, ♂, N 40°27'23.2", E 041°44'41.4", 1720 m, 16.VII.2012, ♀, Yolboyu, 1229 m, 4.VIII.2009, ♀; Olur, Boğazgören, N 40°49'19.2", E 042°12'42.6", 1168 m, 19.VII.2012, ♀, Kaban, N 40°46'41.1", E 042°12'00.6", 1215 m, 19.VII.2012, ♂, Kaledibi, 1057 m, 4.VIII.2009, ♀, Yeşilbağlar, 1000 m, 16.VI.2010, 6 ♀♀; Palandöken, 2300 m, 21.VII.2010, 5 ♀♀, ♂, 2400 m, 21.VII.2010, 6 ♀♀, 2 ♂♂, N 39°51'56.4", E 041°16'19.7", 2155 m, 22.VII.2012, 4 ♀♀, ♂, 2300 m, 1.VIII.2010, 3 ♀♀, 2000 m, 8.VIII.2009, 4 ♀♀, Kümbet, N 39°48'59.7", E 041°43'2.8", 1832 m, 5.VIII.2011, 3 ♀♀, N 39°48'57.8", E 041°0.4'33", 1836 m, 9.VIII.2011, ♀, ♂, Taşlıgüney, 11.VII.1990, 7 ♀♀, 3 ♂♂, Yağmurcuk, N 39°47'13.2", E 041°06'06.1", 2010 m, 9.VIII.2011, 4 ♀♀, 3 ♂♂; Pasinler, 15.VI.1986, ♀, 29.VI.1987, ♀, ♂, 11.VII.1987, ♀, ♂, 1600 m, 25.VII.2009, ♀, Büyüktuy, 1800 m, 2.VII.2010, 2 ♀♀, ♂, N 39°58'46.7", E 041°27'58", 1819 m, 30.VII.2011, ♀, Çöğender, 1740 m, 22.VI.2012, 3 ♀♀, ♂, N 39°59'15.6", E 041°31'07.6", 1768 m, 30.VII.2011, ♀, Kurbançayırı, N 40°01'59.3", E 041°37'38.1", 1760 m, 12.VIII.2012, ♀, Ovaköy, N 39°58'57.7", E 041°29'40.8", 1803 m, 30.VII.2011, ♀, ♂, N 39°58'56", E 041°29'38", 1782 m, 31.VII.2014, 3 ♀♀, Sansar Stream, N 40°04'21.5", E 041°43'28.5", 1877 m, 17.VII.2011, ♀, Serçeboğazı, N 40°00'39.4", E 041°38'23.9", 1725 m, 12.VIII.2012, ♂, Ügümü, N 40°00'39.9", E 041°43'57.0", 1724 m, 17.VII.2011, ♀, 3 ♂♂, Yayla, N 40°05'42.7", E 041°44'03.5", 1990 m, 17.VII.2011, 3 ♀♀, Yiğitpınarı, N 40°02'15.6", E 041°35'51.0", 1815 m, 22.VII.2012, ♀; Pazaryolu, N 40°25'12.8", E 040°46'13.5", 1450 m, 24.VII.2011, ♂, N 40°25'12.1", E 040°47'07.7", 1495 m, 24.VII.2011, ♀, ♂, Göztepe, N 40°23'10.1", E 040°43'44.6", 1672 m, 15.VII.2012, ♂, Gülçimen, N 40°24'36.4", E 040°47'28.5", 1663 m, 20.VII.2011, ♂; Şenkaya, 2.VII.1987, 2 ♀♀, ♂, Deliktaş, N 40°41'57.1", E 042°15'52.7", 1219 m, 13.VII.2011, ♀, Esenyurt, N 40°25'40.2", E 042°18'15.2", 1622 m, 14.VII.2012, 4 ♀♀, İçmesu, N 40°25'27.0", E 042°18'32.1", 1656 m, 14.VII.2012, ♀, İkizpınar, N 40°36'57.4", E 042°21'30.9", 1589 m, 31.VII.2011, 6 ♀♀, 2 ♂♂, Sındıran, N 40°37'20", E 042°21'34", 1409 m, 14.VII.2014, 2 ♀♀, ♂, Taht, N 40°38'29", E 042°20'0.3", 1232 m, 14.VII.2014, ♂, N 40°37'59.4", E 042°20'39.7", 1283 m, 31.VII.2011, ♂; Tekman, Çiçekdağı, N 39°34'40.8", E 041°44'26.8", 1846 m, 26.VI.2011, 5 ♂♂, Geyikli, N 39°47'48.5", E 042°4'31.4", 2185 m, 16.VII.2011, ♂, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1948 m, 16.VII.2011, ♂, Körsu, 1940 m, 2.VII.2010, ♀, ♂, N 39°34'8.2", E 041°44'30.2", 1901 m, 16.VII.2011, 8 ♀♀, 2 ♂♂; Tortum, 1653 m, 15.VI.2010, ♀, 4 ♂♂, N 40°16'37.4", E 041°33'30", 1661 m, 23.VI.2011, ♂, 2.VII.1987, 2 ♀♀, 22.VII.1987, 6 ♀♀, 7 ♂♂, N 40°16'38", E 041°33'29.9", 1660 m, 31.VII.2011, 2 ♀♀, Akbaba, N 40°13'32.6", E 041°29'4.1", 2073 m, 31.VII.2011, 3 ♀♀, ♂, Aksukapı, N 40°23'58.8", E 041°32'46.4", 1648 m, 13.VII.2011, 3 ♀♀, 5 ♂♂, Aktaş, N 40°15'40.5", E 041°32'39.2", 1765 m, 31.VII.2011, 2 ♀♀, ♂, Aşağı Sivri, N 40°19'33.8", E 041°31'46.9", 1546 m, 16.VII.2012, ♀, Derekapı, 950 m, 15.VI.2010, 5 ♀♀, 5 ♂♂, 1247 m, 9.VII.2011, ♀, N 40°24'47.2", E 041°29'19.4", 1247 m,

13.VII.2011, 5 ♀♀, 2 ♂♂, Kireçli Pass, 2400 m, 31.VII.2010, 6 ♀♀, Taşbaşı, N 40°14'01.4", E 041°30'11.9", 1968 m, 6.VII.2012, ♀, 4 ♂♂, N 40°15'26.6", E 041°32'13.8", 1816 m, 13.VII.2011, 5 ♀♀, 2 ♂♂, Yukarı, Sivri, N 40°19'34", E 041°35'51.6", 1734 m, 23.VI.2011, ♂, N 40°20'27.5", E 041°39'01.1", 1962 m, 16.VII.2012, 3 ♀♀; Uzundere, Gölbaşı, N 40°36'04.0", E 041°33'43.1", 1260 m, 7.VIII.2011, ♀, Kirazlı, N 40°34'26.9", E 041°38'52.5", 1231 m, 21.VII.2012, ♀, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 6.VII.2012, 2 ♀♀, ♂, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, 4 ♀♀, ♂; Yakutiye, Atatürk University field, 1850 m, 15.V.2010, ♀, 25.VI.2009, 2 ♀♀, 2.VII.1987, 3 ♀♀, 3.VII.1987, ♀, 4 ♂♂, 9.VII.1986, ♀, ♂, 13.VII.2009, 2 ♀♀, 21.VII.1987, 3 ♀♀, 22.VII.2009, 4 ♀♀, 23.VII.1987, ♀, ♂, 29.VII.2009, ♀, 3.VIII.1998, ♀, 7.VIII.1996, ♂, 19.VIII.1998, ♂, Dumlubaba, Güngörmez, 2500 m, 1.VII.2010, 3 ♂♂, 2200 m, 19.VIII.2009, 3 ♀♀, Güzelyayla, 2000 m, 19.VIII.2009, 6 ♀♀, Karagöbek, N 40°10'15.1", E 041°26'14.9", 2033 m, 13.VII.2011, 4 ♀♀, 2 ♂♂, N 40°09'28.9", E 041°25'58.5", 1961 m, 16.VII.2012, ♀, N 40°09'57.8", E 041°26'8.1", 1993 m, 31.VII.2011, 3 ♀♀, ♂, 1998 m, 3.VIII.2009, 2 ♀♀; **Iğdır:** Melekli, 850 m, 23.VI.2010, ♀, 2 ♂♂, Aralık, 830 m, 23.VI.2010, ♂; **Kars:** Kağızman, 19.VII.1991, ♀, Sarıkamış, 1900 m, 13.VIII.2009, 3 ♀♀, Akkurt, 1650 m, 13.VIII.2009, 3 ♀♀, Karakurt, 1500 m, 13.VIII.2009, 11 ♀♀, 3 ♂♂; **Ordu:** Perşembe, 31.VII.1991, ♂.

Distribution in Turkey: Adana, Ankara (Hoberlandt 1955); Afyonkarahisar, Ağrı, Amasya, Artvin, Balıkesir, Burdur, Çanakkale, Edirne, Elazığ, Kırklareli, Kütahya, Manisa, Muş, Ordu, Sivas, Tekirdağ (Önder 1976); Malatya, Van (Bingöl 1978); Denizli, Uşak (Giray 1980); Bolu, Bursa, İstanbul, Kocaeli, Sakarya (Önder et al. 1981); Diyarbakır (Önder et al. 1995); Yozgat (Tamer et al. 1998); Antalya, Çankırı, Çorum, Eskişehir, Gaziantep, Hatay, İçel, Kahramanmaraş, Karabük, Karaman, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Kilis, Konya, Nevşehir, Niğde, Osmaniye, Sinop (Lodos et al. 2003); almost all regions (Önder et al. 2006); İzmir (Tezcan et al. 2010); Mardin, Siirt (Matocq and Özgen 2010); Diyarbakır (Matocq et al. 2014).

***Plagiognathus chrysanthemi* (Wolff 1804)**

Material examined: **Erzurum:** Aşkale, 1600 m, 8.VII.2009, ♂, Dereköy, N 39°47'33.3", E 040°43'57.8", 1929 m, 5.VII.2012, ♂, Hatuncuk, N 39°48'15.6", E 040°42'09.3", 1869 m, 5.VII.2012, 2 ♂♂, Kavurmaçukur, N 39°45'39.9", E 040°51'58.4", 2233 m, 5.VII.2012, 2 ♂♂, Yaylayolu, N 39°46'53.2", E 040°49'51.4", 2108 m, 5.VII.2012, ♂; Aziziye, Ağzıaçık Pass, 2300 m, 30.VII.2010, 2 ♀♀, 10 ♂, Dallıkavak, N 40°10'33.55", E 040°58'16.1", 2349 m, 20.VII.2011, 2 ♂♂, N 40°10'33.3", E 040°58'14.3", 2243 m, 24.VII.2011, 2 ♂♂, 30.VII.2010, ♂, Eskipolat, N 40°4'10", E 040°56'8.2", 1748 m, 20.VII.2011, 2 ♂♂, Gelinkaya, N 40°01'09.6", E 040°54'48.1", 1796 m, 24.VI.2012, 2 ♂♂, Kümbet, N 39°48'57.8", E 041°04'33", 1836 m, 9.VIII.2011, ♂, Paşayurdu, N 39°59'42.3", E 041°00'18.3", 1836, 18.VII.2012, ♂, Rizekent, 2070 m, 30.VII.2010, ♂, Toprakkale, 2157 m, 30.VII.2010, ♀, ♂, Yoncalık, 1900 m, 16.VIII.2014, ♂; Çat, N 39°35'42.4", E 040°57'59.6", 1913 m, 23.VII.2011, ♀, ♂, Yukarı Çat, N 39°39'04.0", E 041°01'17.1", 2127 m, 18.VII.2012,

♂, Hınıs, 1742 m, 2.VII.2010, 2 ♂♂; Horasan, Kırkgözüler, 1760 m, 15.VI.2010, ♂; İspir, Akseki, N 40°17'15.7", E 041°00'23.6", 2190 m, 20.VII.2011, 2 ♂♂, Güneyköy, N 40°19'59.6", E 040°56'20.5", 2024 m, 24.VII.2011, 2 ♀♀, ♂, Madenköprübaşı, N 40°25'58.4", E 040°50'11.3", 1307 m, 20.VII.2011, ♂; Karayazı, Çatalören, N 39°46'32.1", E 042°01'43.1", 2313 m, 16.VII.2011, ♂, Kırğındere, 2215 m, 2.VII.2010, 3 ♂♂, Yukarı Söylemez, 1896 m, 2.VII.2010, 2 ♂♂; Köprüköy, Eğirmez, N 39°58'09.9", E 041°49'20.7", 1670 m, 13.VIII.2011, ♂, Eyüpler, N 39°47'0.5", E 041°46'55.4", 1745 m, 26.VI.2011, ♂, Geyikli, N 39°48'02.1", E 042°04'05.4", 2144 m, 17.VII.2012, 2 ♂♂, Güzelhisar, 1930 m, 2.VII.2010, 2 ♂♂, Ilıcasu, 2380 m, 17.VII.2010, ♀, N 40°5'39.6", E 041°51'57.1", 2111 m, 30.VII.2011, ♂, Pekecik, N 39°53'12.9", E 041°53'08.3", 1722 m, 26.VI.2011, ♂, Yeşilova, N 39°46'02.7", E 042°02'07.8", 2288 m, 17.VII.2012, 2 ♂♂; Narman, N 40°21'09.9", E 041°55'02.0", 1543 m, 30.VI.2012, ♂, 1900 m, 24.VII.2009, ♀, 2 ♂♂, Çimenli, N 40°8'47", E 041°53'22.5", 2311 m, 19.VII.2011, 2 ♂♂, 2308 m, 4.VIII.2009, 2 ♂♂, Demirdağ, N 40°19'23.5", E 041°42'45.5", 2028 m, 16.VII.2012, 2 ♂♂, Göllü, N 40°13'52.1", E 041°52'06.0", 1842 m, 30.VI.2012, 3 ♂♂, N 40°14'7.9", E 041°51'57.2", 1083 m, 30.VII.2011, ♂, Samikale, N 40°21'57.5", E 041°55'20.6", 1541 m, 30.VII.2011, ♀, Şehitler, N 40°19'54.9", E 041°46'39.2", 1884 m, 16.VII.2012, ♂, Toygarlı, N 40°12'42.9", E 041°53'17.8", 2123 m, 19.VII.2011, 3 ♂♂; Oltu, N 40°32'43.9", E 41°59'44.0", 1455 m, 8.VI.2012, 2 ♂♂, Başbağlar, N 40°27'56.1", E 041°41'37.4", 1868 m, 6.VII.2012, 2 ♂♂, Çamlıbel, N 40°29'36.1", E 041°45'45.2", 1775 m, 13.VII.2011, ♂, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, 3 ♂♂, Demirtaş, N 40°24'58.6", E 041°44'14.4", 1888, 6.VII.2012, ♂, İğdeli, N 40°32'44.8", E 041°50'27.6", 1660 m, 30.VI.2012, 3 ♂♂, İnancı, N 40°27'44.4", E 041°42'42", 1812 m, 31.VII.2011, ♀, Orcuk, N 40°29'44.9", E 041°49'01.0", 1556 m, 6.VII.2012, 2 ♂♂, Özdere, N 40°25'19.5", E 041°43'25.1", 1822 m, 6.VII.2012, 3 ♂♂, N 40°27'57.7", E 041°44'11.9", 1927 m, 16.VII.2012, ♂, 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, 3 ♂♂, N 40°27'23.2", E 041°44'41.4", 1720 m, 16.VII.2012, ♂, Yarbaşı, N 40°26'18.9", E 041°43'50.2", 1784 m, 6.VII.2012, ♂; Olur, Boğazgören, N 40°49'19.2", E 042°12'42.6", 1168 m, 19.VII.2012, ♂, Kaban, N 40°46'41.1", E 042°12'00.6", 1215 m, 19.VII.2012, ♀, ♂, Yeşilbağlar, 1000 m, 16.VI.2010, ♀, 2 ♂♂; Palandöken, Nenehatun, 1975 m, 29.VII.2010, ♀, Palandöken Mountain, 2300 m, 21.VII.2010, 2 ♂♂, N 39°51'56.4", E 041°16'19.7", 2155 m, 22.VII.2012, 3 ♂♂, Yağmurcuk, N 39°47'13.2", E 041°06'06.1", 2010 m, 9.VIII.2011, ♂; Pasinler, Büyüktuy, 1800 m, 2.VII.2010, ♀, 3 ♂♂, N 39°58'46.7", E 041°27'58", 1819 m, 30.VII.2011, ♂, Demirdöven, 1727 m, 29.VII.2010, ♂, Ügümü, N 40°00'39.9", E 041°43'57.0", 1724 m, 17.VII.2011, ♂; Pazaryolu, N 40°25'02.8", E 040°46'41.3", 1452, 15.VII.2012, ♀, ♂, N 40°25'13.1", E 040°46'13.9", 1445 m, 20.VII.2011, ♂, N 40°25'12.8", E 040°46'13.5", 1450 m, 24.VII.2011, ♂, Çiftepinar, N 40°22'05.3", E 041°43'07.4", 1742 m, 15.VII.2012, ♂, Göztepe, 1672 m, 15.VII.2012, 2 ♂♂, Gülçimen, N 40°24'36.4", E 040°47'28.5", 1663 m, 20.VII.2011, ♂; Şenkaya, Gözebaşı, N 40°24'39.9", E 042°18'11.5", 1794 m, 14.VII.2012, 2 ♂♂, İkizpinar, N

40°36'57.4", E 042°21'30.9", 1589 m, 31.VII.2011, 2 ♂♂, Sındıran, N 40°37'20", E 042°21'34", 1409 m, 14.VII.2014, ♀; Tekman, Güzeldere, N 39°49'17.1", E 042°00'19.8", 1948 m, 16.VII.2011, ♂; Tortum, N 40°16'37.4", E 041°33'30", 1661 m, 23.VI.2011, 4 ♂♂, ♀, Aksukapı, 1653 m, 15.VI.2010, 2 ♀♀, ♂, N 40°23'58.8", E 041°32'46.4", 1648 m, 13.VII.2011, 3 ♂♂, 1573 m, 21.VII.2010, ♂, Aktaş, N 40°15'40.5", E 041°32'39.2", 1765 m, 31.VII.2011, ♂, Aşağı Sivri, N 40°19'33.8", E 041°31'46.9", 1546 m, 16.VII.2012, ♂, Derekapı, 950 m, 15.VI.2010, 2 ♂♂, N 40°24'47.2", E 041°29'19.4", 1247 m, 13.VII.2011, ♂, Kireçli Pass, 2400 m, 31.VII.2010, ♂, 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, ♂, 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°36'30.1", E 041°32'51.2", 1282 m, 14.VIII.2012, ♂, Gölbaşı, N 40°35'34.2", E 041°34'40.9", 1260 m, 7.VIII.2011, 2 ♂♂, Kirazlı, N 40°34'26.9", E 041°38'52.5", 1231 m, 21.VII.2012, ♂, Yayla, N 40°27'48.6", E 041°39'32.3", 2005 m, 6.VII.2012, 2 ♂♂, N 40°27'48.6", E 041°39'32.3", 2005 m, 13.VII.2011, ♂; Yakutiye, Atatürk University field, 1800 m, 26.VI.1996, ♂, 2.VII.2008, ♂, 9.VII.1986 m, ♂, 14.VII.1986, ♀, 27.VII.2010, ♀, 1850 m, 3.VIII.1998, ♀, Dumlubaba, Güngörmez, 1950 m, 1.VII.2010, 8 ♂, 2500 m, 1.VII.2010, ♂, Güzelyayla, 2000 m, 19.VIII.2009, 2 ♀♀, 4 ♂♂, Karagöbek, N 40°10'15.1", E 041°26'14.9", 2033 m, 13.VII.2011, 2 ♂♂, N 40°09'28.9", E 041°25'58.5", 1961, 16.VII.2012, ♂, N 40°09'57.8", E 041°26'8.1", 1993 m, 31.VII.2011, ♀, ♂, 1998 m, 3.VIII.2009, ♀, Yeşilyayla, 1950 m, 1.VII.2010, ♀, 3 ♂♂.

Distribution in Turkey: Aydın, Bilecik, Bursa, Edirne, İstanbul, Kütahya, Manisa, Mersin, Muğla, Sakarya, Sivas, Şanlıurfa (Önder 1976); Bolu, Bursa, Kocaeli (Önder et al. 1981); Diyarbakır, Gaziantep (Önder et al. 1995); İçel (Lodos et al. 2003); Adana, Hatay, Kahramanmaraş, Kayseri (Önder et al. 2006); İzmir (Tezcan et al. 2010); Diyarbakır (Matocq et al. 2014).

***Plagiognathus fulvipennis* (Kirschbaum 1856)**

Material examined: Erzurum: Karayazı, Yukarı Söylemez, 1896 m, 2.VII.2010, ♀; Köprüköy, Güzelhisar, 1930 m, 2.VII.2010, 2 ♀♀; Narman, Mahmutçavuş, N 40°20'18.8", E 041°55'36.3", 1560 m, 16.VII.2012, ♂; Oltu, Çamlıbel, N 40°29'06", E 041°45'47", 1635 m, 14.VII.2014 m, ♀; Pazaryolu, 1010 m, 7.VIII.2009, ♀; Tortum, Aksukapı, N 40°23'58.8", E 041°32'46.4", 1648 m, 13.VII.2011, 2 ♂♂; Yakutiye, Karagöbek, N 40°09'57.8", E 041°26'8.1", 1993 m, 31.VII.2011, ♂.

Distribution in Turkey: Ankara, Edirne (Hoberlandt 1955); Denizli, Erzurum, Isparta, Kars, Kırklareli, Mersin, Muğla (Önder 1976); Bolu, Bursa, İstanbul, Kocaeli, Sakarya (Önder et al. 1981); Diyarbakır (Önder et al. 1995); İçel (Lodos et al. 2003); Adana, Antalya, Gaziantep, Hatay, Kahramanmaraş, Konya, Nevşehir, Osmaniye (Önder et al. 2006); İzmir (Tezcan et al. 2010); Diyarbakır (Matocq et al. 2014).

***Psallus lepidus* Fieber 1858**

Material examined: Erzurum: Yakutiye, Atatürk University field, 1850 m, 15.VII.1982, 4 ♀♀, 3 ♂♂.

Distribution in Turkey: Hakkâri, Kırklareli, Tekirdağ, (Önder 1976; Önder et al. 2006); Diyarbakır (Önder et al. 1995); Bartın, Zonguldak (Lodos et al. 2003).

***Psallus oleae* Wagner, 1963**

Material examined: Antalya: Manavgat, 8.VI.1978, ♂.

Distribution in Turkey: Antalya (Yayla 1983); Yozgat (Lodos et al. 2003); Hatay, Yozgat (Önder et al. 2006).

***Psallus pinicola* Reuter 1875**

Material examined: Erzurum: Yakutiye, Atatürk University field, 18.VII.1997, ♂, 15.VIII.1997, 2 ♂♂, 18.VIII.1997, ♀, 19.VIII.1998, ♂.

Distribution in Turkey: Artvin (Önder 1976); Ankara, Çankırı, Eskişehir (Lodos et al. 2003; Önder et al. 2006).

***Psallus variabilis* Fall.**

Material examined: Artvin: Yusufeli, Sebzeciler, 500 m, 16.VI.2010, ♀.

Distribution in Turkey: Bursa (Önder et al. 1981); Antalya (Lodos et al. 2003; Önder et al. 2006).

***Sthenarus roseri* (Herrich-Schaeffer 1838)**

Material examined: Erzurum: Narman, Çimenli, N 40°09'31.3", E 041°53'50.5", 2126 m, 30.VI.2012, ♀; Oltu, 23.VI.1988, ♀.

Distribution in Turkey: Balıkesir, Burdur, Çanakkale, Edirne, Isparta, Kütahya, Mersin, Muğla, Sinop (Önder 1976); Bursa, Kocaeli (Önder et al. 1981); Diyarbakır (Önder et al. 1995); İçel (Lodos et al. 2003); Adana, Ankara, Bartın, Bolu, Eskişehir, Kahramanmaraş, Karabük, Karaman, Kastamonu, Kayseri, Kırıkkale, Kırşehir, Konya, Nevşehir (Önder et al. 2006); İzmir (Tezcan et al. 2010).

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