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Diplazontinae species (Hymenoptera, Ichneumonidae) from Balkan Peninsula, Turkey and Iran

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Abstract

Faunistic data of 20 Diplazontinae species from Balkan peninsula, Turkey and Iran are presented. For each species a short zoogeographical characterization is given.

Key words: Diplazontinae, fauna, Balkans, Turkey, Iran, zoogeography.

Zusammenfassung

Faunistische Angaben zu 20 Diplazontinae-Arten des Balkans, der Türkei und aus dem Iran werden vorgestellt. Für jede Art wieder eine zoogeografische Einstufung angeführt.

Introduction

Diplazontinae are medium-sized subfamily with 19 genera and about 350 species in the world (YU et al. 2012). Most species are in Holarctic region. They are koinobiont endoparasitoids of Syrphidae (Diptera). Oviposition is into the egg or larva and emergence is from the puparium (WAHL 1993). The member are easy recognized from other subfami-

lies by 3-toothed mandible; small and separated from face clypeus, with apical margin usually concave and notched; short and wide first metasomal segment with spiracle in front of the middle; short ovipositor, not or barely extending beyond metasomal apex and with dorsal notch at about middle. Palaearctic genera and species are keyed by MANUKYAN (2007).

The fauna of region investigate is not well studied. There are known 30 species from Bulgaria, 15 species from late Yugoslavia, 3 species from Greece, 11 species from Romanian Dobrudja, 19 species from Turkey and 2 species from Iran (KOLAROV & GHAHARI 2005; KOLAROV 1995, 2007, 2008).

In the present paper 20 Diplazontinae species are presented. Of them 3 species are new records to Bulgaria, 1 species is new record to Macedonia, 8 species are new records to Greece, 2 species are new records to Turkey and 9 species are new records to Iran (in the text they are marked by an asterisk). The general distribution follows mainly YU et al. (2012). Zoogeographical characterization for each species is proposed.

Material and Methods

The insects were collected by swiping net and Malaise trap. The identification was made in University of Plovdiv. Materials are preserved in author's collection.

List of the species

Diplazon deletus (THOMSON, 1890)

Material examined: *Bulgaria – Razgradski heights, 22-30.05.1999, 1 ♀; 30.05.-6.06.1999, 1 ♀; 6-19.06.1999, 2 ♀ ♀; 3-18.07.1999, 1 ♂; 18.07-9.08.1999, 1 ♀; 22.08.-6.09.1999, 2 ♀ ♀; Ludogorsko plato, Beli Lom Riverside, 28.08.1999, 1 ♀; Sofia, Vrnanya, 9.05.1997, 1 ♀; Stara planina Mt., Reselets, 23.07.1990, 1 ♂.

Distribution: Holarctic region.

Diplazon laetatorius (FABRICIUS, 1781)

Material examined: Bulgaria – All country from sea level to 1350 m, fly period from April to November, 218 ♀ ♀. *Macedonia – Galicica Mt., Oteshevo, 18.06.1994, 1 ♀. Greece – Eratini, 22.04.1994, 1 ♀; Saloma, 23.04.1994, 1 ♀; Ioanina, 24.04.1994, 2 ♀ ♀; Balndouma, 24.04.1994, 2 ♀ ♀; Doirani, 27.04.1994, 2 ♀ ♀. Turkey – Kırklareli, Dereköy, 25.04.1986, 1 ♀; Adana, Balkali, 29.04.1982, 1 ♀; 31.05.1983, 3 ♀ ♀; 2-4.10.1979, 5 ♀ ♀; Adana, Karataş, 26.07.1979, 1 ♀; Aydın, Erbeli, 30.04.1979, 2 ♀ ♀; Aydın, Germencik, 17-19.09.1997; 3 ♀ ♀; ICEL Erdenli, 7-23.05.1984, 3 ♀ ♀; ICEL Silifke, 8.05.1980, 2 ♀ ♀; ICEL Tarsus, 31.05.1984, 1 ♀; Muğla, Milas Çamiçi, 24.06.1998, 8 ♀ ♀; Erzincan, Avcılar, 1350 m, 16.06.200, 1 ♀; Izmir, Karaburun, 23.06.1998, 9 ♀ ♀; Muğla, Gökova, Kemer, 26.06.1998, 2 ♀ ♀; Denizli, Kale, 27.06.1998, 1 ♀; Isparta, 13.07.1982, 1 ♀; Adyaman, Karadag, 15.07.1983, 3 ♀ ♀; Afion, Sincanlı, 26.07.1997, 1 ♀; Inanmis, Oltu, 26.07.200, 3 ♀ ♀; Kahramanmaraş, Narlı, 26.07.1980; 1 ♀; Erzurum, 1850 m, 27.07.1999, 1 ♀; Antalia, Elmali, 9.08.1983, 3 ♀ ♀; Sinop, Yenican, 6.09.2001, 1 ♀; Zonguldag, Erelı, 3.09.2001, 1 ♀. Iran – All country, fly period from April to November, 41 ♀ ♀.

Distribution: Cosmopolitan species.

***Diplazon pectoratorius* (THUNBERG, 1822)**

M a t e r i a l e x a m i n e d : Bulgaria – Belasitsa Mt., Kongour, 21.05.2001, 1♂; Vitosha Mt., Beli Bryag, 5.06.1998, 1♂1♀; Sofia, Boyana, 17.06.1997, 1♀; Vitosha Mt., Kopitoto, 1350 m, 26.06.-3.07.1998, 1♀. *Greece – Olympus, Prionia, 1100 m, 26.08.1993, 2♀♀. *Iran – Golestan, Gorgan, 19.04.2001, 1♂; Mazandaran, Ravansar, 20.05.2002, 3♂♂.

D i s t r i b u t i o n : Holarctic, Oriental and Neotropical region.

***Diplazon tibiatorius* (THUNBERG, 1822)**

M a t e r i a l e x a m i n e d : Bulgaria – Strandja Mt., Lopuchna, 12.09.2000, 1♂; Vitanovo, 30.05.2000, 4♀♀; 19.06.2000, 2♀♀; 28.06.2000, 3♀♀; 17.07.2000, 1♀; 29.09.2000, 2♀♀; Varna, 22.07.1993, 1♀; Razgradski heights, 6-19.06.1999, 4♀♀; 19.06.-3.07.1999, 3♀♀; 3-18.07.1999, 3♀♀; 28.08.1999, 1♂; Vitosha, Kopitoto, 1350 m, 30.07.1998, 1♀; 19-26.06.1998, 1♀; Vitosha, Bosnek, 940 m, 8.05.1999, 1♀; 6.06.1998, 1♀; 16.07.1994, 1♀; 4-08.1999, 1♀; 4-11.09.1998, 1♀; Stara planina Mt., Maglish, 3.06.1995, 1♂; 28.06.1995, 1♂; Reselets, 26.07.1992, 1♀; Rhodopi Mt., Madjarovo, 200 m, 19-29.04.2000, 1♀. Turkey – Erzurum, Konakli, 200-2400 m, 22.07.2000, 1♂; Inanmis, Oltu, 1600 m, 26.07.2000, 1♂; Hasanoglu, Ahora, 16.07.1990, 1♀. *Iran – Kuzestan, Ahwas, September, 2006, 1♀.

D i s t r i b u t i o n : Holarctic region and Mexico.

***Enizemum ornatum* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Bulgaria – Stara planina Mt., Maglish, 20.07.1995, 2♀♀; Belasitsa Mt., Kongour, 21.05.2001, 1♀. *Greece – Olympus, Prionia, 1100 m, 26.08.1993, 11♀♀. *Iran – Kerman, Jirof, 10.07.2000, 2♂♂; Kordestan, Baneh, September, 2004, 4♂♂; Mazandran, Chaemchahr, 9.09.2001, 1♂; Kuzestan, Andimesk, April, 2004, 1♀.

D i s t r i b u t i o n : Holarctic and Oriental region.

***Homotropus elegans* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Turkey – Gaziantep Ogiyeli, 13.07.1985, 1♂; Antalia, Elmali, 16.07.1982, 3♀♀; Isparta, 13.07.1982, 1♀. *Iran – Dashtestan, June, 2004, 1♂; November, 2007, 1♂; Ramsar, July, 2007, 1♂.

D i s t r i b u t i o n : Holarctic region.

***Homotropus longiventris* THOMSON, 1890**

M a t e r i a l e x a m i n e d : Bulgaria – Razgradski heights, W. Gradina vill., 27.09.1999, 1♀.

D i s t r i b u t i o n : Palaearctic region.

***Homotropus nigritarsus* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Bulgaria – Belasitsa Mt., Kongour, 21.05.2001, 3♀♀; Stara planina Mt., Maglish, 3.06.1995, 2♀♀; 20.07.1995, 4♀♀; Kalofer, Enina, 26.07.2000, 1♀; Strandja Mt., Tsarevo, June, 1994, 1♀; Vitanovo, 19.08.2000, 1♀; Rhodopi Mt., Madjarovo, 200 m, 3.06.2000, 1♀; Varna, 26.07.1993, 1♀; Vitosha Mt. Bosnek, 940 m, 28.08.-4.09.1998, 1♀. *Greece – Olympus Mt., Prionia, 1100 m, 26.08.1993, 3♀♀. Turkey – Inanmis, Oltu, 1600 m, 26.07.2000, 1♀; Afion-Bayat, Köroglu, 29.06.1998 1♀; Afion, Cine, 18.09.1996, 1♂; Antalia, Elmali, 16.09.1982, 1♀; Kutahia, Çardaralan, 29.07.1997, 1♀; Izmir, Karaburun, 23.06.1998, 1♀; Isparta, Sav, 24.05.2007, 1♀; Gümurhane, Zigana,

12.07.1971, 1♀; Denizli, 19.09.1996, 1♂; Ardahan, Posot, Aşıkzülali, 2200 m, 12.07.2005, 1♂. *Iran – Kuzestan, Andimesk, April, 2004, 1♂.

D i s t r i b u t i o n : Holarctic region and Mexico.

***Homotropus signatus* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Bulgaria – Vitosha Mt., Boyansko ezero, 1-18.09.1999, 1♀; Rhodopi Mt., Madjarovo, 200 m, 24.05.2000, 1♀; Pamporovo, 30.08.1992, 1♀. Turkey – Denizli, Çardak, 28.06.1998, 3♀♀; Denizli, Tavas Tekeköy, 27.06.1998, 1♀; Burdur, 7.08.1980, 1♀; Orhanie, 11.09.1993, 1♀; Rize, Çamlıhemsin, 250 m, 30.07.2000, 1♀; Adana, Balkali, 31.05.1983, 2♀♀; Adana, Caputlu, 8.08.1979, 1♀; Adana, Feke, 2.10.1979, 2♀♀; Isparta, 13.07.1982, 1♂2♀♀; Isparta, Yukarı Gökdere, 1100 m, 21.04.2007, 1♂; Elazığ, 16.07.1982, 1♀; ICEL Silifke, 8.05.1980, 1♀; Antalia, Elmali, 16.07.1982, 1♀; Antalia, Kokuteli, 15.07.1982, 1♂; Kahramanmaraş, Göksun, 25.07.1980, 1♂. *Iran – Mazandaran, Babol, 19.06.2001, 4♂♂; 16.08.2001, 1♀; Songhar, May, 2006, 1♀; Khorasan, Mashhad, 4.06.2001, 1♂.

D i s t r i b u t i o n : Holarctic region.

***Promethes sulcator* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Bulgaria – Razgradski heights, Trubach vill., 6-19.06.1999, 1♂1♀; 3-18.07.1999, 3♂♂1♀; 8-22.08.1999, 2♀♀; 19.09-2.10.1999, 2♂♂; 2-17.10.1999, 1♂; Turkey – Isparta, Yukarı Gökdere, 1100 m, 21.04.2007, 1♀; ICEL Silifke, 8.05.1980, 1♂; Afsin, K. Maras, 1050 m, 14.05.1983, 1♂; Saraycik Kücükses, 14.05.1983, 3♂♂; Muğla-Milas, Çamiçi, 24.06.1998, 1♀; Afyon-Hayat Köroğlu, 29.06.1988, 1♂; Yumurtalık, 15.07.1980, 1♀; Antalia, Korkunteli Elmabahçesi, 18.07.1982, 1♀; Kahramanmaraş, Göksun, 25.07.1980, 1♀. *Iran – Sistan-Zabol, April, 2003, 1♀; Hashtpar, June, 2004, 1♂; Chahr-Mahal Sharecord, June, 2006, 1♂; Gorgan, June, 2006, 1♀; Saghes, July, 2006, 1♂; Ilam-Abdanan, August, 2004, 1♀; Mazandaran, Ghaemshahr, 9.09.2001, 1♂; Khalkhal, September, 2005, 1♀; Bilesavar, September, 2006, 1♀; Kordestan, Baneh, September, 2004, 1♀; Ahwas, October, 2007, 1♀.

D i s t r i b u t i o n : Holarctic and Oriental region.

***Syrphoctonus megaspis* (THOMSON, 1890)**

M a t e r i a l e x a m i n e d : *Bulgaria – Vitosha Mt., Kopitoto, 1350 m, 26.06.-3-07.1999, 1♀; 23.08.1998, 1♀; 3-10.07.1998, 2♀♀; Strandja Mt., Vitanovo, 28.06.2000, 1♀; Belasitsa Mt., hut Belasitsa, 700 m, 12.07.1991, 1♀; Rhodopi Mt., Pamporovo, 1600 m, 13.08.1993, 1♀. *Greece – Olympus, Prionia, 1100 m, 26.08.1993, 3♀♀.

D i s t r i b u t i o n : Europe and Pacific coast of Russia.

***Syrphoctonus tarsatorius* (PANZER, 1809)**

M a t e r i a l e x a m i n e d : Bulgaria – Stara planina Mt., Maglish, 3.06.1995, 1♀; Etropole, 24.10.1983, 1♂. Rhodopi Mt., Pamporovo, 1600 m, 30.08.1992, 1♂. Turkey – Erzurum, Aşkale, Ortahaçe, 25.05.2005, 1♀; Bingöl, Bılaoğlu, 1100 m, 06.2010, 1♀. * Iran – Kuzestan, Ahwas, September, 2005, 1♀; Chahr Machal, Sharekord, June, 2005, 1♀; West Azerbaijan, Salmas, July, 2005, 1♀; Kermanshah, Ravansar, September, 2003, 1♂; Ardabil, Moghan, September, 2006, 1♂.

D i s t r i b u t i o n : Holarctic and Oriental region.

***Syrphophilus bizonarius* (GRAVENHORST, 1829)**

M a t e r i a l e x a m i n e d : Bulgaria – Plovdiv, 160 m, 12.04.2001, 1 ♀; 8-12.05.2001, in apple garden, 5 ♀ ♀; 19.09.1999, 1 ♀; Sofia, Vrnanya, 9.05.1997, 1 ♂; Rhodopi Mt., Madjarovo, 200 m, 24.04.2000, 1 ♀; Vitosha Mt., Bosnek, 940 m, 8.05.1999, 1 ♀; 14-15.06.1999, 4 ♀ ♀; Razgradski heights, Trubach vill., 24.05.1999, 1 ♂; 6-19.06.1999, 2 ♀ ♀; 19.06.-3.07.1999, 1 ♀; 3-18.07.1999, 6 ♀ ♀; 18.07.-8.08.1999, 1 ♀; 8-22.08.1999, 2 ♀ ♀; 22.08.-4.09.1999, 1 ♀; 26-19.09.1999, 3 ♀ ♀; Stara planina Mt., Maglish, 8-28.06.1995, 1 ♂ 1 ♀; 20.07.1995, 1 ♀; Vratsa, 21.08.1994, 1 ♀; Strandja Mt., Lopuchna, 5.05.2000, 1 ♀. *Greece – Balndouma, 24.04.1994, 1 ♀. Turkey – Isparta, Yukarı Gökdere, 21.04.2007, 1 ♂ 2 ♀ ♀; 13.07.1987, 1 ♂; ICEL Silifke, Sarikovak, 8.05.1980, 1 ♂ 1 ♀; ICEL Erdenli, 7.05.1980, 2 ♂ ♂; 23.05.1984, 1 ♂; Saraycik, Kücükses, 14.05.1984, 2 ♂ ♂; Edirne, 10.06.1986, 2 ♂ ♂; Afsin, K. Maras, 14.05.1983, 1 ♂ 1 ♀; Denizli, Tavas, Tekkeköy, 26.07.1998, 2 ♂ ♂; Adana, 4.06.1980, 1 ♀; 2.10.1979, 1 ♀; 26.11.1982, 1 ♀; Adana, Merkez, 15.05.1980, 1 ♂; Adana, Yumurtalık, 7.06.1979, 1 ♂; Adana, Kataş, 1.07.1979, 2 ♂ ♂ 1 ♀; Burdur, Aglasun, 14.07.1982, 1 ♂ 1 ♀; Antalia, Korkuteli, 16.07.1982, 1 ♂; Antalia, Elmali, 16.07.1982, 1 ♂; Antalia, Manavgar, 4.08.1980, 1 ♀; Afion, Dinar, Kazanpunar, 28.06.1998, 2 ♂ ♂; Afion Bayat Köroglu, 29.06.1998, 5 ♂ ♂ 1 ♀; Afion Sinkanli, Akören, 26.07.1997, 1 ♂; Sinop, Ayancik, Bascirlezavie, 6.09.2001, 3 ♂ ♂; ICEL Tasus, Keşbüki, 26.09.1979, 1 ♀. *Iran – Sistan-Zabol, April, 2003, 1 ♂; Yazd, Abardhoo, May, 2005, 4 ♂ ♂; Chahr Machal, Sharekord, June, 2005, 1 ♂; Bushahr, Brazon, August, 3 ♂ ♂ 1 ♀; Ilam, Abdanan, August, 2004, 2 ♂ ♂ 1 ♀; Bilesavar, September, 2005, 2 ♀ ♀; Kermanshahr, Ravansar, 9 ♂ ♂; Kordestan, Baneh, September, 2004, 2 ♂ ♂; Dashtestan, November, 2007, 1 ♀.

D i s t r i b u t i o n : Holarctic and Oriental region.

***Syrphophilus tricinctorius* (THUNBERG, 1822)**

M a t e r i a l e x a m i n e d : Bulgaria – Belasitsa Mt., Kongour, 21.05.2001, 1 ♂ 1 ♀; Vitosha Mt., 1240 m, 4.05.2000, 1 ♀; 1.09.1998, 4 ♂ ♂; 9.10.1995, 11 ♂ ♂; Stara planina Mt., Maglish, 20.07.1995, 1 ♀; Rhodopi Mt., Madjarovo, 200 m, 5.10.2000, 1 ♀. *Turkey – Aydin-Bayat, Köroglu, 29.06.1998, 1 ♂ 1 ♀.

D i s t r i b u t i o n : Holarctic and Oriental region.

***Sussaba hinzi* DILLER, 1982**

M a t e r i a l e x a m i n e d : *Bulgaria – Vitosha Mt., Bosnek, 940 m, 15.06.1999, 1 ♀; 16.07.1999, 1 ♀; 4.08.1999, 3 ♂ ♂ 1 ♀; 4-10.08.1998, 1 ♀; Razgradski heights, Trapishtre vill., 27.08.1999, 1 ♂; Razgradski heights, Trubach vill., 30.05.-6.06.1999, 2 ♀ ♀; 19.06.-3.07.1999, 1 ♀; 3-18.07.1999, 1 ♀; 18.07.-8.08.1999, 1 ♀; Lilyaksko plato, NW Zdravets vill., 21.08.1999, 1 ♀; Rhodopi Mt., Pamporovo, 1600 m, 30.08.1992, 1 ♀; Tsarevo (=Mitchurin), June, 1994, 1 ♀.

D i s t r i b u t i o n : Palaearctic region.

***Sussaba flavipes* (LUCAS, 1849)**

M a t e r i a l e x a m i n e d : Bulgaria – Stara planina Mt., Maglish, 18.08.1998, 1 ♀; Vitosha Mt., Bovansko ezero, 800 m, 24.08-1.09.1999, 1 ♀; Lyliasko plato, N. Rossina vill., 30.09.1999, 2 ♀ ♀; Vitosha Mt., Bosnek, 940 m, 25.07.1999, 1 ♀; Strandja Mt., Vitanovo, 30.05.2000, 1 ♀; 8.06.2000, 2 ♀ ♀; 17.07.2000, 1 ♀; 27.07.2000, 1 ♀. *Greece – Balndouma, 24.04.1994, 1 ♂; Olympos, Prionia, 1100 m, 26.08.1993 1 ♀. *Turkey – Inanmiş, Oltu, 1600 m, 26.07.2000, 1 ♂; Zonguldag, Erenli, 3.09.2001, 1 ♀.

D i s t r i b u t i o n : Holarctic region.

***Sussaba lativentris* MANUKYAN, 1988**

Material examined: *Greece – Olympus, Prionia, 1100 m, 26.08.1993, 5 ♀♀.

Distribution: European part of Russia and Siberia.

***Sussaba pulchella* (HOLMGREN, 1858)**

Material examined: Bulgaria – Rhodopi Mt., Pamporovo, 1600m, 29-30.08.1992, 4♂ 2♀; 10.10.1992, 1♀; Vitosha Mt., Bosnek, 940 m, 30.04.-15.05.1999, 1♂; Vitosha Mt., Kopitoto, 1350 m, 15.06.-3.07.1998, 2♀; 16-26.07.1999, 2♀; Strandja Mt., Vitanovo, 3.05.2000, 1♂; 25.05.2000, 1♂; Plovdiv, 29.09.1999, 1♂; Razgradski heights, W. Gradina vill., 27.09.1999, 1♂; Ludogorsko plato, Lipnik, vill., 29.09.1999, 1♂; Razgradski heights, Trubach vill., 15.06.-3.07.1999, 3♀; 3-18.07.1999, 2♂ 5♀; 18.07.-8.08.1999, 2♀; 22.08.-6.09.1999, 1♂; Stara planina Mt., Maglish, 20.07.1995, 1♀. Turkey – Sinop, Dranaz, 1300 m, 7.09.2001, 1♂.

Distribution: Holarctic and Oriental region.

***Tymmophorus obscuripes* (HOLMGREN, 1858)**

Material examined: Bulgaria – Rhodopi Mt., Pamporovo, 1600 m, 30.08.1992, 1♂; Vitosha Mt., Bosnek, 940 m, 4-11.09.1998, 3♀; 25.09.-2.10.1998, 1♀. *Greece – Baloudouma, 24.04.1994, 1♂. Turkey – Inanmiş, Oltu, 1600 m, 26.07.2000, 1♂.

Distribution: Europe, Turkey, Kazakhstan, Mongolia and North America.

***Woldstedtius citropeatorialis* (SCHMIEDEKNECHT, 1926)**

Material examined: Bulgaria – Plovdiv, 160 m, 9.10.1999, 1♀; Strandja Mt., Vitanovo, 28.06.2000, 1♀; 17.07.2000, 2♂; Razgradski heights, Trubach vill., 8-22.08.1999, 1♂; 6-19.09.1999, 1♀; 19.09.-2.10.1999, 1♂; Vitosha Mt., Kopitoto, 1350 m, 3-10.07.1998, 1♀.

Distribution: Holarctic region.

Zoogeographical characterization

The geographic distribution of the Diplazontinae in the Palaearctic Region was discussed by MANUKYAN (1995). He noted that the Holarctic region is of special significance for the formation of the recent fauna of the subfamily Diplazontinae. Here the zoogeographic characterization follows the chorotype classification of the Near East fauna, proposed by TAGLIANTI *et al.* (1999). After investigation of the recent geographical distribution of the species, treated above, they can be divided into the following groups:

- 1) Species with cosmopolitan distribution – *Diplazon laetatorius*.
- 2) Multiregional distribution in 3 zoogeographical regions has *Diplazon pectoratorius*.
- 3) Species with ranges in 2 zoogeographical regions. Here belong *Diplazon tibiatorius* and *Homotropus nigrifatus*, distributed in Holarctic region and Neotropical region (Mexico) and *Enizemum ornatum*, *Promethes sulcator*, *Syrphoctonus tarsatorius*, *Syrphophilus bizonarius*, *S. tricinctorius* and *Sussaba pulchella*, distributed in Holarctic and Oriental region.

- 4) With Holarctic ranges are 6 species – *Diplazon deletus*, *Homotropus elegans*, *H. signatus*, *Sussaba flavipes*, *Tymmophorus obscuripes* and *Woldstedtius citropectoralis*.
- 5) Palaearctic distribution show 3 species – *Homotropus longiventris*, *Syrphoctonus megaspis* and *Sussaba hinzi*.
- 6) Siberoeuropean range has *Sussaba lativentris*.

The above mentioned data confirm that the large number of species has wide distribution. MANUKYAN (1995) connectd it with parasitism on hosts with a wide distribution.

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