

Contributions to the Dolichopodidae (Diptera) Fauna of Turkey

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ABSTRACT

Faunistic data are given for 5 species of Dolichopodidae, new to the fauna of Turkey and collected in the Marmara and Eagen regions. The following species are recorded for first time in Turkey *Chrysotimus molliculus* (Fallén, 1823), *Hercostomus libanicola* Parent, 1933, *Neurigona erichsoni* (Zedderstedt, 1843), *Teuchophorus cristulatus* Meuffels & Grootaert, 1992, *Teuchophorus bisetus* Loew, 1871. As a result, 104 Dolichopodidae species are known for Turkey at the present. The locations of 5 new collection sites from Turkey are mapped.

Key words: Diptera, Dolichopodidae, Turkey, new records.

INTRODUCTION

Comprehensive investigations of Dolichopodidae fauna of Turkey have not been made until recently (Negrobov 1991, Olejníček 2004, Pârvu and Popescu-Mirceni 2006, Grichanov *et al.* 2007a, Grichanov 2007b). The most recent papers (Tonguç *et al.* 2009, Naglis 2009) have increased Turkish fauna of the family to 99 species that are known from Turkey. The last paper has included 12 new species records for the country (Naglis 2009). Two of them [*Sympycnus pulicarius* (Fallén, 1823) and *Sympycnus annulipes* (Meigen, 1824)] were synonymized by Meuffels (1981), who found a gradual transition from the longer third antennal segment of *S. annulipes* to the shorter third antennal segment of *S. pulicarius*, examining specimens of populations of different localities, mainly in the Netherlands. Later Cole (1990) commenting paper by Beuk (1990) has noted that in the British fauna mainly intermediate forms are present, but showing also a taxonomically insignificant variability in the hind tarsus morphology and even in the male genitalia. Later nobody provided key characters to distinguish different forms. In addition, nothing is known about ecological difference between those phenotypes; therefore, we consider the two names belonging to the same species, *S. pulicarius*. Grichanov *et al.* (2007a) recorded this widely distributed and often mass species from Turkey for the first time.

MATERIAL AND METHODS

Specimens examined in this study are deposited in the following collection: Muğla University, Science and Art Faculty, Department of Biology, Zoology Laboratory, Muğla, Turkey [MUZL]; Specimens were collected in aquatic and semiaquatic habitats in 2004-2008 in the provinces Kırklareli, Çanakkale, Bursa in Marmara region, also in Muğla and Aydın in Eagen region of Turkey. Adults were collected with an entomological hand net (40 cm diameter) or with an aspirator. They were preserved in insect envelopes or vials in the field and then pinned before drying. The faunistic list contains usually localities, altitude, GPS coordinates, collecting date, number and sex of each specimen examined.

RESULTS

Subfamily: DOLICHOPODINAE

Genus: *Hercostomus* Loew, 1857

Hercostomus libanicola Parent, 1933

Distribution: Turkey, Lebanon (Yang, vd., 2006; Grichanov, 2007).

Material examined: Çanakkale, Yenice, Kalkım Town, Çiftlikköy (39° 48' N / 27° 16' E), 250 m, 11.07.2008, 1 male; Kırklareli, Pınarhisar, Yenice Village, Magnetic Area (41° 44' N / 27° 39' E), 565 m, 21.08.2008, 1 male; Kırklareli, Demirköy, Bıçkı Stream (41° 48' N / 27° 48' E), 198 m, 22.08.2008, 1 male.

Subfamily: NEURIGONINAE

Genus: *Neurigona* Rondani, 1856

Neurigona erichsoni (Zetterstedt, 1843) (Fig. 2a)

Distribution: Turkey, Austria, Belgium, Czech, Denmark, Estonia, France, Germany, Hungary, Iran, Netherlands, Norway, Poland, Romania, Russia (Alania, Krasnodar), Sweden, Switzerland, Ukraine, former Yugoslavia (Negrobov, 1991; Yang, vd., 2006; Grichanov, 2007).

Material examined: Turkey: Çanakkale, Bayramiç, Evciler Town, Kaz Mountains, 11. km, 39° 42' N / 26° 47' E, 880 m, 13.07.2008; 1 female; Bursa, Mustafakemalpaşa, Muradiyesarıncı Village, Suçtu Waterfall, 39° 54' N / 28° 23' E, 455 m, 24.08.2008, 1 male.

Subfamily: PELOROPEODINAE (Negrobov 1991) or MEDETERINAE (Grichanov 2007a)

Genus: *Chrysotimus* Loew, 1857

Chrysotimus molliculus (Fallén, 1823) (Fig. 2b)

Distribution: Turkey, Austria, Belgium, Bulgaria, Czech, Denmark, France, Georgia, Germany, Hungary, Ireland, Netherlands, Norway, Poland, Romania, Russia (Krasnodar), Slovenia, Sweden, Switzerland, UK, Ukraine (Yang, vd., 2006; Grichanov, 2007).

Material examined: Turkey: Kırklareli, Demirköy, Yıldız Mountains, Kadinkule Place, 41° 48' N / 27° 44' E, 515 m, 21.08.2008, 1 male.

Subfamily: SYMPYCNINAE

Genus: *Teuchophorus* Loew, 1857

Teuchophorus bisetus Loew, 1871

Distribution: Turkey, Israel, Iraq, Tajikistan, Uzbekistan (Grichanov, 2007).

Material examined: Aydın, Koçarlı, Tekeli Village (37° 46' N / 27° 38' E), 25 m, 03.10.2004, 4 male.

Teuchophorus cristulatus Meuffels & Grootaert, 1992

Distribution: Turkey, Italy (Yang, vd., 2006).

Material examined: Turkey: Muğla, Yatağan, Dipsiz (37° 22' N/ 28° 05' E), 305m., 07.10.2006, 1 male.

CONCLUSIONS AND DISCUSSION

The knowledge of the Turkish Dolichopodidae fauna is still poor. So far, 99 species belonging to Dolichopodidae fauna have been known from previous studies. Now the dolichopodid species number in Turkey has increased to 104 with the records of 5 additional taxa. The distribution of these species in the research area is presented in Fig. 1.

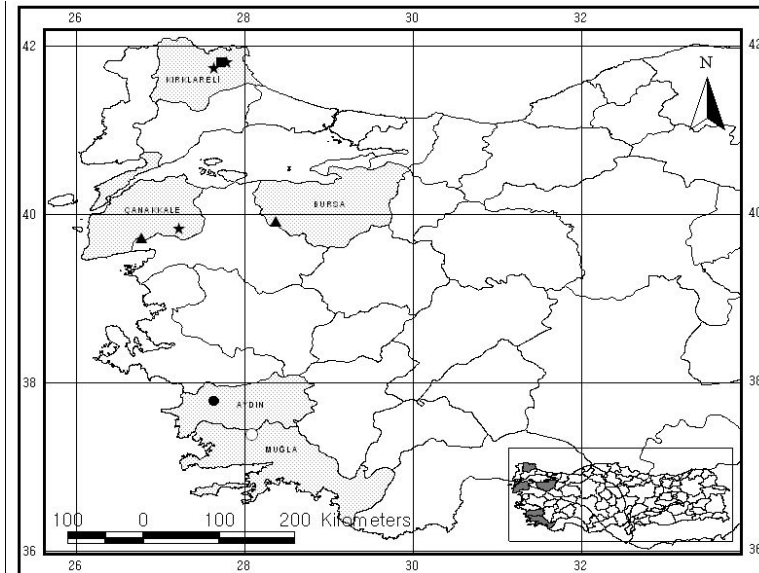


Fig. 1. Distribution of the new records of Dolichopodidae in Marmara and Eagen Regions [*Hercostomus libanicola* (★), *Neurigona erichsoni* (▲), *Chrysotimus molliculus* (■), *Teuchophorus bisetus* (●), *Teuchophorus cristulatus* (○)].

It is especially worth noting records of *Hercostomus libanicola* and *Teuchophorus cristulatus* for the first time after their descriptions. Certainly, the species number of Turkish long-legged flies will increase because we are recording in the present study species with mainly large distribution areas. The real number may reach more than 250 species following special expeditions covering a wider geographical area of the country.

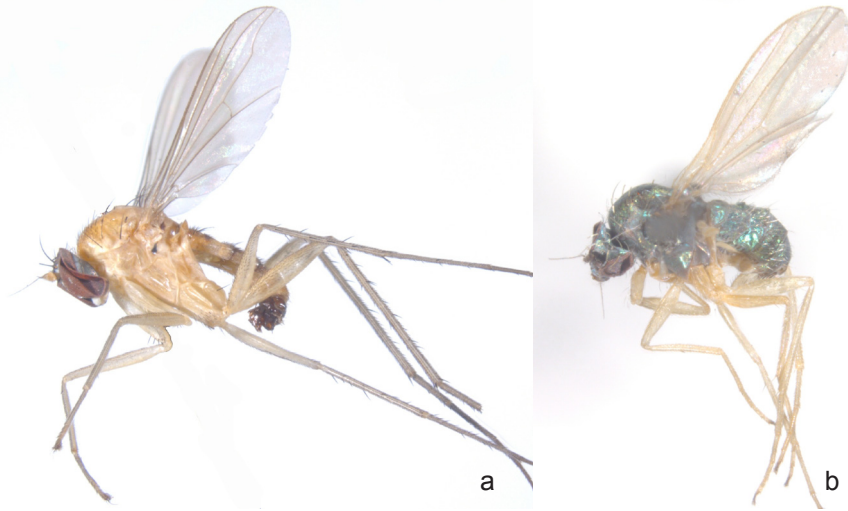


Fig. 2. a) *Neurigona erichsoni* (Zetterstedt, 1843), b) *Chrysotimus molliculus* (Fallén, 1823)

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