

New Contribution to the Turkish Dolichopodidae Fauna (Diptera)

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Abstract: The following eight species are recorded for first time from Turkey: *Argyra diaphana* (FABRICIUS, 1775), *Chrysotus pulchellus* KOWARZ, 1874, *Diaphorus graecus* PARENT, 1932, *Diaphorus winthemi* MEIGEN, 1824, *Gymnopternus celer* (MEIGEN, 1824), *Hercostomus nigrilamellatus* (MACQUART, 1827), *Tachytrechus petraeus* LOEW, 1871 and *Neurigona nubifera* (LOEW, 1869). As a result, the dolichopodid list of Turkey has increased to 112 species.

Key words: Diptera, Dolichopodidae, Turkey, new records

Introduction

Almost all long-legged flies are polyphagous predators feeding on various fine invertebrates including some pests. The most recent papers on Dolichopodidae fauna of Turkey have increased the country list to 104 known species (NAGLIS 2009, POPESCU-MIRCENI and PÂRVU 2009, TONGUÇ *et al.* 2009, 2010). A record of *Sciapus albifrons* (MEIGEN, 1830) by POPESCU-MIRCENI and PÂRVU (2009) with a question mark needs confirmation.

Material and Methods

Specimens examined in this study are deposited in the following collections: the Zoological Museum of Moscow State University, Russia [ZMU] and Muğla University, Science and Art Faculty, Department of Biology, Zoology Laboratory, Muğla, Turkey [MUZL]. Specimens were collected in aquatic and semi-aquatic habitats in 2009 in Turkish provinces Çanakkale, Edirne, Adapazarı, Zonguldak, Bolu, Konya and Antalya. Adults were collected with an

entomological hand net (40 cm diameter), Malaise trap and aspirator. They were preserved in 75% alcohol or in insect envelopes in the field. Distribution part of the list includes countries of Caucasus and East Mediterranean Region and notes on the general distribution for each species after YANG *et al.* (2006) and GRICHANOV (2007) mainly.

Results

Subfamily: DOLICHOPODINAE

Genus: *Gymnopternus* LOEW, 1857

***Gymnopternus celer* (MEIGEN, 1824)**

Material examined: 1♂, Çanakkale, Bayramiç, Evciler Town, Ayazmana Place (39° 44' N / 26° 50' E), 430 m, 17.05.2009, leg. H. Koç and O. Özgül [MUZL].

Distribution: Turkey, Bulgaria, Romania, S. Russia (Krasnodar), Ukraine (Chernovtsy, Kyiv, Lviv, Poltava, Uzhhorod), all Europe, N Kazakhstan, E. Russia (Ural, Altai, Buryatia) (YANG *et al.* 2006, GRICHANOV 2007).

Genus: *Hercostomus* LOEW, 1857

***Hercostomus nigrilamellatus* (MACQUART, 1827)**

Material examined: 1♂, Bolu, Kibricik (40° 52' N / 31° 88' E), 2070 m, 31.08.2009, 2♂♂; Kibricik (40° 50' N / 31° 89' E), 1800 m, 01.09.2009; 1♂, Bolu, pine forest (40° 56' N / 31° 65' E), 1380 m, 30.08.2009, leg. N. Vihrev [ZMU].

Distribution: Turkey, Moldova, Romania, S. Russia (Krasnodar); Europe, E. Russia (?Buryatia) (YANG *et al.* 2006, GRICHANOV 2007).

Genus: *Tachytrechus* HALIDAY, 1851

***Tachytrechus petraeus* LOEW, 1871**

Distribution: Turkey, Armenia, Uzbekistan (YANG *et al.* 2006; GRICHANOV 2007).

Material examined: 1♂, Konya, Akşehir (38° 43' N / 31° 33' E), 03.09.2009, leg. N. Vihrev [ZMU].

Subfamily: NEURIGONINAE

Genus: *Neurigona* RONDANI, 1856

***Neurigona nubifera* (LOEW, 1869)**

Material examined: 1♂, Edirne, Centrum, Küçükdöllük Village (41° 45' N / 26° 40' E), 85 m, 10.05.2009, leg. H. Koç and O. Özgül [MUZL].

Distribution: Turkey, Greece, Former Yugoslavia (YANG *et al.* 2006, GRICHANOV 2007).

Subfamily: DIAPHORINAE

Genus: *Argyra* MACQUART, 1834

***Argyra diaphana* (FABRICIUS, 1775)**

Material examined: 1♂, Sultaniça Site [appr. 40° 37' N / 26° 09' E], 7-13.07.2008, Malaise trap [ZMU].

Distribution: Turkey, Azerbaijan, Moldova, S. Russia (Krasnodar), Romania, Ukraine (Chernovtsy, Ivano-Frankivsk, Kharkiv, Kiev, Uzgorod), Europe, Iran (YANG *et al.* 2006, GRICHANOV 2007).

Genus: *Chrysotus* MEIGEN, 1824

***Chrysotus pulchellus* KOWARZ, 1874**

Material examined: 1♂, Adapazarı, Karasu, 27.08.2009, leg. N. Dvoretzkaya [ZMU].

Distribution: Turkey, Bulgaria; Georgia, Greece, Romania, S. Russia (Krasnodar); Ukraine (Cherkasy), Transpalearctic species (YANG *et al.* 2006, GRICHANOV 2007).

Genus: *Diaphorus* MEIGEN, 1824

***Diaphorus graecus* PARENT, 1932**

Material examined: 2♂♂, Antalya, R. Bridge, Tekeli Village (37° 07' N / 31° 23' E), 06.09.2009, leg. N. Dvoretzkaya [ZMU].

Distribution: Turkey, Greece (YANG *et al.* 2006, GRICHANOV 2007).

***Diaphorus winthemi* MEIGEN, 1824**

Material examined: 1♂, Zonguldak, Alapli, 29.08.2009, leg. N. Vihrev [ZMU].

Distribution: Turkey, Romania, Ukraine (Ternopil), Europe, Russia (Moscow & Orenburg Regions) (YANG *et al.* 2006, GRICHANOV 2007).

Discussion

A total of 104 dolichopodid have been recorded by previous studies. The present paper adds 8 new species, which increases the national list of Turkey to 112 species discovered mainly during the last five years.

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References

- GRICHANOV I. Ya. 2007. A checklist and keys to Dolichopodidae (Diptera) of the Caucasus and East Mediterranean. St. Petersburg, VIZR RAAS (Plant Protection News Suppl.). 160 p.
- NAGLIS S. 2009. New records of Sympycninae (Diptera, Dolichopodidae) from Turkey, with the description of a new species of Teuchophorus. – *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, **82**: 173-180.
- POPESCU-MIRCENI M. & C. PÂRVU 2009. Distributional data on some East-Mediterranean Brachycera (Diptera) [Results of the 'Euphrates' Expedition - 2008, in Turkey and Syria]. – *Travaux du Museum d'Historie Naturelle 'Grigore Antipa'*, **52**: 429-436.
- TONGUÇ A., I. Ya. GRICHANOV & M. KEÇEV 2009. New Records of the Family Dolichopodidae (Diptera) from Turkey. – *Acta Zoologica Bulgarica*, **61** (2): 213-216.
- TONGUÇ A., I. Ya. GRICHANOV, H. KOÇ, O. ÖZGÜL & M. BARLAS 2010. Contributions to the Dolichopodidae (Diptera) Fauna of Turkey. – *Journal of Entomological Research Society*, **12** (2): 103-107.
- YANG D., Y. ZHU, M. WANG & L. ZHANG 2006. World Catalog of Dolichopodidae (Insecta: Diptera). Beijing, China Agricultural University Press. 704 p.

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Нов принос за турската долихоподидна фауна (Diptera)

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(Резюме)

За първи път в Турция се съобщават осем вида: *Argyra diaphana* (FABRICIUS, 1775), *Chrysotus pulchellus* KOWARZ, 1874, *Diaphorus graecus* PARENT, 1932, *Diaphorus winthemi* MEIGEN, 1824, *Gymnopternus celer* (MEIGEN, 1824), *Hercostomus nigrilamellatus* (MACQUART, 1827), *Tachytrechus petraeus* LOEW, 1871 и *Neurigona nubifera* (LOEW, 1869). В резултат долихоподидният списък на Турция се увеличава до 112 вида.