

New Data on Pachygastrinae (Diptera, Stratiomyidae) from Turkey

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ABSTRACT

The Pachygastrinae species of Turkey are reported in this work. *Pachygaster emerita* Krivosheina and Freidberg, 2004 and *Eupachygaster tarsalis* (Zetterstedt, 1842) are recorded for the first time for Turkey. *Pachygaster atra* (Panzer, 1798), *Pachygaster emerita* Krivosheina and Freidberg, 2004 and *Eupachygaster tarsalis* (Zetterstedt, 1842) are pictured. The distribution of these species is briefly discussed and a key to the Turkish species is given.

Key words: Pachygastrinae, *Pachygaster emerita*, *Eupachygaster tarsalis*, new records, Fauna, Turkey

INTRODUCTION

Pachygasterinae is the most species rich subfamily of Stratiomyidae containing more than 600 species, which are mainly distributed in the Australian (about 200 species), Neotropical (about 130 species), Oriental (about 100 species) and Afrotropical (about 100 species) Regions, but they are also found in the Palaearctic (about 47 species) and Nearctic (about 25 species) Regions (Krivosheina 2004, Krivosheina and Freidberg 2004, Woodley 2001, 2011). The subfamily contains 176 genera in the world and is represented in the Palaearctic Region by 20 genera with 1-3 species in each (Krivosheina 2004). Adults of Palaearctic Pachygastrinae are usually small and black, scutellum without scutellar spines, discal cell of wings with 3 M veins. Abdomen generally oval, short and wider than thorax. The Pachygastrinae fauna of Turkey have been insufficiently studied to date, and only one species of *Pachygaster* Meigen 1803 have been recorded from Turkey (Krivosheina 2004, Krivosheina and Freidberg 2004, Rozkošný 1983, Woodley 2001).

MATERIALS AND METHOD

The studied material comprises 1♀ *Pachygaster atra*, 1♂ *Pachygaster emerita*, and 1♂ *Eupachygaster tarsalis*. The material examined in the present work is deposited at the Zoological Museum, Gazi University (ZMGU). The material was identified with the key to European stratiomyids (Rozkošný 1983) and the papers of Krivosheina (2004) and Krivosheina and Freudberg (2004).

RESULTS

Genus: *Pachygaster Meigen, 1803*

Eighteen species of this genus recent and fossil are known in the World (Grund and Hauser 2005; Krivosheina and Freidberg, 2004; Woodley, 2001; 2011). Eight species of them were recorded from the Palaearctic Region (Krivosheina 2004, Krivosheina and Freidberg 2004, Rozkošný 1983, Woodley 2001, 2011). Only one species of the genus was recorded from Turkey (Rozkošný 1983).

Pachygaster atra (Panzer, 1798)

Material examined: TURKEY: Kocaeli, İzmit, Yuvacık Town, Soğukpınar Village, Beşkayalar Natural Park, elev. 730 m, 07 July 2004, 1♀, A.Hasbenli leg (Figs. 1-2).

Antenna yellow in the female. Basal half of wings distinctly blackish, knob of halteres darkened, scutellum semicircular, simple and all femora mainly black (Rozkošný, 1983). Widespread in the Western Palaearctic Region (Austria, Belgium, Bulgaria, Czech Republic, England, France, Germany, Greece, Hungary, Ireland, Italy, Netherlands, Poland, Portugal, Rumania, Scotland, Slovakia, Spain, Sweden, Switzerland, Wales, Yugoslavia), in the Northern Caucasia (Georgia), Russia, Ukraine, Turkey and in Israel (Dubrovsky, 2004; Krivosheina, 2004; Lindner and Freidberg, 1978; Rozkošný, 1983; Rozkošný and Nartshuk, 1988; Woodley, 2001).

Pachygaster emerita Krivosheina and Freidberg, 2004

Material Examined: TURKEY: Adana, Feke, Ormancık Village, elev. 1251 m, 23 June 2002, 1♂, T.Üstüner leg (Fig. 3-4).

Head concave dorsally, ocellar triangle as wide as frontal triangle in the male. Antenna brownish-yellow, darkened flagellum, scutellum rounded at posterior part and compressed laterally, all femora mainly black in the male (Krivosheina and Freidberg 2004). This species was only known from the type locality, Senir, in Israel.

Genus: *Eupachygaster Kertész, 1911*

Five species are known in the World (Krivosheina, 2004; Woodley, 2001; 2011). Two species of the genus were recorded in the Palaearctic Region (Krivosheina and Freidberg, 2004; Woodley, 2001). The species and genus have never been recorded from Turkey until now. The genus is the first record from Turkey.

Eupachygaster tarsalis (Zetterstedt, 1842)

Material Examined: TURKEY: Niğde, Çamardı, Elekgölü Village, elev. 1403 m, 11 July 2002, 1♂, T.Üstüner leg (Fig. 5-6).

Head almost spherical in lateral view, eyes contiguous in males, antennae inserted at middle of head or somewhat lower. Scutellum with a flat marginal rim. Basal half of wings contrastively blackish (Rozkošný, 1983), femora mainly darkened. The species is widespread in Europe (Austria, Belgium, Bulgaria, Czech Republic, Denmark, England, France, Germany, Hungary, Poland, Rumania, Russia, Slovakia, Sweden, Switzerland, Ukraine, Yugoslavia) and also recorded from Turkmenistan and Azerbaijan (Dubrovsky, 2004; Rozkošný and Nartshuk, 1988; Woodley, 2001).

Key to Pachygastrinae from Turkey

- 1- Scutellum without marginal rim, relatively small about 0.3 mm, femora mainly black. (Genus *Pachygaster* Meigen, 1803)2
 - Scutellum with a distinct marginal rim, relatively large about 0.5 mm, femora mainly darkened. (Genus *Eupachygaster* Kertész, 1911).....
*Eupachygaster tarsalis* (Zetterstedt, 1842)
 2- Basal half of wings blackish, antenna yellow, scutellum semicircular.....
*Pachygaster atra* (Panzer, 1798)
 - Wings hyaline, antenna brownish-yellow, darkened flagellum, scutellum apex rounded and laterally compressed.....
 *Pachygaster emerita* Krivosheina and Freidberg, 2004

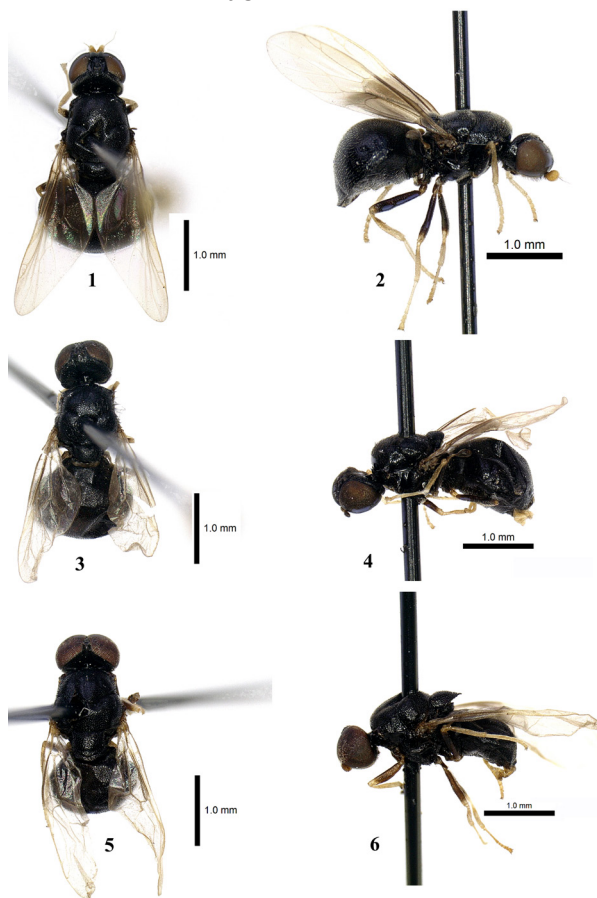


Fig. 1-2. *Pachygaster atra* 1. female in dorsal view and 2. female in lateral view; 3-4. *Pachygaster emerita* 3. male in dorsal view, 4. male in lateral view; 5-6. *Eupachygaster tarsalis* 5. male in dorsal view, 6. male in lateral view.

DISCUSSION

Two new species are recorded for the first time for the fauna of Turkey. *Pachygaster atra* (Panzer, 1798) is recorded with additional records for Turkey. *P. atra* has been recorded from Balıkesir, Bandırma- Erdek in Turkey (Rozkošný, 1983). It is the first record from İzmit-Yuvacık in Turkey. The second record in NW Turkey shows that the species is widely distributed in Turkey. It is interesting that this specimen has been caught by a light trap. *Pachygaster emerita* Krivosheina and Freidberg, 2004 is recorded for the fauna of Turkey for the first time. This specimen was collected by net on a leaf of a trees in a small garden at the edge of a forest in southern Turkey. The finding shows that this species is recorded for the first time from outside the borders of Israel. *Eupachygaster tarsalis* is also recorded for the fauna of Turkey for the first time. This finding in S Turkey thus represents a new southernmost point.

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