

Contributions to the Turkish Tachinidae (Diptera) Fauna

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ABSTRACT

The Tachinidae fauna of Turkey is supplemented by the following 3 species: *Dinera ferina*, *Oswaldia muscaria* and *Phasia hemiptera*. In addition *Dexia rustica* was presented as the second record from Turkey. Description and distribution for each species is also provided.

Key words: Tachinidae, new records, Tokat, Turkey.

INTRODUCTION

Tachinidae is one of the largest families of Diptera with more than 8.000 species worldwide (Ziegler, 1998). Tachinid flies are exclusively endoparasitic in their larval stage and have a vast host range. They parasitize primarily the insect orders Lepidoptera, Coleoptera, Hemiptera, Hymenoptera, Orthoptera and Diptera (Grenier, 1988; Stireman *et al.*, 2006). Although information on this family is limited in Turkey, there have been a number of detailed studies (Doğanlar, 1982a, b; Kara, 1999a, b; 2001a, b; 2002; Kara and Alaoğlu, 2002; Kara and Tschorasnig, 2003; Kara *et al.*, 2010; Atay and Kara, 2014).

The aim of this study is to contribute the Turkish tachinid fauna by adding new records.

MATERIALS AND METHODS

This study was conducted several uplands of Tokat (Boyali-Binecek from Central Tokat, Çatak from Almus) from 2012 to 2013. Tachinids were collected by the first author from crop, forest, weed and ornamental plants with an insect net during the vegetative period. The tachinids were identified by the second and third authors using the keys of Mesnil (1944-1965), Tschorasnig and Herting (1994) and Tschorasnig and Richter (1998). Nomenclature and species arrangement followed Herting and Dely-Draskovits (1993). The photographs were taken with a Leica DFC295 digital camera using Leica Z16 Apo Macroscope. The specimens are deposited at the Entomology Laboratory in Gaziosmanpaşa University, Agricultural Faculty, Plant Protection Department, Tokat, Turkey.

RESULTS

Four species belonging to four tachinid genera have been identified and are listed along with descriptions and their known distribution below.

Subfamily: Exoristinae

Tribe: Blondeliini

Oswaldia muscaria (Fallén, 1810)

Material examined: Almus (Çatak), 10 August 2012, 1♀, 40°14'23"N, 36°53'25"E, 1124m; 18 August 2013, 1♀, 40°14'17"N, 36°53'72"E, 1144m.

Description (Fig. 1): Eyes bare. Frons 0.9 times as wide as an eye. First flagellomere 2.5 times as long as the pedicel. Arista thickened on 2/5 of its length. Bristlets on the facial ridges reach to almost half of its height. Parafrontal hairs extend to the lower frontal bristle. Postpronotum with 3 bristles standing in triangular position. Proepisternum bare. Scutum with 1+3 intraalar, 2+3 acrostichal, 2+3 dorsocentral setae. Lateral scutellar setae longer than the basals. Middle tibia with 3 anterodorsal setae. Costal bristle not different from the surrounding costal setae. r4+5 with three setulae basally. Tergite 2 dorsally not hollowed to the posterior edge. Tergites 3 and 4 with discal bristles. Body length 8 mm.

Distribution: Europe to East Asia (Herting and Dely-Draskovits, 1993; Tschorsnig *et al.*, 2004).

Subfamily: Dexiinae

Tribe: Dexiini

Dinera ferina (Fallén, 1817)

Material examined: Almus (Çatak), 10 August 2012, 1♀, 40°15'30"N, 37°02'51"E, 1150m; 18 August 2013, 1♀, 40°14'17"N, 36°53'72"E, 1144m.

Description (Figs. 2a-2b): Eyes bare. Arista hairy (longest hairs longer than the diameter of the base of the arista). Head higher than long. Gena as wide as the length of antennae. Parafrontal with 6 small hairs on each side. Proepisternum bare. Scutum with 1+3 intraalar, 2+2 acrostichal, 3+4 dorsocentral setae. Apical scutellar bristles strong, crossed. Fore tarsus longer than the height of the head. Hind tibia ad with rather uneven bristles. Hind tibia with 2 dorsal preapical setae. 2nd costal segment bare on underside. R5 open. Abdomen with iridescent spots. Tergite 2 hollowed to its posterior edge. Tergites 3 and 4 without discal bristles. Body length 12-13mm.

Distribution: Europe to Central and West Asia (Herting and Dely-Draskovits, 1993; Tschorsnig *et al.*, 2004).



Fig. 1. *Oswaldia muscaria* head, lateral view.

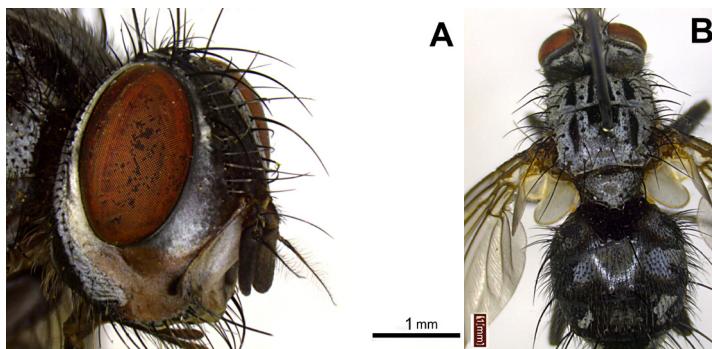


Fig. 2. *Dinera ferina* a. Head, lateral view b. General dorsal view.

***Dexia rustica* (Fabricius, 1775)**

Material examined: Almus (Çatak), 18 August 2013, 1♀, 40°14'17"N, 36°53'72"E, 1144m.

Description (Figs. 3a-3b): Eyes bare. Arista hairy (longest hairs longer than the diameter of the base of the arista). Gena wider than length of antennae. Prosternum bare. Katepisternum with three bristles. Apical scutellar bristles strong, crossed. The very fine hairs at the edge of the calypterae are not longer than the diameter of the seam. Legs yellow. Hind tibia with 2 dorsal preapical setae. 2nd costal segment hairy on underside. Tergite 2 hollowed to its posterior edge. Abdomen evenly dusted to the end, dark brown. Tergites 3 and 4 without discal bristles. Body length 9 mm.

Distribution: Antalya-Turkey (Sahebari *et al.*, 2014), Europe to Central and West Asia (Herting and Dely-Draskovits, 1993; Tschorsnig *et al.*, 2004).

Subfamily: Phasiinae

Tribe: Phasiini

***Phasia hemiptera* (Fabricius, 1794)**

Material examined: Tokat Merkez (Boyalı-Binecek), 02 June 2013, 1♀, 40°29'35"N, 36°39'30"E, 1573m.

Description (Figs. 4a-4c): Hairs of the gena yellowish. Frons 0.2 times as wide as an eye. Sides of the thorax with dense yellow hairs. Hind femur on its basal half reddish. Petiole of wing cell R5 in a line with vein r_4+5 , as long as one-third section of M beyond bend. Sternite 7 of female strongly developed. Abdomen 1.1 times as long as wide. Body length 8 mm.

Distribution: Europe to Central and East Asia (Herting and Dely-Draskovits, 1993; Tschorasnig *et al.*, 2004).

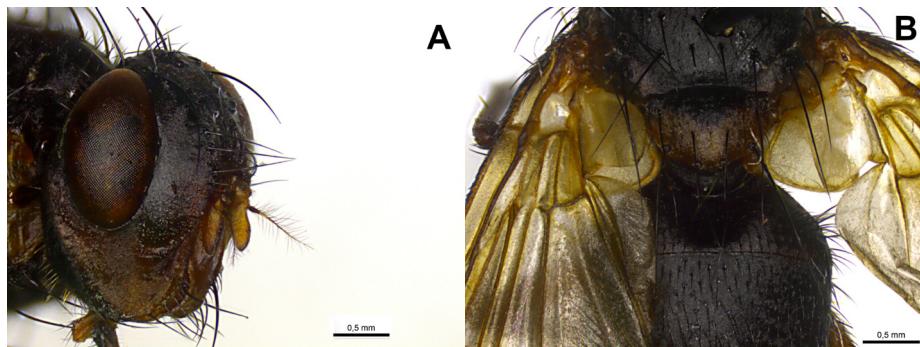


Fig. 3. *Dexia rustica* a. Head, lateral view b. General dorsal view.

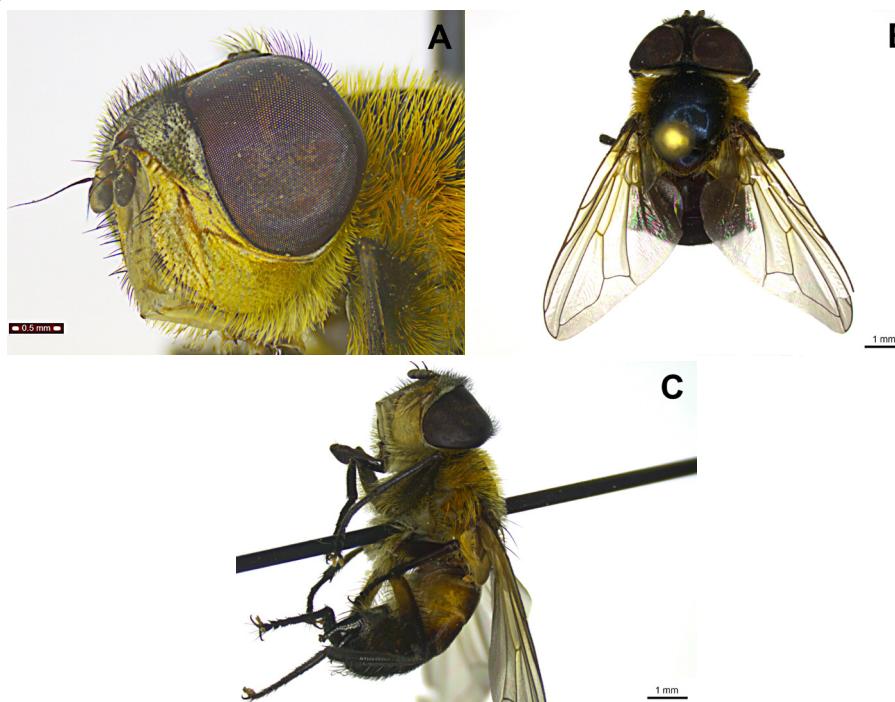


Fig. 4. *Phasia hemiptera* a. Head, lateral view b. Dorsal view c. Lateral view.

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