

Two new records for the Turkish Diptera fauna from Izmir Province, Western Turkey

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Summary

This study was carried out during 1997-1998 in Izmir province, western Turkey. The specimens of Diptera were collected from culture and non-culture plants and identified. *Oscinella nartshukiana* Beschovski, 1978 (Chloropidae) and *Scaptomyza graminum* (Fallén, 1823) were first records for the Turkish Diptera fauna.

Key words: *Oscinella nartshukiana*, *Scaptomyza graminum*, new records, Turkey

Anahtar sözcükler: *Oscinella nartshukiana*, *Scaptomyza graminum*, yeni kayıtlar, Türkiye

Introduction

Diptera is one of the most abundant orders, consisting of approximately 120.000 species belonging to 4 suborders and 188 families (Thompson & Fairman, 1999). These insects are a major component of virtually all non-marine ecosystems; only the arctic and antarctic ice caps are without flies. In addition to being a large order, flies are also of great economic importance. Some studies about Turkish Diptera fauna has been carried out by Anonymous (1987), Campobasso et al. (1999), Civelek et al. (2000), Hayat & Alaoğlu (1990), Hayat & Özbek (1994), Kara (1999a,b), Kılıç (1992, 1996), Öncüer (1991). At the present time 328 species belonging to 18 families have been recorded from Turkey. In this paper, it was aimed to contribute to the Turkish Diptera fauna.

Material and Methods

This study was carried out during 1997-1998, primarily from costal areas in the Izmir region (western Turkey). The specimens were collected between April

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and July in both years by using sweeping nets on cultured and wild plants. These species were identified by Dr. John Deeming (National Museum & Galleries of Wales, Cardiff, UK). The representative specimens were deposited at the Laboratory in the Ortaca Vocational School, Mugla, Turkey.

Results and Discussion

As a result of this study, *Oscinella nartshukiana* Beschovski, 1978 (Chloropidae) and *Scaptomyza graminum* (Fallén, 1823) (Drosophilidae) were recorded new in Turkey.

Family: Chloropidae Meigen, 1803

World wide, 3 subfamilies, 1.200 species in the world, 300 species in Central Europe. Body 1-3 mm. The imagines are usually small flight slow-acting to tiny and quite. The body is yellow or black touched or inconspicuously black, the eyes however magnificently colored. Larvae, typical fly larvae, are hard and quite mobile. They mines predominantly in the impulses and stems of most diverse Gramineae. The larvae of some kinds live however predatory (Haar, 2000).

Genus: *Oscinella* Becker, 1909

Species: *Oscinella nartshukiana* Beschovski, 1978

Description: A small black species, wing length 1 mm (Figure 1); Ocellar triangle extending to or almost to anterior margin of frons, shining but dusted on ocellar prominence. Gena about as deep as width of fore femur. Third antennal segment with a slight dorsoapical angle and with arista dark. Mesonotum dusted with humerus shining. Male cerci semicircular in outline (rather than triangular, which is the case in *O. sensu stricto* species). Halteres pale yellow and legs dirty yellow on at least mid tibia and basal tarsal segments of mid and hind leg.

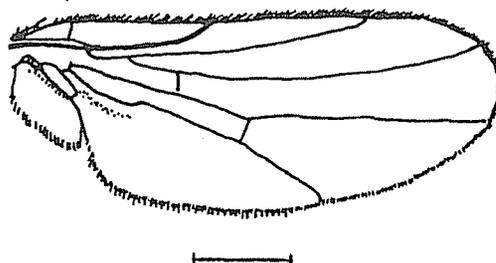


Figure 1. *Oscinella nartshukiana*, wing (Scale line: 1 mm).

Hosts: Unknown. This species was collected first time on grasses by Beschovski (1978).

Distribution: This species was described from a locality close to the Bulgarian capital city of Sofia (Beschovski, 1978).

Material examined: *O. nartshukiana* was collected in Bornova (Izmir) on wild grass in 3.10.1997 (1♂) by sweeping.

Family: Drosophilidae Loew, 1862

Drosophilidae is one of the largest families of acalypterate Diptera and are found worldwide. Members of the family are attracted to and feed upon a great variety of fermenting substances, hence the common name, vinegar, pomace, or fruit flies (the latter not to be confused with the true fruit flies of the family Tephritidae). Oviposition and larval breeding are, however, more highly specialized in fruits or flowers, slime fluxes, decaying leaves, or fungi. Some species are leaf mining, commensal, or even predatory. By the end of 1984, 62 genera and 2.822 described species of this family were known worldwide, and at least 4.000 species were predicted to exist. Evenhuis & Okada (2000) record over 1.000 species in 65 genera and subgenera from the Australasian/Oceanian Regions.

Genus: *Scaptomyza* Hardy, 1849

Species: *Scaptomyza graminum* (Fallén, 1823)

Description: Blackish species, wing length from 2.0 to 2.2 mm. Frons yellow, orbital bristles with 1 ors-2 ori; jowl narrow 1/8 of eyes; antennae entirely yellow, 3rd segment small and round, arista with 5 long fringe. Acrostichal bristles in 4 irregular rows in wings (Figure 2) costa extending R_{4+5} , last section of M_{3+4} 5 times shorter than penultimate, squamae white margin and fringe dark, halteres white. All legs yellow.

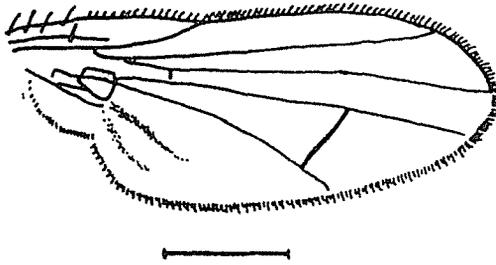


Figure 2. *Scaptomyza graminum*, wing (Scale line: 1 mm).

Hosts: *Aquilegia vulgaris*, *Brassica campestris*, *B. oleracea*, *B. rapa*, *Petasites officinalis* and *Triticum pratense* (Stalker, 1945).

Distribution: Egypt, Formosa, U.S.A. (Stalker, 1945), Russia (Kas'yanov, 1976), Uzbekistan (Maca, 1992), England (Pennington, 1997), Faroe Islands, Iceland and Denmark (Meier et al., 2000), Hawaii (Tamura et al., 2000) and India (Thompson, 2000).

Material examined: *S. graminum* was collected in Menderes (İzmir) on *Triticum vulgare* in 23.5.1998 (1♀) by sweeping.

Özet

İzmir İlinden Türkiye Diptera faunası için iki yeni kayıt

Bu çalışma 1997-1998 yılları arasında İzmir ili ve çevresinde yürütülmüştür. Diptera takımına bağlı türler kültürü yapılan ve yapılmayan bitkiler üzerinden toplanmış ve teşhis

edilmiştir. *Oscinella nartshukiana* Beschovski, 1978 (Chloropidae) ve *Scaptomyza graminum* (Fallén, 1823) (Drosophilidae) Türkiye Diptera faunası için yeni kayıt türlerdir.

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