

Several Rarely Found New Records for the Turkish Syrphidae Fauna (Diptera: Syrphidae)

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ABSTRACT

In this paper 7 species of syrphid flies have been recorded. Five of them have not been previously recorded for Turkey. *Brachypalpus chrysites* Egger, 1859 *Chalcosyrphus eunotus* (Loew, 1873), *Criorhina floccosa* (Meigen, 1822), *Melangyna lasiophthalma* (Zetterstedt, 1843) and *Melangyna umbellatarum* (Fabricius, 1794).

Key words: Syrphidae, Diptera, new records, Fauna, Turkey.

INTRODUCTION

Until now, just one species of the genus *Brachypalpus* has been recorded from Turkey by Peck (1988). Speight (2008) assumes that Peck (1988) also recognises *Brachypalpus meigeni*, which is otherwise taken to be a colour variety of *Brachypalpus laphriformis*.

Three species of the genus *Chalcosyrphus* have been recorded from Turkey: *Chalcosyrphus nemorum* (Fabricius, 1805), *Chalcosyrphus piger* (Fabricius, 1794) and *Chalcosyrphus rufipes* (Loew, 1873) (Saribiyik & Özgür, 2000; Saribiyik, 2004 and Sack, 1932 respectively).

Only one species of the genus *Criorhina* has been recorded from Turkey: *Criorhina berberina* (Speight 2008).

No *Melangyna* species have been recorded for the Turkish fauna till now.

MATERIAL AND METHODS

Specimens of flies were collected from ten localities in the provinces of Kastamonu and Konya in April and August between years 1996-2007. The specimens were caught in the morning with handnet (killing in bottles containing ethyl acetate immediately). Flies were prepared and labeled following standard protocols for museum material. The following works were used for species identification: Sack (1932), Bańkowska (1963), Van Der Goot (1981), Stubbs and Falk (1983), Violovich (1983), Verlinden (1991), and Speight and Sarthou 2008. Listing follows the classification of Speight

(2008). The samples were collected by the author (Leg. S. SARIBIYIK). The specimens are preserved in the personal collection of the author.

RESULTS

Brachypalpus chrysites Egger, 1859

Material Examined: Kastamonu, Ilgaz Mountain National Park, 29.4.2001, 1900m., 2 males, 3 females; 06.05.2001, 3 females. Ilgaz Mountain, Tüfekçi village, 10.06.2001, 1700m., 2 males, 1 female. Ilgaz Mountain Tüfekçi village, diphan locality, 15.06.2002, 1500m., 2 males. Ilgaz Mountain National Park, 24.5.2008 2 males, 1 female. Kastamonu, Daday, Ballıdağ locality, 09.06.2007, 1700m., 2 males.

First record for Turkey.

Habitat: These flies lives in areas where *Salix* sp. plants are found in the edges of *Abies* sp. and *Pinus* sp. forests in highland sections of mountains.

Flowers visited: *Salix* sp. (Salicaceae).

Range: Scandinavia and mountainous parts of Europe south to the Pyrenees; Tatra mountains, Schwarzwald, through the Alps (France, Germany, Switzerland, Liechtenstein, Austria) eastwards into the former Yugoslavia, Roumania and European parts of Russia (Speight, 2008).

Chalcosyrphus eunotus (Loew, 1873)

Material Examined: Konya, Taskent, Gevne valley, 20.04.2001, 1585m., 1 male.

First record for Turkey.

Habitat: This flies lives in areas where *Crataegus* sp. plants are found in *Quercus* sp. forests.

Flowers visited: *Crataegus* sp. (Rosaceae).

Range: Britain, Netherlands, Belgium, France, Germany, Czech Republic, Switzerland, Hungary, Poland, Roumania; in southern Europe from northern Spain, southern France, northern parts of the former Yugoslavia, Armenia and the Caucasus (Speight, 2008).

Chalcosyrphus piger (Fabricius, 1794)

Material Examined: Kastamonu, Daday, Ballıdağ locality, 09.06.2007, 1700m., 1 male.

Habitat: This flies lives in areas where *Ranunculus* sp. plants are found in *Abies* sp. forests.

Flowers visited: *Ranunculus* sp. (Ranunculaceae).

Range: Scandinavia south to the Pyrenees, increasingly montane southwards; eastwards from northern France through central Europe into Asiatic parts of Russia; also in the Nearctic. Species, threatened at the European level and approaching extinction in Western Europe. It is already believed to be extinct in the Netherlands (Speight, 2008).

Criorhina berberina (Fabricius, 1775)

Material Examined: Kastamonu, Bostan village, 23.06.1999, 1400m., 1 male, 03.07.1999, 1 female, Kastamonu, Çatören village, 18.07.1999, 1200m., 1 female, Ilgaz Mountain, Tüfekçi village, diphan

locality, 23.06.2002, 1500m., 1 female, Kastamonu, Biden high plateau, kızılkeş valley, 27.06.2004, 1400 m., 1 female, Kastamonu, Tosya, Dipsiz göl, 21.7.2001 1000m., 1 female.

Habitat: These flies lives in areas where *Crataegus* sp. plants are found in *Pinus* sp. forests.

Flowers visited: *Crataegus* sp. (Rosaceae) and white flowered Umbelliferae.

Range: Fennoscandia south to the Pyrenees and northern Spain; from Ireland eastwards through central Europe to European parts of Russia and Turkey, Italy, the former Yugoslavia, Roumania (Speight, 2008).

Criorhina floccosa (Meigen, 1822)

Material Examined: Kastamonu, Küre, Masruf pass, Camili village, 08.07.1996, 1250m., 1 female, Kastamonu, Biden high plateau, kızılkeş valley, 27.06.2004, 1400m., 1 female.

First record for Turkey.

Habitat: These flies lives on Umbelliferae flowers found near the banks of river near *Fagus* sp. and *Pinus* sp. forests.

Flowers visited: White flowered Umbelliferae.

Range: southern Sweden and Denmark south to the Pyrenees; from Ireland eastwards through central Europe (plus northern Italy and the former Yugoslavia) into European parts of Russia as far as the Caucasus (Speight, 2008).

Melangyna lasiophthalma (Zetterstedt, 1843)

Material Examined: Kastamonu, Ilgaz Mountain National Park, 06.05.2001, 1900m., 1 male.

First record for Turkey.

Habitat: This flies lives in areas where Umbelliferae plants are found in clearings of *Abies* sp. forests in highland sections of mountain.

Flowers visited: White flowered Umbelliferae.

Range: from Iceland and Fennoscandia south to the Pyrenees and mountainous parts of Spain; from Ireland eastwards through northern Europe and mountainous parts of central Europe into European parts of Russia; through much of Siberia. In the Nearctic from Alaska south to Colorado and Maryland (Speight, 2008).

Melangyna umbellatarum (Fabricius, 1794)

Material Examined: Kastamonu, Yukarı İsmaili village, 07.08.1999, 1400m, 1 female.

First record for Turkey.

Habitat: This flies lives in areas where Umbelliferae plants are found in clearings of *Pinus* sp. forests.

Flowers visited: White flowered Umbelliferae.

Range: Fennoscandia south to Iberia; from Ireland eastwards through northern, central and southern Europe (Italy, the former Yugoslavia, Roumania, Bulgaria) into European parts of Russia; through mountainous parts of Siberia to Kamchatka; in N America from Alaska to Arizona (Speight, 2008).

DISCUSSION

The species identified in areas where studies were conducted are rare and their population density is rather low. The studies were generally done in habitats where flowery plants are found in small streams and humid areas in forests in high land zones. The number of the species in the Turkish syrphidae fauna has increased to over 300 together with the 5 new records identified in this study.

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