

## SHORT COMMUNICATION

# First records of some species of Diptera (Insecta) from the Azores

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During a collecting trip undertaken by J. Roháček and M. Vála in the São Miguel Island (Azores) in August and September 2006, mainly devoted to acalyptrate flies, three distinctive species of Diptera were found, two of which proved to be hitherto unrecorded from the Azorean archipelago. These additions to the regional fauna are presented below with a discussion of their origin.

The voucher specimens of the species recorded below are deposited in the following collections: JSO – collection of J. Starý, Olomouc, Czech Republic, SMOC – Silesian Museum, Opava, Czech Republic, ZMAN – Zoological Museum, Amsterdam, Netherlands.

### FAMILY TIPULIDAE

#### *Tipula (Tipula) oleracea* Linnaeus, 1758

Material examined: Azores: São Miguel I.: Remédios nr. Lagoa 0.5 km S, 37°45' N 25°34' W, 180 m, meadow, 02.09.2006, 2 males; Lagoa do Fogo, NW shore, 37°46' N 25°29' W, 575-600 m, netted on lake shore, 7.09.2006, 2 males 2 females, J. Roháček leg.; Lombadas, Ribeira Grande river, 37°47' N 25°27' W, 580 m, sweeping riverside vegetation, 05-09-2006, 3 males, J. Roháček & M. Vála leg., P. Oosterbroek det. (SMOC, JSO, ZMAN).

Comments: A species native to the West Palaearctic area; common and widespread there, known as an agricultural pest. Also widely distributed in the Nearctic (Canada and USA), probably introduced by accidental transport. The recent record from Ecuador (Young et al. 2000) seems to be a similar case. In Macaronesia recorded from Canary Islands (Gran Canaria) (Oosterbroek & Eiroa 2004). The larvae live in soil in gardens, pastures, or meadows, feeding on roots of grasses, seedlings and crops, thus causing commercial losses (Young et al. 2000). Oosterbroek (2009: 195) recorded this species from the Azores based on some of the specimens listed above but without giving precise collecting data. The species was observed flying in numbers in habitats with low, mostly grassy vegetation, including those in montane valleys (see Fig. 1). This is the second species of the Tipulidae from the Azores. The endemic *Tipula (Savtshenkia) macaronesica* Savchenko, 1961 was not collected.

### FAMILY DROSOPHILIDAE

#### *Dettopsomyia nigrovittata* (Malloch, 1924)

Material examined: Azores: São Miguel I.: Sete Cidades 1 km N, 37°52' N 25°47' W, 280-330 m, sweeping over meadow, 08-09-2006, 1 female;



Fig. 1. Valley of the Ribeira Grande river in Lombadas (São Miguel Island, Azores), habitat of *Tipula oleracea* (photo by J. Roháček).



Fig. 2. A sugar-beet field after harvest in bottom of a small crater 4 km N of Ponta Delgada (São Miguel Island, Azores), habitat of *Dettopsomyia nigrovittata* (photo by J. Roháček).

Ponta Delgada 4 km N, 37°46' N 25°41' W, 200-230 m, sweeping over field margin, 4.ix.2006, 1 female, both J. Roháček leg. and det. (SMOC).

Comments: A widespread (mainly tropical to subtropical) species known from North and South America, Hawaii, Japan (including Bonin Islands), Oriental Region, Australia, Africa and Canary Islands (Okada 1982; Singh & Fartyal 2002). There is only one previous record from the whole West Palaearctic area, viz. that from Canary Islands (Tenerife, see Hackman 1958) where the species is considered introduced (Bächli et al. 2004). The specimens examined were collected in man-affected habitats, at margins of a field (Fig. 2) and a meadow, respectively.

#### FAMILY HIPPOBOSCIDAE

##### *Ornithomyia chloropus* Bergroth, 1901

Material examined: Azores: São Miguel I: Sete Cidades 1 km N, 37°52' N 25°47' W, sweeping vegetation in wet ravine, 31.08.2006, 1 male, J. Roháček leg. and det. (SMOC).

Comments: A Palaearctic species mainly recorded from North Europe (including Iceland) but also known from Central Europe, rarely in South Europe, Near East and North Africa (Büttiker 1994; Petersen 2009). In Macaronesia hitherto only recorded from the Canary Islands (Tenerife and La Palma, see Báez 1978). This blood-sucking bird parasite displays a very low host specificity. Although preferentially living on various species of Passeriformes it has also recorded from representatives of Strigiformes, Falconiformes and Lariformes (Chalupský 1980). It was therefore not surprising to find it in São Miguel Island (albeit purely accidental, as previously mentioned).

#### DISCUSSION

All the above recorded species belong to widespread taxa which were obviously recently introduced into the São Miguel Island. *Tipula oleracea* proved to be a very successful immi-

grant (either from Europe or North America) inasmuch as it establishes rich populations (documented in 3 localities) even in mountain regions (Fig. 1) without grassland habitats typical of this species. The drosophilid *Dettopsomyia nigrovitta* certainly has a different origin. As it is originally a tropical-subtropical species it was most probably introduced from Africa (or from Canary Islands, see above), possibly with transport of tropical fruits, ornamental flowers or other products. The record from the Azores apparently is the northernmost occurrence of the species. The bird parasite *Ornithomyia chloropus* may have reached the Azores with host birds from any part of the West Palaearctic area. The finding in the São Miguel I. represents a new westernmost distributional limit of this species (see Petersen 2009).

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