



Syrphidae (Diptera) from the Greek island of Lesvos, with description of two new species

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Abstract

The results of the hoverfly (Syrphidae) collection by the ‘Malloch Society’ on the Greek island of Lesvos are presented. Fieldwork took place from February to March 2006 and from May to June 2010. An account of 66 species from 28 genera is provided including two species new to science, five species new to Greece and data for several rarely recorded species. We describe *Eumerus armatus* Ricarte and Rotheray **sp. nov.**, a medium size species with red abdomen. We also describe *Sphiximorpha hiemalis* Ricarte, Nedeljković and Hancock **sp. nov.**, a hairy species with distinctive colour and pollinosity patterns and abdomen shape. The female of *Eumerus claripennis* Coe, 1957 is described and the male genitalia are figured. The majority of species encountered belonged to the typically Mediterranean genera *Eumerus* (8 spp.), *Merodon* (16 spp.) and *Paragus* (6 spp.). Approximately 71% of the recorded species also occur in Turkey. This supports the idea that West Mediterranean and Anatolian faunas overlap in Lesvos.

Key words: fauna, *Merodon*, *Eumerus armatus* **sp. nov.**, *Eumerus claripennis*, *Sphiximorpha hiemalis* **sp. nov.**, Greece, Agiasos, sweet chestnut forest

Introduction

Hoverflies (Diptera, Syrphidae) are widespread in the world and play important ecological roles such as pollination, predation and nutrient cycling (Rotheray & Gilbert 2011). In Europe, the amount of faunistic and biological data on the Syrphidae has allowed them to be used as environmental bioindicators (Speight & Castella 2001). However, the syrphids are insufficiently studied in parts of southern Europe, for instance, in the Eastern Mediterranean, where Greece, with about 1400 islands, is possibly the great unknown (Petanidou *et al.* 2011).

A total of 269 hoverfly species have been recorded from Mainland Greece, Crete, the Cyclades, Rhodes and the Dodecanese (Speight *et al.* 2010). This total does not, however, include the Greek island of Lesvos, which is the third largest island in the Aegean Sea and is situated only 9km from the Turkish coast. Marcos-García *et al.* (2000) reported *Eupeodes lucasi* (Marcos-García et Laska, 1983) from Lesvos. More recently, 22 *Merodon* species have been recorded, five of which were described as new to science (Vujić *et al.* 2007; Ståhls *et al.* 2009; Radenković *et al.* 2011). Surveys by García-Gras (2008, unpublished) included 79 additional species. Thus, the number of hoverfly species known from Lesvos is 102.

In 2006 and 2010, members of the Malloch Society (www.mallochsociety.org.uk) visited Lesvos and recorded syrphids. New additions to the fauna and new species were found and these and other results are described in this paper.