



<http://dx.doi.org/10.11646/zootaxa.4058.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:C5BB2D52-5B65-4BA7-B632-2FE984261389>

The first southwest Asian record of the subfamily Microdontinae, and the description of a new species of *Metadon* Reemer from Iran (Diptera: Syrphidae)

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Abstract

Metadon persicus Gilasian & Reemer **sp. nov.** is described, based on a single female specimen from the Zagros mountains in Iran. Morphological variation among the members of the genus *Metadon* Reemer and their distribution in the world are discussed. Photographs of the new species are provided. The subfamily Microdontinae represents a new taxon for south-western Asia and the genus *Metadon* is reported from the western Palaearctic region for the first time.

Key words: hover flies, *Metadon persicus* Gilasian & Reemer **sp. nov.**, Persia

Introduction

Due to their attractiveness and economic importance as pollinators and predators of aphids, Syrphidae are relatively well known to Iranian entomologists, compared to other families of Diptera. All species of hoverflies previously recorded from Iran belong to the subfamilies Syrphinae and Eristalinae (Dousti & Hayat 2006; Gilasian 2007; Gilasian & Sorokina 2011; Kazerani *et al.* 2013). The present study is part of our research on the taxonomy of the Syrphidae fauna of Iran with the aim of raising the current knowledge of this family in western Asia.

Unlike most Syrphidae, Microdontinae are rarely seen on flowers but can often be found nearby ant nests, in which their larvae prey on the ant brood. Microdontinae larvae superficially resemble molluscs, and have even been described as such by malacologists on several independent occasions (Cheng & Thompson 2008).

Microdontinae occur worldwide, mostly in tropical regions, and more than half of the 460 described species have been reported from the Neotropics (Reemer & Ståhls 2013a,b). In their comprehensive revision of the subfamily, Reemer & Ståhls (2013a) described 10 new genera, including *Metadon*, 26 new species, and prepared a key to all genera and species groups. Recently, Reemer & Bot (2015) described six new species of *Microdon* Meigen from Madagascar, also providing a key to the Madagascan genera. The phylogenetic relationships among Microdontinae were investigated by Reemer & Ståhls (2013b).

Material and methods

The specimens were collected in the Lorestan and Fars provinces in western and southern Iran, respectively (Figs 1–3). The collecting areas are located in the Zagros Mountains, a mountain range of 1500 km length ranging from the northwest to the southeast of Iran. The material has been collected by insect net and is deposited at the Hayk Mirzayans Insect Museum (HMIM), Tehran, Iran.

The specimens were examined using an Olympus SZH microscope, and photographs were taken with a 650D Canon digital camera and edited in Adobe Photoshop CS2. Body length was measured in millimetres (mm) from