



Two new species of *Herina* (Diptera: Ulidiidae) from the Mediterranean region, with key to species groups

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Abstract

Herina dimorphica n. sp. (type locality Israel) and *H. sicula* n. sp. (type locality Sicily, Italy) are described and illustrated, and a new species group (the *Herina dimorphica* species group) is established for both species. *H. dimorphica* is characterized by a sexually-dimorphic wing pattern and venation. *H. sicula* is similar albeit not sexually-dimorphic. Almost all known *Herina* species are assigned to one of nine species groups, which are keyed.

Key words: Tephritoidea, Ulidiidae, *Herina*, species group

Introduction

With about 700 described species, the Ulidiidae are the third largest family in the Tephritoidea (Kameneva and Korneyev, 2010). The Palearctic ulidiid fauna comprises about 200 species (Soós, 1984; Zaitzev, 1984), with about half of them occurring in the Mediterranean basin. Morgulis (2012) treated 39 species from Israel and considered about one third of them to be undescribed.

With over forty described species occurring mainly in the Holarctic Region and on high mountain grasslands of the Oriental Region and Papuan subregion, *Herina* is among the largest genera of ulidiids, especially in the Palearctic Region and Europe (Kameneva, 2007). Until recently this genus was not known from Israel. Merz (2002) described *H. aartseni* from east Mediterranean countries, including Israel.

From 1970 on we have been collecting in the northern part of Israel a large number of specimens of another, very different, *Herina* species with an atypical wing pattern and venation (wing sexually dimorphic) that was obviously undescribed. In 1986, in Sicily, AF collected an additional undescribed species that although not sharing all the wing peculiarities with the Israeli species is obviously closely related to it. Based on this overall similarity, as well as peculiarities of the male terminalia, we consider these two species to be sister species. The two new species are described here, and their possible relationships with other species of *Herina* are briefly discussed. Most known species of *Herina* are preliminarily assigned to nine groups, of which two were defined by Merz (2002) and seven are newly defined here, including *Herina dimorphica* species group which is established here for the two new species. All the species groups and a few ungrouped species are keyed.

Material and methods

Collecting was carried out using a sweeping net. Specimens were killed using a cyanide killing jar and were pinned or preserved in 70% alcohol. Specimens for the biological observations were placed in glass tubes in the field and then transferred into a plastic cage in the laboratory. The flies were given honey as food and moist cotton-wool as a source of water.