## A new species of *Phlebosotera* Duda (Diptera: Asteiidae) from the Mediterranean, with comments on its biology and a key to *Phlebosotera* species

[Eine neue Art aus der Gattung *Phlebosotera* Duda (Diptera: Asteiidae) aus dem Mittelmeergebiet, mit Bemerkungen zur Biologie sowie einem Bestimmungsschlüssel für die *Phlebosotera*-Arten]

## by Amnon FREIDBERG and Miguel CARLES-TOLRÁ

Tel Aviv (Israel) Barcelona (Spain)

Abstract	<i>Phlebosotera clypeata</i> spec. nov. is described from the Mediterranean countries of Spain, Italy (Sicily), Morocco, and Israel. The genus <i>Phlebosotera</i> Duda is redescribed, and a key to its species is given. The epigamic behaviour of <i>P. clypeata</i> is described and discussed.
Key words	$\label{eq:Asteriorange} A steiidae, \textit{Phlebosotera}, Palaearctic Region, Mediterranean, taxonomy, behaviour, new species, key$
Zusammenfassung	Phlebosotera clypeata spec. nov. wird aus mehreren Mittelmeerländern, wie Spanien, Italien (Sizilien), Marokko und Israel, beschrieben. Die Gattung Phlebosotera Duda wird redeskribiert und ein Bestimmungsschlüssel der Arten wird geliefert. Das Fortpflanzungsverhalten von P. clypeata wird dargestellt und diskutiert.
Stichwörter	Asteiidae, <i>Phlebosotera</i> , paläarktische Region, Mittelmeergebiet, Taxonomie, Verhalten, neue Art, Bestimmungsschlüssel

## Introduction

Asteiidae is a small and little known family with about 140 described species worldwide (Freidberg, unpublished data). Asteia Meigen is the dominant genus, containing more than half of all the family's species. Phlebosotera Duda, with 18 species, is the second largest genus in the family, but almost nothing has been published on this genus beyond the taxonomic descriptions of species. Moreover, only four species were described based on reasonably large series of specimens (nine specimens or more), and only four species were described from both sexes. Ten species were described from the holotype only, and nine are still known from one sex only, hampering subsequent studies due to the sexual dimorphism prevalent in this genus. For most species, no subsequent data have been published following their original description. The most recently described species is P. maeandrica Carles-Tolrá (1998), but several additional undescribed species exist in collections, particularly from Israel (Freidberg, unpublished data). Practically nothing is known about the biology of *Phlebosotera* and no immatures have been described so far, except for the statements made by PAPP (1998) that "the larvae of Phlebosotera species were reared from under pine bark" and "the puparium of *Phlebosotera* is very similar to [that of] Leiomyza". The discovery of a new but widespread species in the Mediterranean basin prompted us to launch a study of this genus, aiming first at describing this species, and later at conducting a full revision of the genus.