

Some notes on the genus *Sycophila* Walker, 1871 (Hymenoptera: Eurytomidae) in the west of Iran

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Abstract. Recent studies have shown that four species of *Sycophila* (*S. biguttata*, *S. binotata*, *S. submutica*, and *S. variegata*) can be added to the list of Iranian Hymenoptera. A simple key to species and notes on their biology are given. The variability of characters, e.g. colour, and the value of some useful characters for separating species is briefly discussed.

Kurzfassung. Neue Untersuchungen haben gezeigt, dass vier Arten der Gattung *Sycophila* zur Hymenopterenfauna Irans hinzugefügt werden können, und zwar *S. biguttata*, *S. binotata*, *S. submutica* und *S. variegata*. Ein einfacher Artenschlüssel und Angaben zur Biologie der einzelnen Arten werden dargestellt. Die Variabilität der Merkmale, z.B. der Färbung, und der Wert einzelner Merkmale zur Artunterscheidung werden kurz diskutiert.

Key words. *Sycophila*, Eurytomidae, Iran, *Quercus*, gall.

Introduction

The genus *Sycophila* (Hymenoptera: Chalcidoidea, Eurytomidae) was described by Walker (1871) with *Sycophila decatomoides* designated as the type species. It is one of the most distinct eurytomid genera, widely distributed throughout the world and especially well represented in the Palaearctic fauna. There are many taxonomic works for the Palaearctic region, including ERDÖS (1952), ZEROVA (1995), NIEVES-ALDREY (1983), and PUJADE I VILLAR (1994). Nevertheless the taxonomic position of the genus has been the subject of debate. Some authors have given tribal rank to *Sycophila* (Decatomi of BALDUF 1932); some have discussed it as distinct subfamily (Decatomiinae of FERRIÈRE 1950; Eudecatomiinae of ZEROVA 1995), whilst others have placed it in the subfamily Eurytominae (BOUČEK 1988, NOYES 2005).

Biologically this genus may be divided into two groups. The first group is associated with various cynipid galls on trees and herbaceous plants. These temperate species frequently emerge from cynipid galls (CLARIDGE 1959, NIEVES-ALDREY 1983, PUJADE I VILLAR 1994). The second group is distributed in tropical areas and is mostly reared from *Syconia* on *Ficus* trees. Some are true parasitoids but others may be inquiline.

BURKS (1971) described a new genus *Eudecatoma* which included species belonging to group one of *Sycophila*, and differentiated it from other genera according to the thoracic notum sculpture and the shape of the anterior femora and gaster. BOUČEK (1974) did not accept that these characters were sufficiently definitive for the genus and synonymised it with *Sycophila*, although this synonymy has been challenged recently by ZEROVA (1995) based on the fact that the type species of *Sycophila* has enlarged fore and hind femora.

The characters which differentiate this genus from other genera in the family Eurytomidae include: a distinct submarginal infumation, little difference between the antennae of the two