



<http://dx.doi.org/10.11646/zootaxa.3620.3.5>

<http://zoobank.org/urn:lsid:zoobank.org:pub:1B04F939-9FFA-4B01-B851-7A6A7EDDF131>

Revision of the Indian *Microplitis* Foerster (Hymenoptera: Braconidae: Microgastrinae), with description of one new species

ANKITA GUPTA

National Bureau of Agriculturally Important Insects, Post Bag No. 2491, H. A. Farm Post, Bellary Road, Hebbal, Bangalore 560 024, Karnataka, India.

E-mail: drankitagupta7@gmail.com

Abstract

The Indian fauna of the genus *Microplitis* Foerster, 1862 is revised. An illustrated key to eight species including the description of one new species, *M. murkyi* sp. nov., is provided. Six previously described species, namely: *M. ajmerensis* Rao & Kurian, *M. demolitor* Wilkinson, *M. indicus* Marsh, *M. manilae* Ashmead, *M. prodeniae* Rao & Kurian, and *M. spodopterae* Rao & Kurian are elaborated with taxonomical variations and extended distribution. Two species, *M. bageshri* Sathe, Inamdar & Dawale and *M. dipika* (Bhatnagar) are considered *incertae sedis*. A new combination is suggested for *Snellenius maculipennis* (Szepliget) which is placed into synonymy with *Microplitis*. Information on taxonomic history of the genus, diagnostic characters of all the included species, distribution and host relationships are provided.

Key words: Parasitic wasps, host relationships, India, *Microplitis*, Microgastrinae, revision

Introduction

The apomorphic genus *Microplitis* was established by Foerster in 1862 with the type species *Microgaster sordipes* Nees von Esenbeck. The species are larval endoparasitoids of agriculturally important pests, particularly lepidopteran species of *Helicoverpa* and *Spodoptera*. The hosts mostly belong to the family Noctuidae, and to some extent Sphingidae and Lymantriidae, although some other families have also been recorded. The genus can be recognized by a large areolet, roughly sculptured propodeum often with a median longitudinal carina, shape and sculpture of first metasomal tergite, and with a weakly defined groove separating second and third tergum (Nixon 1965, Mason 1981, Austin & Dangerfield, 1992 & 1993). The genus is diverse and well documented from the Holarctic region in comparison with the tropical and subtropical regions. After the exhaustive work by Austin & Dangerfield (1992 & 1993) it is well known from the Australasian region.

Wilkinson (1930) revised the Indo-Australian species of *Microplitis* and included ten species from this region. His key included *Snellenius maculipennis* (Szepliget) (as *M. maculipennis*) and *nomen nudum similis* Ashmead (as *M. similis*) from India; *M. perelegans* (Bingham) and *M. basalis* (Bingham) from Australia; *S. radicalis* (Wilkinson) (as *M. radicalis*) from China; *S. philippinensis* (Ashmead) (as *M. bimaculatus*) from Kuching, Borneo; *M. pallidipes* Szepliget from Singapore; *M. spectabilis* (Haliday) from Quetta, India (now in Pakistan); *M. manilae* Ashmead and *S. philippinensis* (Ashmead) from Philippines; *M. atamiensis* Ashmead and *M. spinolae* (Nees) (as *M. sapporoensis* Ashmead) from Japan. Papp (1979, 1986) separated a group of species with reduced sculpturing, previously considered in *Microplitis*, and placed them in a new genus, *Glabromicroplitis* Papp. Austin and Dangerfield (1993) reviewed Australian and New Guinean species of *Microplitis* and *Snellenius* along with their biology and host relationships. They documented 30 species, along with redescription of some, and placed the genus *Glabromicroplitis* Papp (type species, *Glabromicroplitis mahunkai* Papp) into synonymy with *Microplitis*. Janzen *et al.* (2003) studied the host specificity and hyperparasitism associated with *Microplitis* species in relation to sphingid hosts. Song & Chen (2008) mentioned the existence of 25 species from China. Fernández-Triana (2010) reported 21 species and expressed the possibility of nearly 60 species based on barcoding data.