



<http://dx.doi.org/10.11646/zootaxa.3716.2.7>

<http://zoobank.org/urn:lsid:zoobank.org:pub:1D8EEE3F-712D-4B06-B107-06CB7B025A1B>

On some brachypterous Encyrtidae (Hymenoptera: Chalcidoidea) from India, with description of four new species

MOHAMMAD HAYAT^{1,3}, SHAHID BIN ZEYA¹ & K. VEENAKUMARI²

¹Department of Zoology, Aligarh Muslim University, Aligarh 202 002, India

²National Bureau of Agriculturally Important Insects, Bengaluru 560 024, India

³Corresponding author. E-mail: hayat.mohd44@gmail.com

Abstract

Four new species of brachypterous Encyrtidae (Hymenoptera: Chalcidoidea) are described. These are: *Cheiloneurus mandyanus* Hayat, **sp. nov.**, *Encyrtus coorgensis* Hayat & Zeya, **sp. nov.**, *Microterys atturensis* Hayat, **sp. nov.** and *Pseudectroma indicum* Hayat & Zeya, **sp. nov.** The following species that exist either in brachypterous forms only or in both brachypterous and macropterous forms are recorded: *Anomalicornia tenuicornis* Mercet, *Cheiloneurus bangalorensis* (Subba Rao), *C. quadricolor* (Girault), *Diversinervus cervantesi* (Girault), *Globulencyrtus politus* (Hoffer), *Indaphycus planus* Hayat, *Neodusmetia sangwani* (Subba Rao), *Prochiloneurus bolivari* Mercet, *Rhopus atys* Noyes & Hayat and *Sakencyrtus mirus* Hayat. *Globulencyrtus politus* and *P. bolivari* are newly recorded from India. A diagnosis of *Globulencyrtus*, and redescriptions of *G. politus*, *P. bolivari* based on the Indian specimens and of the brachypterous forms of *R. atys* are given. The occurrence of brachyptery in the Encyrtidae is briefly noted together with a list of brachypterous species recorded from India.

Key words: *Cheiloneurus*, *Encyrtus*, *Globulencyrtus*, *Microterys*, *Pseudectroma*, new brachypterous species, records

Introduction

Brachypterous or short-winged species, occur frequently in some genera of the family Encyrtidae (Hymenoptera: Chalcidoidea), and several other chalcidoid families, such as Aphelinidae, Chalcididae, Eulophidae, Eupelmidae, and Pteromalidae. In Encyrtidae, brachypterous species or species with both brachypterous and macropterous forms are known in at least 94 genera as we could ascertain from the generic keys given by Prinsloo & Annecke (1979, Afrotropical genera), Noyes (1980, Neotropical genera), Noyes & Hayat (1984, Indo-Pacific genera), Noyes (1988, New Zealand genera), Trjapitzin (1989, Palaearctic genera), Noyes & Hayat (1994, genera of Oriental Anagyrini), Noyes et al. (1997, Nearctic genera), Zhang & Huang (2004, Chinese genera) and Hayat (2006, Indian genera). Of these 94 genera, 27 genera are represented only by brachypterous species. The remaining 67 genera contain one to several brachypterous species or species which exist in both macropterous and brachypterous forms.

From India, females of the following species are known either from brachypterous forms only or from both macropterous and brachypterous forms:

Anomalicornia tenuicornis Mercet—macropterous and brachypterous.

Cerapterocerus augustus Hayat—macropterous and brachypterous.

Cerapterocerus brachypterus Singh & Agarwal—brachypterous.

Cheiloneurus bangalorensis (Subba Rao)—macropterous and brachypterous.

Cheiloneurus quadricolor (Girault)—macropterous and brachypterous.

Diversinervus cervantesi (Girault)—brachypterous.

Indaphycus planus Hayat—macropterous and brachypterous.

Metaphycus brevielus Kaul & Agarwal—brachypterous.