



<http://dx.doi.org/10.11646/zootaxa.4018.3.4>

<http://zoobank.org/urn:lsid:zoobank.org:pub:3A68CC66-1197-4F15-953B-D190721951AC>

The genus *Macroocula* Panfilov in Egypt, with two new species (Hymenoptera: Bradynobaenidae: Apterogyninae)

NEVEEN S. GADALLAH^{1,4}, AHMED M. SOLIMAN^{2,3},
AHMED M. AL-SHAHAT² & MOHAMMED T. HOSSNI²

¹Entomology Department, Faculty of Science, Cairo University, Giza, Egypt. E-mail: n_gadallah@hotmail.com

²Zoology Department, Faculty of Science (Boys), Al-Azhar University, P.O. Box 11884, Nasr City, Cairo, Egypt.
E-mail: ammsoliman@yahoo.com

³Plant Protection Department, College of Food and Agriculture Sciences, King Saud University, P.O. BOX 2460, Riyadh 11451, Saudi Arabia.

⁴Corresponding author. E-mail: n_gadallah@hotmail.com

Abstract

The genus *Macroocula* Panfilov in Egypt is reviewed. Seven species were previously recorded from Egypt: *M. magna* (Invrea, 1965), *M. mahunkai* Argaman, 1994, *M. morawitzi* (Radoszkowski, 1888), *M. nigriventris* (Invrea, 1960), *M. nitida* (Bischoff, 1920), *M. savignyi* (Klug, 1829) and *M. sinaica* (Invrea, 1963). *Macroocula brothersi* Gadallah & Soliman, **sp. nov.** (Egypt, Wadi Shab, Red Sea) and *M. salehi* Gadallah & Soliman, **sp. nov.** (Egypt, Wadi Shaghab, Aswan) are described and illustrated. The subspecies *M. nitida nitida* (Bischoff, 1920) and *M. nitida patrizii* (Invrea, 1932) are raised to species level. An illustrated key and a faunistic list of *Macroocula* species are given.

Key words: new species, bradynobaenid wasps, faunistic list, Saudi Arabia, United Arab Emirates

Introduction

Macroocula Panfilov, 1954 is a relatively large genus in the subfamily Apterogyninae, with 41 recorded species and subspecies (Pagliano, 2002, 2008, 2011; Gadallah *et al.*, 2014). It was first erected by Panfilov (1954) with the type of the genus *Apterogyna morawitzi* Radoszkowski, 1888.

Members of the genus are widely distributed in Africa and Asia, where the majority of them inhabit North Africa, Arabia and the Middle East (Pagliano 2002, 2008, 2011; Lelej & Osten 2004; Gadallah *et al.* 2014). Their biology is still unknown except for being nocturnal or crepuscular species (Pagliano 2002, 2008).

Members of the genus *Macroocula* are characterized by their large eyes that together with their dull colours indicate that they have crepuscular and nocturnal habits; metasomal T2 and T3 are blackish in most species. In the male: fore and hind trochanters without any protuberances, while the middle one with a strong protuberance (with the exception of a few Arabian species with hind trochanter with protuberance similar to that on middle one) (Pagliano 2002); eye bulged, hemispherical, with diameter equal to 4 × distance between inner eye margin and antennal tubercle; wing veins light yellow. In females eyes with diameter equal to distance between inner eye margin and antennal tubercle; no setal fringe on posterior margin of metasomal terga (Pagliano 2002).

In Egypt, the genus *Macroocula* is previously represented by seven species: *M. magna* (Invrea, 1965); *M. mahunkai* Argaman, 1994; *M. morawitzi* (Radoszkowski, 1888); *M. nigriventris* (Invrea, 1960); *M. nitida* (Bischoff, 1920); *M. savignyi* (Klug, 1829) and *M. sinaica* (Invrea, 1963) (Pagliano 2002). In the present study two new species, *M. brothersi* **sp. nov.** and *M. salehi* **sp. nov.** are described, thus increasing the total number to nine species in the Egyptian fauna. The subspecies *M. n. nitida* (Bischoff) and *M. n. patrizii* (Invrea) are raised to species level, because of the separating characters seen in both sexes, and also from the fact that they were both collected at the same localities (in the present work as well as in Pagliano 2002). An illustrated key for identifying the Egyptian species and a faunistic list are also given.