



<http://dx.doi.org/10.11646/zootaxa.3905.2.3>

<http://zoobank.org/urn:lsid:zoobank.org:pub:EF1F09FE-C414-4653-B4F7-841C4E348D27>

The genus *Apterogyna* Latreille, 1809 in Egypt, with three new species (Hymenoptera: Bradynobaenidae: Apterogyninae)

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Abstract

The genus *Apterogyna* Latreille is reviewed from Egypt, based on specimens collected from Wadi Digla (Cairo), Saint Catherine (South Sinai) and those deposited in Egyptian and Italian insect collections as well as recorded data from the literature. Five *Apterogyna* species were previously recorded from Egypt: *A. grandii* Invrea, *A. latreillei* Klug, *A. mickeli* Giner Marí, *A. mocsaryi* André, and *A. olivieri* Latreille. Three new species *Apterogyna flavicapillata* Soliman & Gadallah **sp. nov.** (South Sinai), *A. oshaibahi* Soliman & Gadallah **sp. nov.** (Wadi Digla), and *A. similis* Soliman & Gadallah **sp. nov.** (Giza) are described and illustrated. An illustrated key of eight Egyptian species of *Apterogyna* is given.

Key words: Apterogyninae, *Apterogyna*, new species, Wadi Digla, Saint Catherine, faunistic list

Introduction

The genus *Apterogyna* Latreille, 1809 is a relatively large genus in the subfamily Apterogyninae, with 35 recorded species and one subspecies (Pagliano 2002, 2004, 2011), including *A. tenuicostata* Nonveiller and *A. unicolor* Audouin which are considered as *nomina nuda* (Pagliano 2002). Members of the genus are widely distributed in Africa (26 species); 13 species and one subspecies were recorded from Arabia to central Asia (Pagliano 2002, 2004, 2011; Gadallah *et al.* 2014). Their biology is still unknown.

Members of the genus *Apterogyna* are characterized by their small to medium size, 5–14 mm long; both sexes are usually with red antennae, males sometimes with black scape; head and mesosoma (♀) usually red, metasoma wholly or partly black; body (♂) usually brightly coloured, with head and mesosoma usually black, metasoma black, or more rarely, partially red; eyes (♀) located above midline of face, in males they are small, not bulging, separated from the occipital carina by a distance at least equal to their own diameter; ocelli (♂) at most as wide as diameter of F1; mid trochanter (♂) with ventral tooth; fore wing with closed brachial cell; the male genitalia very compact, with parameres short and wide. T1 and T2 (♀) with more or less developed tuft of setae apicomesally, occupying a maximum of 2/3 the width of terga (*A. latreillei* with apical fringe of white setae on both terga); T3 (♂) always fringed apically.

In Egypt, the genus *Apterogyna* is represented by five species: *A. grandii* Invrea, 1956; *A. latreillei* Klug, 1829; *A. mickeli* Giner Marí, 1945; *A. mocsaryi* André, 1905 and *A. olivieri* Latreille, 1809 (Pagliano 2002). In the present study, three new species: *A. flavicapillata*, *A. oshaibahi* and *A. similis* are described. An illustrated key to species is also given.

Material and methods

The present study is based on specimens collected from Wadi Digla, Saint Catherine and those deposited in the

Acknowledgements

Sincere gratitude to Denis J. Brothers (University of KwaZulu-Natal, South Africa), for critical reviewing and kind efforts to improve the manuscript. Also many thanks to subject editor Arkady S. Lelej for valuable comments and criticisms on the manuscript. We are grateful to two anonymous reviewers for comments and suggestions that helped to improve this article.

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