



First record of Stephanidae (Hymenoptera, Stephanoidea) for the fauna of Egypt

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Abstract

The family Stephanidae (Hymenoptera, Stephanoidea) is recorded for the first time for the Egyptian fauna, with one species, *Foenatopus bisignatus* Aguiar & Jennings, 2010. A single specimen was collected among *Acacia raddiana* trees infested with *Agrilus roscidus* Kiesenwetter (Coleoptera, Buprestidae), which represents a likely new host record.

Key words: Host record, Saint Catherine, Egypt

Introduction

Stephanidae Leach is a relatively small, often rare, but nearly cosmopolitan family (Aguiar 2004). Their rarity certainly contributed to the fact that nearly 95% of all stephanid species were described from singletons (Aguiar 2004). The group currently comprises 350 valid species in 15 valid genera (including 8 extinct species in 4 extinct genera) (Aguiar *et al.* 2013). They mainly occur in subtropical and tropical forests (Vilhelmsen 1997; van Achterberg 2002), and about half of the species are Oriental. Their phylogenetic relationships remain somewhat ambiguous, but they are usually considered to be the most basal group of Apocrita (Hymenoptera) (Königsmann 1978; Rasnitsyn 1980; Downton *et al.* 1997; Ronquist *et al.* 1999).

Foenatopus Smith is the largest genus of the family, with nearly 50% of stephanid species placed in it (Yu *et al.* 2012). Members of this genus are characterized by the absence of veins 2-SR and 2-SR+M of the fore wing and the absence of or hardly seen 1-SR vein; Vein 2 CU1 of fore wing nearly always reduced, but sometimes complete; the presence of a large sclerite in between the hind coxae; neck of pronotum moderately to very slender and finely striate, with indistinct pronotal fold; outer side of hind tibia usually without fine oblique striae, with or without ventral fine carinae (Hong *et al.* 2011).

The most important taxonomic efforts concerning the classification of this family on a worldwide basis were those of van Achterberg (2002) who revised the Old World species of some stephanid genera and Aguiar (2004) who catalogued the world genera of Stephanidae. Both Australian and Chinese Stephanidae were also revised and keyed by Aguiar (2001) and Hong *et al.* (2011) respectively.

For the Arabian Peninsula, *Foenatopus bisignatus* Aguiar & Jennings was first reported from the United Arab Emirates by Aguiar & Jennings (2010). Another study concerning this genus was conducted in the Middle East (Aguiar *et al.* 2010) in which three new *Foenatopus* species were described and illustrated, *F. hesperophagus* Aguiar from Turkey, *F. prousti* Aguiar & Turrisi and *F. crispus* Aguiar from Iran.

Here we document the first record of Stephanidae for Egypt, and provide a new host record.

Material and methods

This study is based on a female specimen collected by Malaise trap placed among *Acacia raddiana* trees in Wadi Gebal (St. Catherine, South Sinai). The specimen is deposited in Efflatoun Bey collection (Entomology Department, Faculty of Science, Cairo University) (CUE). Photos were taken by a Canon G12 camera attached to Optech trinocular zoom stereomicroscope (LFZT). Measurements of the different parts were made using an ocular micrometer. In the morphometrical section, measurements and abbreviations were adopted as in Aguiar (2001) and the values in parenthesis are those from the original description of *F. bisignatus*.