

Description of *Aphelopus mangshanensis*, a new species of Dryinidae from China

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Abstract

Aphelopus mangshanensis n. sp., from Mount Mangshan (Hunan Province, P. R. China), is described. The new taxon is different from all other Oriental species of *Aphelopus* Dalman, because of the tridentate distal apex of the aedeagus.

Key words: Hymenoptera, Chrysidoidea, Mt. Mangshan, Hunan, P. R. China.

Introduction

Dryinidae (Hymenoptera Chrysidoidea) are parasitoids of Hemiptera Auchenorrhyncha (Guglielmino and Olmi, 1997; 2006).

The genus *Aphelopus* Dalman is distributed in all zoogeographical regions (Olmi, 1984; 1999) and numbers sixty-six species, among which twenty-eight were described from the Oriental region (Bergman, 1957; He and Xu, 2002; Olmi, 1984; 1991; 1995; 1998; 2008a; 2008b; Xu and He, 1999; Xu *et al.*, 1997; 1998; 1999; 2000). The species of *Aphelopus* are known to parasitize Cicadellidae Typhlocybinae (Guglielmino and Olmi, 1997; 2006).

In 2011, the authors examined specimens of *Aphelopus* from P. R. China and found a new species described herein.

Materials and methods

The descriptions follow the terminology used by He and Xu (2002) and Olmi (1984; 1994; 1999). The measurements reported are relative, except for the total length (head to abdominal tip, without the antennae), which is expressed in millimetres.

In the description POL is the distance between the inner edges of the two lateral ocelli; OL is the distance between the inner edges of a lateral ocellus and the median ocellus; OOL is the distance from the outer edge of a lateral ocellus to the compound eye; OPL is the distance from the posterior edge of a lateral ocellus to the occipital carina; TL is the distance from the posterior edge of an eye to the occipital carina.

To complete the present paper the types of all Oriental species of *Aphelopus* were examined.

The following abbreviation was used in the text:

SCAU = The Hymenopteran Collection of South China Agricultural University, Department of Entomology, Guangzhou, Guangdong, P. R. China.

Aphelopus mangshanensis n. sp.

Diagnosis

Male with head black, except mandibles testaceous; mesosoma black; notauli incomplete, reaching about 0.6 length of scutum; aedeagus with distal apex tridentate; right basivolsella with two subdistal bristles; left basivolsella with one subdistal bristle.

Material examined

Male holotype (figure 1), "P. R. CHINA: Hunan Province, Mt. Mangshan, 13.VIII.2010, sweeping, Huayan Chen coll."; [red] "*Aphelopus mangshanensis* n. sp. Z. Xu, M. Olmi, A. Guglielmino, H. Chen det. ♂" (SCAU).

Description

Male

Fully winged; length 2.2 mm. Head black, except mandibles testaceous; antenna black-brown, except segment 1 testaceous; mesosoma black; metasoma brown; legs testaceous. Antenna filiform, covered with long sparse hairs; antennal segments in following proportions: 5:5:5:6:5:6:8:9:15; length/breadth ratio of ninth antennal segment: 9:2. Head dull, granulated; frontal line incomplete, only present in anterior half of face; POL = 6; OL = 3; OOL = 3; OPL = 2; TL = 3; greatest breadth of posterior ocelli as long as OL; occipital carina complete. Scutum and scutellum dull, granulated. Notauli incomplete, reaching approximately 0.6 length of scutum. Metanotum shiny, without sculpture. Propodeum without transverse carina between dorsal and posterior surface; dorsal surface reticulate rugose; posterior surface with two longitudinal keels, lateral areas reticulate rugose and median area almost completely smooth and without sculpture. Forewing hyaline, without dark transverse bands; stigmal vein short, regularly curved; marginal cell open. Aedeagus tridentate (figure 2); basivolsella without basal outer process; left basivolsella with one subdistal bristle; right basivolsella with two subdistal bristles. Tibial spurs 1, 1, 2.