



A new record of *Zatypota albicoxa* (Hymenoptera: Ichneumonidae) from Indonesia, with description of a new species of its host spider (Araneae: Theridiidae)

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Abstract

Zatypota albicoxa (Walker) is newly recorded from Mt. Merapi, Java Is., Indonesia. This is the first record of *Z. albicoxa* from this part of the Oriental region and from the Southern Hemisphere, and the first record of the genus *Zatypota* from Southeast Asia. The Indonesian population of *Z. albicoxa* attacks a theridiid spider of the genus *Parasteatoda*, as do populations of *Z. albicoxa* in other regions. The spider is a new species, and is described under the name of *Parasteatoda merapiensis*.

Key words: irregular three-dimensional web, host-shift, Java, koinobiont, parasitism, *Parasteatoda*, *Polysphincta*-group

Introduction

Zatypota albicoxa (Walker) belongs to the *Polysphincta* group of genera (Ichneumonidae, Pimplinae), which are exclusively koinobiont ectoparasitoids of spiders. As far as known each species of the group utilizes a very narrow range of spiders as hosts, usually one or a few closely related species. The genus *Zatypota* Förster, parasitizing mainly theridiid spiders, is the largest genus among the group (Gauld & Dubois 2006) and has an almost worldwide distribution (Fitton *et al.* 1987). *Zatypota albicoxa* utilizes several species of spider but exclusively those of the genus *Parasteatoda* Archer, three species in Japan and two species in Europe. Although the parasitoid is widely distributed in the Eastern and Western Palearctic areas and in the Oriental part of China (see Yu *et al.* 2005) and Japan (Matsumoto & Takasuka 2010), it had been never recorded from Southeast Asia.

During our ongoing investigation of polysphinctine wasps in Indonesia, we found theridiid spiders parasitized by *Z. albicoxa* at Mt. Merapi, Java Is., Indonesia. The spider belongs to the genus *Parasteatoda* which consists of about 40 species, mainly from East to Southeast Asia (Chrysanthus 1963, 1975; Levi *et al.* 1982; Yoshida 2008, 2009; Zhu 1998), and is recognized as new to science.

Material and methods

The study site is about 250,000 m² extent and located at an altitude of 1,100 m (S 07° 34' 46.8" E 110° 26' 49.0", Kaliurang, Province of Yogyakarta) of Mt. Merapi (alt. 2,914 m, an active volcano), Central Java, Indonesia. Sampling was carried out on 13th and 15th August 2009, 27-28th February 2010 and 17th August 2010. This area is covered with volcanic ash soil and dominated by *Albizia falcataria* (Fabales, Mimosaceae). We checked as many as