



<http://dx.doi.org/10.11646/zootaxa.3795.2.9>

<http://zoobank.org/urn:lsid:zoobank.org:pub:1412CCFC-2A64-45DA-8957-3D5B63E784A0>

First record of Poemeniinae (Hymenoptera, Ichneumonidae) from Peru, with description of a new species and a key to the world species of *Ganodes* Townes

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Abstract

The subfamily Poemeniinae (Hymenoptera, Ichneumonidae) is reported for the first time from Peru. We describe and illustrate a new species, *Ganodes atayupanquii* sp. n. Castillo & Sääksjärvi, which was collected from the Peruvian Andes at 1500 m. A key to the species of *Ganodes* Townes and new distribution records of *G. wahl* Díaz and *G. matai* Gauld are provided.

Key words: Neotropics, Pimpliformes, parasitoid, taxonomy, tropical, Andes, montane

Introduction

The ichneumonid subfamily Poemeniinae comprises ten genera which are represented in the Holarctic, Oriental, Afrotropical and Neotropical regions (Gauld 1991; Wahl & Gauld 1998). According to Wahl and Gauld (1998) the Pimpliformes arose in the north temperate region and diversified into the tropical regions, first into the Old World tropics, then into the New World tropics. After the recent discovery of the primitive genus *Rodrigama* Gauld, 1991, from Taiwan and Japan (Matsumoto & Broad 2011), the genus *Ganodes* Townes, 1957 remained the only genus of the subfamily restricted to the Neotropical region. *Ganodes* is one of the most derived genera of poemeniines and comprises seven described species, two from Brazil, one from Brazil and Venezuela, and one each from Argentina, Costa Rica, Mexico, and Venezuela (Gauld 1991; Wahl & Gauld 1998; Díaz 2008).

The biology of *Ganodes* is unknown. However, due to similarities in the shape of their ovipositors, there is a possibility that they have a similar life history to species of the genus *Pseudorhyssa* Merrill, which are cleptoparasitoids of wood-boring rhyssines (Gauld 1991). This hypothesis is supported by Gauld (1991) who reported observing the Costa Rican *G. matai* Gauld, 1991, on a tree on which *Epirhyssa* sp. (Ichneumonidae, Rhyssinae) was ovipositing.

Species of *Ganodes* are large ichneumonids with diverse black, white and/or reddish patterns on the thorax. *Ganodes* can be distinguished from other genera of Poemeniinae by the combination of the following characters: (i) tarsal claws of fore and mid legs of female with small teeth and (ii) vein *3rs-m* of fore wing present (Wahl & Gauld 1998).

The aim of the present paper is to describe a new species of *Ganodes* from the tropical Peruvian Andes. In addition, we provide a key to the world species of the genus.

Material and methods

We searched for new specimens of the genus *Ganodes* at The Natural History Museum, University of San Marcos, Lima, Peru (MUSM), the Zoological Museum, University of Turku, Finland (ZMUT) and the Natural History

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