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***Clistopyga caramba* sp. nov. (Hymenoptera: Ichneumonidae; Pimplinae), an astonishing example of mimicry in spider-attacking parasitoid wasps**

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Abstract. *Clistopyga caramba* sp. nov. Castillo & Sääksjärvi, collected from the tropical Andean-Amazonian interface in Peru, is described and illustrated. The new species is characterized by highly modified posterior metasomal tergites and a rare colour pattern of the metasoma. Two possible explanations for the bizarre metasomal morphology and colouration are proposed.

Key words: Amazonia, Andes, Peru, morphology, ants, spiders, mimicry, Salticidae, rain forests, Neotropical

Introduction

Clistopyga Gravenhorst, 1829 is a moderately large pimpline genus currently comprising 37 described species (Yu *et al.* 2012; Bordera *et al.* 2014) and a large number of undescribed tropical species. The genus seems to be most species rich in the New World where 19 species have been reported from North America (including Mexico), eight species from Costa Rica, three from El Salvador and four species from the vast continent of South America (Gauld 1991; Gauld *et al.* 1998; Gauld *et al.* 2002; Yu *et al.* 2012; Bordera *et al.* 2014). However, this does not accurately reflect the real distribution of the New World *Clistopyga*. Gauld (1991) proposed that the genus is most species-rich in the Neotropical region which is corroborated by our unpublished data, showing that South America indeed harbours a rich but still little-known fauna of *Clistopyga*.

Most *Clistopyga* species are rarely observed ichneumonids and thus little is known of their life history strategies. What little we know of *Clistopyga* biology is based mainly on a few observations and rearings from Europe (Townes & Townes, 1960; Fitton *et al.*, 1988), where at least two species have been reared from spider (Agelenidae, Clubionidae and Segestriidae) egg sacs in concealed locations, where the larvae feed essentially as predators on the spider eggs (Nielsen, 1929). The only potential exception to this biology is the report by Gauld (1991) and Wahl & Gauld (1998) that *Clistopyga manni* Cushman has been reared as an ectoparasitoid of an adult salticid spider within its egg sac. The details of the biology are unknown but in this case the spider was partially eaten and Gauld (1991) suggests that *C. manni* may be acting as an idiobiont ectoparasitoid. In the closely related *Zaglyptus*, at least some species sting the adult spider to death and the ichneumonid larva consumes both spider and egg sac (Nielsen, 1935).

The main aim of this study is to describe an astonishing new species of *Clistopyga* collected from the tropical Andean-Amazonian interface in Peru, South America. We also propose two hypotheses to explain the bizarre morphology of this species. The current paper is part of a larger project aiming to revise the Neotropical *Clistopyga* (see Bordera *et al.* 2014).