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***Pseudacteon notocaudatus* and *Pseudacteon obtusitus* (Diptera: Phoridae), two new species of fire ant parasitoids from South America**

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Abstract. Ongoing studies in South America of phorid flies of the genus *Pseudacteon* Coquillett 1907 have revealed two further new species in this genus that are described here: *P. obtusitus* and *P. notocaudatus*. Both species are parasitoids of *Solenopsis* (F.) fire ants.

Key words: Phoridae, phorid, parasitoid, *Pseudacteon*, *Solenopsis*, fire ant

Introduction

The genus *Pseudacteon* contains a rich diversity of nearly seventy described species of parasitoid flies that are hosted by several genera of ants, with a large radiation of about twenty species associated with *Solenopsis saevissima* complex fire ants in the Neotropics. Much attention has been given to *Pseudacteon* species that parasitize *Solenopsis* fire ants for their potential use in biological control of fire ants (Feener & Brown 1992, Orr *et al.* 1995). During field studies of *Solenopsis* fire ants in Brazil and Argentina, several undescribed species have been referenced in literature (e.g. Calcaterra *et al.* 2005, Kronforst *et al.* 2007, Patrock *et al.* 2009). In this study we formalize two of these previously undescribed *Pseudacteon* species that parasitize *Solenopsis* fire ants. One species (*P. obtusitus*) is closely related to *P. obtusus* Borgmeier 1925 while the second (*P. notocaudatus*) is related to *P. pradei* Borgmeier 1925.

Materials and methods

Material is deposited in the Natural History Museum of Los Angeles County (LACM), University of Texas at Austin Insect Collection (UTIC), Museo Argentino de Ciencias Naturales Bernardino Rivadavia (MACN), and P.J. Folgarait (PJF) collection. Specimens were examined whole, either dried and mounted or preserved in ethanol, to allow examination of intact morphology.

Terms are those of the Manual of Nearctic Diptera (McAlpine *et al.* 1981). We use the term “oviscape” in place of ovipositor to describe the structures associated with oviposition on segment 7 (Plowes *et al.* 2009).

Taxonomy

We describe two new species of *Pseudacteon*. Since this is not a broad revision we have not included a comprehensive key but provide diagnostic comments to separate the new species from closely related congeners.

***Pseudacteon notocaudatus* new species**

Fig. 1