



A new species of Syringogastridae (Diptera, Acalyptratae) from the Amazon Basin and new records for Brazil

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Abstract

Syringogaster papaveroi Prado, 1969 is redescribed from southeastern Brazil, and *S. fapeam*, n. sp., is described from the upper Rio Negro, state of Amazonas. The known range of *S. apiculata* Marshall and Buck, 2009, previously known from Amazonian Peru and Ecuador, is extended for the first time to Brazil. The phylogenetic tree and key of Marshall *et al.*, 2009 are emended to include the new species and new information on *S. papaveroi*.

Key words: key, *Syringogaster*, Syringogastridae, Diptera

Introduction

Syringogaster Cresson is a distinctive, monophyletic Neotropical genus of ant-like flies presently organized into four species group, three of which are extant (Marshall and Buck 2010). They are characterized by a petiolate abdomen, a long and collar-like prothorax, a swollen and spinose hind femur, and reduced head chaetotaxy (Marshall *et al.* 2009). Prado (1969) revised the genus to include six species from Brazil, two from Central America, and the Mexican *Megamerina fulvida* Bigot (in fact a species of *Odontomera* Macquart) that was later transferred to Richardiidae (Marshall *et al.* 2009). In this paper the authors revised the genus to include 22 species, of which 11 extant species and 2 fossil species from Dominican amber were described as new. The members of Syringogastridae occur throughout tropical areas of the Neotropical region, from San Luis Potosí, Mexico to Misiones, Argentina, with the exception of the Antilles, from which they are known only through the fossil record (Marshall *et al.* 2009). Their biology is poorly known, but adults often walk on the upper surfaces of broad leaves, in striking similarity to ants in the genus *Pseudomyrmex* Lund (Papavero 1964). In Brazil there are seven recorded species: *amazonensis* Prado, *atricalyx* Marshall and Buck, *carioca* Prado, *cressoni* Prado, *lanei* Prado, *lopesi* Prado, and *papaveroi* Prado. Three of these are known from the Amazon Basin, all from the state of Pará (*amazonensis*, *atricalyx* and *cressoni*). The family is poorly known in the Amazon Basin of Brazil (Prado and Papavero 2002), presently with only six specimens known. Based on recently collected specimens, we here add new geographical records, describe one new species, and provide previously unpublished morphological data on *S. papaveroi* (specimens of which were not available to Marshall *et al.* 2009). The phylogenetic analysis of Marshall *et al.* (2009) is expanded through the addition of this new information.

Material and methods

This study is based on the examination of specimens housed in the following institutions: the Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Brazil and the Museu de Zoologia da Universidade de São Paulo (MZUSP), São Paulo, Brazil. Detached wings were mounted on microslides in Canada balsam and pinned along with the specimens. Dissected terminalia were macerated in hot 85% lactic acid according to Cumming (1992) and examined in glycerin on depression slides. After examination, detached parts were placed in microvials with