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New genus and species of Neotropical robber flies (Diptera, Asilidae, Asilinae)

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Abstract

A new genus and species of *Papaverellus aureocingulatus* from Brazil, belonging to the asilid subfamily, is described and illustrated. Photographs of the habitus of the male and female in lateral view, and male terminalia in ventral view are provided. The systematic position of *Papaverellus* **gen. nov.** is suggested and will be addressed in a future paper.

Key words: Brachycera, distribution, *Papaverellus aureocingulatus*, new genus & species, taxonomy

Introduction

Asilinae Latreille, 1802 is the most diverse subfamily of Asilidae, including 177 extant genera, distributed in all biogeographic regions, except Antarctica. Sixty-six genera are recognized in the Neotropical region, of which 18 occur in Brazil (Geller-Grimm 2004; Papavero 2009; Vieira 2012a).

Recent taxonomic contributions of Asilinae Latreille, 1802 in the Neotropical region may be found in the catalog of species (Papavero 2009), keys to genera (Papavero *et al.* 2009), revision of the genus (Lamas & Mellinger 2011, Vieira *et al.* 2013), illustrations and description of male and female terminalia of some species (Artigas & Carrera-Suárez 2011), descriptions of species (Lamas & Mellinger 2008, Vieira 2012b, c, Vieira *et al.* 2012), and notes on the geographic distribution of some species (Vieira 2012a).

While a cladistic analysis of Asilinae was being carried out (Vieira *et al.* in prep.), a number of Asilinae specimens, representative of a new genus, were found at the collection of Museu Nacional do Rio de Janeiro (MNRJ). Later, field expeditions to the Project Sisbiota Caatinga, produced additional specimens. This paper presents a description, diagnoses, illustrations and photographs of a new genus and new species of Asilinae, *Papaverellus aureocingulatus*, and comments on related genera.

Material and methods

This study is based on the examination of specimens housed in the following institutions: Museu Nacional do Rio de Janeiro (MNRJ), Rio de Janeiro, Rio de Janeiro state, Brazil; Instituto Nacional de Pesquisas da Amazônia (INPA), Manaus, Amazonas state, Brazil; Museo de Zoología, Universidad de Concepción, (MZUC–UCCC) Concepción, Chile.

Morphological terminology follows Cumming & Wood (2009). Dissected terminalia were placed in a 10% KOH solution at 40°C for 8 hours, washed in water, treated with 10% acetic acid, and subsequently examined in concavity slides in glycerin. After examination and illustration, the detached parts were placed in microvials with glycerin and pinned with their respective specimen. The label data is cited in full, with the original spellings, punctuations, and dates. Information presented within square brackets is complementary data not included on the labels. Data for the same specimen but from different labels are separated by slashes (/).

PARATYPES. Same label data as holotype, repositories as follows (1♀ MNRJ); (1♂ MNRJ); (1? sex [terminalia lost] INPA); (2♂; 1♀ MZUC–UCCC); BRASIL, Piauí, P.[arque] N.[acional] Sete Cidades, 19–25.iv.2012, 193 m.a. 04.09909°S, 4170952°W {03°55'39"S 41°42'42"W}, Oliveira & Somavilla / *Papaverellus aureocingulatus* Artigas & Vieira Paratype (2♂; 1♀ INPA); same data, except: (1♂ MZUC–UCCC); BRASIL, P[iauí], Piracuruca P.[arque] N.[acional] de Sete Cidades, 19–24. IV. 2012, J.A. Rafael, F. Limeira–de–Oliveira cols. / Armadilha Malaise (1♀ MZUC–UCCC).

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