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Taxonomic revision of *Pseudorhopalia* Wilcox & Papavero, 1971 (Insecta, Diptera, Mydidae, Rhopaliinae), with description of a new species from the Brazilian Amazon

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Abstract

The previously monotypic genus *Pseudorhopalia* Wilcox & Papavero, 1971 is here revised, with description of a new species, *Pseudorhopalia manauara*, sp. n. The type-species, *P. mirandai* (d'Andretta & Carrera, 1951), is only found in north-eastern Brazil, in the semiarid Caatinga biome. On the other hand, the new species is found in the humid Brazilian Amazonia, within dense ombrophilous forest and campina (scleromorphic scrub vegetation associated with white sand).

Keywords: Asiloidea; Mydidae; campina; caatinga; biodiversity

Introduction

Mydidae (Diptera, Asiloidea) are one of the most notable families of Diptera, including the largest flies known. The Brazilian species *Gauromydas heros* (Perty, 1833) reaches up to 7 cm in body length (Autuori 1952), excluding antenna. The family currently comprises 11 subfamilies, 66 genera and about 470 valid species (Lyons & Dikow 2010). Most species of Mydidae inhabit dry areas (Wilcox 1981), with few species occurring in tropical forests (Wilcox & Papavero 1975, Papavero *et al.* 2002). Adults are found in short periods of the year, probably spending most of their life cycles as larvae.

Rhopaliinae include 26 valid species in 6 genera distributed in the Afrotropical, Neotropical and Palaearctic regions. Papavero & Wilcox (1974) erected this subfamily originally to include the genera *Perissocerus* Gerstaecker, 1868 (Afrotropical, Palaearctic), *Pseudorhopalia* Wilcox & Papavero, 1971 (Neotropical), *Rhopalia* Macquart, 1838 (Palaearctic), and *Rhopaliana* Séguy, 1934 (Palaearctic). The following features were considered as diagnostic for Rhopaliinae: hind metatarsus never five times as long as wide; veins M₁ and M₂ coalescent, forming a single vein; anal cell closed; cell r₄ usually widely open; hind tibia cylindrical; male hypandrium completely fused to gonocoxite; gonostylus absent; female terminalia with spines on acanthophorites (Papavero & Wilcox 1974).

The Neotropical genus *Midacritus* Séguy, 1938, formerly placed in Apiophorinae (Papavero & Wilcox 1974), was later considered within Rhopaliinae in the key to the American genera of Mydidae by Artigas & Papavero (1990), as well as in the most recent catalogue of Neotropical Mydidae (Papavero 2008). Despite the cited authors having not presented a formal explanation for this change, it seems likely that the lack of a ventral keel in the hind tibia of *Midacritus* (also absent in the remaining Rhopaliinae) has supported their decision.

The genus *Pseudorhopalia* was originally created to include a single species, *P. mirandai* (d'Andretta & Carrera, 1951), currently the only known Brazilian species of Rhopaliinae (Papavero *et al.* 2002, Papavero 2008). This species has been found exclusively in Ceará State, northeastern Brazil (d'Andretta & Carrera 1951), within the semiarid Caatinga biome (Albuquerque 1999, Bastos *et al.* 1998, Velloso *et al.* 2002). *Pseudorhopalia* is herein revised, with redescription of the genus and the type-species, and addition of a new species. The definition of the genus is reviewed and discussed in order to accommodate the new species.

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