Acroceridae (Diptera): a pictorial key and diagnosis of the Brazilian genera

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Abstract

There is no catalog or identification keys for Brazilian genera and species of Acroceridae. This paper provides, for the first time, a key and diagnosis of the Brazilian genera of the Acroceridae, based on morphological characters and illustrated with photographs. The key and diagnoses are based on morphology rather than on color as has been used in previous studies. The key includes nine genera: Acrocera Meigen, Exetasis Walker, Lasia Wiedemann, Ocnaea Erichson, Ogcodes Latreille, Philopota Wiedemann, Pialea Erichson, Pterodontia Gray and Terphis Erichson.

Key words: Brazil, identification key, Neotropical, taxonomy, systematics

Introduction

Acroceridae is a small group of flies comprising approximately 520 described species, 51 genera and three subfamilies (Panopinae, Acrocerinae and Philopotinae; Thompson 2006). However, this traditional subfamilial classification was tested recently and Acrocerinae was demonstrated to be polyphyletic (Winterton et al. 2007). This family is widespread geographically with species found in all biogeographical regions. Despite this vast distribution, these flies are rarely found in nature, being in consequence a biologically poorly known family, especially in the Neotropical region (Pujol-Luz 2004). There are 30 species and nine genera in Brazil, most of which still need a revision and redescription.

A small head, enlarged calypter, usually humpbacked thorax and swollen abdomen are characteristics of adults. This group is very diverse in size, shape and coloration. Some species feed at flowers and may be specialized pollinators as suggested by their long proboscis (often equal to body length) and nectar feeding habits. Other species have poorly or undeveloped mouthparts and do not feed (Schlinger 1981). Larvae are almost always endoparasitoids of spiders, with a life cycle of four instars that are hypermetamorphic (Schlinger 1987).