



A new species of the genus *Monopelopia* from South Brazil, with keys to the Neotropical–Nearctic species (Diptera: Chironomidae: Tanypodinae)

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Abstract

A new species, *Monopelopia paranaense* is described and illustrated, based on immatures collected in a little pond in Parana State (South Brazil) and adults reared in laboratory. Keys to males, larvae and pupae of all species of the genus *Monopelopia* Fittkau known in the New World are also provided.

Key words: Diptera, Chironomidae, *Monopelopia*, taxonomy, new species, Neotropics, Nearctic region, keys

Introduction

The adult males of *Monopelopia* can be recognized among Pentaneurini by having the apical flagellomere completely set off, R₂₊₃ absent or reduced and a single tibial spur present on each leg (Murray & Fittkau 1989). The forked abdominal D and L setae are diagnostic characters for the pupae (Fittkau & Murray 1986). The larva can be distinguished by having the Lauterborn organs arising like the ends of a tuning fork from second antennal segment and posterior parapod claws with strong teeth on inner margin (Fittkau & Roback 1983).

In the Neotropical region four species have been assigned to the genus: *Monopelopia boliekae* Beck *et* Beck (1966) from Colombia, *M. mikeschwartzi* Epler *et* Janetzky (1998) from Jamaica, *M. minuta* Serpa-Filho *et* Oliveira (1997) from Brazil and *M. caraguata* Mendes, Marcondes *et* Pinho (2003) from Brazil and USA.

Monopelopia appears to be widespread but scarce (Roback 1986). The genus has a Holarctic distribution with one species known from the Palaearctic: *M. tenuicalcar* Kieffer (1918), and two from the Nearctic: *M. boliekae* and *M. tillandsia* Beck *et* Beck (1966). There are also records from the Oriental and Afrotropical regions (Murray & Fittkau 1989). The immatures are known to inhabit small to very small water bodies and boggy waters seem to be the preferred habitat (Fittkau & Roback 1983). Of the above mentioned species, *M. boliekae*, *M. tillandsia*, *M. mikeschwartzi* and *M. caraguata* inhabit phytotelmata. Cranston (2007) recorded an additional undescribed species occurring in bromeliads in Puerto Rico.

The last revision of the genus was done by Roback (1986) with identification keys to all life stages of the New World. Later, Mendes *et al.* (2003) provided new identification keys focusing on the Nearctic and Neotropical species.

We here describe a new species of *Monopelopia* based on all life stages. The material was collected in a little pond of boggy water in Parana State - South Brazil. The identification key provided by Mendes *et al.* (2003) is modified in order to include the new species.