



A new species of *Parachironomus* Lenz, 1921 (Diptera: Chironomidae: Chironominae), and description of immature stages of two other species from the Neotropical Region

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Abstract

Parachironomus lupus is described and figured as adult male, pupa and larva, and the immatures of *P. cayapo* Spies *et al.* and *P. tirio* Spies *et al.* are described for the first time based on specimens collected from different water systems in southeast Brazil. Generic diagnoses for the adult male, pupa and larva are emended, and keys to pupae and larvae of four *Parachironomus* known from Brazil are presented.

Key words: Diptera, Chironomidae, *Parachironomus*, new species, Neotropical region

Introduction

The genus *Parachironomus* (Diptera: Chironomidae: Chironominae) was erected by Lenz in 1921. It belongs to the *Harnischia* complex of genera, and includes 21 species known from the Neotropical Region. In the first regional summary of the genus (Spies *et al.* 1994), 17 species were included. Since then, Spies & Reiss (1996) have added *P. directus* (Dendy & Sublette), and Spies (2008) has split *P. supparilis* (Edwards) in three species: *P. supparilis* Edwards, 1931, *P. longistilus* Paggi, 1977 and *P. valdiviensis* Spies, 2008.

The larva of an unnamed species living in association with the aquatic macrophyte *Mayaca fluviatilis* Aublet in reservoirs in the southeast Brazil was recorded as *Parachironomus* sp. 3 by Trivinho-Strixino & Strixino (1995). Based on this material and on males with associated pupal and larval exuviae, the new species is described below as male, pupa and larva. The immature stages of *P. cayapo* Spies *et al.* 1994 and *P. tirio* Spies *et al.* 1994 are also described. Keys to pupae and larvae of four *Parachironomus* known from Brazil are presented.

Material and methods

The larvae were collected using a hand net in various aquatics systems in southeast Brazil, and were reared individually in the laboratory to obtain the associated pupal exuviae and adults. Specimens examined were slide-mounted in Euparal, following the procedures outlined by Pinder (1983, 1986, 1989). Morphological terminology and abbreviations follow Sæther (1980), except that the term “taenia” is used for any broad, flattened pupal seta according to Langton (1994). Measurements are given as the value of the holotype [in square brackets], followed by the range and the number of specimens examined in parenthesis if it differs from the number (n) stated at the beginning of description.

The holotype of the new species and other material examined is deposited in the Reference Collection of Laboratório de Entomologia Aquática (LEA), Universidade Federal de São Carlos (UFSCar), Brazil. One