



New species of *Cryptochironomus* Kieffer, 1918 (Diptera: Chironomidae: Chironominae) from Brazil

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Abstract

Three new species of *Cryptochironomus* Kieffer, 1918, *C. brasiliensis*, *C. mantiqueira* and *C. reshchikovi*, are described and figured as male, pupa and larva. Diagnoses for the male, pupa and larva of the genus are emended. The specimens were collected from different water systems in southeast Brazil.

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

Introduction

The genus *Cryptochironomus* belongs to the *Harnischia* complex that includes more than 140 species, but only two were recorded in the Neotropical Region so far (Spies & Reiss 1996): *C. astax* Roback, 1960 from Peru and *C. fulvus* Johannsen, 1905 from Nicaragua.

Cryptochironomus are widely distributed in Brazil and are known for many ecological studies (e.g. Trivinho-Strixino & Strixino 2005, Aburaya & Callil 2007, Sanseverino & Nessimian 2008) which, however, focus primarily on the generic level, resulting in insufficient taxonomic resolution for ecological, phylogenetic and evolutionary analysis. The Holarctic species of the genus were described and revised by several authors in all stages (Curry 1958, Roback 1957, Sæther 1977, 2009, Shilova 1966; Townes 1945), but a comprehensive revision of the genus is still not available. In the present study three new species are described in all stages, and generic diagnoses to males (Cranston *et al.* 1989), pupae and larvae (Pinder & Reiss 1983, 1986) are emended.

Material and methods

The larvae were collected using a hand net in different aquatic systems in southeast Brazil and were reared individually in the laboratory to obtain the associated pupae 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 the term “taenia” used for any broad flattened seta on pupae according to Langton (1994). When three or more specimens were measured, measurements are given as the value of the holotype [in brackets], followed by the range and mean with the number of observed specimens in parenthesis if it differs from the number (n) stated at the beginning of the description. Seta counts are given only as the range.

The material examined is housed in the Coleção de Referência do Laboratório de Entomologia Aquática (LEA) of the Universidade Federal de São Carlos (UFSCar), São Paulo State, Brazil.