

A new species of *Chironomus* Meigen (Diptera: Chironomidae: Chironominae) from polluted streams of southeastern Brazil

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Abstract

The larva, pupa, adults, and karyotype of *Chironomus inquinatus* sp. n. are described. This species lives in polluted streams in southeastern Brazil and belongs to the *pseudothummi* cytocomplex, with chromosome arm combinations AE, BF, CD, and G.

Key words: *Chironomus inquinatus* sp. n., morphology, karyology, Chironomidae, Diptera, Brazil

Introduction

Many studies report the presence of *Chironomus* in Brazil, stressing its predominance in polluted aquatic systems (e.g., Guerreschi & Melão 1997, Santos *et al.* 1997, Sá *et al.* 1998, Marques *et al.* 1999, Callisto *et al.* 2000). However, species identification is difficult and many species are not distinguishable on the basis of external larval morphology, requiring analysis of characters from all life stages. In addition, the adults of various species show either similar morphological features or great intraspecific variation. On the other hand, a combination of conventional morphology and karyosystematic analysis of polytene chromosomes has successfully identified many *Chironomus* species (e.g., Michailova 1989, Wülker *et al.* 1989, Wülker 1991, Kiknadze *et al.* 1998, Butler *et al.* 1999, Spies *et al.* 2002).

The present work was conducted within a broader research program on Chironomidae distribution in the State of São Paulo, Brazil (Biota-FAPESP), and describes the adult and immature stages, as well as the karyotype of *Chironomus inquinatus*, a new species that