

Phylogenetic analysis of *Notalina* (*Neonotalina*) Holzenthal (Trichoptera: Leptoceridae), with the description of two new species from southeastern Brazil

ADOLFO R. CALOR¹, RALPH W. HOLZENTHAL² & DALTON S. AMORIM¹

¹*Departamento de Biologia, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, Universidade de São Paulo. Av. Bandeirantes, 3900, CEP 14040-901, Ribeirão Preto, São Paulo, Brazil (acalor@usp.br, dsamorim@usp.br)*

²*Department of Entomology, University of Minnesota, 219 Hodson Hall, 1980 Folwell Avenue, St. Paul, MN 55108, USA (holze001@umn.edu)*

Abstract

Two new species of *Notalina* (*Neonotalina*) Holzenthal 1986 from southeastern Brazil are described and illustrated, *N. (Neonotalina) froehlichii* Calor & Holzenthal and *N. (Neonotalina) paulista* Calor & Holzenthal. Phylogenetic analyses confirm the placement of the nine Neotropical species of *Notalina* into two species groups, the *roraima* species-group and the *brasiliana* species-group, with northern South American and southeastern Brazilian patterns of distribution, respectively. Additional collection records of previously described species from Brazil are provided.

Key words: Trichoptera, Leptoceridae, *Notalina*, Neotropical, systematics, phylogeny

Introduction

The Leptoceridae Leach 1815, or long-horned caddisflies, are recognized by their long, narrow forewings and very long, filiform antennae (Neboiss 1977, Morse & Holzenthal 1987). The family is cosmopolitan and contains 1567 described species, making it the second largest family in the order after the Hydroptilidae (1677 species) in species diversity (Morse 2003). Like the Hydroptilidae, long-horned caddisflies are especially diverse in warmer regions. There are 148 species in the Neotropics (Flint et al. 1999), 41 of them in Brazil (Paprocki et al. 2004). Species are found in an extensive variety of habitats, ranging from high mountain torrents and cascades to meandering lowland rivers,