



Smicridea (Trichoptera, Hydropsychidae) from 3 Brazilian Amazonian States: New species, larval taxonomy and bionomics

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Abstract

Seven new species of *Smicridea* (*Rhyacophylax*) are described from the states of Amazonas, Roraima and Mato Grosso, Brazil: *S. araguaiense* **sp. nov.**, *S. bicornuta* **sp. nov.**, *S. bifasciata* sp. nov., *S. dentisserrata* **sp. nov.**, *S. helenae* **sp. nov.**, *S. flinti* **sp. nov.**, *S. roraimense* **sp. nov.** Larvae and pupae of *S. helenae* **sp. nov.**, *S. (Smicridea) palifera* Flint, *S. (S.) obliqua* Flint and *S. (R.) appendiculata* Flint are described and illustrated. Morphological variation observed in *S. (R.) coronata* Flint and *S. appendiculata* is presented. Species bionomics are presented and new species are recorded for Brazil and for the states of Amazonas, Roraima and Mato Grosso.

Key words: aquatic insects, caddisfly, immature stages, Neotropical streams, *Smicridea* (*Rhyacophylax*), *S. (Smicridea)*

Introduction

The family Hydropsychidae is cosmopolitan, with a distribution that includes many isolated oceanic islands. The immatures inhabit primarily flowing waters. The larva constructs a silken net, attached to a retreat, by means of which it filters food from the flowing water. This family is divided into 5 subfamilies: Diplectroninae, Arctopsychninae, Hydropsychinae, Smicrideinae and Macronematinae (Flint *et al.* 1999, Geraci *et al.* 2005, Scheffer 1996, 2005); only the last 2 subfamilies are found in the Amazon region (Holzenthal *et al.* 2007).