



A new species and new records of microcaddisflies (Trichoptera: Hydroptilidae) from northeastern Brazil

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Abstract

The Hydroptilidae constitute the most diverse and widespread family of Trichoptera in the world. About 90 species of microcaddisflies have been recorded from Brazil, but the northeastern region is one of the least-sampled. In this work we describe a new species of *Metrichia* from Pernambuco State. Furthermore, we present the first records of *Flintiella andreae* Angrisano 1995 and *Oxyethira bettyae* Thomson & Holzenthal 2012 from Brazil, and four other new records from the northeastern region.

Key words: taxonomy, caddisflies, Neotropical, survey, *Metrichia pernambucana* sp. nov.

Introduction

The Hydroptilidae constitute the most diverse and widespread family of Trichoptera (over 2,000 described species) in the world (Holzenthal *et al.* 2011; Morse 2013). The family was erected by Stephens (1836) and reviewed by Marshall (1979), who divided it into two subfamilies: Hydroptilinae and Ptilocolepinae, with the nominotypical subfamily divided into six tribes. Later, the subfamilies were elevated to family rank and the tribes of Hydroptilinae elevated to subfamily (Malicky 2001, 2005, 2008; Holzenthal *et al.* 2011), although this ranking has been disputed (Holzenthal *et al.* 2007).

The redefined family Hydroptilidae contains about 70 genera in six subfamilies (Hydroptilinae, Leucotrichiinae, Ochrotrichiinae, Orthotrichiinae, Neotrichiinae, and Stactobiinae), except that six genera are genera *incertae sedis* (Holzenthal *et al.* 2007). Currently, about 90 species of Hydroptilidae are recorded from Brazil, but there are no records from the northeastern region.

We describe here a new species of *Metrichia* from Pernambuco State. Additionally, we present the first records of *Flintiella andreae* Angrisano 1995 and *Oxyethira bettyae* Thomson & Holzenthal 2012 from Brazil, and four other records of microcaddisflies from the northeastern region: *Abtrichia antenatta* Mosely 1939, *Betrichia hamulifera* Flint 1983, *Neotrichia filifera* Flint 1983, and *Neotrichia feolai* Santos & Nessimian 2009.

Material and methods

The material was collected using light traps at nine localities in eight municipalities, between October 2011 and September 2012. Works by Paprocki *et al.* (2004), Flint (1999), and Santos *et al.* (2013) were consulted for information about the species distributions. For examination of the male genitalia, the abdomen of each specimen was removed and cleared in 10% KOH. Pencil sketches were made using a compound microscope (Carls Zeiss, model Axiostar Plus, at 400x magnification) equipped with camera lucida. The pencil sketches were scanned,