



## Two new species of *Austrolimnius* Carter & Zeck (Insecta: Coleoptera: Elmidae) from Southeastern Brazil

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### Abstract

The genus *Austrolimnius* Carter & Zeck has its greatest known diversity in Oceania, but its fauna in the Americas is poorly known. In this paper, two new species—*Austrolimnius uncatus* **sp. nov.** and *A. bocainensis* **sp. nov.**—are described and illustrated based on adult specimens collected at Serra da Bocaina National Park, São José do Barreiro Municipality, São Paulo State, and Nova Friburgo Municipality, Rio de Janeiro State, Brazil. *Austrolimnius uncatus* **sp. nov.** is characterized by the long setae on the mesotarsus, the medial expansion of the hind tibiae, and the hook-like shape of the male genitalia. *Austrolimnius bocainensis* **sp. nov.** can be recognized by the absence of setae on the mid-tarsus, the cylindrical hind tibiae, and the slightly curved genitalia with few setae. A pictorial key for the Brazilian species of the genus is given. New records of Brazilian species of the genus are reported.

**Key words:** Aquatic insects, Atlantic forest, Elminae, taxonomy

### Introduction

The genus *Austrolimnius* was erected by Carter and Zeck (1929) in a revision of the Australian Dryopidae. Originally it contained two species described by King (1865) in the genus *Elmis* Latreille and two new species. In the same work those authors erected the genus *Neosolus*, which was later considered by themselves to be a junior synonym of *Austrolimnius* (Hinton, 1939).

*Austrolimnius* is one of the most speciose genera of the family Elmidae, being common in Oceania and the Neotropics (Manzo, 2007 and 2005). In the Australian region, *Austrolimnius* diversity is relatively well known, with 52 species and one subspecies described from Australia and Tasmania, and 31 species from New Guinea (Gómez & Bello, 2006). In the Americas, 20 species of *Austrolimnius* are recorded between northern Mexico (Hinton, 1971) and southeastern Argentina (Manzo, 2007). Of these, just five are known from Brazil, in the states of Goiás, Rio de Janeiro, Rondônia, Santa Catarina, and São Paulo (Fig. 5).

In this paper two new Brazilian species of *Austrolimnius* are described and illustrated. A pictorial key to the species of the genus from Brazil is given. New records of *A. formosus* (Sharp), *A. laevigatus* (Grouvelle) and *A. pilulus* (Grouvelle) are provided.

### Material and methods

The drawings were made with a camera lucida at the Laboratório Integrado de Microscopia e Análise de Imagem (LIMAI-UNIRIO) and the pictures were taken with a digital camera (Sony DCS-W1) attached to a stereomicro-