

## Article



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## Two new species and records of *Stenochironomus* Kieffer from Brazilian Amazon region, with description of immature stages (Diptera: Chironomidae)

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## **Abstract**

Two new species of *Stenochironomus* Kieffer, 1919 are described in Brazil. New records of *Stenochironomus nudipupa* Borkent, 1984 and *S. gladius* Borkent, 1984 from Brazil, new data on geographical distribution of *S. jubatus* Borkent, 1984 and *S. triannulatus* Borkent, 1984 from the State of Roraima, and *S. bacrionis* Borkent, 1984 recorded from the State of Amazonas, as well as emended descriptions of immature stages of *S. triannulatus* Borkent, 1984 and *S. reissi* Borkent, 1984 are also presented.

Key words: Diptera, Chironomidae, Stenochironomus, new species, Neotropical region, Brazil

## Introduction

The genus *Stenochironomus* was established by Kieffer (1919). Afterward, Townes (1945) designated *Chironomus pulchripennis* Coquillett, 1902 as type species for this genus by subsequent designation (Spies and Sæther 2004). Since then, worldwide studies *Stenochironomus genus* have been conducted, and new species have been described (Lehmann 1981; Yamamoto 1981; Rossaro 1982; Borkent 1984; Sasa and Suzuki 1999, 2000a, 2000b; Zorina 2001; Pinho *et al.* 2005; Andersen *et al.* 2008; Qi *et al.* 2008; Dantas *et al.* 2010; Zorina 2010). The genus is thus comprised of 95 known species occurring in all zoogeographical regions except Antarctica (Borkent 1984; Qi *et al.* 2008; Andersen *et al.* 2008; Dantas *et al.* 2010; Zorina 2010). In the Neotropical region there are 28 described species, 18 of which occur in Brazil, 2 in the Southern region, 1 in the Southeastern region and 15 in the Amazon region (Spies and Reiss 1996; Pinho *et al.* 2005; Andersen *et al.* 2008; Dantas 2010).

The immature stages can be found mining submerged leaves and wood, these mines are used as shelter and feeding area during larval and pupal stages (Borkent 1984; Labandeira 1998). Borkent (1984) proposed a division of *Stenochironomus* into two subgenera, based on obligatory immature mining habits on leaves or wooden trunks. These subgenera are *Stenochironomus* (*Petalopholeus*) with immature stages mining leaves and *Stenochironomus* (*Stenochironomus*) with immature stages mining wood. This subdivision has not been adopted by the authors of later descriptions, because only a few species are known from immature stages, thus becoming difficult to be ascribed to any subgenus (Pinho *et al.* 2005; Andersen *et al.* 2008, Qi *et al.* 2008; Dantas *et al.* 2010).

In this paper, we describe two new species which mining process caused submerged leaves to decay. We present also descriptions of immature stages of *Stenochironomus triannulatus* Borkent, 1984, an emended redescription of *Stenochironomus reissi* Borkent, 1984, as well as first records of two other species from Brazil.

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