



## A review of Neotropical species in *Thienemanniella* Kieffer (Diptera, Chironomidae)

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### Abstract

Three species previously described from the neotropical region are revised and four new species are described: *Thienemanniella biobio* **sp. n.** and *T. manihuales* **sp. n.** as males and pupae from Chile, *T. sancticaroli* **sp. n.** and *T. ubatuba* **sp. n.** as males, females and immature stages from Brazil. The new *Thienemanniella sprete* species group is delimited consisting of *T. sprete* (Roback) *sensu* Sublette & Sasa, *T. sanctivincenta* Saether, *T. liae* Paggi, *T. sancticaroli* **sp. n.** and *T. ubatuba* **sp. n.** Keys to the known Neotropical males, pupae and larvae are presented.

**Key words:** Orthoclaadiinae, *Thienemanniella*, new species, neotropics

### Introduction

*Thienemanniella* Kieffer, 1911, originally described from the Palaearctic region, is a widely distributed genus rich in species, whose members occur in a broad variety of permanent water bodies (Cranston *et al.* 1989). Several revisions have been published for different regions of the world, the Nearctic (Hestenes & Sæther 2000; Fu & Sæther 2012) with currently 9 species, the Afrotropical region (Fu *et al.* 2010a) with 6 species, and East Asia with 30 species (Fu *et al.* 2010b).

Prior to the present work, four species of *Thienemanniella* were known from the Neotropical region (Paggi 2007). *T. sprete* (Roback, 1962) was described based on a male from Panamá. Sæther (1981) described *T. sanctivincenta* from Saint Vincent as male, female and immature stages, but Sublette and Sasa (1994) treated this name as synonymous with *T. sprete*. *T. medialis* Sublette & Sasa, 1994, was described as male, female and pupa from Guatemala. More recently *T. liae* Paggi, 2007 was described from Argentina based on the male, female and immature stages. According to Spies and Reiss (1996), *T. similis* (Malloch, 1915), a species described from the Nearctic region as adult female only, has been recorded from Puerto Rico.

In the present work, four new species are described as males and pupae, two from Chile and two from Brazil; for the latter two, the females and larvae are described as well. All known life stages of the new species run to *Thienemanniella* in the respective keys to genera of the *Corynoneura* group by Wiedenbrug and Trivinho-Strixino (2009), except the pupa of *T. manihuales* **sp. n.** that has pearl rows, characteristic for the genus *Corynoneura* (see remarks section).

### Material and methods

Adults, pharate adults and pupal exuviae of the Brazilian material were collected with drift nets, larvae with hand nets. Living larvae were isolated in small boxes (1 cm x 1 cm) half filled with stream water. Boxes were checked