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## Article



# A redescription of *Rheotanytarsus lamellatus* Reiss in all stages (Diptera: Chironomidae) and new records from Argentina

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### Abstract

Immature stages and adult female of *Rheotanytarsus lamellatus* Reiss are described for the first time, and the male is redescribed, diagnosed and compared with *R. meridionalis* (Johannsen). Both species are reported for the first time from Argentina. Keys to South American male adults and pupae are given.

Key words: Tanytarsini, Rheotanytarsus, systematics, new records, mountain streams, Neotropical

### Introduction

*Rheotanytarsus* Thienemann & Bause in Bause, 1913 is represented by 94 described species distributed worldwide and recorded from all zoogeographical regions except Antarctica (Sæther & Kyerematen 2001; Kyerematen & Andersen 2002). It includes 19 species described from the Neotropical region and Mexico (Spies & Reiss 1996; Kyerematen *et al.* 2000; Andersen & Kyerematen 2001; Kyerematen & Andersen 2002). Many of the species in *Rheotanytarsus* are only known as male adults. The species separation is based upon features of the male hypopygium, but females cannot always be assigned to species.

Although this genus is particularly rich in tropical rain forests (Cranston 1997), both in number of species and individuals, their species diversity in Argentina has not been estimated. Only one species was recorded from Argentina so far: *R. globosus* Reiss (Reiss 1972). Reiss (l.c.) described also *Rheotanytarsus lamellatus* from Chile (Valdivia) based on a single male adult. *R. meridionalis* (Johannsen) is known from Puerto Rico.

In this paper we introduce the first records of *R. lamellatus* and *R. meridionalis* from Argentina. Here we present the first description of immature stages (4th–instar larvae and pupa), the adult female and a redescription of the male of *R. lamellatus*, as well as a discussion on diagnostic characters of these two species recorded.

#### Material and methods

Larvae and pupae were collected using a Surber net (mesh size 300  $\mu$ m). The adults were collected using a light trap. The specimens were mounted on slides in Euparal following the procedure outlined in Epler (2001). The general terminology follows Sæther (1980). The term "taeniate" is used, in accordance with Langton (1994), for the filamentous setae on the pupal exuviae. Measurements are given as range (and mean) of all available specimens in  $\mu$ m. All the material is deposited in Instituto Miguel Lillo, Tucumán, Argentina (IML).

The key to adult males from South America includes five morphotypes known from Brazil, Peru, Puerto Rico, Chile and Argentina (Andersen & Kyerematen, 2001).