

## Redescription of the female, male, and pupa of *Simulium itaunense* D'Andretta & González B. (Diptera: Simuliidae)

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### Abstract

In this paper, the female, male, and pupa of *S. itaunense* D'Andretta & González B. are redescribed based on material collected from the state of Rio Grande do Sul. The affinities of *S. itaunense* with other South American simuliid species are discussed and its distribution, biology, and medical importance in Brazil are presented. The adults of *S. itaunense* are externally most similar to those of *S. guianense* Wise (species complex), *S. orbitale* Lutz, and *S. perplexum* Shelley, Maia-Herzog, Luna Dias & Couch, but they can be easily identified by the structure of the male and female genitalia. The pupa is readily distinguished by the number of filaments, which vary from 45 to 56. *Simulium itaunense* has only been recorded from Brazil, where the immature stages can be found in small rivers with clear water and sandy river beds. They have also been found on Podostemaceae and on rocks in fast-flowing streams. The females bite horned [sic] cattle in Rio Grande do Sul.

**Key words:** Simuliidae, Neotropical Region, taxonomy, *Simulium itaunense*, *Trichodagmia*, Brazil

### Introduction

Species of the Neotropical subgenus *Trichodagmia* Enderlein (*sensu* Crosskey & Howard 1997, 2004) are found from southeastern Brazil to Amazonia. They also occur in the Guyanas, from southern Venezuela to western South America, extending to Paraguay, Colombia, and Argentina (Miranda-Esquivel & Coscarón 2001). This subgenus includes 14 species, one of which, *S. guianense* Wise, is known to be a species complex and the primary vector of river blindness in Brazil (Charalambous *et al.* 1996; Shelley 2002). Several others are highly anthropophilic (*S. nigrimanum* Macquart) or are a biting nuisance to