





Taxonomy of Simulium (Inaequalium) petropoliense Coscarón (Diptera: Simuliidae) from Brazil, with the first description of the male and larva

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Abstract

We describe the male and larva of *Simulium petropoliense* for the first time and redescribe the female and pupa. All morphological characters are fully illustrated and comparisons with closely related species are given.

Key words: black fly, Neotropical region, taxonomy, *Inaequalium, S. petropoliense*, Brazil, Simuliidae

Introduction

Species of the subgenus *Inaequalium* Coscarón & Wygodzinsky are widely distributed in the Neotropical Region, extending from Central America (Panama) to northeast Argentina (Coscarón 1987, 1991; Juñent & Coscarón 2001). This subgenus includes 20 species, with the vast majority of taxa commonly found in the coastal, mountainous areas of southern Brazil (Crosskey & Howard 2004, Coscarón 1991, Coscarón-Arias & Coscarón 1997, Pessoa *et al.* 2005, Pepinelli *et al.* 2006). *Inaequalium* was erected by Coscarón & Wygodzinsky (1984) to accommodate 10 species. The adults of most of the species in *Inaequalium* are morphologically homogenous, and species recognition relies mainly on the configuration of the pupal gill filaments. The subgenus is divided into the *botulibranchium* and *inaequale* species groups, with 4 and 13 species, respectively (Crosskey & Howard 2004). The former authors did not assign *S. pseudoexiguum* Nunes de Mello & Barbosa de Almeida to any species group. More recently, two species of

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