

***Simulium (Thyrsopelma) duodenicornium*, a new black fly species (Diptera: Simuliidae) from the Southeast Region of Brazil**

MATEUS PEPINELLI¹, NEUSA HAMADA² & SUSANA TRIVINHO-STRIXINO¹

1 Laboratório de Entomologia Aquática, Depto. de Hidrobiologia, Universidade Federal de São Carlos, Rodovia Washington Luís, Km 235, CEP 13565-905 Cx Postal 676, São Carlos, São Paulo, Brazil. E-mail: mateuspepi@yahoo.com.br; strixino@power.ufscar.br

2 Coordenação de Pesquisas em Entomologia, Instituto Nacional de Pesquisas da Amazônia, Cx Postal 478, 69011-970, Manaus, AM, Brazil. E-mail: nhamada@inpa.gov.br

Abstract

We describe the female, male, pupa, and larva of a new black fly species in the subgenus *Thyrsopelma*. Males of *Simulium duodenicornium* n. sp. have a black scutum, without silver bands or patterns, covered with golden yellow hairs. The female scutal pattern is similar to that of most other species in the subgenus *Thyrsopelma* with a black scutum covered by groups of gray-whitish hairs. Males of the new species can be distinguished by the shape of the ventral plate and females by the shape of the hypogynial valves. The pupa of the new species has 12 short, thick, rigid gill filaments, with highly sclerotized and pointed tips. The pupa is similar to those of *Simulium guianense* s. l. Wise and *Simulium perplexum* Shelley, Maia-Herzog, Luna Dias & Couch, but the gill filaments are thicker basally and do not have spicules in an annular arrangement. The larvae are similar to those of most species in the subgenus *Thyrsopelma*, with ovoid setae covering the body cuticle. The stream in which *S. duodenicornium* was collected forms part of the headwaters of the Piracicaba River, which is a tributary of the Tietê River. This stream is located in Joanópolis County, São Paulo State, Brazil, in a rainforest area of the Serra da Mantiqueira, in the Atlantic Forest (Mata Atlântica) domain.

Key words: Simuliidae, black fly, *Thyrsopelma*, aquatic insects, Brazil, taxonomy

Introduction

The validity of the subgenus *Thyrsopelma* has been discussed by workers such as Shelley *et al.* (1997) and Crosskey & Howard (2004), who regard this subgenus as synonymous with the subgenus *Trichodagmia*. Coscarón (1987, 1991) considered both subgenera valid. Miranda-Esquivel & Coscarón (2001), using a cladistic analysis, recognized the two subgenera, indicating that the monophyly of the subgenus *Thyrsopelma* rests on the