



## A new species of *Downshelea* Wirth & Grogan and a redescription of the male of *Downshelea cebacoi* (Lane & Wirth) (Diptera: Ceratopogonidae)

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### Abstract

A new species of predaceous midge, *Downshelea lanei* Felipe-Bauer & Borkent, is described and illustrated based on male and female specimens from the Amazonian Region of Brazil. The male of *Downshelea cebacoi* (Lane & Wirth) is redescribed and illustrated and the distribution of this species is now restricted to Panama and Costa Rica.

**Key words:** predaceous midges, Neotropical Region, Amazonas, Pará, new species

### Introduction

In their revision of the Ceratopogonini of the world, Wirth and Grogan (1988) placed the species of the *Monohelea multilineata* group in the new genus *Downshelea*, which includes 33 species worldwide (Borkent, 2009). Borkent and Spinelli (2000, 2007) listed 18 species from the Neotropical Region and Felipe-Bauer and Silva (2008) subsequently described *D. oliveirai* Felipe-Bauer from northern Brazil. Seven of these 19 species were originally described from Brazil and two others, *D. cebacoi* (Lane & Wirth) and *D. guianae* (Wirth), were reported as occurring in northern Brazil (Pará state). With the addition of the new species described here, there are now 10 species known from Brazil and 20 from the entire Neotropical Region.

Lane and Wirth (1964) described *M. cebacoi* based on two males and one female from Almirante, Bocas del Toro, Panama (type locality) and one male from Cachimbo airstrip, Pará, Brazil. These authors deposited the male holotype (#66437) and female allotype from Panama in the United States National Museum, Washington, D.C. (USNM) and two male paratypes, from Panama and Brazil (FSPC).

The study of the male paratype of *D. cebacoi* from Brazil and an additional conspecific male and three females from the Brazilian states of Pará and Amazonas revealed that these are significantly different from those specimens described as *D. cebacoi* from the type-locality and represent an undescribed species. In this paper we describe the new species and redescribe the male of *D. cebacoi*, which is now known only from Costa Rica and Panama.

### Material and methods

Individual specimens are deposited in the following collections:

CCER	Collection of Ceratopogonidae, Instituto Oswaldo Cruz, Rio de Janeiro, Brazil.
CNCI	Canadian National Collection of Insects, Ottawa, Ontario, Canada.
FSPC	Entomological Collection, Faculdade de Saúde Pública, USP, São Paulo, Brazil.
INBC	Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica.
USNM	National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.