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Description of the immatures of the predaceous midge *Bezzia blantoni* Spinelli & Wirth (Diptera: Ceratopogonidae)

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Abstract

The fourth instar larva and pupa of *Bezzia blantoni* Spinelli & Wirth (1989) are described, illustrated and photomicrographed by using phase-contrast microscopy and Scanning Electron Microscope (SEM). The larva, which shows features typical to carnivorous larvae, is compared with that of *B. roldani* Spinelli & Wirth. The species is recorded for the first time from the Martín García island, located in the La Plata river between Argentina and Uruguay. Details of the biology traits, breeding location and feeding behavior are given.

Key words: Larva, Pupa, *Bezzia blantoni*, SEM, Martín García island, Argentina

Introduction

The genus *Bezzia* Kieffer includes relatively large-sized, predaceous midges represented in the Neotropics by 46 species, of which the egg of one, the larva of four and the pupa of eight species are known (Borkent & Spinelli, 2007). The adults are important predators of small invertebrates, mainly chironomid midges. The immatures are relatively common inhabitants of different kind of wetlands, mainly streams, lakes and ponds, as well as other habitats, such as sphagnum bogs, rice fields, hoofprints in a sandy creek bed, water in tree holes, and water in bromeliads (Ronderos *et al*., 2007).

The widespread species *Bezzia blantoni*, known from Belize to Argentina, was originally described by Spinelli & Wirth (1989) based on adult and pupa. Although these are relatively modern descriptions, the one of the pupa is incomplete. This species was not been mentioned again in the literature, except in catalogs in reference to the original description.

During a recent entomological survey carried out in Martín García island, located in La Plata River between Argentina and Uruguay, larvae and pupae of *Bezzia blantoni* were collected. The purpose of this paper is to describe the fourth instar larva and redescribe the pupa of this species on the basis of observations carried out with Phase-Contrast Microscopy (PCM) and with Scanning Electron Microscopy (SEM).

Material and methods

Larvae and pupae were collected with micropipetae by placing in a plastic tray floating hydrophytes from a pond located in the Martín García island. Immatures were carried to the laboratory in vials containing water of the environment, transferred individually in Petri dishes and observed daily to record development. This water contained some small, unidentified microorganisms, upon which the larvae likely fed. All immatures were examined under both dissecting and compound microscope. For the observation of larvae with PCM at oil immersion, they were slide mounted in Canada balsam, placed with their ventral side upward in order to

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