



Description of the female, pupa, and larva of *Culex (Melanoconion) bahiensis* Duret, and redescription of the male (Diptera: Culicidae)

EDUARDO A. LESTANI¹ & GUSTAVO C. ROSSI^{2,3}

¹Centro de Investigaciones Entomológicas de Córdoba, Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba, Av. Vélez Sársfield 1611, X5016GCA, Córdoba, Argentina

²Centro de Estudios Parasitológicos y de Vectores, CCT La Plata, CONICET- Universidad Nacional de La Plata. Calle 2 N° 584, B1902CHX, La Plata, Argentina

³Corresponding author. E-mail: gustavo@cepave.edu.ar

Abstract

We describe for the first time the female, pupa, and larva of *Culex (Melanoconion) bahiensis* and also redescribe the male and illustrate the male genitalia and the pupa and larva. This is the first record of the species for Argentina.

Key words: *Cx. (Melanoconion) bahiensis*, *Culex*, *Melanoconion*, redescription, Argentina

Introduction

As part of a mosquito-biodiversity study held in the Iguazú National Park in the province of Misiones, Argentina the first author had the opportunity to capture immature stages of a species of *Culex (Melanoconion)*, which were identified as *Cx. (Mel.) bahiensis* after the larvae and pupae were reared in the laboratory to obtain adults. This species was previously known only from a male collected in Uruçuca, State of Bahia, Brazil and formally named *Cx. bahiense* by Duret (1969). The name was later emended by Stone (1970). This species was not mentioned further in the literature, and the female and the immature stages remained unknown. We describe here the female, pupa, and larva, and redescribe the male. This is the first record of the species for Argentina.

The subgenus *Melanoconion* is poorly known, even though some species are recognized as vectors of pathogens that cause diseases in humans (Monath *et al.*, 1985; Sirivanakarn, 1983). In recent years, a better understanding of the component species has been gained mainly through descriptions of the immature stages and the females, which potentially play a role in the transmission of arboviruses.

Material and methods

All specimens of *Cx. bahiensis* were collected from a puddle in the Parque Nacional Iguazú. The larvae and pupae were either reared to adults or processed directly. Specimens were deposited in the collection of the División Entomología of the Museo de Ciencias Naturales de La Plata, Universidad Nacional de La Plata, Argentina. The morphological terminology follows Harbach and Knight (1980, 1982). The life stages are indicated as follows: M (male), MG (male genitalia), F (female), Pe (pupal exuviae), L (fourth-instar larva), and Le (larval exuviae). An asterisk following an abbreviation denotes that the life stage was at least partially illustrated in the publication cited. All measurements are given in millimeters along with a range.