Zootaxa 2263: 21–30 (2009)
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

Morphological redescription of the immature and adult stages of *Culex* (*Culex*) *acharistus* Root (Diptera: Culicidae)

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Abstract

Culex (*Culex*) *acharistus* Root is redescribed in the adult, pupal and larval stages. The male genitalia, pupa, and fourth-instar larvae are illustrated. The paper includes available information on the distribution, bionomics and taxonomy of the species.

Key words: *Culex* (*Culex*) *acharistus*, redescription, distribution, bionomics, taxonomy

Introduction

Culex (*Culex*) *acharistus* was described by Root (1927) based on the male genitalia of specimens collected in Agua Limpa, Brazil, based on a few morphological characters of the adults. Although the adults were reared from larvae, the larval and pupal exuviae were not preserved and nothing was said about the immature stages. Lane (1953) partially described and illustrated the pupa, but no information was provided about the origin of the material. Stone & Knight (1957) designated a lectotype, which is deposited in the National Museum of Natural History in Washington, DC, as follows: "… a fragmentary male with the thorax and one leg on a pin and the terminalia on a slide…". Bachmann & Casal (1963) recorded the species from Argentina, and described the larva (for the first time) and the pupa, both briefly and with partial drawings. They also described the male genitalia and the cibarial armature of the female. Forattini & Rabello (1965) more fully characterized the pupa. Bram (1967) separated *Cx. acharistus* from closely related species based only on "the presence of minute annulations on the apical third of the dististyle [= gonostylus]" of the male genitalia, and extended the distribution of the species to Chile and Colombia.

Despite the importance of mosquitoes as pests and vectors or potential vectors of arboviruses and parasites, many species of the subgenus *Culex* in the Neotropical Region are poorly known and difficult to identify. During studies carried out in 1988 in Chaco Province of Argentina, *Cx. acharistus* was the most abundant species when cases of Eastern Equine Encephalitis were occurring in horses (Avilés et al. 1989).

The purpose of this paper is to provide a complete description of the adult male and female, pupa and fourth-instar larva of *Cx. acharistus* to foster recognition of the species, particularly females.

Accepted by G. Courtney: 12 Sep. 2009; published: 13 Oct. 2009