



Two new species of *Culex* subgenus *Melanoconion* (Diptera: Culicidae) from the Amazon forest

ROSA SÁ GOMES HUTCHINGS¹ & MARIA ANICE MUREB SALLUM^{2,3}

¹Coordenação de Pesquisas em Entomologia, Instituto Nacional de Pesquisas da Amazônia, Caixa Postal 478, 69011-970 Manaus, AM, Brasil

²Departamento de Epidemiologia, Faculdade de Saúde Pública, Universidade de São Paulo, Avenida Dr. Arnaldo 715, 01246-904 São Paulo, SP, Brasil

³Corresponding author. E-mail: masallum@usp.br

Abstract

Two new mosquito species (Diptera: Culicidae), *Culex (Melanoconion) phyllados* n. sp. and *Culex (Melanoconion) brachiatus* n. sp. from the state of Amazonas, Brazil, are here validated and described based on morphological features of the male genitalia. Both species are morphologically more similar to both *Culex coppenamensis* Bonne-Wepster & Bonne and *Culex alinkios* Sallum & Hutchings than to any other species of the Bastagarius Subgroup of the subgenus *Melanoconion*. Diagnostic characters for the identification of the adult male of both species are provided.

Key words: Amazon basin, Culicidae, *Culex (Melanoconion)*, new species

Introduction

Thirty-eight species of subgenus *Melanoconion* Theobald of genus *Culex* Linnaeus (Diptera: Culicidae) were collected at the Parque Nacional do Jaú, state of Amazonas, Brazil (Hutchings *et al.* 2005), including a few individuals identified as two distinct morphological forms similar to *Culex coppenamensis* Bonne-Wepster and Bonne (Sallum & Hutchings 2003). Comparing those two Amazonian forms with specimens collected in the Vale do Ribeira, situated in the Atlantic Forest in southeastern São Paulo state, Brazil, we observed several morphological characteristics in the male genitalia that could distinguish all three forms. Consequently, specimens collected in the Vale do Ribeira were employed to describe and validate *Culex alinkios* Sallum and Hutchings (Sallum & Hutchings 2003). Additional comparisons of the male genitalia of the two Amazonian forms with those of *Cx. coppenamensis* collected in localities north of Manaus and with the drawings of this species available in the literature (Pecor *et al.* 1992) showed that both forms belong to two unnamed species. Consequently, in the present study, we name and validate the Amazonian *Cx. coppenamensis* Forms 1 and 2 of Sallum and Hutchings (2003) as new species of the subgenus *Melanoconion*. We also provide diagnostic characters to distinguish *Cx. coppenamensis*, *Cx. alinkios* and the new species.

Material and methods

Mosquitoes were collected in Novo Airão, São Gabriel da Cachoeira, Nhamunda and the Japurá municipalities in Amazonas State, Brazil. In Novo Airão, fieldwork was carried out in the Jaú National Park and in Japurá at the Juami-Japurá Ecological Station. Specimens were collected in undisturbed (forest) and disturbed