



***Brumptomyia carvalhoi* sp. nov. (Diptera: Psychodidae: Phlebotominae) from Atlantic forest domain, São Paulo State, Brazil**

PALOMA HELENA FERNANDES SHIMABUKURO¹, ANA MARIA MARASSÁ² & EUNICE APARECIDA BIANCHI GALATI³

¹Centro de Pesquisa Leônidas e Maria Deane, Fiocruz – Amazônia, Rua Terezina, 476, Adrianópolis, 69057-070, Manaus – AM, Brazil. E-mail adress: paloma@amazonia.fiocruz.br

²Instituto Adolfo Lutz, Secretaria Estadual da Saúde de São Paulo, Av. Dr. Arnaldo, 355, 8º andar, Cerqueira César, 01246-902, São Paulo, SP, Brazil.

³Faculdade de Saúde Pública - Universidade de São Paulo, Av. Dr. Arnaldo 715, Cerqueira César, 01246-904, São Paulo, SP, Brazil.

Abstract

Brumptomyia carvalhoi sp. nov. (Diptera, Psychodidae: Phlebotominae) from Ribeira Valley, São Paulo State, Brazil is described and illustrated. This new taxon is morphologically similar to *Brumptomyia mangabeirai* (Barretto & Coutinho, 1941).

Key words: *Brumptomyia*, São Paulo State, new species, Phlebotominae, identification key

Introduction

A new species of *Brumptomyia* França & Parrot, 1921 was captured in 2001 and 2002 during an ecological study undertaken in two Atlantic forest reserves situated within the Serra de Paranapiacaba, in southern São Paulo State, Brazil: Parque Estadual Turístico do Alto Ribeira (PETAR) and Parque Intervalas, respectively, 260 m and 890 m above sea level.

The genus *Brumptomyia* França & Parrot, 1921 is typically Neotropical and consists of 25 species, of which only six have not been recorded in Brazil (Galati 2003). Although the systematics of New World Phlebotomines has been controversial for the last century, the status of the genus *Brumptomyia* is not disputed (Forattini 1973; Lewis et al. 1977; Ready et al. 1980; Galati 2003).

Both sexes of *Brumptomyia* possess the following characteristics: (i) ascoids with a posterior spur, (ii) the external ascoid of AIII is located more basally than the internal one, (iii) the presence of ventro-cervical sensilla, (iv) the presence of setae on the anterior region of the katepisternum, (v) an incomplete suture between the katepimeron and the metepisternum, and (vi) the absence of post-alar setae.

Males possess: (i) a gonocoxite bearing straight and stout setae on the apical region of the inner side, and (ii) a gonostyle with five developed spines, the two external spines being implanted in one single tubercle.

Females possess: (i) a segmented spermathecae body, (ii) individual sperm ducts that are four or more times longer than the spermathecae body, (iii) a cibarium, with the anterior and posterior teeth situated in a horizontal position, although the posterior teeth are sometimes also laterally positioned, forming several rows and (iv) a sclerotized area located beyond the posterior teeth of the cibarium.