

A faunal survey of nycteribiid flies (Diptera: Nycteribiidae) associated with bats in Paraguay

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Abstract

An extensive survey of ectoparasitic nycteribiid flies infesting bats in Paraguay provides information about their taxonomy and hosts at a geographic interface between subtropical and temperate habitats. During the study, 2,931 bats representing five families, 22 genera, and 45 species were captured and sampled for ectoparasites. Of these, 86 individuals belonging to six species of vespertilionid bats, and one individual of a molossid bat, harbored 150 fly specimens. We identified five species of *Basilina* Miranda-Ribeiro, with one, *Basilina juquiensis* Guimarães, representing a new record for Paraguay. In total, six species of *Basilina* have been reported to occur in Paraguay.

Key words: *Basilina*, bat flies, ectoparasites, Paraguay, Vespertilionidae.

Introduction

The family Nycteribiidae comprises light brown wingless flies that are obligate, blood-feeding ectoparasites of bats. Two genera occur in the Western Hemisphere — the cosmopolitan *Basilina* Miranda-Ribeiro and the endemic *Herskovitzia* Guimarães and D'Andretta. Species of *Basilina* are associated with vespertilionid bats, with the exception of two species specific to the phyllostomid bat *Mimon crenulatum* (E. Geoffroy) (Guimarães 1966; Theodor & Peterson 1964). *Herskovitzia* spp. are the only bat flies exclusively associated with Neotropical bats of the genus *Thyroptera* Spix (Thyropteridae) (Peterson & Wenzel 1987).