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Article



## Five new species of *Myrsidea* Waterston (Phthiraptera: Menoponidae) from tanagers (Passeriformes: Thraupidae) in Panama

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## Abstract

There are 23 species of *Myrsidea* recognized from passerine thraupid hosts. Five new species parasitic on members of this avian family are described. They and their type hosts are *Myrsidea rozsai* ex the Thick-billed Euphonia, *Euphonia laniirostris* d'Orbigny & Lafresnaye, *M. cruickshanki* ex the Carmiol's Tanager, *Chlorothraupis carmioli* (Lawrence), *M. patersoni* ex the Grey-headed Tanager, *Eucometis penicillata* (Spix), *M. pagei* ex the Crimson-backed Tanager, *Ramphocelus dimidiatus* Lafresnaye, and *M. valimi* ex the Tawny-capped Euphonia, *Euphonia anneae* Cassin. The first species is placed in the *bonariensis* species group, while the remaining four are placed in the *fusca* species group. Sequences of a portion of the mitochondrial cytochrome oxidase I (COI) gene were compared to other species of *Myrsidea* and were highly divergent.

Key words: chewing lice, Myrsidea, Phthiraptera, Menoponidae, Passeriformes, Thraupidae

## Introduction

There are 23 recognized species of the genus *Myrsidea* Waterston from passerine hosts in the family Thraupidae and in the "genera incertae sedis" immediately following that family (as defined in Dickinson 2003). These include 22 species treated by Price and Dalgleish (2006) and a new species subsequently described by Sychra in Sychra *et al.* (2007). After recent extensive collecting in Panama using ethyl acetate fumigation (Clayton *et al.* 1992), we have material that enables us to describe five new species of *Myrsidea* from tanagers (Thraupidae) and allies.

In the following descriptions, all measurements are in millimeters. Abbreviations are TW, temple width; HL, head length at midline; PW, prothorax width; MW, metathorax width; AWIV, abdomen width at segment IV; ANW, female anus width; GL, male genitalia length; and TL, total length. Host classification below that of order follows Dickinson (2003). The parenthetical number following each female and male heading is for the number of specimens examined.

Holotypes of the new species are in the collection of the Illinois Natural History Survey, Champaign. Paratypes are distributed between that collection and that of the Fairchild Museum, University of Panama. Sequences from a portion of the mitochondrial cytochrome oxidase I (COI) gene were obtained from each of the new species using methods described by Johnson *et al.* (2002) and compared to sequences of other *Myrsidea* species to assess the genetic distinctiveness of the new species.