



Article

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Four new species of *Hemicaecilius* Enderlein (Lachesillidae: Psocoptera) from Valle del Cauca, Colombia

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Abstract

Four related species of *Hemicaecilius*, from Valle del Cauca, Colombia, are here described and illustrated. They constitute a species assemblage distinct from two of the known species of the genus, *H. venezolanus* and *H. cuzcoensis*, found to the north and south, respectively from Valle del Cauca, along the Andes. The types are deposited in the Entomological Museum, Universidad del Valle, Santiago de Cali, Colombia (MUSENUV).

Keywords: Andes, taxonomy, neotropics

Introduction

The lachesillid genus *Hemicaecilius* Enderlein, presently includes three species: *H. bogotanus* Enderlein, of which only one forewing and one hindwing remain, *H. venezolanus* García Aldrete & Mockford, known from one female, and *H. cuzcoensis* García Aldrete & Mockford, known from one male (García Aldrete & Mockford, 1997, 2011). Recently, two of us (RGO and NSC), collected a sizable number of specimens of this genus in Valle del Cauca, Colombia, that represent four undescribed species; the finding of these specimens is significant, as the females agree in general with the female body plan of *H. venezolanus*, and the males agree in general with the male body plan of *H. cuzcoensis*; although these Colombian species constitute an assemblage distinct from the species mentioned above, their finding provides a sound ground to establish a diagnosis of the genus. The purpose of this paper is to describe and illustrate the new species, to characterize them as distinct from *H. cuzcoensis* and *H. venezolanus*, and to present a diagnosis of *Hemicaecilius*.

Material and Methods

77 specimens were available for study, of these, 16 were dissected in 80% ethyl alcohol, and their parts were then mounted on slides in Canada Balsam, following standard procedures (see González Obando *et al.*, 2011). Color was recorded from whole specimens in 80% ethyl alcohol, under a dissecting microscope at 80X, with cold white light illumination. Standard measurements of slide mounted parts were taken using an ocular micrometer mounted in a Nikon Eclipse 200 microscope; in the descriptions below, they are given in μm . Illustrations are from digital photographs taken with a Canon T3i camera and Helicon Focus program, some were processed in a vector graphics editor CorelDraw (González Obando *et al.*, 2011). Abbreviations, for parts measured are: FW: right fore wing; HW: right hindwing; F, T, t1, t2: femur, tibia and tarsomeres of right hind leg; ctt1: number of ctenidiobothria on t1; Mx4: fourth segment of right maxillary palpus; f1...fn: flagellomeres 1...n; IO: minimum distance between compound eyes; D and d: antero-posterior diameter and transverse diameter, respectively, of right compound eye. The types and other specimens studied, are deposited in the Entomological Museum of the Universidad del Valle, Santiago de Cali, Colombia (MUSENUV).