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The genus *Elaphopsocus* Roesler (Psocodea: 'Psocoptera': Psocidae) with six new species from Brazil and Colombia

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Abstract

Six new species of *Elaphopsocus* Roesler from Brazil and Colombia are described and illustrated. Revised generic diagnoses are provided for *Elaphopsocoides* and *Elaphopsocus*; based on the structure of the male hypandrium and phallosome three species groups are recognized in *Elaphopsocus*.

Key words: *Elaphopsocus*, *Elaphopsocoides*, Colombia, Brazil, Neotropics

Introduction

The family Psocidae includes over 900 described species in 80 genera. It is the largest and most diverse family within the Psocodean suborder Psocomorpha (Yoshizawa & Johnson 2008). About 100 species belonging to the family have been described in Colombia and Brazil, 22 and 88 species respectively, rather small numbers in relation to the total number of species described in the family (García Aldrete & Mockford 2009; Lienhard & Smithers 2002; Román-P. *et al.* 2014). Thus, the lack of knowledge is evident in the alpha taxonomy of Psocidae in the Neotropics, where a high diversity of 'Psocoptera' has been documented recently (González-Obando *et al.* 2011; García Aldrete *et al.* 2012; Casasola-González *et al.* 2013; Román-P. *et al.* 2014; Saenz-Manchola *et al.* 2014; Calderón-Martínez *et al.* 2014; García Aldrete *et al.* 2014; García Aldrete & Silva Neto 2014). This contrasts with the diversity of psocids recorded in other latitudes (*e. g.* El-Hawagry *et al.* 2013; Liu *et al.* 2014).

More than 70 years have passed since the description by Roesler (1940) of the single species assigned to *Elaphopsocus*, and this was based on two males from Brazil. Here we provide information on females for the first time, re-diagnose the genus and distinguish it from *Elaphopsocoides* Román-P., García Aldrete & González, and present a scheme of classification based on the male hypandrium and phallosome.

Material and methods

We studied thirteen specimens of six species of *Elaphopsocus*; ten of them were dissected in 75% ethanol. The head, terminalia, and right wings and legs were mounted on slides in Canada balsam. Measurements (in microns) were taken using an ocular micrometer mounted on a Nikon Eclipse microscope. Color was recorded by placing whole specimens, before dissection, under a microscope illuminated with cold white light at 40X. The illustrations were made from photographs taken with a Canon T3i and Helicon Focus program and processed in a vector graphics editor CorelDraw X7.

Abbreviations for lengths of parts measured are as follows: FW: right forewing; HW: right hindwing; F: Femur of right hind leg; Mx4: fourth segment of right maxillary palpus; f1...fn: flagellomeres 1...n of right antenna; IO: minimum distance between compound eyes in dorsal view of head; D and d: antero-posterior diameter and