

## **Article**



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## New genera of Lachesillidae (Psocodea: 'Psocoptera': Eolachesillinae: Graphocaeciliini) from Valle del Cauca, Colombia

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## **Abstract**

Two new related Colombian genera of Lachesillidae, including three new species, from the Department of Valle del Cauca, are here described and illustrated. They belong in the tribe Graphocaeciliini (Eolachesillinae). The new genera differ from the other genera in the tribe lacking ocelli, by characters of the male clunium, phallosome, endophallus, paraprocts, and female subgenital plate, gonapophyses and IX sternum. The types are deposited in the Entomological Museum of the Universidad del Valle (MUSENUV), in Santiago de Cali, Colombia.

Key words: taxonomy, Neotropics, Valle del Cauca

## Introduction

Males of the genera in the tribe Graphocaeciliini (Psocoptera: Lachesillidae: Eolachesillinae), have a clunial shelf over the area of the epiproct, and some also have various clunial projections over the area of the paraprocts, or between the epiproct and each paraproct (Mockford & Sullivan 1986; García Aldrete & Mockford 2011; García Aldrete 2012; García Aldrete et al. 2012). The tribe presently includes 11 genera, three of which have ocelli: Graphocaecilius Enderlein, Anomopsocus Roesler, and Mesolachesilla Mockford & Sullivan; the other eight genera lack ocelli: Antilachesilla, Prolachesilla, Nanolachesilla, Tricholachesilla, Notolachesilla, all erected by Mockford & Sullivan, plus Amazolachesilla García Aldrete & Mockford, Cuzcolachesilla García Aldrete and Anomolachesilla García Aldrete et al.

All the genera in the tribe present considerable variation in the structural plan of the male phallosome, male hypandrium, and in the female gonapophyses + IX sternum, that give ground for further groupings (García Aldrete *et al.* 2012).

Since 2010, within the frame of a project to survey the psocid fauna of Valle del Cauca, Colombia, we found several specimens of three species that present characters of Graphocaeciliini: tarsi two-segmented, no ocelli, lacinia bicuspid, with external cusp bidentate,  $V_{2+3}$  elongate, and aedeagus terminating in a pointed or knobbed process, with the posterior border of the male clunium slightly thickened over the area of the epiproct, or strikingly, with a broad, curved, posterior spatulate projection that covers most of the epiproct. The phallosome presents external parameres either distally blunt or pointed, the endophallus is well developed, and the subgenital plate, with a median posterior concavity, or with two median posterior projections, is unique, quite different from those in the other genera in the tribe. These three species can not be assigned to any of the described genera of Graphocaeciliini, so we erected a new genus to include the two species in which the males have the clunium projected over the area of the epiproct, partially covering it; we also erected another genus for the other species in which the male lacks a clunial projection; these two genera have the same structural plan for the male and female genitalia, and they are related to each other, and we maintain that the differences between them, support the creation of two generic taxa (see diagnoses below). The purpose of this paper is to describe and illustrate these two genera.