

## **Article**



## Three new species of *Loneura* (Psocodea: 'Psocoptera': Ptiloneuridae) from Gorgona Island, Cauca, Colombia, with a new infrageneric classification

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## **Abstract**

Three related species of *Loneura* Navás, from Gorgona Island (Cauca, Colombia), are here described and illustrated. The types are deposited in the Entomological Museum of the Universidad del Valle (MUSENUV). A set of infrageneric groups within *Loneura* is proposed based on the structure of the male hypandrium and phallosome. The species of the genus are assigned to the groups recognized in this classification.

Key words: Colombian Pacific, neotropics, psocid fauna, Epipsocetae

## Introduction

Sarria (2011) conducted the first systematic study of Psocoptera in Colombia. In that study, 68 species in 37 genera and 21 families were recorded from Gorgona, a small island of 13.8 km² in the Colombian Pacific that is separated from the continent by only 35 km (02°47′–3°06′N: 78°6′–78°18′W). That study analyzed samples taken during field work in 2009 and 2010, together with specimens collected by canopy fogging in 2007 (see Pimienta *et al.* 2008). The genus *Loneura* (Ptiloneuridae) was not represented in these samples. However, during field work on Gorgona Island in February, March and May, 2011, by the Biology Department of the Universidad del Valle, three undescribed species of this genus were found.

Loneura Navás is essentially a neotropical genus, whose species extend from southwestern United States (southern Arizona), to southern Brazil (Santa Catarina). At present it includes 17 described species, but 17 further undescribed species are represented in the collection of García Aldrete (Moreira de Castro 2007). Only two species are recorded from Colombia (García Aldrete et al. 2011), but recent collecting in Valle del Cauca has revealed the presence of six additional undescribed species. The megadiverse nature of Colombia suggests that many more species remain to be discovered. The purpose of this paper is to describe from Gorgona Island, as a distinct insular unit, three related species of Loneura based on 14 specimens. For the dissecting, mounting and measuring procedures see González et al. (2011). The type series of each species is deposited in the Entomological Museum of the Universidad del Valle, Santiago de Cali, Colombia (coden: 23530-23537 MUSENUV).

**Loneura gorgonaensis n. sp.** (♂). (Figs. 1–5)

**Diagnosis.** Head with a creamy white, oblique band between each compound eye and epistomal suture, enclosing antennal fossae (Fig. 2). Forewing M five branched, M5 distally forked (Fig.1), resulting in six M veins reaching the wing margin; areola postica tall, almost reaching M, 1.23 times as tall as wide. Hindwing M two branched. Hypandrium with side sclerites fused proximally to central piece; this anteriorly convex, with side projections parallel to side sclerites and two stout, distally rounded posterior projections, each bearing an anteapical macrosetae