



Description of a new high Andean butterfly species (Lepidoptera: Lycaenidae: Theclinae) from the “Sierra Nevada del Cocuy”, Colombia

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Abstract

A new species of *Penaincisalia*, *P. elisabeth* sp. n. is described and diagnosed from the “Sierra Nevada del Cocuy” in north-eastern Colombia. Adult specimens and genitalia of both sexes are illustrated and compared with *P. saraha*, hypothetically the most closely related species.

Key words: Andes, *Pons*, Boyacá, “browni group”, *Penaincisalia*

Introduction

The “browni group” of *Penaincisalia* consists of eight species: *P. browni* (Johnson), *P. regala* (Le Crom & Johnson), *P. saraha* (Johnson), *P. vittata* (Johnson), *P. magnifica* (Johnson), *P. cuiva* Prieto & Rodriguez, *P. purpurea* (Johnson) and *P. caeruleonota* Hall & Willmott. Recently this species group was reviewed and all species illustrated showing in some cases its geographical variation (Prieto et al. 2008). However, a distinctive new taxon has been collected after that review appeared, in the “Sierra Nevada del Cocuy”, a compact mountain mass extending in a north-south direction in the eastern “cordillera” in Boyacá and one of the most striking mountain massifs of Colombia. Although this taxon is not currently known to be sympatric with *P. saraha*, presumably the most closely related species, it possesses unique wing pattern characters.

The species described below belongs to the Eumaeini because it has ten forewing veins, male genitalia lacking a juxta and the male foretarsus is fused and stubby tipped (Eliot 1973). It is placed in *Penaincisalia* because it has an androconial cluster consisting of a scent pad at the distal portion of the discal cell in the forewing, and a minute brand, presumably a scent patch (Bálint & Wojtusiak 2006; Johnson 1990). This genus was placed within the *Micandra* section of Eumaeini by Robbins (2004). This new species belongs to the “browni group” because it presents a sexual dimorphic hindwing tornus where the male has a spatulated lobe and the female has a well developed tail accompanied by a small lateral lobe (Bálint & Wojtusiak 2006; Prieto & Rodriguez 2007).

Methods

For comparative purposes with the species described below, the external morphological variation was analyzed among 40 males and 7 females and 7 genital dissections of male and female specimens of *P. saraha* from Colombia and Ecuador from various museums and private collections, as noted below.

We used terminology for genitalia and wing pattern morphology from Eliot (1973), Robbins (1991) and Johnson (1992). Dissections of the genitalia were made using standard techniques for Lepidoptera, macerating the abdomen in a hot 10% KOH solution. The adult images were taken with a digital camera (Nikon Coolpix 4500). Images of the genitalia structures were taken with the same camera attached to a Zeiss DV4 stereomicroscope and a Leica DMRB microscope.