



Article

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***Mirnapis ohloweni* Packer and Dumesh, new species with notes on *M. inca* Urban (Hymenoptera: Apidae: Eucerini)**

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Abstract

The bee genus *Mirnapis* is revised. *Mirnapis ohloweni* Packer and Dumesh new species, is described from East of Nazca, Peru and compared to both sexes of the type species, *M. inca* Urban, based upon material from northern Chile. Thus, the female of the genus is described for the first time. Both sexes of both species are illustrated and variation in some important characteristics noted. The new material permits a more detailed diagnosis of the genus. Michener's (2007) key to South American Eucerini is modified to facilitate the identification the genus and Vivallo's (2009) key to Chilean Eucerini is emended to permit identification of *M. inca*.

Key words: Chile, Peru, bees, taxonomy

Introduction

The genus *Mirnapis* was described by Urban (1997) based upon 6 males from Arequipa, Peru. Generic level status was considered warranted as a result of the following combination of characteristics: T6 with gradulus dentate laterally, mesotibia with specialized lanceolate hairs, pygidial plate narrowly rounded, S7 with lateral lobes sinuate, gonostylus not capitate and with fine setae, penis valves with apex rounded or weakly pointed and terga with long fine hairs (Urban, 1997). Urban (1997) compared the new genus with *Gaesischia*, *Santiago* and *Svastrides* because all four genera led to the same couplet in Michener *et al.*'s (1955) key to the genera of South American Eucerini. A full description of the genus has not been possible until now however, because the female was unknown.

The purpose of this paper is to describe the female of *Mirnapis inca* and a new species, *M. ohloweni* Packer and Dumesh. It also compares the new species with the type species of the genus, contrasts *Mirnapis* with related genera and emends identification keys to permit identification of *Mirnapis* among South American genera of Eucerini and Chilean eucerine species.

Methods

Terminology for bee morphology generally follows Michener (2007), with F, S and T referring to flagellomeres, sterna and terga, respectively. Dimensions of some features, including hair length, are given in terms of the diameter or the median ocellus—MOD. Puncture density is presented in terms of the relative dimensions of puncture diameter (d) and puncture interspaces (i). In the generic description, states for the main characteristics that differentiate the various genera of Neotropical Eucerini are provided for *Mirnapis*.

Male terminalia were dissected from relaxed specimens, cleared in 5% KOH and stored in glycerin.

Images were taken with a Visionary Digital BK Plus imaging system using a Canon EOS 40D digital SLR camera and processed with Adobe Photoshop.

Field methods employed by the senior author included standard netting and various trapping methods. *Mirnapis* females were most often caught in traps, mostly in blue, deep cup traps (Creative Converting, True Blue,