

FIRST RECORD OF THE BEE *CHILICOLA* (*PSEUDISCELIS*) *ROSTRATA* (FRIESE, 1906) (COLLETIDAE: XEROMELISSINAE) IN CHILE: A RECENT ADVENTIVE SPECIES TO THE COUNTRY?

José Montalva¹ & Laurence Packer²

¹631 West Sola Apt B Santa Barbara, CA, USA. montalva.jose@gmail.com.

²Department of Biology, York University, 4700 Keele St. Toronto, ON, M3J 1P3, Canada.

Abstract

The presence of the solitary bee *Chilicola rostrata* is recorded for the first time in Chile (Santiago, Metropolitan Region). This species belongs to the subgenus *Pseudiscelis* and was previously known from Argentina. Given the distinctive morphology of this bee and the history of studies on the melittofauna of the country, it is likely that this species is a recent adventive to the country.

Key words: Anthophila, *Pseudiscelis*, Chile, South America.

Primer registro para Chile de la abeja *Chilicola* (*Pseudiscelis*) *rostrata* (Friese, 1906) (Colletidae: Xeromelissinae): una especie adventicia reciente para el país?

Resumen

Se cita por primera vez para Chile (Santiago, Región Metropolitana) la especie de abeja solitaria *Chilicola rostrata*, esta pertenece al subgénero *Pseudiscelis*, hasta ahora sólo conocido en Argentina. Dada la distintiva morfología de esta abeja y la historia melitológica del país, es altamente probable que esta especie sea una adventicia reciente en el país.

Palabras clave: Anthophila, *Pseudiscelis*, Chile, Sudamérica.

The Neotropical genus *Chilicola* Spinola is comprised of small (3–8 mm in length), slender bees. Typically, the body is long and black with inconspicuous pubescence (Michener, 1995; Michener, 2007; Packer & Genaro, 2007). The genus occurs from Mexico to Chile with its greatest diversity in Chile (Toro & Moldenke, 1979; Michener, 1995; Michener, 2007; Packer & Genaro, 2007; Montalva & Ruz, 2010).

The objective of this note is to report the presence of *Chilicola rostrata* (Friese, 1906) (Figure 1) in central Chile. This species belongs to the subgenus *Pseudiscelis*, which only has two described species: *C. nanula* Packer 2007 and *C. rostrata* (Michener, 1995; Michener, 2007; Packer & Genaro, 2007). The subgenus is currently known from the provinces of Salta and La Rioja, in northern Argentina (Michener, 1995; Michener, 2007; Packer & Genaro 2007).

In November 2008, one male and one female of *C. rostrata* were collected foraging on *Schinus molle* L. (Anacardiaceae), on the Juan Gómez Millas Campus, Universidad de Chile, Ñuñoa,

Santiago de Chile, Región Metropolitana (33°27'59.11" S; 70°35'45.97" W). During the months of December 2008 and January 2009, five males and two females were collected foraging on *Aloysia citrodora* Palau (Verbenaceae) and *Brassica campestris* L. (Brassicaceae) in the same locality. In January 2011, 13 males and 7 females were collected on *A. citrodora*.

The sampled individuals are now housed at the Pontificia Universidad Católica de Valparaíso (PUCV), York University in Canada (PCYU), Instituto de Entomología de la Universidad Metropolitana de Ciencias de la Educación (UMCE), and the personal collection of the senior author (JM).

Studied material: Chile, Región Metropolitana, Ñuñoa 11 November 2008, J. Montalva leg (2 PUCV); Chile, Región Metropolitana, Ñuñoa 15 December 2008, J. Montalva leg. (4 JM); Chile, Región Metropolitana, Ñuñoa 18 December 2009, J. Montalva leg. (3 JM); Chile, Región Metropolitana, Ñuñoa 27 January 2011, C. Guerra leg. (2 PCYU); Chile, Región Metropolitana, Ñuñoa 27 January 2011, C. Guerra leg. (2 UMCE); Chile, Región Metropolitana, Ñuñoa 27 January 2011, C. Guerra leg. (16 JM).

Specimens of *C. rostrata* are characterized as small bees, approximately 4 mm in body length, with unusually elongate head, almost twice as long as wide or even longer, absence of a facial fovea, and the malar area about 1.5 to 3.0 times as long as the basal mandibular width. Males have a long yellow stripe on the lower paraocular area adjacent to the clypeus and supraclypeal area, the maxillary palpus has seven segments, and the pronotum is elongate (Michener, 1995; Michener, 2007; Packer & Genaro, 2007).



Figure 1. *Chilicola rostrata* male, lateral view. Scale: 1 mm.
Figura 1. *Chilicola rostrata* macho, vista lateral. Escala: 1 mm.

Chilicola rostrata is the only known species of the subgenus *Pseudiscelis* in Chile (Toro & Moldenke, 1979; Montalva & Ruz, 2010). It seems unlikely that this species could have been native to Chile and to have gone unrecognized for such a long time given the amount of melittological research carried out in the country. Rather, it seems likely that this stem-nesting bee has recently been introduced from the other side of the Andean mountains.

Acknowledgements

Thanks to Dr. Victor Hugo Gonzalez (USDA-ARS; Utah State University, USA) and Eduardo Faúndez for their comments on previous versions of this manuscript. We also thank Cristhopher Guerra and Juan Luis Allendes for providing some of the studied material.

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