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INSECTA MUNDI

A Journal of World Insect Systematics

0776

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Date of issue: June 26, 2020

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Insecta Mundi 0776: 1–4

ZooBank Registered: urn:lsid:zoobank.org:pub:721330FC-7A36-4720-9A20-071B922B5193

Published in 2020 by

Center for Systematic Entomology, Inc.

P.O. Box 141874

Gainesville, FL 32614-1874 USA

<http://centerforsystematicentomology.org/>

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Electronic copies (Online ISSN 1942-1354, CDROM ISSN 1942-1362) in PDF format

Printed CD or DVD mailed to all members at end of year. Archived digitally by Portico.

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Layout Editor for this article: Robert G. Forsyth

First records of *Ancognatha aymara* Mondaca, 2016 (Coleoptera: Scarabaeidae: Dynastinae: Cyclocephalini) in Argentina

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Abstract. *Ancognatha aymara* Mondaca, 2016 (Coleoptera: Scarabaeidae: Dynastinae: Cyclocephalini), a species previously known only from Chile, is recorded for the first time in northern Argentina. The new records are based on male specimens collected in the provinces of Jujuy and Salta. Illustrations of the habitus and male genitalia of the species are presented in color photographs. A map with its current distribution in Chile and Argentina is included.

Key words. Chile, Jujuy, Salta, distribution.

Introduction

The genus *Ancognatha* Erichson, 1847 (Coleoptera: Scarabaeidae: Dynastinae: Cyclocephalini) includes 23 valid species (Moore et al. 2018a, b; Paucar-Cabrera and Ratcliffe 2018) distributed from Arizona and New Mexico in the United States to northern Argentina, Chile, and Bolivia (Moore et al. 2018b). Adults of some species are known to be attracted to lights at night and to occur in high elevation habitats, reaching elevations above 4,000 m in Peru and northern Chile (Pardo-Locarno et al. 2006; Figueroa and Ratcliffe 2016; Mondaca 2016). Adults of *Ancognatha* can be distinguished from other genera of Cyclocephalini (e.g., *Aspidolea* Bates and *Cyclocephala* Dejean) by a mentum with the apex deeply incised or distinctly emarginate or with the surface medially furrowed in the apical third; the labrum is detached and inclined from the roof of the mouth; the mandibles are narrow and upwardly pointed; the frontoclypeal suture is obsolete medially; the base of the pronotum lacks a marginal bead; and the protarsus in the males is always enlarged (Ratcliffe 2003).

The Argentinean species of *Ancognatha* have been not reviewed, and probably the diversity is greater than currently known. Until now, only two species of this genus were recorded from this country: *Ancognatha erythrodera* (Blanchard) and *Ancognatha lutea* Erichson (Moore et al. 2018b).

The purpose of this paper is to report the presence of *A. aymara* Mondaca in northern Argentina, based on two male specimens collected in localities of Jujuy and Salta provinces. These new records correspond to the natural distribution of this species on both sides of the Andes Mountain range, which is not surprising due to the similarity of habitats in neighboring localities in Chile and Argentina.

Material and Methods

Five specimens of *Ancognatha aymara* were studied: from Chile, the holotype and two paratypes of *A. aymara* deposited at Museo Nacional de Historia Natural, Santiago, Chile (MNNC) and in the private collection of the author (JMEC); and from Argentina, two male specimens belonging to the private collection of Juan E. Barriga, Curicó-Los Niches, Chile (JEBC) which will be deposited in the Museo de Zoología, Universidad de Concepción, Concepción, Chile (UCCC).

Male genitalia were extracted by relaxing the specimens in hot water, cleansing in a hot solution of KOH at 90°C for one hour, and then glued on cardboard point for photographing. Habitus and male genitalia photographs were taken by a Canon DCM510 camera. Primary type label data are quoted verbatim between (“ ”). Geographical coordinates of the collecting sites were recorded using Google Earth Pro. A distribution map (Fig. 2) was generated by entering the geographical coordinates on the website www.simplemappr.net.

Results

Ancognatha aymara Mondaca, 2016

(Fig. 1a–1c)

Examined material. Two male specimens from: Argentina, Jujuy, Puerta, XII-1943, leg. H. Rossi (1 male); Argentina, Salta, Chicoana, II-1989, col. M. Viana (1 male) (JEBC-UCCC, ex Viana collection).

Other examined material. *Ancognatha aymara*. Holotype male at MNNC, labeled: “Chile, Socoroma, Prov. Parinacota, I Reg. 3.000 m, 22-III-2007, Leg. F. Ramírez.” Paratypes at JMEC, labeled: Socoroma, Prov. Parinacota, I Reg. 3000 m, 18-III-2006, Leg. A. Ramírez (1 male); Chile, Parinacota, Socoroma 3000 m, 16-IV-2007, col. F. Ramírez (1 male).

Diagnosis. Male and female of small body size (length 13–20 mm), body dorsally and ventrally castaneous to reddish brown, shiny; elytra slightly darker than pronotum; head, scutellum, and legs brown (Fig. 1). Clypeus semicircular or broadly rounded, apex narrowly rounded and slightly reflexed. Frontoclypeal suture sinuous, obsolete medially, posteriorly with a low tubercle at middle situated between suture and frons. The female of *A. aymara* lacks dark spots or dark lines on the midline of the pronotum, and the widest point of the elytral is the epipleura adjacent to the base of ventrite 2. Aedeagus: Parameres short, basally widened, apex obtuse, lateral excavation with deep, semicircular notch (Fig. 1b, 1c). Phallobase 1.3 times longer than parameres (Fig. 1b).

Distribution. *Ancognatha aymara* is now known from northern Chile (Parinacota Province, Arica and Parinacota Region) and northern Argentina (Jujuy and Salta provinces) (**new record**) (Fig. 2).

Remarks. This contribution increases the number of *Ancognatha* species registered for Argentina to three. *Ancognatha aymara* is an indigenous species that is found at high elevations on both sides of the Andes mountain range, following the trend shown by other Scarabaeidae associated with highland environments (e.g., *Eremophygus* Ohaus, *Microogenius* Gutiérrez, *Peruquime* Mondaca and Valencia (all Rutelinae), *Scybalophagus* Blanchard (Scarabaeinae), *Leuretra* Erichson (Melolonthinae), *Allidiotoma* Arrow (Allidiostomatinae) and *Paranimbus* Schmidt (Aphodiinae). In this way, the Andes mountain range is not a barrier that limits the distribution of this and other species of Scarabaeidae, but instead acts as a natural corridor that has allowed these taxa to diversify in South America. It is possible that the absence of records in Argentina is due to the scarcity of collections focused on this family of beetles.

Acknowledgments

I acknowledge the collaboration of Juan Enrique Barriga (Chile) and Mario Elgueta (MNNC), who provided specimens for study. I also thank Marcelo Guerrero for the photographs illustrating this paper. I am grateful to Brett Ratcliffe and Andrew Smith for valuable corrections and suggestions.

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Received May 11, 2020; accepted May 26, 2020.

Review editor Paul E. Skelley.

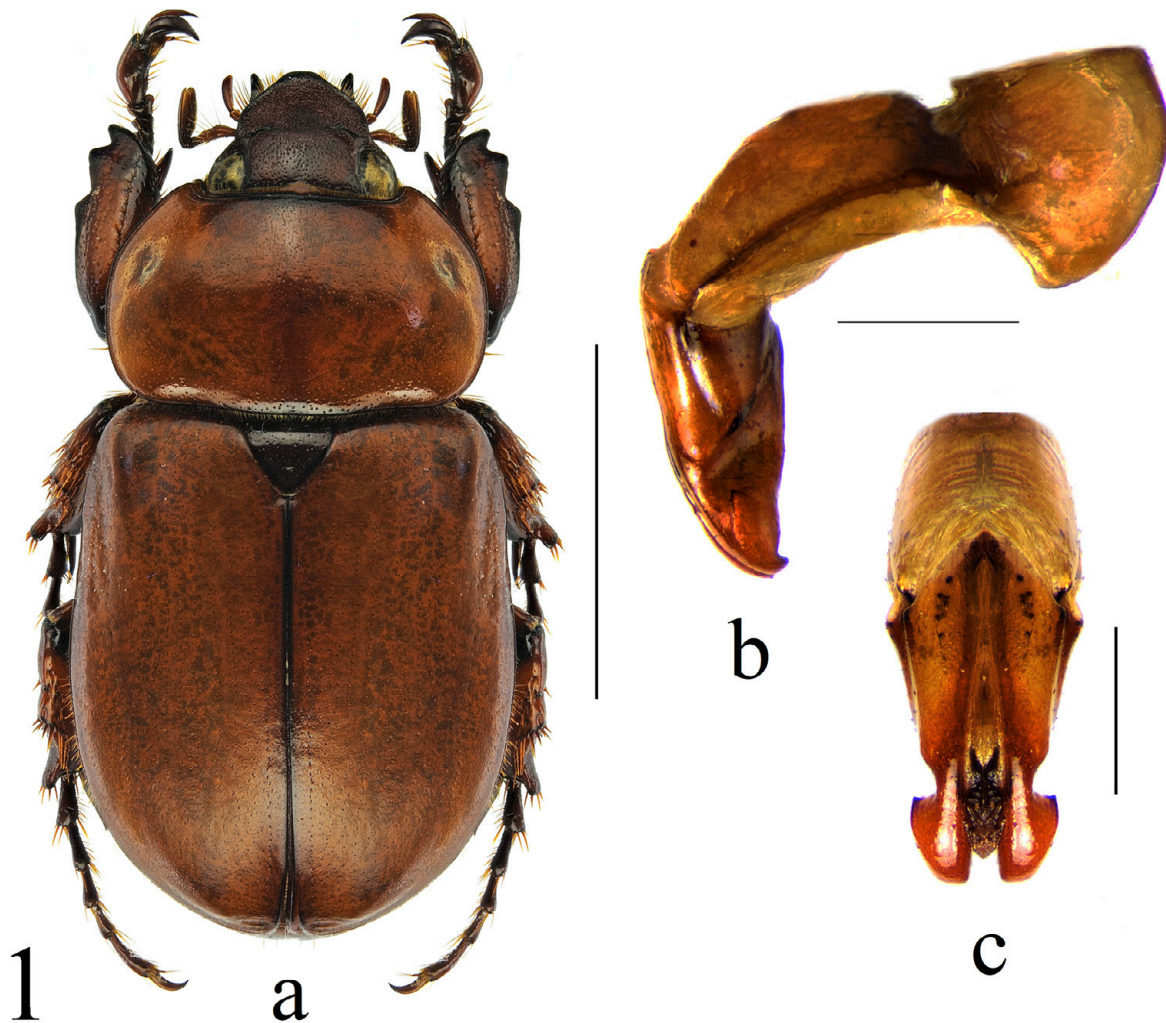


Figure 1. *Ancognatha aymara* Mondaca from Salta, Argentina. **a)** Male, dorsal habitus. Scale bar: 0.5 mm. **b–c)** Parameres, caudal and lateral views. Scale bar: 1.0 mm.



Figure 2. Distribution of *Ancognatha aymara* in Chile (white stars) and Argentina (yellow circles).