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New species and records of *Macroductylus* Dejean (Coleoptera: Scarabaeidae: Melolonthinae: Macroductylini) from Bolivia

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Abstract

Two new species of *Macroductylus* Dejean (Coleoptera: Scarabaeidae: Melolonthinae) from Bolivia are described and illustrated: *M. megaphyllus* **new species** (from Comarapa, Santa Cruz and Sehuenca, Cochabamba) and *M. yunganus* **new species** (from Mairana and Comarapa, Santa Cruz). In addition, the species *Macroductylus bolivianus* Moser, *M. gracilis* Moser, and *M. nobilis* Frey are redescribed and illustrated to help facilitate identification of these species. A key to the 10 species of *Macroductylus* presently known from Bolivia is provided.

Key words: taxonomy, rose chafers, Yungas

Resumen

Se describen e ilustran dos nuevas especies de *Macroductylus* Dejean (Coleoptera: Scarabaeidae: Melolonthinae) en Bolivia: *M. megaphyllus* **sp. nov.** (Comarapa, Santa Cruz y Sehuenca, Cochabamba), y *M. yunganus* **sp. nov.** (Mairana y Comarapa, Santa Cruz). Además, se describen e ilustran *Macroductylus bolivianus* Moser, *M. gracilis* Moser y *M. nobilis* Frey para ayudar en la identificación de tales especies. Se incluye una clave para distinguir las 10 especies de *Macroductylus* registradas actualmente en Bolivia.

Introduction

The genus *Macroductylus* Dejean (Coleoptera: Scarabaeidae: Melolonthinae: Macroductylini) includes 112 species, three in Canada and the United States of America, 37 from Mexico and Central America, and 72 in South America (Arce-Pérez and Morón 2000, 2005, 2009, 2010, 2011; Evans 2003). The species from Bolivia, here listed in the order in which they were described, are poorly known: *M. cupreus* Blanchard, *M. aeneus* Kirsch, *M. bolivianus* Moser, *M. gracilis* Moser, *M. signatipennis* Moser, *M. disparilis* Moser, *M. nobilis* Frey, and *M. zischkai* Frey. During a recent study of the Melolonthinae in the collections of the Canadian Museum of Nature, Natural History Museum Wien, and Miguel A. Morón personal collection, we found many specimens of *Macroductylus* that represented both new species and records from Bolivia. The descriptions, illustrations, and precise locality data for these species and specimens are included in this paper.

Technical terms and characters used in the species descriptions are those of Arce-Pérez and Morón (2000). Illustrations were made with the aid of a camera lucida and stereomicroscope, and measurements were obtained using caliper or ocular micrometer. The photographs were taken with a multifocal Leica microscope Z16AP0A and a Leica camera DFC 490 using the Leica Applications Suite software (Leica Microsystems, Solms, Germany). Specimens used in this study are deposited in the following collections: Canadian Museum of Nature, Ottawa, Canada (CMNC); Instituto de Ecología, A.C. Xalapa, Mexico (IEXA); Natural History Museum Wien, Vienna, Austria (MHNW); Miguel A. Morón personal collection, Xalapa, Mexico (MXAL), Naturhistorisches Museum, Basel, Switzerland (NHMB), and Zoologisches Museum Humboldt Universität zu Berlin, Germany (ZMHU).

(CMNC) and Manfred Jäch (MHNW) for loan of studied specimens. Eva Sprecher-Uebersax (NHMB) sent us photographs of paratypes from the Frey collection. Joachim Willers (ZMHU) sent us useful photographs of specimens studied by Julius Moser. Bruce Gill (Ottawa, Canada) reviewed the English of final draft. This publication represents a contribution to the research line “Coleópteros Lamellicornios de América Latina” supported by Instituto de Ecología A.C. (account 902-08-011).

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