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Mexican Buprestidae: two new species of Acmaeodera Eschscholtz and a review of the genus Chalcophora Dejean

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Abstract

Two distinctive new Mexican species of Acmaeodera Eschscholtz are described, A. xanthoskeles from the Yucatán Peninsula and A. inusitata from Michoacán. The Mexican species of the genus Chalcophora Dejean, C. hondurasica Casey and C. mexicana Waterhouse, are reviewed and discussed along with two U.S. and Canadian species, C. angulicollis (Le-Conte) and C. virginiensis (Drury). Chalcophora angulicollis is shown not to occur in Texas as has long been recorded.

Key words: Buprestidae, *Acmaeodera*, *Chalcophora*, Mexico, new species, review

Introduction

The genus Acmaeodera Eschscholtz 1829 is one of the larger and more widely distributed of the family Buprestidae. It falls short of being truly cosmopolitan by having no known species present in Australasia. In the Old World there is an accepted classification of subgenera (Holm 1978; Volkovitsh 1979), while nothing so well structured has been defined for the New World species. According to Westcott (2012) there are 155 described species in Mexico; earlier he postulated a total of about 200 (Westcott 2005). With the potential number of undescribed species in Mexico still awaiting their respective formal introduction to science, the species described below permit us to advance one small step towards a more complete understanding of this interesting and diverse group.

Until now three species of the genus Chalcophora Dejean 1833, C. hondurasica Casey 1909, C. mexicana Waterhouse 1882, and C. virginiensis (Drury 1770), have been reported to occur in Mexico. Our study indicates there are only two, and that reports of C. virginiensis in both Mexico and Central America were based on misidentifications of C. mexicana and C. hondurasica, respectively. Another species, the western U.S. C. angulicollis (LeConte 1857), has never been reported from Mexico but is likely to occur there, in our opinion considerably more likely than is C. virginiensis. The former is discussed separately at the end of the paper, for which a new host record is also given. Chalcophora hondurasica is reported for the first time from Mexico, and new Mexican state records are provided for *C. mexicana*.

Four letter collection and institutional abbreviations follow Arnett et al. (1993) except as follows: CSCA = California State Collection of Arthropods, Sacramento, U.S.A.; CZUG = Universidad de Guadalajara, México; RHTC = Robert H. Turnbow, Enterprise, Alabama, U.S.A.; TSRS = Tennessee State University Nursery Research Station, McMinnville, U.S.A.; UAEM = Universidad Autónoma de Morelos, Cuernavaca, México; UANL = Universidad Autónoma de Nuevo León, Linares, México. These can also be found, sometimes with additional data and links, at the "Insect and Spider Collections of the World" web site at the Bishop Museum, Hawaii: http:// hbs.bishopmuseum.org/codens/codens-inst.html. The abbreviations herein are provided in parentheses at the end of label data and may refer to more than one preceding specimen. Unless otherwise indicated, label data is not always provided verbatim; e.g., the dates have been standardized and punctuation usually differs.

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