

# ZOOTAXA

211

**A checklist of the New World chafers  
(Coleoptera: Scarabaeidae: Melolonthinae)**

ARTHUR V. EVANS



Magnolia Press  
Auckland, New Zealand

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(*Zootaxa* 211)

458 pp.; 30 cm.

12 June 2003

ISBN 0-9582395-7-6 (Paperback)

ISBN 0-9582395-8-4 (Online edition)

PUBLISHED BY

Magnolia Press

P.O. Box 41383 St. Lukes

Auckland 1030

New Zealand

e-mail: [zootaxa@mapress.com](mailto:zootaxa@mapress.com)

<http://www.mapress.com/zootaxa/>

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ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

## A checklist of the New World chafers (Coleoptera: Scarabaeidae: Melolonthinae)

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## Abstract

A checklist and bibliography of the New World Melolonthinae are presented. As of 31 December 2002, the New World melolonthine fauna consists of 11 tribes, 122 genera, and 2,705 valid species, including 11 fossil species. The checklist is a synthesis of the tribal classifications of Blackwelder (1944), Britton (1978) and Evans (2002). Seven new combinations, eleven replacement names, and eight new synonyms are recognized. Thirteen varietal names were evaluated and determined to be subspecific in rank. The type species of 21 genera are here designated. Three genera and one species are listed as *incertae sedis*. Since the catalogs of Dalla Torre (1912, 1913) and Blackwelder (1944) two genera and two species have been removed from the New World Melolonthinae. *Sericoides nossi* Martínez, 1971 and *Sericoides rechencui* Martínez, 1971 are nomina nuda.

**Key words:** Coleoptera, Scarabaeidae, Melolonthinae, chafers, New World

## Introduction

The Melolonthinae, commonly called chafers, is one of the largest and most diverse subfamilies of scarabs, with nearly 800 genera and perhaps 12,000 species worldwide (see Houston and Weir, 1992). Many species are considered pests, both as adults and as larvae, damaging a wide variety of crops and pastures. The adults are often encountered in large numbers flying about lights during warm evenings. Despite their economic importance and imposing presence, the systematics of the subfamily is still far from stable.

Recognition of taxa as tribes or subfamilies has not been applied consistently. The Melolonthinae, along with the Rutelinae, Dynastinae, and Cetoniinae, is sometimes included in the family Melolonthidae by Latin American researchers. Moreover, the tribal classification is in a relative state of confusion due to the lack of definition and inconsistent use of characters (Hardy, 1978b; Ratcliffe, 1991). The tribal classification followed here is primarily a synthesis of Blackwelder (1944), Britton (1978) and Evans (2002).

The Melolonthinae has long been plagued by a lack of stability at the tribal level. The descriptions of the majority of genera and species published before 1940 are largely inadequate and rarely accompanied by illustrations, making reliable determinations difficult, if not impossible, without examination of type material. Many of these workers rarely consulted types, resulting in numerous synonymies and incorrect tribal placements. Britton (1957) has pointed out that the descriptions of earlier workers simply validated names, but rarely made the insects themselves recognizable. Not until a comparative analysis of all genera, including the larvae, will the higher classification of the Melolonthinae achieve some stability and begin to reflect the phylogenetic relationships of the group.

Since relatively few workers have been involved in the description of melolonthines, the location of literature and type material is simple in theory, but sometimes difficult in practice. The majority of types of New World chafers are housed in the following collections: