

ZOOTAXA

948

**A catalog and distributional analysis of the Rutelinae
(Coleoptera: Scarabaeidae) of Ecuador**

AURA PAUCAR-CABRERA



Magnolia Press
Auckland, New Zealand

AURA PAUCAR-CABRERA

A catalog and distributional analysis of the Rutelinae (Coleoptera: Scarabaeidae) of Ecuador
(*Zootaxa* 948)

92 pp.; 30 cm.

20 April 2005

ISBN 1-877354-94-5 (paperback)

ISBN 1-877354-95-3 (Online edition)

FIRST PUBLISHED IN 2005 BY

Magnolia Press

P.O. Box 41383

Auckland 1030

New Zealand

e-mail: zootaxa@mapress.com

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

© 2005 Magnolia Press

All rights reserved.

No part of this publication may be reproduced, stored, transmitted or disseminated, in any form, or by any means, without prior written permission from the publisher, to whom all requests to reproduce copyright material should be directed in writing.

This authorization does not extend to any other kind of copying, by any means, in any form, and for any purpose other than private research use.

ISSN 1175-5326 (Print edition)

ISSN 1175-5334 (Online edition)

A catalog and distributional analysis of the Rutelinae (Coleoptera: Scarabaeidae) of Ecuador

AURA PAUCAR-CABRERA

*Division of Entomology, W436 Nebraska Hall, University of Nebraska State Museum, Lincoln, NE 68588;
Pontificia Universidad Católica del Ecuador, Departamento de Biología, Av. 12 de octubre y Patria, Quito-
Ecuador; aurapcn@yahoo.com*

Table of contents

Dedication	5
Introduction	5
Materials and Methods	7
Overview	9
Checklist and distributional records of the Rutelinae of Ecuador.....	9
Tribe ANOMALINI	9
Genus <i>Anomala</i> Samouelle, 1819	9
Genus <i>Callistethus</i> Blanchard, 1851.....	17
Genus <i>Strigoderma</i> Burmeister, 1844.....	19
Tribe ANOPLAGNATHINI.....	22
Genus <i>Platycoelia</i> Dejean, 1833.....	22
Tribe GENIATINI	26
Genus <i>Bolax</i> Fischer von Waldheim, 1829.....	26
Genus <i>Geniates</i> Kirby, 1819.....	27
Genus <i>Leucothyreus</i> MacLeay, 1819	27
Genus <i>Lobogeniates</i> Ohaus, 1917	29
Genus <i>Trizogeniates</i> Ohaus, 1917	29
Tribe RUTELINI	30
Genus <i>Acraspedon</i> Arrow, 1899	30
Genus <i>Aequatoria</i> Arrow, 1899	30
Genus <i>Anticheira</i> Eschscholtz, 1818	31
Genus <i>Anticheroides</i> Soula, 1998.....	32
Genus <i>Badiasis</i> Machatschke, 1970	32
Genus <i>Calomacraspis</i> Burmeister, 1844	33
Genus <i>Chasmodia</i> MacLeay, 1819	33
Genus <i>Chlorota</i> Burmeister, 1844	34
Genus <i>Chrysina</i> Kirby, 1828.....	35

Genus <i>Chrysophora</i> Dejean, 1821	36
Genus <i>Cnemida</i> Kirby, 1827	36
Genus <i>Dorysthetus</i> Blanchard, 1845	36
Genus <i>Exothyridium</i> Soula, 2002	37
Genus <i>Heterochlorota</i> Soula 2002	37
Genus <i>Homonyx</i> Guérin-Méneville, 1839	37
Genus <i>Hypaspidius</i> Arrow, 1899	37
Genus <i>Lagochile</i> Hoffmanssegg, 1817	38
Genus <i>Lasiocala</i> Blanchard, 1851	38
Genus <i>Macraspis</i> MacLeay, 1819	39
Genus <i>Maripa</i> Soula, 2002	42
Genus <i>Mecopelidnota</i> Bates, 1904	42
Genus <i>Mesomerodon</i> Ohaus, 1905	43
Genus <i>Microrutela</i> Bates, 1904	43
Genus <i>Minidorysthetus</i> Soula, 1998	44
Genus <i>Parachlorota</i> Soula, 2002	44
Genus <i>Paradorysthetus</i> Soula, 2002	44
Genus <i>Paraptenomela</i> Soula, 2002	44
Genus <i>Paratelaugis</i> Ohaus, 1915	45
Genus <i>Pelidnota</i> MacLeay, 1819	45
Genus <i>Promacropoides</i> Sigwalt, 1987	49
Genus <i>Pseudoanticheroides</i> Soula, 1998	49
Genus <i>Pseudochlorota</i> Ohaus, 1905	49
Genus <i>Pseudohypaspidius</i> Soula, 1998	49
Genus <i>Pseudomacraspis</i> Ohaus, 1903	50
Genus <i>Pseudoptenomela</i> Soula, 2002	50
Genus <i>Pseudothyridium</i> Soula, 2002	50
Genus <i>Ptenomela</i> Bates, 1888	52
Genus <i>Rutela</i> Latreille, 1802	54
Genus <i>Telaugis</i> Burmeister, 1844	55
Genus <i>Thyridium</i> Burmeister, 1844	55
Genus <i>Thyriochlorota</i> Ohaus, 1915	55
Genus <i>Tipicha</i> Soula, 2002	57
Tribe SPODOCHLAMYINI	57
Genus <i>Anatista</i> Breme, 1844	57
Genus <i>Spodochlamys</i> Burmeister, 1855	57
Analysis of Distribution by Tribe	58
Tribe Anomalini	58
Tribe Anoplognathini	59
Tribe Geniatini	60
Tribe Rutelini	60
Tribe Spodochlamyini	61
Discussion and Conclusions	61
Acknowledgements	63
Literature Cited	64
Index	

Abstract

Research on the Ecuadorian Rutelinae (Coleoptera: Scarabaeidae) was conducted to determine the diversity of the group in Ecuador and to examine distributional patterns. Results showed that the Rutelinae are distributed in all zoogeographical zones of the country except the Galápagos Islands. Species of Rutelinae occupy a wide variety of habitats ranging from sea level to the high Andes. Areas with the greatest diversity of species, in decreasing order, are the tropical habitats on both sides of the Andes, the subtropical, and the temperate zones. Ecuador has 298 species and 53 genera of Rutelinae. In sum, 36% of the species are endemic to Ecuador.

Resumen

Se realizó un estudio faunístico con el objetivo de conocer la biodiversidad de Rutelinae (Coleoptera: Scarabaeidae) en el Ecuador. Los resultados muestran que la subfamilia Rutelinae está distribuida en todos los pisos zoogeográficos del Ecuador excepto en Galápagos. Las especies de Rutelinae ocupan una amplia variedad de hábitats desde el nivel del mar hasta el piso alto andino. Las áreas con mayor diversidad de especies, en orden decreciente, son los pisos tropicales, subtropicales y temperado. Ecuador tiene 298 especies y 53 géneros de Rutelinae. El 36% de las especies son endémicas.

Key words: Coleoptera, Scarabaeidae, Rutelinae, Ecuador, catalog, distribution.

Dedication

I dedicate this volume to the memory of my friend Heyller Restrepo, who was an inspirational young scientist and a valuable scarab worker who devoted himself to the study of the Scarabaeidae of Colombia.

Introduction

The family Scarabaeidae is a large group of beetles that includes over 27,800 described species worldwide (Jameson and Ratcliffe 2002). Some adults of Scarabaeidae are noticeable due to their relatively large size, bright colors, elaborate ornamentation, interesting life histories, and many interesting adaptations (Jameson 1998b). The subfamily Rutelinae is composed of approximately 200 genera and 4100 species distributed worldwide (Machatschke 1972). The English common name of the subfamily, the shining leaf chafers, reflects the fact that many members of the subfamily are brightly colored, beautifully patterned, and often brilliantly metallic leaf-feeding beetles. Others in the subfamily, such as the species of *Anomala*, are small, obscure beetles. Adult rutelines are phytophagous and may aid in pollination of plants (Jameson 1998b). Larvae feed on living roots, compost, and decaying plant parts such as logs, stumps, and roots.