

# ZOOTAXA

1026

**Systematics of *Robustagramma*, a new genus of New World Sphaeroceridae  
(Diptera)**

STEPHEN A. MARSHALL & YONGSHENG CUI



Magnolia Press  
Auckland, New Zealand

STEPHEN A. MARSHALL & YONGSHENG CUI

**Systematics of *Robustagramma*, a new genus of New World Sphaeroceridae (Diptera)**  
(*Zootaxa* 1026)

122 pp.; 30 cm.

29 July 2005

ISBN 1-877407-16-X (paperback)

ISBN 1-877407-17-8 (Online edition)

FIRST PUBLISHED IN 2005 BY

Magnolia Press

P.O. Box 41383

Auckland 1030

New Zealand

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

## Systematics of *Robustagramma*, a new genus of New World Sphaeroceridae (Diptera)

STEPHEN A. MARSHALL & YONGSHENG CUI

Department of Environmental Biology, University of Guelph, Guelph, Ontario, Canada N1G 2W1  
samarsha@uoguelph.ca, yscui@hotmail.com

### Table of contents

Abstract .....	4
Introduction .....	5
<i>ROUSTAGRAMMA</i> MARSHALL AND CUI, NEW GENUS .....	6
Key to the species of <i>Robustagramma</i> .....	12
<i>Robustagramma brevicilium</i> group .....	19
<i>Robustagramma atratum</i> Cui and Marshall, new species .....	19
<i>Robustagramma brevicilium</i> Cui and Marshall, new species .....	21
<i>Robustagramma lingulatum</i> Cui and Marshall, new species .....	22
<i>Robustagramma longiseta</i> Cui and Marshall, new species .....	13
<i>Robustagramma paralongiseta</i> Cui and Marshall, new species .....	25
<i>Robustagramma parauniseta</i> Cui and Marshall, new species .....	26
<i>Robustagramma setilamella</i> Cui and Marshall, new species .....	27
<i>Robustagramma uniseta</i> Cui and Marshall, new species .....	29
<i>Robustagramma robustinervus</i> group .....	30
<i>Robustagramma dilatatum</i> Cui and Marshall, new species .....	31
<i>Robustagramma robustinervus</i> Cui and Marshall, new species .....	32
<i>Robustagramma setosum</i> Cui and Marshall, new species .....	34
<i>Robustagramma binitidum</i> group .....	35
<i>Robustagramma binitidum</i> Cui and Marshall, new species .....	36
<i>Robustagramma macrosternum</i> Cui and Marshall, new species .....	38
<i>Robustagramma obscuratum</i> Cui and Marshall, new species .....	39
<i>Robustagramma rarum</i> Cui and Marshall, new species .....	42
<i>Robustagramma crassipalpus</i> group .....	43
<i>Robustagramma bolivarensis</i> Cui and Marshall, new species .....	43
<i>Robustagramma brasiliense</i> Cui and Marshall, new species .....	45
<i>Robustagramma crassipalpus</i> Cui and Marshall, new species .....	46
<i>Robustagramma latistylum</i> Cui and Marshall, new species .....	48
<i>Robustagramma longistylum</i> Cui and Marshall, new species .....	50
<i>Robustagramma nigrivittatum</i> Cui and Marshall, new species .....	51
<i>Robustagramma altifrons</i> group .....	53
<i>Robustagramma altifrons</i> Cui and Marshall, new species .....	53

<i>Robustagramma arizonense</i> Cui and Marshall, new species .....	55
<i>Robustagramma hebes</i> Cui and Marshall, new species .....	57
<i>Robustagramma incurvum</i> Cui and Marshall, new species .....	59
<i>Robustagramma minutiseta</i> Cui and Marshall, new species .....	61
<i>Robustagramma obscurifrons</i> Cui and Marshall, new species .....	63
<i>Robustagramma robustum</i> group .....	64
<i>Robustagramma aequale</i> Cui and Marshall, new species .....	65
<i>Robustagramma angustistylum</i> Cui and Marshall, new species .....	66
<i>Robustagramma biangulatum</i> Cui and Marshall, new species .....	68
<i>Robustagramma crassisaccus</i> Cui and Marshall, new species .....	71
<i>Robustagramma gigantisclerosum</i> Cui and Marshall, new species .....	72
<i>Robustagramma grenadense</i> Cui and Marshall, new species .....	75
<i>Robustagramma kittsense</i> Cui and Marshall, new species .....	76
<i>Robustagramma luciense</i> Cui and Marshall, new species .....	78
<i>Robustagramma mayense</i> Cui and Marshall, new species .....	79
<i>Robustagramma oculiculus</i> Cui and Marshall, new species .....	81
<i>Robustagramma ovipennis</i> (Duda), comb. nov. ....	82
<i>Robustagramma robustum</i> (Spuler) comb. nov. ....	84
<i>Robustagramma sinuosum</i> Cui and Marshall, new species .....	86
<i>Robustagramma spinatimargo</i> Cui and Marshall, new species .....	88
<i>Robustagramma vulgare</i> Cui and Marshall, new species .....	90
<i>Robustagramma triangulatum</i> group .....	92
<i>Robustagramma multiseta</i> Cui and Marshall, new species .....	92
<i>Robustagramma triangulatum</i> Cui and Marshall, new species .....	94
<i>Robustagramma flavistylum</i> group .....	96
<i>Robustagramma angusticauda</i> Cui and Marshall, new species .....	96
<i>Robustagramma brevicauda</i> Cui and Marshall, new species .....	97
<i>Robustagramma cultriforme</i> Cui and Marshall, new species .....	99
<i>Robustagramma flavistylum</i> Cui and Marshall, new species .....	101
<i>Robustagramma pallidistylum</i> Cui and Marshall, new species .....	103
<i>Robustagramma setituberousum</i> Cui and Marshall, new species .....	105
Species not placed in species groups .....	107
<i>Robustagramma acutistylum</i> Cui and Marshall, new species .....	107
<i>Robustagramma disjunctum</i> Cui and Marshall, new species .....	109
<i>Robustagramma mirabile</i> Cui and Marshall, new species .....	112
<i>Robustagramma orthogonium</i> Cui and Marshall, new species .....	115
Acknowledgments .....	121
References .....	121

## Abstract

The genus *Robustagramma* is described for a distinctive clade of Limosininae occurring from Canada south to Argentina. Keys, descriptions, distributional data and phylogenetic hypotheses are provided for 8 species groups and 54 species. Fifty-two of the 54 included species are described as new.

**Key words:** *Robustagramma*, Limosininae, Sphaeroceridae, new species, phylogeny