

# ZOOTAXA

1098

**Whiteflies of Belize (Hemiptera: Aleyrodidae)  
Part 2—a review of the subfamily Aleyrodinae Westwood**

JON H. MARTIN



Magnolia Press  
Auckland, New Zealand

JON H. MARTIN

**Whiteflies of Belize (Hemiptera: Aleyrodidae)**

**Part 2—a review of the subfamily Aleyrodinae Westwood**

(*Zootaxa* 1098)

116 pp.; 30 cm.

19 Dec. 2005

ISBN 1-877407-36-4 (paperback)

ISBN 1-877407-37-2 (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)

## Whiteflies of Belize (Hemiptera: Aleyrodidae) Part 2—a review of the subfamily Aleyrodinae Westwood

JON H. MARTIN

Department of Entomology, The Natural History Museum, Cromwell Road, London SW7 5BD, UK  
e-mail: j.martin@nhm.ac.uk

### Table of contents

Abstract . . . . .	4
Introduction . . . . .	4
Terminology and scope . . . . .	4
Neotropical Aleyrodinae extending into the Old World . . . . .	6
Specimen depositories . . . . .	7
Genera and species of Aleyrodinae present in Belize . . . . .	8
<i>ALEUROCANTHUS</i> Quaintance & Baker . . . . .	8
<i>ALEUROCERUS</i> Bondar . . . . .	8
<i>ALEUROCYBOTUS</i> Quaintance & Baker . . . . .	10
<i>ALEUROGLANDULUS</i> Bondar . . . . .	13
<i>ALEUROPARADOXUS</i> Quaintance & Baker . . . . .	16
<i>ALEUROPLATUS</i> Quaintance & Baker . . . . .	18
<i>ALEUROPLEUROCELUS</i> Drews & Sampson . . . . .	19
<i>ALEUROTHRIXUS</i> Quaintance & Baker . . . . .	20
<i>ALEUROTRACHELUS</i> Quaintance & Baker . . . . .	22
<i>ALEUROTULUS</i> Quaintance & Baker . . . . .	25
<i>ALEUROVITREUS</i> gen. nov. . . . .	28
<i>BEMISIA</i> Quaintance & Baker . . . . .	32
<i>CRENIDORSUM</i> Russell . . . . .	37
<i>DIALEURODES</i> Cockerell . . . . .	38
<i>DIALEUROLONGA</i> Dozier . . . . .	40
<i>DISIPHON</i> Russell . . . . .	42
<i>PARALEUROLOBUS</i> Sampson & Drews . . . . .	44
<i>PERACCHIUS</i> Lima & Racca-Filho . . . . .	45
<i>SINGHIELLA</i> Sampson . . . . .	46
<i>TEGMALEURODES</i> gen. nov. . . . .	47
<i>TRIALEURODES</i> Cockerell . . . . .	53
<i>TRIALEUROLONGA</i> gen. nov. . . . .	60
Acknowledgements . . . . .	63
References . . . . .	63
Appendix 1—check list of the Aleyrodidae-Aleyrodinae of Belize, with known host genera or families . . . . .	67
Appendix 2—summary of taxonomic changes proposed in this work . . . . .	76
Illustrations . . . . .	78

## Abstract

A field survey of Sternorrhyncha (Hemiptera) in Belize, principally conducted within the Chiquibul Forest Reserve (CFR), has revealed almost 200 species of whiteflies, all but 40 of them belonging to the subfamily Aleyrodinae. Provided here is an illustrated account of described Belize species of Aleyrodidae-Aleyrodinae. This account proposes three new generic synonymies, three new specific synonymies, nine ten combinations, one revalidated species and provides descriptions of three new genera and 12 new species. Two appendices are provided: a check list, which includes species remaining undescribed, and the associated host-plant genera or families (when known) of all putative species; and a summary of taxonomic changes proposed here. Line drawings and/or photographs of slide-mounted puparia are provided for all described species, and photographs alone are provided for a few of the more distinctive species that remain undescribed.

**Key words:** Whiteflies, Aleyrodinae, review, Belize, neotropical, check list, illustrations, host-plants

## Introduction

The Aleyrodidae comprises a single family within the Sternorrhyncha, one of three suborders of the Hemiptera, and includes around 1,500 currently valid species and subspecies names. This communication is the conclusion of a two-part systematic account of this family in the Central American country of Belize. The study material is the result of an extensive survey conducted within the Chiquibul Forest Reserve (CFR), Cayo District, whilst the author was based at Las Cuevas Research Station. The first part of this study (Martin, 2004) provided an account of the subfamily Aleurodicinae in Belize, and included an introduction to general whitefly biology and natural history, a review of literature relevant to taxonomic studies of both of the two whitefly subfamilies in the New World, details of the methodologies involved, and protocols for the field collection and laboratory preparation of whitefly specimens. The reader is therefore referred to Part 1 for all of these general topics.

In its two parts this is the most detailed account, to date, of Central American Aleyrodidae and is particularly timely in view of the increases in distribution of several species, as discussed below.

## Terminology and scope

All descriptions and discussions here concern the puparium (fourth-instar nymph), unless otherwise stated. Figure A (p. 5) depicts a stylised aleyrodine puparium, with the major morphological features annotated. Puparial descriptions and discussions presented here generally follow the terminology discussed by Russell (1943) and employed by Martin