



*Zootaxa* 2398: 1–65 (2010)  
www.mapress.com/zootaxa/

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**Monograph**

ISSN 1175-5326 (print edition)

**ZOOTAXA**

ISSN 1175-5334 (online edition)

# ZOOTAXA

2398

## **New genera, species and host plant records of Nearctic and Neotropical Tephritidae (Diptera)**

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Magnolia Press  
Auckland, New Zealand

*Accepted by D. Bickel: 21 Jan. 2010; published: 12 Mar. 2010*

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(*Zootaxa* 2398)

65 pp.; 30 cm.

12 March 2010

ISBN 978-1-86977-487-5 (paperback)

ISBN 978-1-86977-488-2 (Online edition)

FIRST PUBLISHED IN 2010 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

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)

## Table of contents

|  |    |
|--|----|
| Abstract   | 3  |
| Introduction   | 4  |
| Materials and Methods  | 4  |
| <i>Acidogona</i> Loew  | 5  |
| Key to species of <i>Acidogona</i>                             | 5  |
| <i>Acidogona melanura</i> (Loew)                               | 6  |
| <i>Acidogona stecki</i> Norrbom, new species                   | 6  |
| <i>Acinia picturata</i> (Snow)                                 | 10 |
| <i>Acrotaenia otopappi</i> (Doane)                             | 11 |
| <i>Agallamyia</i> Norrbom, new genus                           | 12 |
| <i>Agallamyia pendula</i> Norrbom, new species                 | 14 |
| <i>Dictyotrypeta crenulata</i> (Wulp), new combination         | 18 |
| <i>Dictyotrypeta incisa</i> (Wulp), new combination            | 20 |
| <i>Dioxyna crockeri</i> (Curran), new combination              | 20 |
| <i>Dracontomyia</i> Becker                                     | 21 |
| <i>Dracontomyia footei</i> Aczél                               | 22 |
| <i>Dyseuaresta mexicana</i> (Wiedemann)                        | 22 |
| <i>Euarestoides dreisbachi</i> Foote                           | 23 |
| <i>Homoeothrix aberrans</i> (Schiner), new combination         | 24 |
| <i>Lamproxynella</i> Hering                                    | 24 |
| <i>Neosphaeniscus</i> Norrbom, new genus                       | 24 |
| <i>Oedicarena beameri</i> Norrbom & Ming                       | 28 |
| <i>Oedicarena latifrons</i> (Wulp)                             | 28 |
| <i>Ostracocoelia mirabilis</i> Giglio-Tos                      | 28 |
| <i>Paracantha</i> Coquillett                                   | 29 |
| <i>Paracantha trinotata</i> (Foote), new combination           | 33 |
| <i>Phacelochaeta</i> Norrbom, new genus                        | 33 |
| Key to species of <i>Phacelochaeta</i>                         | 34 |
| <i>Phacelochaeta obliqua</i> Norrbom, new species              | 35 |
| <i>Phacelochaeta quinquefasciata</i> (Hendel), new combination | 37 |
| <i>Phacelochaeta quinquevittata</i> (Norrbom), new combination | 39 |
| <i>Plaumannimyia</i> Hering                                    | 42 |
| <i>Plaumannimyia eugenia</i> (Wulp), new combination           | 42 |
| <i>Procecidochara atra</i> (Loew)                              | 43 |
| <i>Procecidochara suttoni</i> Norrbom, new species             | 44 |
| <i>Pyrgotoides</i> Curran                                      | 50 |
| <i>Rachiptera</i> Bigot  | 50 |
| <i>Rachiptera parallela</i> (Hendel), new combination          | 52 |
| <i>Rhagoletis</i> Loew   | 52 |
| <i>Rhagoletis fuscobasalis</i> (Hering), new combination       | 53 |
| <i>Rhynencina spilogaster</i> (Steyskal)                       | 53 |
| <i>Stenopa</i> Loew  | 55 |
| Key to species of <i>Stenopa</i>                               | 57 |
| <i>Stenopa affinis</i> Quisenberry                             | 57 |
| <i>Stenopa mexicana</i> Norrbom, new species                   | 57 |
| <i>Stenopa vulnerata</i> (Loew)                                | 58 |
| <i>Tomoplagia stonoi</i> Aczél                                 | 59 |
| <i>Trupanea pseudovicina</i> Hering                            | 59 |
| <i>Xanthaciura insecta</i> (Loew)                              | 60 |
| Acknowledgments  | 66 |
| References   | 63 |

## Abstract

Three new genera and five new species of Tephritidae (Diptera) are described from the Nearctic and Neotropical Regions. The new genera are: *Agallamyia* Norrbom (type species: *A. pendula* Norrbom, n. sp.), *Neosphaeniscus* Norrbom (type species: *Euribia m-nigrum* Hendel), and *Phacelochaeta* Norrbom (type species: *Procecidochara quinquefasciata* Hendel). The new species include: *Acidogona stecki* Norrbom (Guatemala, Mexico: Chiapas), *Agallamyia pendula* Norrbom (Guatemala), *Phacelochaeta obliqua* Norrbom (Ecuador), *Procecidochara suttoni* Norrbom (Guatemala), *Stenopa mexicana* Norrbom (Mexico). Five new generic synonyms are proposed: *Cecidocharella* Hendel, 1936 =

*Dracontomyia* Becker, 1919; *Gerrhoceras* Hering, 1942 = *Pyrgotoides* Curran, 1934; *Stoneola* Hering, 1941 = *Rhagoletis* Loew, 1862; *Strobelia* Rondani, 1868 = *Rachiptera* Bigot, 1859; and *Xenochaeta* Snow, 1894 = *Acidogona* Loew, 1873. The following 41 new combinations are proposed: *Acidogona dichromata* (Snow), *Dictyotrypeta crenulata* (Wulp), *D. incisa* (Wulp), *Dioxyna crockeri* (Curran), *Dracontomyia tucumana* (Aczél), *D. borrichia* (Bush & Huettel), and *D. elegans* (Hendel), *Homoeothrix aberrans* (Schiner), *Neosphaeniscus m-nigrum* (Hendel) and *N. flexuosus* (Bigot), *Paracantha trinotata* (Foote), *Phacelochaeta quinquefasciata* (Hendel) and *P. quinquevittata* (Norrbom), *Plau-mannimyia ameghinoi* (Brèthes), *P. coelestina* (Hering), *P. delicatella* (Blanchard), *P. difficilis* (Malloch), *P. dolores* (Hering), *P. eugenia* (Wulp), *P. flava* (Adams), *P. hestiae* (Hendel), *P. imitatrix* (Hering), *P. miseta* (Hering), *P. plagiata* (Blanchard), *P. scutellata* (Séguy), *P. setulosa* (Malloch), *P. subaster* (Malloch), *P. suspecta* (Malloch), *P. thomsoni* (Hendel), *P. titschacki* (Hering), and *P. valdesiana* (Gandolfo & Norrbom), *Pyrgotoides paradoxus* (Hering) and *P. peruvianus* (Korytkowski), *Rachiptera alboguttata* (Hendel), *R. baccharidis* (Rondani), *R. bimaculata* (Hendel), *R. ferruginea* (Hendel), *R. lutulenta* (Hendel), *R. parallela* (Hendel), and *R. rubiginosa* (Rondani), and *Rhagoletis fusco-basalis* (Hering). A lectotype is designated for *R. fuscobasalis*. New distribution and host plant records also are reported.

**Key words:** Diptera, Tephritidae, Tephritinae, taxonomy, host plant, Asteraceae

## Introduction

The Tephritidae chapter in the forthcoming *Manual of Central American Diptera* will include a new key to the Neotropical genera and a synopsis of the genera occurring in Central America and southern Mexico. Research for that chapter resulted in the recognition of several new genera and new generic synonymies, which are published here to be available for the Manual. Various new species are also described, new combinations are proposed, and new host plant records are also published so that these data may be included in the Manual chapter. Many of the new distribution and host records are from recent collecting efforts in Guatemala, whose tephritid fauna, except for the genus *Anastrepha*, is relatively poorly known compared to those of Mexico and Costa Rica.

## Materials and Methods

Label data for all examined specimens will be made available in the New World fruit fly specimen database on the Systematic Entomology Laboratory web site ([www.sel.barc.usda.gov:591/diptera/Tephritidae/TephIntro.html](http://www.sel.barc.usda.gov:591/diptera/Tephritidae/TephIntro.html)). A USNM barcode label was added to most specimens that previously lacked a barcode label. These labels do not indicate ownership, they are unique specimen identifier numbers. In the Type data and Specimen examined sections the barcode number is listed following the depository acronym for each specimen or series. Acronyms for the institutions where specimens are deposited are: AMNH—American Museum of Natural History, New York; BMNH—Natural History Museum, London; CAS—California Academy of Sciences San Francisco; CDFA—California Department of Food & Agriculture, Sacramento; CNC—Canadian National Collection, Ottawa; CUI—Cornell University, Ithaca; DEBUG—Department of Environmental Biology, University of Guelph; FSCA—Florida State Collection of Arthropods, Gainesville; IEXV—Instituto de Ecología, Xalapa; IML—Instituto Miguel Lillo, Tucumán; IMZ—Istituto e Museo di Zoologia, Turin; MCZ—Museum of Comparative Zoology, Harvard University, Cambridge; MHNG—Muséum d'Histoire Naturelle, Geneva; MNHNP—Muséum National d'Histoire Naturelle, Paris; MSUL—Michigan State University, East Lansing; MZUSP—Museu de Zoologia, Universidade de São Paulo; NMW—Naturhistorisches Museum, Vienna; PAN—Polish Academy of Sciences, Warsaw; SDNHM—San Diego Natural History Museum, San Diego; SMT—Staatliches Museum für Tierkunde, Dresden; TAMU—Texas A&M University, College Station; TAUI—Tel Aviv University; UAT—University of Arizona, Tucson; UCB—University of California, Berkeley; UCD—Bohart Museum, University of California, Davis; UCRSJ—Universidad de Costa Rica, San José; UKaL—Snow Museum, University of Kansas, Lawrence; USNM—National Museum of Natural History, Smithsonian Institution, Washington, DC; USU—Utah State University, Logan; UVG—Universidad del Valle de Guatemala; ZIL—Zoological Institute, Lund.