



Zootaxa 2847: 1–122 (2011)
www.mapress.com/zootaxa/

Copyright © 2011 · Magnolia Press

Monograph

ISSN 1175-5326 (print edition)

ZOOTAXA

ISSN 1175-5334 (online edition)

ZOOTAXA

2847

The Hemiptera-Sternorrhyncha (Insecta) of Hong Kong, China—an annotated inventory citing voucher specimens and published records

JON H. MARTIN¹ & CLIVE S.K. LAU²

¹Corresponding author, Department of Entomology, Natural History Museum, Cromwell Road, London SW7 5BD, U.K.,
e-mail j.martin@nhm.ac.uk

²Agriculture, Fisheries and Conservation Department, Cheung Sha Wan Road Government Offices, 303 Cheung Sha Wan Road, Kowloon, Hong Kong, e-mail clive_sk_lau@afcd.gov.hk



Magnolia Press
Auckland, New Zealand

Accepted by C. Hodgson: 17 Jan 2011; published: 29 Apr. 2011

JON H. MARTIN & CLIVE S.K. LAU

The Hemiptera-Sternorrhyncha (Insecta) of Hong Kong, China—an annotated inventory citing voucher specimens and published records

(*Zootaxa* 2847)

122 pp.; 30 cm.

29 Apr. 2011

ISBN 978-1-86977-705-0 (paperback)

ISBN 978-1-86977-706-7 (Online edition)

FIRST PUBLISHED IN 2011 BY

Magnolia Press

P.O. Box 41-383

Auckland 1346

New Zealand

e-mail: zootaxa@mapress.com

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

© 2011 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)

Front cover and on title page—Adult female of *Icerya jaihind* (Rao) (Coccoidea, Monophlebidae) in Aberdeen Country Park, Hong Kong Island.

Table of contents

Abstract	4
Abbreviations used in this paper	4
Introduction to Sternorrhyncha	4
Introduction to Hong Kong	5
Materials and methods	5
Sternorrhyncha in Hong Kong	6
The inventory of Hong Kong Sternorrhyncha	8
Aleyrodoidea	8
Aleyrodidae—Aleyrodinae	9
Aleyrodidae—Aleurodicinae	18
Aphidoidea—Aphididae	19
Aiceoninae	19
Aphidinae—Aphidini	20
Aphidinae—Macrosiphini	22
Calaphidini—Panaphidini	25
Eriosomatinae—Eriosomatini	26
Eriosomatinae—Fordini	26
Eriosomatinae—Pemphigini	27
Greenideinae—Cervaphidini	27
Greenideinae—Greenideini	27
Greenideinae—Schoutedeniini	28
Hormaphidinae—Cerataphidini	29
Hormaphidinae—Nipponaphidini	30
Lachninae—Eulachnini	32
Lachninae—Lachnini	32
Neophyllaphidinae	32
Phyllaphidinae	33
Taiwanaphidinae	33
Aphidoidea—Adelgidae	33
Coccoidea	33
Aclerdidae	33
Asterolecaniidae	33
Coccidae	34
Conchaspidae	37
Diaspididae—Aspidiotinae	37
Diaspididae—Diaspidinae	38
Diaspididae—Leucaspinae	43
Diaspididae—Odonaspinae	44
Eriococcidae	45
Halimococcidae	45
Kerriidae	45
Monophlebidae	45
Ortheziidae	46
Pseudococcidae	46
Psylloidea	49
Calophyidae	49
Carsidaridae	49
Homotomidae	50
Phacopteronidae	50
Psyllidae	51
Triozidae	52
Acknowledgements	53
Bibliography	54
Appendix 1. Alphabetical check list of Hong Kong Sternorrhyncha, indicating the group to which each species belongs	59
Appendix 2. Index to host-plant genera with their families	70
Appendix 3. Host-plants, arranged by family, and the Sternorrhyncha recorded from them in Hong Kong	73
Appendix 4. Sternorrhyncha material deposited in Hong Kong at PPRD	106
Illustrations	111

Abstract

An account of the Sternorrhyncha recorded from Hong Kong, comprising approximately 485 species, is presented. This is primarily based upon voucher holdings in the collection of the Natural History Museum, London and it includes incompletely identified taxa. Also included are records based solely on published data. Host plant data are included where known and there are four appendices for quick cross-reference of names, groups and hosts. One new species in the Aleyrodidae is described, *Rhachisphora takahashii* **sp. nov.**. One new synonymy in the Aleyrodidae is proposed, *Aleurocanthus cheni* Young (1942) becoming a junior synonym of *A. spiniferus* (Quaintance, 1903) **syn. nov.**. Two nomenclatural changes in the Psylloidea are proposed: *Colophorina hungtouwensis* Fang & Yang (1986) **comb. nov.** is transferred from *Psylla*; *Macrorhomotoma sinica* Yang & Li (1984) is proposed as a junior synonym of *M. gladiatum* Kuwayama (1908), **syn. nov.**. One nomenclatural change in the Diaspididae (Coccoidea) is proposed: *Neoparlatoria lithocarpi* Takahashi (1934) is removed from synonymy with *N. formosana* Takahashi (1931), **stat. rev.**

Key words: Hong Kong, China, Sternorrhyncha, Hemiptera, host plants, check lists, specimen vouchers, specimen preparation

Abbreviations used in this paper

AFCD—Agriculture, Fisheries and Conservation Department, Government of the Hong Kong Special Administrative Region, China
ANIC—Australian National Insect Collection, CSIRO, Canberra, Australia
BMNH—The Natural History Museum, London, U.K., formerly British Museum (Natural History)
CAS—California Academy of Sciences, San Francisco, U.S.A.
CIE—former Commonwealth Institute of Entomology, London
CDFA—California Department of Agriculture, Sacramento, U.S.A.
HK—Hong Kong Special Administrative Region, China
HUSJ—Entomological Institute, Faculty of Agriculture, Hokkaido University, Sapporo, Japan
ICZN—International Code of Zoological Nomenclature
IEAUN—Dipartimento de Entomologia e Zoologia Agraria di Portici, Università di Napoli Federico II, Italy
IIE—former CAB International Institute of Entomology, London
LEW—Laboratory of Entomology, Wageningen, Netherlands
MHNG—Muséum d’Histoire Naturelle, Genève, Switzerland
MMB—Moravian Museum, Brno, Czech Republic
NT—New Territories
NZAC—New Zealand Arthropod Collection, Auckland, New Zealand
PPRD—Plant and Pesticides Regulatory Division, based at AFCD Headquarters at Cheung Sha Wan, Kowloon
TARI—Taiwan Agricultural Research Institute, Taichung, Taiwan
TLF—Tai Lung Experimental Station (previously known as Tai Lung Farm), Lin Tong Mei, Sheung Shui, NT (the agricultural experimental station of AFCD)
UCD—R.M. Bohart Museum of Entomology, University of California, Davis, U.S.A.
USDA—United States Department of Agriculture
USNM—US Department of Agriculture, Beltsville, Maryland, U.S.A. (custodians of the Sternorrhyncha collections of the United States National Museum of Natural History, Washington DC)
ZMB—Zoological Museum, Institute of Zoology, Chinese Academy of Sciences, Beijing, China

Introduction to Sternorrhyncha

The Sternorrhyncha are one of the suborders of Hemiptera, an order of insects whose members feed via mouthparts modified into stylets. This feature facilitates the piercing of a substrate and ingestion of liquid food through a tube-like structure guided by a rostrum. All sternorrhynchous groups are phytophagous, feeding on plant sap. The Sternorrhyncha comprises about 16,000 described species in four superfamilies (Gullan & Martin, 2009). Aphidoidea (aphids, adelgids and phylloxerids, figs 14–24) contains about 4300 species worldwide, Coccoidea (scale insects,