BOOK REVIEW

BEN-DOV Y. & GERMAN V.: A SYSTEMATIC CATALOGUE OF THE DIASPIDIDAE (ARMOURED SCALE INSECTS) OF THE WORLD, SUBFAMILIES ASPIDIOTINAE, COMSTOCKIELLINAE AND ODONAPIDINAE. Intercept, Andover, UK, 2003, 1111 pp. ISBN 1-898298-93-9. Price GBP 80.00.

Ben-Dov Y.: A SYSTEMATIC CATALOGUE OF THE SCALE INSECT FAMILY MARGARODIDAE (HEMI-PTERA: COCCOIDEA) OF THE WORLD. Intercept, Wimborne, UK, 2005, 400 pp. ISBN 1-84585-000-9. Price GBP 40.00.

MILLER D.R., GIMPEL M.E. & RUNG A.: A SYSTEMATIC CATALOGUE OF THE CEROCOCCIDAE, HALIMOCOCCIDAE, KERMESIDAE, MICROCOCCIDAE, ORTHEZIIDAE, PHENACOLEACHIIDAE, PHOENICOCOCCIDAE, AND STICTOCOCCIDAE (HEMIPTERA: COCCOIDEA) OF THE WORLD. Intercept, Wimborne, UK, 2005, 554 pp. ISBN 1-84585-001-7. Price GBP 54.87.

These three volumes are parts of a series of publications produced by a project called Scale Net. This project was initiated in 1995 by Y. Ben-Dov (Bet Dagan, Israel) and D.R. Miller (Beltsville, Maryland, USA). One mission of the project is to catalogue the scale insects of the world. Information for most of the scale insects processed under this project is currently available on the Internet (http://www.sel.barc.usda.com/scalenet/scalenet.htm).

The Scale Net project started with the data in a computerized database for soft scales (Coccidae) and mealybugs (Pseudococcidae) compiled by Year Ben-Dov (1993, 1994). A database system, which was developed by Gary Gibson (Agriculture and Agri-Food Canada, Ottawa, Ontario, Canada) made the production of hard-copy catalogues possible.

The three parts of the Catalogue reviewed here follow a previous publication, which covered the Eriococcidae (Miller & Gimpel, 2000). The structure and form of all parts of the Catalogue are as follows: Common name, Systematics, Keys for identification, Host Plants, Distribution, Biology, General Remarks, Citations, information on their correct scientific name, taxonomy, common names, synonyms, as well as diagnostic features and economic importance.

The first volume reviewed is on armoured scale insects, comprised of the largest family, Diaspididae, in the superfamily Coccoidea. Several species of armoured scale insects, for example the California red scale and the pernicious scale, are of great economic importance as they are destructive pests of crops

such as cassava, citrus, avocado, sugarcane, pineapple, as well as various forest trees and ornamentals. This part of catalogue provides up-to-date data on three subfamilies, namely Aspidiotinae, Comstockiellinae and Odonaspidinae, covering 864 species placed in 118 genera, which have been described since Linnaeus (1758). This book is a synthesis and catalogue of all of the information published on these genera and species worldwide up to December 2002.

The second volume is on the scale insect family Margaro-didae (Hemiptera: Coccoidea), includes data on 442 species and subspecies that are placed in 77 genera. The family Margaro-didae includes some destructive pests of agricultural crops such as citrus, coconut, grapevine, mango, oil palm, deciduous fruit trees, forest trees and ornamentals. On the other hand, several margarodid species are beneficial insects, as they produce substances of economic importance (e.g. Armenian cochineal – *Porphyrophora hamelii*). This book is a synthesis and catalogue of all the information published on these genera, species and subspecies worldwide from 1758 to December 2003, plus several works published in 2004.

The third volume provides systematic catalogues of eight families of scale insects for the world. Cerococcidae (ornate pit scales) including 72 valid species in 3 genera, Halimococcidae (pupillarial palm scales) 21 valid species in 5 genera, Kermesidae (gall-like scales) 91 species in 10 genera, Micrococcidae (Mediterranean scales) 8 species in 2 genera, Ortheziidae (ensign scales) 162 species in 11 genera, Phenacoleachiidae 2 species in 1 genus, Phoenicococcidae (palm scale) 1 species in 1 genus and Stictococcidae 15 species in 3 genera. Some species in these families are serious agricultural pests and others pose a threat if accidentally introduced into certain countries of the world. This book is a synthesis and catalogue of all of the taxonomic information published on these families worldwide up to May 2003, plus a few major works in 2004.

This catalogue was only published because of the great support of experts from all over the world. It incorporates a great deal of information and data on the collections and material in tens of museums and institutes.

This catalogue will be of major importance to entomologists who require information on scale insects, state and university researchers, particularly crop protection specialists and quarantine officers. These excellent books are recommended to anyone interested in scale insects, their ecology, life history and pest management.

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