

Book reviews

Palm trees and their insects

Howard, F. W., Moore, D., Giblin-Davis, R. M., & Abad, R. G. 2001: *Palm Trees and their Insects*. — CABI Publishing, Oxford. 400 pp. Price £58.50.

Nordic countries are not exactly endowed with palm trees and, one might expect, a book covering these trees and their insects would interest only a few avid Botanical Garden visitors and greenhouse enthusiasts. Yet, more and more sun-loving entomologists travel nowadays to tropical countries and encounter palm trees. And if that happens, a dedicated insect lover, no matter which country she or he comes from, would want to find out which species occur in, on, or near such palms. It is precisely for such situations that this book would be the ideal companion.

Containing 400 pages, the book starts with 16 attractive, full-page colour plates showing photographs of palm plantations and numerous species of palm insects. The photographs provide a fine backdrop for the theme of the book, although I found it regrettable that those photographs featuring insects did not contain a scale or some familiar object (e.g. head of a matchstick, or one-penny-coin) to estimate the size of the illustrated species. The book's first author, F. W. Howard, alone signs responsible for chapters 1, 7, and 8, but together with R. G. Abad (Lepidoptera and Coleoptera), D. Moore (Orthoptera and Acari), and M. R. Wilson (Hemiptera), he also wrote chapters 2 (Defoliators of Palms) and 3 (Sap-feeders on Palms). Vernacular or common palm names, like for instance 'gru-gru, timite, pewa, etc.' (Williams 1951) are unfortunately ignored, which is a pity, because locals are very often ignorant of the scientific names and know 'their' plants only by common names.

Each chapter starts with a brief philosophical, humorous, or scientific quotation and then delves into the subject matter of the chapter. The first chapter, for instance, gives a very brief overview

of insects and then introduces palm trees in all their variety. Palm tree ecology, terminology, and economic importance are covered and text boxes, inserted into this as well as the other chapters, provide additional and more detailed information in a very readable manner.

The next two chapters are as well written and informative as the first one. The scanning electron micrographs contain size-scales, but close-up photographs and line illustrations once again lack scales or information on the sizes of the depicted insects or insect parts. The illustrations are good, but since it is mentioned in the front of the book that, with a few (listed) exceptions, all were prepared by the principal author (FWH), this reviewer feels that there was no need to initialize each illustration separately with sometimes rather large letters in the body of the book.

The tables that list the various insects and mites together with their host palms and the geographic region one can find them in, are very useful and seemingly based on thorough research. Species mentioned in the text can be found in the index at the end of the book, provided one knows their scientific names, since some common appellations like Palmfly, Palm mealy bug and Palmleaf skeletonizer, present in Gordh and Headrick (2001), were not listed, and 46 pages of references should be a guarantee that few key publications in the field of palm insect research have been missed.

Chapter 5 deals with palm borers and is as good and informative a chapter as the other chapters of the book. R. M. Giblin-Davis, the author of chapter 5, even entered reference scales on virtually all of his illustrations. However, while chapters 2 and 3 had their sub-section titles listed on the contents page at the beginning of the book, the sub-sections of chapter 5 are unfortunately not mentioned on that page. Also, I find it a bit surprising that in the text box on edible palm-insects one key reference was missing, namely the first description of *Rhynchophorus* as an important food item among the Onabasulu people of the south-

ern highlands of Papua New Guinea (Meyer-Rochow 1973).

Questions of population regulations of palm tree pests and pest control methods are dealt with in chapters 6 and 7 and although interesting and important, entomologists hoping to find information on approaches using molecular genetics and genetic engineering would be disappointed. Folk wishing to learn more about traditional and time-honoured field techniques, on the other hand, would be delighted to find an extra little chapter devoted to this topic at the end of the book.

Although the theme of the book is rather specialized and of little use to Nordic field entomologists, the authors have managed to integrate an enormous amount of extremely interesting, sometimes even fascinating, information. The book becomes, thus, a reference volume on a subject that is poorly covered in other tomes or textbooks.

A new world checklist of diving beetles published

Nilsson, A. N. 2001: Dytiscidae (Coleoptera). World Catalogue of Insects. 3. — Apollo Books, Stenstrup, Denmark. 395 pp. ISBN 87-88757-62-5. Price 690 DKK.

Now available! A new world catalogue on the beetle family Dytiscidae has been published. In the last few decades, researchers and students of diving beetles taxonomy, in particular, have been eagerly waiting for it. The study of Dytiscidae has come a long way since 1920, the publication year of the predecessor of this catalogue. The catalogue outline adopted by Zimmermann, the author of the former catalogue, differed somewhat from the new one. Despite the family Dytiscidae already being well known in comparison with many other insect groups, numerous new species and taxa of higher rank, particularly from the tropics, have been described. A new catalogue, therefore, was needed.

First, some general comments on the new catalogue. It opens with a detailed Contents section, which comprises an additional index of the catalogue. An introductory section follows in which the concepts used in the catalogue are explained. Noteworthy in this context is that a number of

I liked this book a lot (even if many illustrations lacked scales and information about the magnification in close-up shots was missing); in fact, I liked it so much that I shall make sure it is in my luggage when I make my next trip to Jamaica (or any other country in which I am likely to encounter palm trees).

References

- Gerdh, G. & Headrick, D. H. 2001: A Dictionary of Entomology. — Cabi Publ., Oxford. 1032 pp.
 Meyer-Rochow, V. B. 1973: Edible insects in three different ethnic groups of Papua and New Guinea. — Am. J. Clin. Nutrition 26: 673–677.
 Williams, R. O. 1951: The useful and ornamental plants in Trinidad and Tobago. — Guardian, Port-of-Spain. 335 pp.

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important nomenclatorial additions (11 new names) are proposed in this part of the book. Each valid species is listed under its current genus in alphabetical order. The original combination of names, name(s) of author(s) and year of publication are given. In the complete list of references, the user of the catalogue can trace the source for the introduction of a certain taxon. Type locality is noted, and if a modern treatment — e.g. a description or a revision — exists, reference is made to it. Any available synonyms are listed under the valid name. Fossil names are included in a separate appendix. Rough geographical distribution at the level of zoogeographical regions is provided.

An expert who has undertaken the immense, time-consuming task of providing a world catalogue of such a species-rich insect family as Dytiscidae, is worthy of the sincerest admiration and gratitude of colleagues. For many of us, a constant problem for many decades has been the worry of missing taxa in revisionary work. With a reliable catalogue, much time is saved, as the need for many basic literature checks is eliminated.

Is the catalogue reliable? In most cases the answer is yes. The author, Dr. Anders Nilsson of Umeå, Sweden, is an experienced and renowned expert on aquatic insects and the family Dytiscidae in particular. I was, however, rather surprised when I examined information on the first genus (*Agabus*)

under Contents on p. 5. Under the heading it reads that the total number of species is given for each taxon. For *Agabus*, it stated 167. Nevertheless, on p. 15 in parentheses after *Agabus*, 166 spp. was told as the species number. A similar discrepancy was found for two additional cases up to group *confinis* on p. 16. Because of this, I made ten random tests on the congruency of given species numbers between the Contents and the catalogue text. Fortunately, they all proved to be correct, at least in this respect. The observed mistakes are, thus, to be ignored, taking into consideration how easily errors of this kind may occur despite modern computers. From the users point of view, I do, however, regard the Contents section as unnecessary, since a much more user-friendly index is found at the end of the book. A second detail that I disagree with is the alphabetical presentation of taxa, although this principle is defensible within each genus. Each taxon can, however, be found in the index. A minor complaint, which is nonetheless noteworthy concerns the recommended citation of the catalogue

(p. 4). For an unknown reason, the number of volume is excluded!

Despite these small oversights, we can only congratulate the author for a fine piece of work. The publisher is also thanked for the excellent introduction of the new insect catalogue series. Three volumes of high standard have already been published since the beginning of 1998. For students and scientists working with aquatic beetles, these volumes (all dealing with water-living Coleoptera) have filled a notable gap. The forthcoming volumes, now underway, will deal with terrestrial insect groups — and hopefully they will be of the same high standard. A copy of these catalogues should be found in museums of natural history worldwide. The book is also a veritable treasure for ecologists and other biologists working with the aquatic freshwater fauna.

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New Palaearctic Coleoptera catalogue published by Apollo Books

Löbl, I. & Smetana, A. (eds.) 2003: Catalogue of Palaearctic Coleoptera. 1. Archostemata-Myxophaga-Adephaga. — Apollo Books, Stenstrup, Denmark. 818 pp. ISBN 87-88757-73-0. Price 900 DKK.

Only a few years after initiating the publication of the “World Catalogue of Insects”, out of which a few volumes already exist, Apollo Books has introduced a new checklist-series entitled “Catalogue of the Palaearctic Coleoptera”. In the biological sciences in general, and for taxonomists in particular, new species-lists are always highly appreciated (provided of course they are reliable, high-standard reference-works, giving the latest situation concerning the groups of organisms they deal with). When I saw this voluminous new book, my immediate reaction was: “is this really necessary, when new volumes covering the global beetle fauna are either already available or will be in near future?” Also noteworthy is the fact that the production of complete catalogues for certain species-rich families such as the ground beetle fam-

ily Carabidae, will take years. The usefulness of catalogues restricted to a certain biogeographical province is, however, often limited when the truth is that most systematists and taxonomists work from a global perspective. Nevertheless, this opinion can be interpreted as my personal standpoint — no doubt there will be many who defend the splitting of faunas into catalogues in accordance with geographical borders, especially when world-catalogues in many cases cannot be readily foreseen or when the distribution of a group is restricted within one province.

The new Apollo catalogue comprises ca. 100 000 species, or the entirety of species of Archostemata, Myxophaga and Adephaga, which are known to occur in the Palaearctic Region. The information sheet that accompanies the first volume tells us that the complete catalogue is ultimately destined to comprise eight volumes and that a new volume will be published on average once every 18 months. This schedule seems quite optimistic, when it is widely known that some Coleopteran family have been more-or-less neglected during recent decades. Production of unsatisfactory catalogues cannot be supported in general.

For each species listed in the catalogue the following information is given: primary taxonomic information of available names in genus and species levels, published before the year 2000. In addition, the type species of genera and subgenera, including synonyms, are provided. Moreover, the catalogue lists the distribution of species and subspecies on a country level. It is noteworthy that problematic areas, such as the Arabian Peninsula, the Himalayas and China, are also considered. The catalogue is a collective compilation of approximately one hundred coleopterists, who come from various countries — many of them are leading specialists in the world. This catalogue is not only a reference work that considers the outcome of taxonomists and systematists because numerous nomenclatorial and taxonomic acts are also set forth in the present volume.

One detail that historically causes almost endless discussion, is the alphabetical presentation of taxa below the subfamily level that is taken into use in a catalogue. In many cases, this practise can appropriately be defended (user friendly) but, on the other hand, the use of this book feels strange and inconvenient to those who work with taxonomic groups with reasonably stable classifications such as Dytiscidae. The lack of a complete species-level index also raises another question: how is it ensured that a neophyte coleopterologist will actually find a species that has been transferred to another genus? To manage this, one needs thorough knowledge of the group including the publication where the presu-

able transfer was first carried out. The lack of a species-level index is a problem, but it is defensible in the light of the fact that the number of pages required for such an index would almost have doubled the size of the book. Yet another small detail also invokes a further question: why is the year of publication provided in the present index for genera and subgenera, when it is repeated after the name of the taxa in the catalogue? The general impression of the book is that it is well edited, and has a nice layout. Printing errors seem to be scarce but at least in the copy I reviewed the text on the bottom one fifth of page 589 remains unprinted (list of references). The year for publication of *Nebria nivalis* Paykull should be at least 1790 and not 1798 as claimed by the catalogue on page 88.

Despite such small oversights, we can only congratulate the editors, authors and publisher of this edition for a comprehensive catalogue. I especially appreciate the fact that the type species is provided for the taxa on the generic level, and that the distribution is recorded at country level for species (country abbreviations following the name could be arranged in a more logical way; for instance in accordance with geographical location). Hopefully, the forthcoming Apollo volumes will be of the same high standard. In any event this catalogue is an invaluable tool and is much needed in museums of natural history and wherever large collections of beetles are to be found.

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