

Biology, Distribution and Diversity of Tineid Moths

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BIOLOGY, DISTRIBUTION AND DIVERSITY OF TINEID MOTHS, by Gaden S. Robinson. 143 pages, 16 color plates with 512 figures, 210 x 295 mm, hardbound. ISBN 978-983-40053-9-9. Southdene Sdn Bhd, P.O. Box 10139, 50704 Kuala Lumpur, Malaysia; email: hsbar@pc.jaring.my. © Natural History Museum, London, 2009. £40 (~ \$64).

This global review of the family Tineidae conveniently summarizes much that the author and others have learned about the clothes moths and their relatives, a biologically interesting group on which Gaden Robinson (1949–2009) had devoted much of his professional life. It is likely that the author realized while completing this volume that it would be his final major work. Sadly he was not able to view its publication, which appeared just a few weeks after his death, following a nearly two year decline of his health. An obituary and brief biography of the author is included as a preface to the text.

Basically this volume brings together, within a geographical framework, much of the essential information about Tineidae that has appeared in Robinson's web-based world catalogue of the Tineidae [Global Taxonomic Database of Tineidae (Lepidoptera); <http://www.nhm.ac.uk/entomology/tineidae/index.html>], Robinson, *et al.*, Lepidoptera host plant database [Hosts – a Database of the World's Lepidopteran Hostplants; <http://www.nhm.ac.uk/research-curation/research/projects/hostplants/>], and his excellent review with E. S. Nielsen on the Tineid Genera of Australia (Robinson & Nielsen 1993).

Early in the introduction, Robinson proposes the whimsical query “Why Tineidae—why pick on me”. To this he responds, with typical Robinsonian humor “Because you're cute little moths. I think it's the hair that does it – Jimi Hendrix taken to extremes, but well-kempt, admittedly. And facial hair to match.” Following this popular approach, the text becomes strictly business, first providing a family diagnosis (How Tineidae are defined), followed by a detailed discussion of the 16 currently recognized subfamilies (Classification within Tineidae). Under the latter section Robinson summarizes not only their morphological characteristics, but also major biological attributes within each subfamily, and the number of genera and species currently recognized within each subgroup tallied by biogeographical region. Unfortunately, no morphological illustrations nor taxonomic keys have been included, which otherwise would have assisted in recognizing subfamilies. Possibly these would have been provided had the author been provided more time to devote to this review. A major feature of this work are the 500 color figures of adults and 12 of larval cases, primarily sampled from the collections of the Natural History Museum, London (BMNH). Although many of the images appear poorly defined against a rather dark background, they do provide a ready means to identify many of the more distinctive species. Several species are represented by holotypes and many have never been illustrated before. A number of specimens are unspread or damaged, reflecting the need for much more collecting in this

poorly surveyed family. The author was able to illustrate representative species for 272 of the 341 known tineid genera. Robinson reports that of these 341 genera, 106, or 31%, are currently unassigned to any subfamily. It should be pointed out that the names of two color figures, *Dryadaula terpsichorella* and *Opogona harpalea*, have been mistakenly switched on the back cover (but not in the text). This minor error undoubtedly occurred after the author had any opportunity to correct it.

The following section—2. Distribution, biology, and diversity—constitutes nearly 70% of the volume, wherein the biology and diversity of most of the world's genera and representative species are summarized according to geographical regions, beginning with major island groups of the Pacific, Indian, Atlantic Oceans, and the subantarctic islands of the southern ocean. Next the standard biogeographical regions are treated, starting with the Nearctic and progressing through the Neotropical, Palearctic, Afrotropical, Oriental, and Australian Regions. Within each regional treatment, taxa are summarized according to

subfamilies, as defined in the introduction. The advantage of this approach, of course, being that one can find all diagnostic information included for each region. Unfortunately, it also requires repeating basic information about widespread taxa sometimes for several regions.

This book will provide an excellent introduction to future studies on the Tineidae for any major region of the world. Together with his very usable world catalogue for the family, and the review of the Australian genera with E. Nielsen (1993), Robinson has greatly enabled future work on this family. It is significant to mention that for these latter contributions and others, Gaden Robinson received the prestigious Jordan Award from the Lepidopterists' Society in 2007.

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