

## BOOK REVIEW

**A Guide to the Genera of Beetles of South Australia. Part 6.** E. G. Matthews. Special Educational Bulletin Series No. 9. South Australian Museum, Adelaide, S.A. 67 pp. A\$11.95 plus \$2.50 postage within Australia (Set Pts. 1-6 A\$45 plus A\$8 postage).

This is the latest part in Eric Matthews' valuable treatment of the South Australian Coleoptera. As with all the earlier Parts the application of this latest volume has a utility extending far past the state boundary suggested by the title. The cover is graced with an illustration of the clerid *Trogodendron fasciculatum* Schreibers by Kathy Bowshall-Hill.

It has been some years since the publication of Part 5 (1987), which concluded with the Tenebrionioidea. However, Part 6 confronts the Lymexyloidea, Cleroidea and the particularly difficult Cucujoidea, which must go a long way in explaining the delay.

Entomologists and coleopterists are still faced largely with two reference alternatives when seeking to come to grips with the diversity and complexity of the Australian beetle fauna. The first choice is one of recourse to a meagre number of generalised or fundamental treatments of the fauna (even the massive new tomes of *Insects of Australia* afford precious little space for individual families). The second entails gaining a grasp of less accessible specialist taxonomic works. For the field naturalist or ecologist working with insects, there is little detailed reference material that allows some taxonomic placement of sample material without the need to compare specimens with museum collections (frequently themselves in need of revision) or plead for identifications from the apparently dwindling array of full-time taxonomists. For the Eyrean and some Bassian Coleoptera at least, "*A Guide to the Genera of Beetles of South Australia, Pt. 6*" provides a means of identifying (to genus) many of the beetles that would otherwise remain before us as nameless entities.

There are 28 families and 140 genera treated in Part 6 and these are all accompanied by a full illustration or figures of critical characters that allow reasonable confidence in working through the keys. Cleridae, Trogossitidae, Lymexylidae and many Melyridae can usually be readily assigned to genera and species. However, the Introduction points out that, while there are relatively few species in the Cucujoidea, there are many higher taxonomic categories and the slight character differences that distinguish many groups, in combination with minute size (frequently < 3mm), compound the difficulties of identification within this superfamily. The text notes that the status of a number of groups (e.g. Coccinellidae-Coccidulinae and Coccinellidae-Scymninae) is in a transitional state. Several families (e.g. Phalacridae, Corylophidae) require revision (J. F. Lawrence pers. commun.), while additional revisions are proceeding with Nitidulidae. This family includes a large number of genera associated with or implicated in the pollination of plants.

Fortunately, the wealth of figures (plus key diagrams) permits the ready elimination of unlikely cucujoid species. Further step-wise elimination of possibilities is made by reference to characters given on Plates 10-13 before attempting the keys. As the author notes, a binocular microscope is an unavoidable prerequisite for working with such small insects. In its absence salient features that distinguish Nitidulidae, Phalacridae, Coccinellidae genera, and genera of less frequently encountered families will remain elusive.

As with the previous volumes there is a very useful and comprehensive Reference and bibliography chapter listing the major chapters on the families and genera covered in Part 6. The cumulative References cited in the six parts published greatly diminish what would otherwise be some very time consuming literature searches. This alone provides ample justification for acquiring the modestly priced full set.

As in the preceding volumes, the bulk of the text is devoted to an overview of the classification, known biology and distribution of individual families, subfamilies and genera. This is adequate, but the paucity of biological or ecological information for many groups reflects the poor state of our knowledge rather than intentional brevity by the author.

This is a most welcome addition to our understanding of the Australian beetle fauna. Given the difficulty of small scale associated with much of the fauna treated, in combination with the ecological importance of many of the families and genera, Part 6 will probably rank amongst the most significant volumes in the series. One day we may see the completed series published under a single hardcover edition.

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