

untimely death in 1969 in an automobile accident was a great loss to science, as well as a great personal loss to many of us. This reviewer had the pleasure of meeting Dr. Bleszynski at various times in Vienna, London and New York, and of working closely with him for many years through a voluminous correspondence. He takes this opportunity to acknowledge the enormous benefit which he received. Any day the mail might bring a letter telling of the discovery of a long-lost type in Leningrad or Berlin, or pointing out that the so-called type in some museum was a specimen caught years after the publication of the original description!

In this volume the Palaearctic Crambinae (including what some authors separate as the Ancyloleptinae) are divided into 370 species in 49 genera, a far cry from the status of the classification in the Staudinger and Rebel Catalog, the last to cover the whole ground, where the totals are 165 species in 11 genera. Some genera seem somewhat heterogeneous, but at least the problems are clarified, and future workers will doubtless split still further. The type species of all generic names and the type specimens of all nominal species are cited, with the dates and methods of their designations. Generic and species synonymies and keys are given, and there is an excellent terminal bibliography.

The Palaearctic fauna is, of course, extremely important for the study of the Nearctic, since at least 10 genera and 11 species are common to both, while other Nearctic species are extremely close to their Palaearctic counterparts. Obviously we must have full knowledge of the Palaearctic fauna in order to understand our own. Bleszynski's zoogeographic survey is especially interesting in this respect. All of this is true, of course, not merely for the Crambinae but for all of the Nearctic microlepidoptera that have Palaearctic relationships.

The planning and producing of this book, and presumably also of the volumes to come, reflect the greatest credit possible on the editors who conceived the series. All sorts of unexpected things make the volume far more usable and valuable. These include a lexicon of terms in German, English, French and Russian, and an alphabetical list and index of geographic localities and another of abbreviations. The illustrations are divided into three groups: color paintings of adults, male genitalia and female genitalia. In this way illustrations that must be carefully compared with each other are on the same, or adjacent plates, which greatly facilitates their study. I was greatly intrigued by the forethought that provided three bound-in colored ribbons with which to mark the places of the illustrations of a species to compare them with each other. Another superior feature is the numbering of all the species in a single sequence, not in separate sequences by genera. Thus, species No. 136 in the text is illustrated by color painting No. 136, male genitalia no. 136 and female genitalia no. 136, which greatly facilitates getting the picture of the species as a whole. (As far as I know this idea was first used by E. P. Felt at Cornell in an article on North American Crambinae in 1884.) The essential data of each specimen illustrated are given on the legend page. The color paintings, the work of Dr. Gregor, are most beautifully done and printed, and are a pleasure to use. The whole volume sets a very high standard, hitherto unattained.

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AUSTRALIAN BUTTERFLIES, by Charles McCubbin. 1971. Thomas Nelson (Australia) Ltd., Melbourne and Sydney, Australia. vii-xxx + 206 p., 30 text figures, numerous colored illustrations, 1 map. Price: about \$30.00 (U. S.).

BUTTERFLIES OF THE AUSTRALIAN REGION, by Bernard D'Abrera. 1971. Lansdowne Press Pty. Ltd., Melbourne, Australia. 414 p., 2 text figures, numerous colored illustrations, 3 maps. Price: about \$40.00 (U. S.).

These books are the first since "Seitz" was published about half a century ago which illustrate the butterflies of Australia and the Australian region, respectively, in color. It is somewhat unfortunate, however, that the two books were published in the same year, because the coverage of Australia in duplicate could affect the sales of both books. This overlapping is more apparent than real, though, since the McCubbin book deals with the butterflies of Australia, Tasmania and the offshore islands only, whereas D'Abbrera's book deals with the entire Australian region from New Zealand to Weber's line and north to the Solomons and Fiji.

The treatments are quite different, too. McCubbin deals with fewer than 400 species and is able to consider these in much greater detail. D'Abbrera, by contrast, must consider at least five times as many names, and the coverage possible under such conditions can be little more than skeletal, concentrating on the identification of the entities, not on their habits or habitats. McCubbin has been able to give much fuller insight on what the butterflies are like in the field, and in general, what they "do for a living." These firsthand observations make the McCubbin book a very readable one.

McCubbin has been able to include the Hesperioidea in his book, whereas space limitations have not enabled D'Abbrera to do so. Perhaps because less is known about the habits and life histories of the Australian skippers, the section on the Hesperioidea in McCubbin's book is perhaps the weakest one: if any portion of the book seems to have been taken from others' observations, it would be that section, with a few notable exceptions where it was obvious the author had firsthand experience. Much of the identification and observational criteria cited seem to have been drawn from Evans' *Catalogue* and from various of Waterhouse's papers. D'Abbrera did not cover the skippers, as stated above, but he does mention the possibility of doing this group in a later companion volume. I have a difficult time seeing how such a book could be done in the same format as the present one: there just aren't that many hesperioids in the Australian region. Perhaps he would have been better advised to either cover the skippers in the present book, thereby adding fewer than 100 pages to it, or perhaps doing a second volume including the Lycaenoidea and expanding his discussions of all species. As it stands now, the weakest part of the D'Abbrera work is the coverage of the Danaidae, especially the genus *Danaus*. The other danaids are at least passably covered (though *Euploea* could use a bit more expanded coverage), but the entire book could have been strengthened by adding another page or two of plates and discussion to *Danaus*, perhaps at the expense of *Ornithoptera*. Books are bought for their illustrations, however, and the bird-wings are among the most spectacular of the butterflies—this may have governed the decision to expand the *Ornithoptera* coverage beyond that that was necessary.

Both books are remarkably free of disturbing typographical and other errors. The errata sheet that came along with our copy of D'Abbrera rectifies many of these errors, but no such sheet accompanied the McCubbin volume. As is always the case, a few such errors have eluded the authors' scrutiny: McCubbin has "Klak" (rather than "Kluk") as the author of *Danaus*, and he has placed *Pantoporia c. consimilis* (Bdv.) in the correct genus in the text (p. 60), but on the plate the butterfly is listed as "N." (presumably *Neptis*) *c. consimilis* (it is very possible that the plate was done before Eliot's revision of the Neptini was done); D'Abbrera describes as new *Hypochrysops emiliae* on p. 335, figures it as "*emilia*" on the preceding page (rectified in the errata sheet) and lists it as "*emilia*" in the index on p. 407 without correction. To further belabor the authors for these small errors would be nit-picking. In one instance, however, McCubbin has corrected a long-standing nomenclatorial error: Bethune Baker described *Ogyris waterhousei* in 1905 (Trans. Entomol. Soc. London: p. 273), and McCubbin has correctly cited it; D'Abbrera has followed the logical, but incorrect emendation to "*waterhousei*." None of these errors is serious, and they in no way detract from the usefulness of either book.

McCubbin's illustration of food plants is very useful, particularly for the collector who might want to find the species in the field. This is an innovation which could be followed to advantage by other illustrators in the future. Perhaps the most impressive coverage of the D'Abrera book involves the Lycaenidae; he has made sense of a group that has stymied many of us attempting to identify these beautiful, but confusing, insects. The fact that many of the new taxa described by D'Abrera in the text are lycaenids indicates that he probably specializes in the group, and his careful handling of the Lycaenidae shows an expert's touch.

Both books owe much of their usefulness to their colored illustrations. It is difficult to imagine how the paintings depicted in McCubbin's book could have been improved upon, and I only wish I had the opportunity to see the originals! The illustrations in D'Abrera's book were derived from Ektachromes and are subject to some color shifts on some, but not all plates. The color shifting may be the fault of the original transparencies or they may be the fault of the printer — there's no way of determining this from long distance. Comparison of the plates with actual specimens at hand shows that the color shift, when it occurs, involves the blue; the blue shows up poorly in the figures of the pierid genus *Saletara*, but the blue is too intense in several of the Satyridae. If one does not take absolute color values too seriously (and it would be dangerous to do so in taxonomic work, anyway), the D'Abrera plates lose none of their usefulness.

From a purely personal standpoint, I wish D'Abrera had used either "upper surface" or "dorsal" for the "recto" he utilizes, and that he had used either "under surface" or "ventral" for "verso." His terms are not in general usage, and the reason for using them instead of more familiar terms is obscure.

The McCubbin book supplements the fine little *Australian Butterflies* by I. F. B. Common (1964, Brisbane, Jacaranda Press) with the excellent colored illustrations and in more detailed discussions of the species. D'Abrera, by contrast, has put out a book that has no "post-Seitz" counterpart, with the exception of Barrett and Burns' *Butterflies of Australia and New Guinea* (1951; Melbourne, N. H. Seward), a book with almost nothing to recommend it scientifically and little more esthetically.

I would very much like to see D'Abrera (or someone equally competent) do a companion volume of the butterflies of Indonesia, or at least from Celebes westward, where the book could bridge the gap between his present volume and Corbett and Pendlebury's *Butterflies of the Malay Peninsula*. If this were done a great deal of the mystery surrounding the Indo-Australian fauna would be cleared up for those of us interested in these butterflies, but without ready access to the great European collections. It is very difficult to envision what McCubbin can do for an "encore" to produce another book of the quality of the present one, unless he undertakes one on the beautiful Australian diurnal moths.

On balance both books are excellent, and if the budget can take something in excess of \$70.00, the interested lepidopterist should have both. If, however, economics of this magnitude are the deciding factor, the reader must determine what his interests are and be guided by them. If he wants identification of Australian butterflies, either book will do, or he can get by with Common's little book; if he wants the finest pictures of Australian butterflies and information on their habits, he should buy McCubbin's book; if his interests go beyond the confines of Australia and he wants more than adequate figures and updated nomenclature, he should buy D'Abrera's book. As an artistic masterpiece and for workers on Australian butterflies in general, McCubbin's book is the best available. The regional scope of D'Abrera's book and its greater scientific "meat" make *Butterflies of the Australian region* the greater prize. Buy either, you won't be disappointed. In any event, "Seitz" is no longer a "must" for the interested lepidopterist's library.

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