

the Survey collection whose provenance is unknown. They may have originated from Benjamin Dann Walsh or Cyrus Thomas as well as from Peabody. Walsh and Thomas were state entomologists of Illinois and were correspondents of Edwards. Their collections were the nucleus of the present Survey collection; some of their material may be still extant in it, although it is no longer recognizable. One of these additional specimens is a male *Euptychia gemma* (Hübner) taken by Edwards himself in West Virginia on 11 June 1878.

I have placed identifying labels on yellow paper reading "From/W. H. Edwards" on all of these specimens and they, with the similarly labelled Edwards material that came to the Survey with my collection, make it one of the largest repositories of Edwards butterflies outside the Carnegie Museum, where the Edwards collection itself is preserved.

The Herman Strecker collection in the Field Museum of Natural History contains more than 70 specimens bearing Edwards' holograph labels. I believe that most of these did not originate from Edwards, but were either determined by him for Strecker, or before Strecker received them. One specimen bears Strecker's label stating that he had sent it to Edwards for naming. A number of these specimens were collected by David Bruce in Colorado, and Bruce is given as their source on Strecker's labels. Many of the Edwards labels in the Strecker collection contain only the name and sex of the butterfly, with no statement of locality or collector, and their pins are not the type Edwards used. All of this indicates that Edwards was not their original source. Two specimens bear label reading "This is the writing of/W. H. Edwards. A." "A" was Eugene Murray Aaron, who curated the Strecker collection at the Field Museum during the late 1930's.

The Strecker collection contains other material which does not bear Edward's own labels, but which he had studied as evidenced by Strecker's labels. Some of this latter group of specimens have been identified as members of the type series of their taxa and have been designated and labelled as holo-, lecto- or paratypes by Brown in his studies of the Edwards type material (*loc. cit.* and subsequent papers).

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BOOK REVIEWS

MICROLEPIDOPTERA PALAEARCTICA: VOLUME I. CRAMBINAЕ, by Stanislaw Bleszynski. 1965. H. G. Amsel, H. Reisser and F. Gregor, eds., in 2 parts: text (in German), xlvii + 553 p.; 133 col. pls., Verlag Georg Fromme & Co., Wien. Price: Austrian schillings 1560, Deutschmarks 240 (less if entire series is bought).

The distinguished author specialized on the pyralid subfamily Crambinae for 15 years, paying particular attention to the Palaearctic, Ethiopian, Indoaustralian and Neotropical faunas. He was the first European worker to make as complete as possible use in classification of the male and female genitalia, as well as of all other available characters. He also travelled very extensively, visiting all museums and collections where there might be types, as a result of which he was able to correct a great many errors and misconceptions that had crept into the literature since 1758. In all this he strictly followed the International Code of Zoological Nomenclature, which gave his work a sound basis that will ensure its endurance. Perhaps his most valuable work was breaking up the overgrown "wastebasket" genus *Crambus* into which nearly everything crambine had been thrown for over a century (it contained 74% of all species in Staudinger and Rebel), resurrecting a number of Hübner's genera and naming others himself. His most intensive work was, of course, on the Palaearctic fauna, and is represented by the volume being reviewed. Dr. Bleszynski's

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.).