

BOOK REVIEWS

AN ANNOTATED CHECK LIST OF THE MACROLEPIDOPTERA OF BRITISH COLUMBIA. By J. R. J. Llewellyn Jones. The Entomological Society Of B. C. Occasional Paper No. 1: 148 pp. Issued June 14, 1951. Price: \$1.00 (address of Society Secretary: P. O. Box 210, Kamloops, B. C. Canada).

Intended primarily as a revision of BLACKMORE'S List (1927) the list now includes approximate season of flight of each species and host plants where data on these was available. All recent changes in nomenclature have been incorporated, also the check list numbers from MCDUNNOUGH'S "Check List of the Lepidoptera of Canada and the U. S. A". Distribution of each species within B. C. is given.

No great amount of collecting has been done in B. C. since the issuance of the original list, and most of the new records are from the author's collection, consisting entirely of southern Vancouver Island material, and from the collection of Dr. W. R. BUCKELL made at Shushwap Lake.

"Popular" names have been assigned to nearly every species, subspecies, and form. It cannot be said that this has added anything to the value of the work. There is at present among North American entomologists a general lack of interest in vernacular names, and this trend can hardly be considered undesirable. Such names, when of less than specific value, are particularly cumbersome.

It should be noted that the food plant records must be used with caution. Such information, in order to attain reasonable accuracy, must be based on a great mass of data gathered from every locality in the area covered. It has proved nearly impossible for Mr. JONES to obtain such data, so of necessity many of the host plant records are based on the author's own observations of material collected in a restricted area. However, if only as a guide to what plants are worth trying, this innovation is bound to prove useful to those interested in rearing Lepidoptera.

The number of species, broken down into superfamilies, included in JONES' new list of B. C. Macrolepidoptera is approximately as follows: Papilionoidea 130; Hesperioidea 24; Sphingoidea 17; Saturnioidea 5; Noctuoidea 530; Bombycoidea 6; Drepanoidea 10; Geometroidea 308; total — 1030. BOWMAN'S List of Alberta Lepidoptera gives about 1500 species. About 130 are butterflies, approximately 40% Microlepidoptera. This, as far as it goes, indicates an almost exact parallel with the B. C. List.

The typesetting has been very carelessly done, so the errata and addenda pages should be carefully studied.

In spite of minor shortcomings, this list is certain to prove popular with collectors. It must be remembered that the author undertook an extremely onerous assignment in preparing an annotated catalogue, in place of the usual straight list. As a result, the book will always be useful as a guide to where and when to go for any species desired. Similiar books covering every section of the continent would not come amiss.

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DIE SCHMETTERLINGE MITTELEUROPAS. By Walter Forster & Theodor A. Wohlfahrt. [In German.] [First instalments], vol. 1, viii + 32 pp., 18 figs.; vol. 2, 32 pp., 4 pls., 13 figs. Stuttgart, 1952. Publisher: Franckh'sche Verlagshandlung, W. Keller & Co., Stuttgart, Germany. Subscription price of the first instalments of vols. 1 and 2 is DM. 10. There will be 5 more instalments of vol. 1 totaling 256 pp., and vol. 2, totaling 128 pp., 27 pls., bringing the total presubscription price to DM. 60. After subscription period closes the price for vols. 1 and 2 complete, bound, will be DM. 76.

This excellent work, well-illustrated with colored figures, on the butterflies and moths of central Europe, will be a "must" to all European collectors, and to many Americans who are interested in the world-wide relationship of these insects. To one

who collected last summer in the Dolomites in Italy, the Alps of Switzerland, as well as in France, the usefulness of this work is beyond estimation.

Dr. FORSTER and Prof. Dr. WOHLFAHRT are well qualified to write on the Lepidoptera. In the first part of their treatise, they have given an outline of the equipment needed by a collector for the purpose of catching, killing, rearing and preparing these insects, including the larvae. The first volume will deal also with a number of subjects including the structure and evolution of Lepidoptera, their ecology, enemies, parasites, diseases, economic value, genetics, systematics and nomenclature, geographical distribution, phylogeny, etc.

The second part commences the treatment of the diurnal Lepidoptera, starting with Papilionidae, continuing with Pieridae, and takes one part way through Satyridae (*Erebia*). The text figures are mostly of the venation, with a few of the genital armature. The 4 plates, from water colors by Prof. Dr. WOHLFAHRT, that accompany this part, contain 73 beautiful, life-size figures, ending with *Colias*. These figures are well arranged for comparative purposes, and the explanation of the plates shows when and where each specimen was taken. In the text a section is devoted to each species (with the popular German name), within which the particular subspecies occurring in central Europe is described and brief reference made to the larva and pupa. No reference to original descriptions or other bibliographical information is given here. Apparently these will follow near the end of vol. 1. Some generic characters for the imago, larva and pupa are included. The work should prove especially valuable to all collectors and students for the easy and rapid determination of their specimens.

Vols. 3, 260 pp., 30 pls.; 4, 400 pp., 30 pls., and 5, 320 pp., 30 pl., will be published in 1954, 1956, and 1958 respectively, all devoted to the moths, but the subscription prices therefore cannot be estimated at this time.

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DE PLAGEN VAN DE CULTUURGEWASSEN IN INDONESIË, L. G. E. Kalshoven, with cooperation of H. J. V. Sody (Mammals) and A. C. V. van Bommel (Birds). Vol. 2: pp. 513-1065, figs. 229-599, pls. X-XVI. Published 1951 by W. van Hoeve, The Hague, Netherlands. Price: 39.50 Dutch guilders.

The first volume of this excellent handbook (in Dutch) on the pests of the cultivated plant crops in Indonesia has been reviewed on page 50, vol. 4, of the *News*. The second volume is as beautifully executed and illustrated, and contains also an appendix: "English translation of the text for illustrations", pp. 1-14. On pages 523-658 the remaining families of Lepidoptera are treated, viz. Zygaenidae, Drepanidae, Geometridae, Lasiocampidae, Eupterotidae, Notodontidae, Bombycidae, Saturniidae, Arctiidae, Asotidae, Agaristidae, Noctuidae, Lymantriidae, Sphingidae, and Rhopalocera. Life history of many species, injury to crops, etc. are illustrated with figs. 229-389, and larvae and pupae of more important Lepidopterous pests are depicted on the nice coloured Plate IX. Furthermore the remaining insect orders, viz. Diptera and Hymenoptera are treated, and followed by Amphibia, Reptiles, Birds, and Mammalia. A general index to both volumes is enclosed.

Hardly having finished with this monumental work Dr. KALSHOVEN has started preparation of another handbook: on the Forest Insects of Indonesia.

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