with the anal area and a diffuse subterminal band chocolate-coloured. Length of the forewing 12 mm. "Ost-Afrika: Ukinga-Berge, V.1899, GOETZE".

Metarctia lugubris is nearly related to a series of forms inhabiting the mountainous regions of Central and East Africa, e.g. *Metarctia fletcheri* Kiriakoff, *M. carmel* Kiriakoff, *M. flora* Kiriakoff etc., all of which have a more or less well developed terminal process of the valva. It belongs to the nominate subgenus, and should be called *Metarctia* (*Metarctia*) *lugubris* Seitz.

Silveira, A., J. F. Carbonell Bruhn, C. Múnez E. Valdés, Investigaciones sobre Acridoideos del Uruguaya. Primera contribucion. Montevideo, Avril 1958; 485 pp., 312 figs., 29 maps.

The publication of this book, by the Uruguayan Ministry of Agriculture, was made possible by a grant from the Rockefeller Foundation and constitutes the first contribution to the study of the injurious grasshoppers of Uruguay. This country suffers much damage caused by the "tucuras" or grasshoppers, and did especially so in the years 1953 and 1954, when the plague was so severe that it surpassed the entire damage done during the past fifty years.

The knowledge of the Orthoptera of this country is still insufficient, and only sparsely detailed descriptions in the very scarce literature can be consulted. The above mentioned book will fill up the gap, and is the first of an intended series. It is divided into several sections and chapters, dealing with general systematics, morphology, cytology, geographical distribution, variations caused by differences in population-density, natural enemies and control.

All these different chapters are well written, profusely illustrated by good figures and photographs, and contain interesting data. The keys to subfamilies and species with figures of the different parts of the external anatomy greatly facilitate determination. The chapter devoted to cytology states that in Acridoidea (with the exception of the subfamilies Pamphaginae and Pyrgomorphinae) there is a constant number of 23 chromosomes in the male, and 24 in the female. According to HUXLEY variation in these numbers may be the cause of the origin of new species or groups of species.

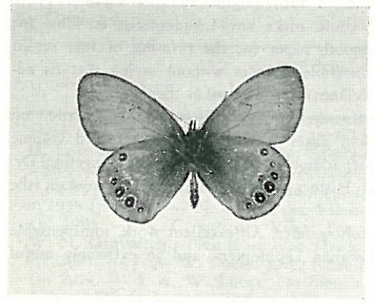
The total number of species dealt with is 32, belonging to 3 subfamilies and 25 genera. A careful study was made of the vegetation (list of plants), location and altitude of 13 "zones" (among them permanently infested ones). Several of these zones were photographed to give an idea of the different landscapes and environments. The study of these areas revealed that there is a seasonal difference in the proportion of males and females and in the population-density. These data are recorded in tables. The natural enemies are not only insects but also spiders, mites, different worms, birds and reptiles. Most of them are dealt with in some detail. The results of control measures by means of chemical products are shown by tables and statistics. It was found that the different species are not equally susceptible to the different chemical products. The main part of the book (beginning on p. 75) deals with every single species and its synonyms, and gives Spanish translations of original descriptions (where necessary), very good photographs, figures, and even some coloured plates. Some of the species, e.g. *Scyllinops bruneri* Rehn, are dealt with very extensively, occupying 33 pages.

On the whole it is a very useful publication, well illustrated, full of systematical and biological notes, indispensible for all workers on Orthoptera, especially for those interested in the grasshoppers of South America. The names of the authors and collaborators are a guarantee for the high scientific standard of this work. My congratulations to all of them, and I hope that this publication will soon be followed by a second. — C. WILLEMSE.

Coenonympha hero L. f. defasciata nov.

door

P. H. VAN DE POL



Coenonympha hero L., f. *defasciata* nov. (onderzijde)

Van de in mijn bezit zijnde exemplaren van *Coenonympha hero* L. is één exemplaar gekenmerkt door een nog sterkere reductie van de witte band op de onderzijde van de vleugels dan bij de subsp. *angustefasciata* Lempke reeds het geval is. De beschrijving van deze afwijkende vorm is als volgt:

Coenonympha hero L. (subsp. *angustefasciata* Lempke), f. **defasciata** nov. Witte band op de onderzijde van voor- en achtervleugels ontbrekend (zie afb.). Holotype: ♂, Winterswijk, 9.VI.1957.

Summary

Coenonympha hero L., f. *defasciata* nov. White band on the under side of fore and hind wings faïls. Taken at Winterswijk in the province of Guelderland.

Bennekom, Hullenberglaan 7.

Zimmerman, E. C., Insects of Hawaii. Volume 7, Macrolepidoptera. University of Hawaii Press, Honolulu, 1958. XIV + 542 pp., 425 illustrations in text. Price $ 9.50.

The writer is performing a Herculean task by editing an exhaustive ecyclopedic handbook on the entire fauna of the Insects of Hawaii. So far a one man job on some 19 orders of insects is already accomplished in six excellently edited volumes of some 1900 pages with over 800 illustrations, containing information on about 1370 species.

The latest contribution, volume 7, deals with the Macrolepidoptera on 542 pages, with 425 cuts, containing records of 168 species of the so-called Macrolepidoptera which were known to occur in Hawaii up to the end of 1956. These species belong to 46 genera and are distributed over only three families of Heterocera, as follows: Geometridae, 95, Noctuidae, 90, and Sphingidae, 9 species; there are only ten species of Butterflies. Of the total of 158 moths, 130 are endemic and only 28 apodemic or foreign. Twelve genera and subgenera are endemic. Only two species of butterflies are endemic. These figures are of great interest to the zoogeographer and show the great isolation of the Hawaiian Islands.

After a short introduction to the 7th volume, a "Check-list" and a "Summary of nomenclatorial changes" are given. Then follows a "History of the study of Hawaiian Lepidoptera", with portraits of the great Lepidopterists who specialised in the fauna, viz., R. C. L. PERKINS, O. H. SWEZEY, Edward MEYRICK, and Lord WALSINGHAM. Further a short chapter "Derivation of the Hawaiian Macrolepidoptera", and at last the special part, "Classification", beginning with a short but clear and well-illustrated diagnosis of the order. Keys to suborders, families, subfamilies, genera, species, are added to the enumeration of the species.

Information on the species is terse, and mostly contains, except range and distribution,