

## REVIEWS

*ZUR MORPHOLOGIE DER SCHMETTERLINGSEIER* [On the morphology of the eggs of Lepidoptera]. By Ewald Döring. 154 pp., 61 pls. (3 colored). 1955. Publisher: Akademie-Verlag, Mohrenstrasse 39, Berlin W 8, Germany. [Price, bound, 33 Marks.]

This book is one of the most noteworthy works ever written on classification of the immature stages of Lepidoptera. It stands alone as a manual for the identification of the eggs. Herr DÖRING has prepared a key to the eggs of 622 species and has given drawings of the dorsal and lateral views, micropyle, and lateral details of all of them. Some of the figures are rather badly blurred in reproduction, but all are usable. There are also 128 colored figures, showing the color changes during maturation of the egg in 30 species, and six plates showing diagrammatically the variations of micropyle type, surface sculpturing, profile, and natural groupings of eggs following oviposition. The nomenclature is the 1910 usage of SEITZ, but for convenience the *Register* at the end of the text also gives the comparable usage of BERGE & REBEL and of newer authors, especially BOURSIN and FORSTER.

In the body of the key, the plate and figure numbers are given for each species, and the figures also show the couplet number in which the species is to be found in the key. Throughout the key, in addition to the identification characters there is a brief description of the egg and its measurements.

Geographically, most of the species are from Germany, although a few other species popular with breeders are included. However, lepidopterists from all parts of the world can expect to find the book useful for comparison, and in many cases North Americans will be able to infer correctly the determination of their own species, which should often run in the key to a related German species.

Herr DÖRING sticks pretty close to the problem of identifying the eggs, but he devotes some space to evidence in the egg shape for phylogenetic classification.

The book deals with the so-called Macrolepidoptera and a few micros. The species are distributed as follows: 89 butterflies, 9 Zygænidæ, 22 Arctioidea, 11 Lymantriidæ, 14 Lasiocampidæ, 5 Drepanidæ, 5 Saturniidæ, 12 Sphingidæ, 20 Notodontidæ, 7 Thyatiridæ, 310 Noctuidæ, 112 Geometridæ, 1 Lemoniidæ, 1 Bombycidæ, 1 Endromididæ, 1 Ægeriidæ, and 2 Cossidæ.

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*DIE SCHMETTERLINGE SÜDBAYERNS UND DER ANGRENZENDEN NÖRDLICHEN KALKALPEN. II. TEIL — DIE KLEINSCHMETTERLINGE. 2. HEFT — GLYPHIPTERYGIDAE BIS MICROPTERYGIDAE.* By Ludwig Osthelder. Beilage zum 41. Jahrg., *Mitt. Münchn. Ent. Ges.* 135 pp. 1951. [Available from Münchner Entomologische Gesellschaft, Munich, Germany.]

The first *Heft* of this annotated checklist of the Microlepidoptera of southern Bavaria appeared with volume 29 of the *Mitteilungen*. Since the families are given in reversed phylogenetic sequence (*i.e.*, most primitive are last), this *Heft* completes the work. Localities, dates, and for some species other notes are given for each species, falling in families as follows: 14 species of Glyphipterygidæ, 48 Yponomeutidæ, 22 Plutellidæ, 276 Gelechiidæ, 245 Elachistidæ, 101 Gracilariidæ, 28 Lyonetiidæ, 80 Nepticulidæ, 5 Talæporiidæ, 90 Tineidæ, 5 Eriocraniidæ, 10 Micropterygidæ. Family lines are drawn more broadly than most contemporary authors would prefer. The type is unusually large and clear.

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