

Literature Cited

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PARASITINSEKTEN DER BLATTMINIERER EUROPAS. By L. Fulmek. 203 pp. 1962. Publisher: W. Junk, Den Haag, Netherlands. [Bound; price Dutch Guilders 28.00].

The author arrived at the good idea of publishing a book on the insect parasites of leaf miners, as an addition to the monumental work of E. M. HERING *Bestimmungstabellen der Blattminen von Europa* (see review in *Lepid. news* 11: 177-178; 1957). In its main part (145 pages) the new book represents an annotated check list of 680 host species, all of them being leaf miners recorded in Europe. Among them 415 species are Lepidoptera, 213 Diptera, 35 Coleoptera, and 17 Hymenoptera. This comprises about 34% of the entire total of leaf miners (over 2000 species) treated by HERING in his book. The number of host species reviewed by FULMEK in his present book must be recognized as rather high, taking into consideration the fact that insect parasites are known so far in only about 10% of all described insect species.

In the check list the host species are arranged alphabetically, by orders and genera. In each order the lists of hosts are preceded by a summary of the systematic distribution of the genera among the families and concluded by some statistical data on the parasites. The annotations to

each host species are limited to the basic synonymy (when necessary) and lists of parasitic species with geographic data, occasionally with reference to the recording authors. An alphabetical index of over 1200 parasites (21 pages of the book) refers to the above check list of the hosts. Preface, introduction, discussion, and summary are briefly composed and, together with the short lists of the basic literature and abbreviations, make up the remaining pages of the book, the main purpose of which is to awaken in the students of leaf miners an interest in the parasites of this group of insects.

Among the European leaf miners, 55 parasitic insects are known in the Hymenoptera, 169 in Coleoptera, 385 in Diptera, and 520 in Lepidoptera. Most of the parasites (99.4%) belong to the Hymenoptera families Braconidæ, Chalcididæ, Cynipidæ, Ichneumonidæ, Proctotrupidæ, and some Vespoidea; only some few (0.6%) to the Diptera. Especially "record-breaking" in the number of parasites are the Lepidoptera species *Coleophora laricella* Hb. and *Tischeria ekebladella* Bjk., each of them having 42 parasitic species.

The style in which the book is written is very concise but nevertheless quite understandable. The author may only be accused of inconsistency of the language used in the locality names which are either done in Latin (Austria; Germ = Germania, Germany; Suec = Suecia, Sweden; Gall = Gallia, France; etc.) or in German (Ungarn = Hungary; Russl = Russland, Russia; Polen = Poland; etc.), or even in a mixture of these two languages (WGall = "West" Gallia, western France; SGall = "Süd" Gallia, south France). No explanations for the abbreviated locality names are given. Upper Bavaria is indicated now as "ObBayern" (Oberbayern), now as "SBayern" (Südbayern). The editorial defects consist of the use of the same roman characters for the names of insects and plants, authors' names, and the locality data. The chapters are not always distinctly separated in the text; their titles are at times completely omitted, or do not correspond to those in the table of contents. All these defects need to be corrected in a second edition, in case this will be published.

In its gold stamped linen cloth cover, the book has a very pleasant appearance; the paper is good, the type is clear. The price (about \$7.80) cannot be regarded as very high for a book of this kind. The book will undoubtedly be approved by the leaf miner students, for whom it is intended.

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