

M. S. Gilyarov, D. A. Krivolutsky: Opredelitel obitayushchikh v pochve kleshchey (Sarcoptiformes) (Key of the soil mites (Sarcoptiformes)). Publ. House Nauka, Moscow 1975, 491 pp. Price 3.27 R.

The first part of a very useful and expected series of monographs dealing with soil mites is now presented to the scientific public. It is devoted to the extensive suborder Sarcoptiformes (groups Oribatei and Acaridiae), which is markedly dominating among the other groups of soil acarofauna.

The book was edited by M. S. Gilyarov and D. A. Krivolutsky and prominent Soviet acarologists (E. M. Bulanov-Zakhvatkina, B. A. Vainshtein, V. I. Volgin, L. D. Golosova, A. B. Lange, V. D. Sevastyanov, L. G. Sitnikova and E. S. Shaldybin) participated in its preparation. The keys include the species which were confirmed to occur in the territory of the U.S.S.R. and the illustrations were based on figures published either in original descriptions of new taxa or in basic monographs of a revising character. Thus arose a work of extreme value.

After the introductory part offering an outline of the taxonomic status of mites follows the key of orders and suborders. Great attention is paid also to general questions of the role of soil mites in soil formation and balance in the soil communities. The occurrence of mites in various soil types is figured in tabular summary from which it follows that the highest number of mites (100 000 specimens/m²) was found in black earth, while the absolutely lowest number (200 specimens/m²) lives in salt soils. Soil mites thus serve as important bioindicators of the quality of soil and at the same time reflect the influence of anthropogenic factors on the biogeocenosis.

The systematics is an essential part of the

monograph and includes 91 families of the group Oribatei and 4 families of the group Acaridiae. The authors accept the taxonomic classification after F. Grandjean, A. A. Zakhvatkin and J. Balogh. Each family and genus are at first characterized in general and individual species are listed in keys. The text is supplemented with numerous instructive drawings, which are marked with numbers up to 1200, but in fact their total number is much higher (some of them are marked also with additional letters).

The volume concludes with a comprehensive list of references, which comprises papers dealing with the determination of the groups discussed, descriptions of new taxa or revisions. It is to be regretted that such a comprehensive book is not provided with an index, which would be very helpful. Unfortunately, the edition was very low (2500 copies) and therefore the book is a wanted rarity which had been out of print before it appeared on the counters of the book-stores.

This book is a unique work in its concept, extent of the matter and high level of elaboration. It should be ranged with basic works not only in soil zoology, but also in other fields related to this subject, including the parasitology, as, for example, oribatid mites and their relation to helminthology, or mites of the group Acaridiae which are a part of the nest fauna of free-living reservoir animals etc. After this successful edition of the first volume, the following ones devoted to other groups of soil mites will be all the more expected.

Dr. M. Daniel, C.Sc.