

multiplying in shorter generation time than in our experiments. It is, therefore, to be admitted that more virulent strains may exist in free nature with a better developed ability to penetrate the host tissue.

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L. Č., Vojenský ústav hygieny, epidemiologie a mikrobiologie, Praha-Střešovice, ČSSR

JAROSLAV WEISER: NEMOCI HMYZU (INSECT DISEASES)  
ACADEMIA, Publishing House of the ČSAV, Prague 1966  
554 pp., 254 illustr., 3 coloured plates

A very well arranged monographic work with excellent illustrations, three coloured plates, an author and subject index. The references, comprising 5,000 entries, follow each chapter concerned. Only the paper should have been of better quality.

The general part, informing in detail on insect pathology, on the symptoms of the infections and of their course, on the epizoo-

tology and the techniques of experimental infections, is followed by a comprehensive special part based, as also the entire work, on the most recent knowledge obtained in this field. Here, attention has rightly been given to the virus infections of insects. The following chapters discuss rickettsioses and bacterial infections of insects, spirochaetoses, mycoses, protozoan and helminthic invasions.

The work informs on a multitude of facts, observations and experiments concerned with more than a thousand insect species. The author and his school have contributed with a number of fundamental discoveries to the development of this scientific branch. As the author himself remarked in his introduction, he considered it his duty to inform about the present state of insect pathology within the framework of the Czechoslovak Academy of Sciences. The monograph itself gives evidence of the great perseverance of its author. Admirable is not only the perfect mastering of the subject, but also the objectivity of its author — originally a protozoologist — and his interest in insect pathology, which enabled him to cover so successfully the entire field of this scientific branch.

Dr. J. Weiser D. Sc., head of the Department of Insect Pathology of the Entomological Institute of the Czechoslovak Academy of Sciences, can actually be considered the founder of systematics in this branch of biological sciences in Czechoslovakia, although there had been some activity in this field before (Komárek, Rozsypal). But looking back on these years, such studies were very scarce before 1938. The generous grants given to the developing sciences by the Socialist Republic and the newly established institutions of the Czechoslovak Academy of Sciences led also to an increase in the number and value of works published on insect pathology. In Weiser's monograph more than 8% of all references cited are by Czechoslovak authors.

The value of this work rests not only with the numerous facts elaborated from a very objective and highly scientific point of view, but also with the presentation of such facts, which ought to be known. This multitude of new facts gives clear evidence of the tremendous

development of insect pathology in recent years.

On such extensive monographs as the one by Weiser, the participation of the scientific editors, O. Jírovec and B. Rosický leaves its traces. The clear and logical arrangement of the subjects concerned are ample proof of their collaboration.

The work is not a mere compendium, because hardly any topic has been left untouched. Perhaps it would have been useful to mention Krasilschik's paper on *Microclossia prima*, a parasite destroying the beet webworm *Lexostegesticticalis* in former Russia. (Rambousek foresaw by the presence of this parasite during a calamity caused by this pest in the Haná in 1921, the absence of the second generation of this pest.) Another item, deserving attention is Koubek's "yellow" disease of the pupae of the sugarbeet leaf miner *Pegomyia brassicae* in connection with the uncertain cooccus infection of the ovaries of the same pest, found by the author of this review and, perhaps also Blattný's application in the large *Beauveria* sp. used for the control of *Bothynoderes punctiventris*. The dispute on the classification of viruses as organisms or non-organisms has, in my opinion, been definitively solved in favour of the latter alternative.

Insect diseases: these are the fundaments of a new branch concerned with the protection of plants and other objects. The monograph offers not only a sound theoretical basis, but also instructions about mass cultivations of parasites of pests from the experimental stage to the practical application. Everyone, who is working in entomology, should add this work to his library. The translation of this monograph into one of the universal languages would make it accessible to the widest range of readers and give a true picture of the advanced stage of the Czechoslovak biological sciences of today.

Academician Ct. Blattný