

## BOOK REVIEWS

Proceedings of the 6th Conference of the Czechoslovak Plant Virologists, Olomouc 1967. Edited by Ctibor Blatný. Academia, Publishing House of the Czechoslovak Academy of Sciences, Prague, 1969; 346 pages; Dfl. 63.55.

The 6th Conference of the Czechoslovak Plant Virologists was held at the Palacký University in Olomouc from September 19–22, 1967, and was sponsored by the Czechoslovak Academy of Sciences.

The meeting was divided into two sections, viz pathogenesis and diagnostics which consisted of contributions by 28 and 32 speakers respectively. About half of the number of speakers were from Czechoslovakia. The proceedings contain most of the papers read during the conference.

Most of the contributions in section I are concerned with aspects of the infection process, such as stimulation and inhibition of infection by various chemicals, properties of double-stranded RNA, spread of virus from callus tissue, and changes in host metabolism brought about by the virus infection.

Section II contains papers on a large number of viruses in different crops. About one third of the contributions in this section are related to yellows (witches' broom) type diseases. At the time the authors were asked to submit their papers for the conference the findings of mycoplasma-like organisms in plants affected with this type of diseases had not yet been published. Hence, most of the papers on this subject report efforts to prove the virus character of the pathogen. However, studies on transmission and epidemiology of the causal agent of these diseases are still of value.

The division into sections I and II is not always quite clear. A contribution like 'Studies on the host range of potato virus Y' by J. Horváth in section I would better fit in section II whereas the paper 'Aldolase activity in a hypersensitive host-virus combination' by K. K. Kristev should have been included in section I.

Because of the fact that, as mentioned in an editorial remark, the authors were responsible for scientific and formal correctness and for the English version of their papers, the presentation of the contributions is not always satisfactory. Due to the printing paper used the quality of a number of photographs, especially that of the electron micrographs, is not very good.

An author and subject index facilitate the use of the book.

J. Dijkstra

H. Eidman: *Lehrbuch der Entomologie*. Paul Parey, Hamburg and Berlin, 1970 2nd revised edition by F. Kühlnhorn, 633 pages, 378 figures; price D.M. 68.–

Thirty years ago the wellknown 'Lehrbuch der Entomologie' by H. Eidmann appeared. Its well-balanced presentation of all major aspects of entomology made this book particularly valuable to all those who needed a good background in general entomology.

A second edition revised by F. Kühlnhorn was published last year. This edition greatly resembles the first, but the size of the book increased from 500 to 633 pages, which is to be regretted. Authors of text-books should try to present the growing amount of knowledge in a more concise way and select the most essential topics.

Much attention is paid to insect morphology, anatomy and systematics. For those who need a good introduction into these fields the book will be most valuable. Those interested in experimental entomology, however, will be somewhat disappointed. For instance a chapter headed 'Physiologie der Ernährung' gives only a very short summary of some essential nutrients but gives no information on their effects on insect development. I could find no mention of artificial diets which play a vital role in entomological research.

On page 454 it is stated that an increasing photoperiod will reduce the tendency to enter diapause. This may hold for the few cases where the change in photoperiod causes the photoperiodic response, but in most other cases the length itself is responsible. In this part I miss a good curve of that photoperiodic response.

The book is well illustrated.

In spite of these shortcomings the book as a whole will certainly be valuable.

G. W. Ankersmit

Grace M. Waterhouse: The genus *Phytophthora* de Bary. Diagnoses (or descriptions) and figures from the original papers, 2nd edition, 1970. Mycological Papers No. 122. Commonwealth Mycological Institute, Kew. 59 pp., 21 plates, price £ 2.

In this compilation are given the diagnoses or, in absence of a diagnosis, selected basic description of all the species that ever have been placed in the genus *Phytophthora* or in genera considered in synonymy with it. The diagnoses and descriptions are quoted in the language used in the original publication (except in the case of those in Japanese). English translations are given of all diagnoses and descriptions in foreign languages.

The first part of the publication deals with the genus and the eight genera placed in synonymy with it: *Blepharospora*, *Kawakamia*, *Mycelophagus*, *Nozemia*, *Phloeophthora*, *Pseudopythium*, *Pythiacystis*, and *Pythiomorpha*.

This part is followed by a carefully composed survey of the species together with any earlier combinations on which they were based. The alphabetical arrangement of the species is very convenient for finding quickly the required information about a certain species. The last pages of the text contain a list of names not taken into *Phytophthora*.

The 59 pages of text are followed by 21 plates with reproductions of the original figures.

Since the first edition (1956) nine new descriptions of taxa have been added. Many of these descriptions are incomplete, without a Latin diagnosis or indication of a type. So most of the names given by the authors turned out to be invalid. Compared with the first edition one of the favourable differences is, that notes are added to indicate if a taxon is invalid, illegitimate, or antedated by an earlier description with the same epithet. Besides the nine new descriptions of *Phytophthora* species, thirteen new names have appeared including both new combinations and old names newly discovered.

For students of the genus *Phytophthora* the first edition has already proved to be very useful. The compilation of all these diagnoses in one publication means much timesaving. But still more important for workers concerned with this genus is to have access to diagnoses and figures published in papers which are difficult to obtain or are written in Japanese or other foreign languages difficult to understand.

The book is useful not only for mycologists but also for phytopathologists. As most *Phytophthora* species are the cause of severe diseases of cultivated plants, workers concerned with phytopathology will certainly be very pleased with this second edition of 'The genus *Phytophthora*'.

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