Book review

K.F. Harris (Ed.), 1988. Advances in disease vector research, Vol. 5. Springer Verlag, New York/Berlin/Heidelberg/London/Paris/Tokyo. X + 300 pp.: text with tables and illustrations; references at the end of each chapter; general index (15 pp). Cloth bound. Price DM 158.

The book is the fifth volume in an annual series, up to this volume entitled 'Current topics in vector research' of which the first two volumes were published by Praeger Publishers in New York. According to the preface, the title of the series has been changed in order 'to more accurately define the scope of the series and prevent confusion about the scientific disciplines covered in it'. However the title still seems to lack precision since a *vector*, according to the 'Guide to the use of terms in plant pathology' (CMI Phytopathological Papers No 17, 1973), is 'an organism able to transport and transmit a *pathogen*'. Hence, a vector does not transmit a *disease*. Disease may result as a consequence of transmission of a pathogen if the recipient organism is susceptible and sensitive to infection.

The present volume contains 11 chapters of which seven deal with vectors of plant pathogens, almost exclusively viruses. One of the contributions covers spiroplasmas and mycoplasmas as well as viruses. The chapters of interest to plant pathologists cover leafhopper cell cultures as a means for Phytoreovirus research (5, Kimura and Omura), a cladistic analysis of leafhopper vector complexes (6, Triplehorn), Fiji disease virus of sugar-cane (7, Ryan), tropical maize pathogens (8, Tsai and Falk), tomato spotted wilt virus transmission by thrips (9, Reddy and Wightman), virus-pollen interactions (10, Cooper, Kelly and Massalski), and the correlation between stylet paths made by aphids during superficial probing and non-persistent virus transmission (11, Lopez-Abella, Bradley and Harris). Though an interesting subject, it is questionable whether pollen, dealt with in the chapter on virus-pollen interaction, fits in with the concept of a vector as defined above. The other chapters deal with juvenile hormone regulation in mosquitos, tick-borne virus infections in marine birds, tick paralysis, and tick tissue and cell culture in vector research.

It is impossible to discuss the contributions individually within the limited scope of this description. I have found much information worth reading and the book is essential reading for those involved in vector research. The price (c. US$ 85.50, which means US$ 0.285 per page) is prohibitive for purchase by individual researchers.

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