THE RAFFLES BULLETIN OF ZOOLOGY 2003 **52**(1): 281-283
© National University of Singapore

BOOK REVIEW

Insect Pest Management and Ecological Research. Walter, G. H., 2003. Cambridge University Press. 387 pp. ISBN 0-521-80062-5.

This is not the usual book on Pest Management. It is a discussion of how ecological principles and research should be integrated into pest management. There are 10 meaty chapters.

The author begins in Chapter 1 by criticizing pest management literature for insufficient coverage of insect ecology, as well as an understanding of pest physiology, behaviour and ecology in the application of integrated pest management (IPM). He also points out the flaws in IPM related research. It is also highlighted that methodological problems encountered in IPM-oriented research are based on generalisations in biology rather than factual information. Chapter 2 discusses the relationships among facts, theory and application in pest management. Chapter 3 gives an account of the historical trends in pest management, and discusses several reasons for the failure of IPM to fulfil its potential. The rest of the chapters focus on the importance of developing research directions, and practice of IPM based on ecological principles. Many aspects of ecological theory and theoretical basis for IPM research and practice are discussed. Examples given include pest-natural enemy relationships, good taxonomy, sexual species and behaviour of the insects. Efforts to close the gap between theory and practice are also suggested.

Each ecological principle is dealt with in great detail, and there are 93 pages of references (almost a quarter of the book). It is an informative book although it is quite a struggle to read through it. However, to incorporate all the theoretical and ecological components stated in this book into IPM will require a great deal of time and research personnel, not to mention financial resources.

Shuit-Hung Ho
Department of Biological Sciences
National University of Singapore
Kent Ridge, Singapore 119260, Republic of Singapore