

Book review

Insect–plant biology, second edition

Schoonhoven, Louis M., van Loon, Joop J.A., Marcel Dicke. (Eds.). 2005. Oxford University Press, pp. 421 + xvii, £34.95 (paperback)/£75.00 (hardback), ISBN: 0-19-852594-8 (paperback)/0-19-852594-X (hardback).

This is the second edition of a highly successful book published in 1998 and has undergone a major revision in the light of the tremendous advances made recently, particularly in the molecular basis of insect olfaction and on induction of plant defences relating to interactions at higher trophic levels. Above all, this is a comprehensive and authoritative account and, as such, will be of great value to students and researchers alike. Even where ideas are changing and there remains scientific dispute, the authors have captured a balanced view. This is particularly true of the specific and various entries throughout the book relating to chemosensory interactions. Indeed, I would recommend reading these sections to those still regurgitating the old dogmas of widely occurring generalist and odourant receptors. As would be expected and required, there is an initial overview of the subject, which then leads on to a description of relevant plant structure followed by the essential phytochemistry. Excellent chapters on host finding and choice incorporating insect physiology, follow with

later chapters covering ecology and evolution, including a chapter on interactions with flowers. Finally, there is a valuable chapter on applying the understanding of insect–plant interactions to crop protection – an issue that will certainly require even further expansion for the next edition. Appendices include suggestions of further reading, structural formulae and methodology, the latter being of extreme importance. There are some inconsistencies in the formulae to which I must refer as a chemist, with occasional structural errors and some omission of stereochemical detail.

This book is justifiably dedicated to the great pioneer of this area of science, Tibor Jermy. I fully expect that the present authors will be similarly honoured for their immense contribution to the area, which provides the final recommendation of this book.

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