

BOOK REVIEW

Behaviour and impact of Aphidophaga. Proceedings of the 4th meeting of the IOBC W. G. Ecology of Aphidophaga. Edited by L. Polgar, R. J. Chambers, A. F. G. Dixon and I. Hodek. SPB Academic Publishing bv: The Hague. 350 pp. US\$92.00.

This book contains a selection of papers and posters from the 4th symposium of the International Organization of Biological Control working group 'Ecology of Aphidophaga'. The meeting was held in September 1990 at Gogollo, Hungary and was attended by 84 participants from 22 countries.

A brief foreword explains the history of the 'Ecology of Aphidophaga' working group and is followed by the list of participants of the symposium. This is followed by the first paper, a short review by I. Hodek dealing with prey specificity in Aphidophaga. The paper is actually an abridged version of a longer paper published in *Acta Entomol. Bohemoslov.* (1991). The subsequent 49 papers are split into three sections. The papers in each section are listed alphabetically. While the research presented comes mainly from Europe, there is a reasonable smattering of papers from Australia, Canada, Egypt, India, Japan, Malaysia, Nigeria, South Africa and U.S.A.

The first section, "Aphid Parasites" has 13 papers which cover topics ranging from population ecology, host selection, parasitoid biology and behaviour, to the action of semiochemicals on parasitoids and biological control. The field studies presented include examples of both broad-acre and tree crops and deal with both direct comparisons between aphid and parasitoid numbers, and studies of the importance of refuge areas in augmenting parasitoid numbers. There are several laboratory based studies such as: the ability of *Aphidus ervi* (Haliday) to change host; the role of parasitism in reducing the density-dependent production of alates; the possible reasons for parasitised aphids moving away from the feeding site; and the influence of semiochemicals on the behaviour of cereal aphid parasitoids.

The second section, "Aphid Predators" contains 29 papers, most (19) of which present data regarding members of the Coccinellidae with the remaining papers dealing with Neuroptera (3), Syrphidae (3), Carabidae (2), birds preying on Aphidophaga (1), and refuge areas (1). These papers cover a diverse field of interests including inter- and intraspecific predator competition, population ecology, biological control, conservation, dispersal, taxonomy, biology and reproductive, searching and feeding behaviours.

The final section, "Effect of Chemicals on Aphidophagous Insects" has seven papers which discuss the effect of pesticides on parasitoids, lacewings, ladybirds and other non-target invertebrate species. The main areas discussed include the effects of pesticides on the predators *Chrysopa carnea* (Stephens), *Cycloneda limbifer* (Casey) and *Coccinella septempunctata* (L.), the effect of an insect growth regulator on the *Myzus persicae* (Sulzer)/*Aphidius matricariae* (Haliday) host/parasitoid system, and methodology useful in assessing the recovery of aphidophagous species after pesticide application.

The table of contents, while clearly listing each article is quite crowded and would have been better if it had been subdivided into the three sections. The index, a list of the accumulated key-words from the papers presented, includes both common and scientific nomenclature. I found it lacked many of the names of species discussed in the text which made locating useful information difficult.

The overall layout is pleasing to the eye and the choice of font character and size makes the text easy to read. Tables and figures are for the most part well laid out, although some of the reductions have left axis values indistinct.

This book is a good guide to some of the research currently being carried out on the Aphidophaga. It contains some new ideas, but largely provides new examples of, or extensions to, existing ideas. Because these papers are either talks or posters, they are generally short, five to six pages, and so most do not contain the detail expected of a scientific journal. In addition, the editors point out that publication was not dependent upon modifications suggested by the editors being carried out.

As a final comment, "Behaviour and Impact of Aphidophaga" will be of interest to those involved not only in studies of aphids and their predators and parasites, but also those involved in studying predator/parasite prey/host interactions and the effects of pesticides on beneficial insects. However, at US\$92.00, I would probably wait until it was in the library before getting a copy.

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