

Hall, F.R., Menn, J.J. (ed.): **Biopesticides: Use and Delivery**. - Humana Press, Totowa 1999. 640 pp., USD 119.50. ISBN 0-89603-515-8.

Fifty nine leading experts in the biopesticide field were invited to contribute comprehensive chapters on really all aspects of biopesticides.

The book is divided into seven parts covering different areas of development, formulation, mode of action, registration and use of biopesticides. Each part usually includes several chapters. In the first part, prospects and economic projections for biopesticides in the United States, Europe, and developing countries are discussed. The second part is focused on biofungicides. Product *AQ10* is taken as an example in commercial developing of a biofungicide. The utility of *Gliocladium virens* for control of soilborne pathogens and joint action of biofungicides are also described in this part. Next part, the largest one, is devoted to bioinsecticides which represent the major segment of biopesticides. Neem seed derived products and neem oil as insect growth regulators, antifeedants and insecticides are dealt with in two chapters, the spynosins in one chapter. *Bacillus thuringiensis* derived agents and transgenic plants as well as use of baculoviruses are described in two chapters. One chapter brings data about entomopathogenic nematodes and the last chapter describes joint action of baculoviruses and other agents. Part four deals with bioherbicides, relatively less used group of biopesticides. Mycoherbicides and formulation and application of plant pathogens for weed control are described in this part. Part five has only one chapter giving insight into the group of pheromones used for insect control. Part six covers aspects of registration of biopesticides, namely registration process and regulatory requirements in the United States and in Europe, views of industry relating to safer policies, and an example for approval process of biopesticides is also given (IR - 4 program for minor crops). Part seven deals with management protocols, completing the "lifecycle development" of biopesticides. The appropriate formulation of a biopesticide is even more important than that of a classical pesticide and that is why two chapters are devoted to this problem. Monitoring the fate of biopesticides, the dose acquisition processes, strategies for resistance management and field management are also discussed in this part.

All chapters are well supported by extensive reference list (usually more than fifty items), which enable further detailed information searches to be conducted.

The book "Biopesticides: Use and Delivery" is the most comprehensive source of information about this group of products of relatively quickly growing importance, and could be very helpful not only for everyone working in research in crop protection and for university teachers and students in this field, but also for entomologists, environmental biologists, microbiologists, biotechnologists, etc.

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