

BOOK REVIEW

PERSLEY G.J. (ed.): BIOTECHNOLOGY AND INTEGRATED PEST MANAGEMENT. Biology in Agriculture Series No. 15. CAB International, Wallingford, UK, 1996, xvi + 475 pp. ISBN 0-85198-930-6. Hardcover. Price USD 110.00.

This new title provides a selective overview of contemporary trends in the development of biotechnologies and their use for practical pest management. The book contains contributions by 32 authors, originally presented as lectures on the Conference at Bellagio (Italy), in 1993. The heterogeneous origin of the text has some positive and negative consequences. The texts report on the situation as it appeared in the early 1990's and sometimes witness the ephemerality of views and opinions in a dramatically developing branch such as the contemporaneous biotechnology. Twenty-three lectures are organized into nine sections and contain case studies of the implementation of biotechnologies in different countries and on various crops, as well as sections dealing with general problems (preventing the adaptation of pests to transgenic crops etc.).

The book is focused on using biotechnologies for protection of crops and plant cultures against animal, largely insect, pests. The authors introduce an acceptable definition for using biotechnologies as methods aimed at using living organisms, or their parts, to make special products or modify plant production. The most important topics are perspectives of using transgenic organisms, crops and microbial antagonists in protection against insect pests and an innovation of field cropping. The introductory chapters review the principles of

integrated plant protection and contemporary research and implementation of biotechnologies. Several chapters deal with using transgenic plants with incorporated genes for producing toxins of *Bacillus thuringiensis*. The transgenic "insecticide" plants now available are still not convenient for practical use, but are a promising step in developing more elaborate mechanisms of transgenic resistance against insects. Examples of the contribution of genetic engineering for the development of new biopreparates are also given. Inspiring chapters summarize the recent status of introducing biological methods of plant protections in Asian, African and South American tropics. The products of bioengineering now available could decrease intensive chemical protection in the systems of Integrated Pest Management. By contrast, the biotechnologies are difficult to introduce into „ecological“ systems of crop production. The dichotomy of technological and ecological thinking may be well demonstrated by comparing different chapters.

The chapters differ not only in length, but also in the mode of treating subjects. The contributions vary from comprehensive reviews through case reports to insightful outlooks into the future of the branch. The book may stimulate strategical thinking of research workers involved in the development of new technologies. It may serve as a convenient reading in postgraduate courses, provide information for people preparing laws, or serve as a source for journalists who need objective information for a current dispute on ecological problems.

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