1. Record Nr. UNINA9910253903003321 Advances in Insect Control and Resistance Management / / edited by A. **Titolo** Rami Horowitz, Isaac Ishaaya Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2016 **ISBN** 3-319-31800-4 Edizione [1st ed. 2016.] 1 online resource (347 p.) Descrizione fisica Disciplina 570 Soggetti Entomology Agriculture Biotechnology **Ecology Ecotoxicology Ecology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. 1. Advances in Insect Control and in Resistance Management: an Nota di contenuto Overview -- 2. Principles of IPM in Cultivated Crops and Implementation of Innovative Strategies for Sustainable Plant Protection -- 3. Biological Control and Pollination Services on Organic Farms -- 4. The Evolution of Alternative Control Strategies in a Traditional Crop: Economy and Policy as Drivers of Olive Fly Control -- 5. Enhancing Resistance Management and Performance of Biorational Insecticides with Novel Delivery Systems in Tree Fruit IPM -- 6. Manipulation of Insect Reproductive Systems as a Tool in Pest Control -- 7. The Zoophytophagous Predator Nesidiocoris tenuis: a Successful but Controversial Biocontrol Agent in Tomato Crops -- 8. Development of Semiochemicals and Diatomaceous Earth Formulations for Bed Bug Pest Management -- 9. Developing a Bioacoustic Method for Mating Disruption of a Leafhopper Pest in Grapevine -- 10. Cell-based Screening Systems for Developing Novel Insecticides: Insights from the

EcR-Reporter Paradigm -- 11. Control and Resistance Monitoring of Thrips and Whiteflies -- 12. Resistance to Diamide Insecticides in

Lepidopteran Pests -- 13. Resistance Mechanisms of Helicoverpa armigera -- 14. Advances in Managing Pest Resistance to Bt Crops: Pyramids and Seed Mixtures -- 15. Insecticide Resistance and its Impact on Vector Control -- 16. Insecticide Resistance in Natural Enemies.

Sommario/riassunto

This book covers advanced concepts and creative ideas with regard to insect biorational control and insecticide resistance management. Some chapters present and summarize general strategies or tactics for managing insect pests such as the principles of IPM in various crop systems and biorational control of insect pests, advances in organic farming, alternative strategies for controlling orchard and field-crop pests. Other chapters cover alternative methods for controlling pests such as disruption of insect reproductive systems and utilization of semiochemicals and diatomaceous earth formulations, and developing bioacoustic methods for mating disruption. Another part is devoted to insecticide resistance: mechanisms and novel approaches for managing insect resistance in agriculture and in public health.