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Nota di contenuto	1. Preface 2. Improving the efficacy of biological control by ecostacking 3. Integrative biological control approaches in Chinese agriculture, Biodiversity enhancement for improving biological control 4. Perennial wildflower strips to enhance natural enemies of insect pests in Belgium 5. Flower strips for ecosytem services in Switzerland, Felix Herzog, Agroscope, Zurich Switzerland 6.

Enhancement of natural control functioning of rice insect pests by manipulating biodiversity in rice-based ecosystems -- 7. Cover crops enhance biological control of insect pests in apple orchards in China --8. Enhancement of natural control function in aphids by intercropping and infochemical releasers in wheat ecosystem -- 9. Crop diversity and disease control, Specific techniques to enhance ecostacking -- 10. Ecological enhancement of arthropod natural enemy application in biological control -- 11. Chemical ecology of egg parasitoids in crop protection -- 12. Current knowledge on the migratory moth Autographa gamma as basis for future chemo-ecological research --13. The development of biocontrol products and their applications in the field -- 14. Effects of insecticides on pollen beetles (Brassicogethes aeneus) and their tersilochine parasitoids in Germany -- 15. How microbiome approaches can assist market development for biological control -- 16. Successful use of entomopathogenic nematodes to control a defoliator outbreak in an environmentally sensitive area --17. Bees and medicinal plants -- 18. Climate change implications --19. Night warming on predator-prey interactions: implications for biological control -- 20. Landscape-level drivers of biocontrol and case study from local to regional scale under climate change in China -- 21. Spotted Wing Drosophila-blueberry interactions.

Sommario/riassunto

This book is the first to integrate biological control into a conceptual framework - ecostacking - uniting all aspects of biological control and ecosystem services. In 2018 the "First International Congress of Biological Control" was organised and held in Beijing, China. The chapters highlight some of the achievements presented at the congress, worldwide. Of particular significance are the numerous contributions by Chinese researchers illustrating the remarkable progress made on developing and adopting multiple biological control strategies over vast agricultural areas, largely replacing chemical pesticides for sustainable agricultural and horticultural production. In many parts of the world including Europe, fragmented research based on short-term funding has been unable to answer to the needs to develop sustainable long-term solutions to crop protection, while colleagues in China have been successful in implementing programs that exemplify the power of the ecostacking approach. Key contributions by European and US specialists combined with the expertise and experiences by the Chinese contributors comprise the building blocks for the integration of biological control approaches into the overall frame of ecostacking. This book will lead the way to a broader, integrated adoption of biological control techniques in sustainable pest, disease and weed management supporting also the functioning of other key ecosystem services. Chapter 2 of this book is available open access under a CC BY 4.0 license at link.springer.com.