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Altri autori (Persone)	BellowsT. S FisherT. W
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Nota di contenuto	Front Cover; Handbook of Biological Control; Copyright Page; Contents; Contributors; Preface and Acknowledgments; PART I: INTRODUCTION; Chapter 1. Scope and Significance of Biological Control; Introduction; Principles and Processes; Agents, Biology, and Methods; Applications; References; Chapter 2. Theories and Mechanisms of Natural Population Regulation; Introduction; Single-Species Populations; Introduction; Interspecific Competition; Host-Parasitoid Systems; Host-Pathogen Systems; Multispecies Systems; References; PART II: PRINCIPLES AND PROCESSES; Chapter 3. Taxonomy and Biological Control Introduction Taxonomy: The Historical Perspective; Contributions of Biological Control to Taxonomy; Sources of Taxonomic Expertise; Literature, Reference Collections, and Voucher Specimens; Modern Systematic Tools and Techniques; References; Chapter 4. Molecular Methods in Classical Biological Control; Introduction and Rationale; Molecular Markers; Applications in Biological Control; Conclusions; References; Chapter 5. Exploration for Natural Enemies; Introduction; Areas for Search; Risk Assessment and Evaluation of Natural Enemy

Potential

Planning, Preparation, and Execution of a Foreign Collecting Trip References; Chapter 6. Quarantine; Introduction; Establishing Quarantine Facilities; Quarantine Procedures; Personnel; References; Chapter 7. Culture and Colonization; Culture of Hosts for Entomophagous Arthropods; Culture of Entomophagous Arthropods; Colonization of Entomophagous Arthropods; Addendum; References; Chapter 8. Life Table Construction and Analysis for Evaluating Biological Control Agents; Introduction; Definitions and Data Collection; Assessing Quantitative Impact of Natural Enemies
Determining Ecological Roles of Natural Enemies Experimental Designs for Life Table Studies; Applications to Categories of Natural Enemies Other Than Parasitoids; Conclusions; References; Chapter 9. Evaluation of Biological Control with Experimental Methods; Introduction; Evaluation Techniques; Exclusion or Inclusion Techniques; Assay Techniques; Summary; References; Chapter 10. Evaluation of Results; Introduction; Naturally Occurring Biological Control; Estimating the Benefits and Costs of Classical Biological Control; Justifying the Need for Biological Control; Perceived Risk; Conclusion
References Chapter 11. Periodic Release and Manipulation of Natural Enemies; Introduction; Augmentation; Conservation; Monitoring; Rearing; In Vitro Rearing; Conclusions; References; Chapter 12. Genetic Improvement and Other Genetic Considerations for Improving the Efficacy and Success Rate of Biological Control; Introduction; Category 1: Biological Control by Restoring a Natural Balance; Category 2: Biological Control of Secondary Pests; Category 3: Biological Control of Weeds and Pests in Novel or Disturbed Environments; Genetic Considerations for Improved Success Rates in Biological Control Limited Opportunity for Genetic Improvement in Category 1 Cases of Biological Control

Sommario/riassunto

For many years the use of chemical agents such as pesticides and herbicides has been effective in controlling the many varieties of pests that infest both agricultural crops and backyard gardens. However, these pests are gradually becoming resistant to these agents, because the agents themselves are acting as selective factors making the pests better and better able to resist and persist. As a result, the use of biological controlling agents is increasing. This book is a comprehensive and authoritative handbook of biological control.Key Features* Introduction (preface plus 2 ch