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Nota di contenuto	Biocontrol Agents of Phytonematodes; Copyright; Contents; Contributors; Preface; Part I: Phytonematodes and Biocontrol Agents; 1: Impact of Phytonematodes on Agriculture Economy; 1.1 Introduction; 1.2 The Nature of Phytonematodes; 1.2.1 Habitat, taxonomy, biology, parasitism and injury; 1.2.2 Sampling, spatial distribution and contribution in the soil food web; 1.3 Phytonematode Genera, Species and Races; 1.3.1 Economically important plant parasitic nematodes worldwide; 1.3.2 Economic thresholds for damage by plant parasitic nematodes; 1.3.3 Examples of damage by plant parasitic nematodes; 1.3.4 Plant parasitic nematode distribution and population density: implications and management; 1.3.5 Progress in molecular and biochemical studies; 1.4 Impact of Phytonematodes on World Agriculture; 1.4.1 Rationale and methodology; 1.4.2 Previous estimates of nematode damage; 1.4.3 Our current estimates; 1.4.4 The true cost of nematodes; 1.5 Challenging Issues Related to the Estimates; 1.5.1 Redirections in the type and choice of applicable nematicides; 1.5.2 Intensive agriculture system; 1.5.3 Climate change; 1.5.4 Lag in nematode-genetic manipulation; 1.5.5 Quarantine problems; 1.5.6 Confusion in identification of some plant parasitic nematode species and races; 1.5.7 Discrepancy in nematode technological progress among different countries; 1.5.8 Inaction or shift in plant parasitic

nematode management; 1.5.9 Lack of economically oriented plant-parasitic nematode research; 1.6 Resources and Facilities Devoted to Nematology versus Limitations; 1.7 Economic Framework of Phytonematodes; 1.8 Conclusions and Future Prospects; Acknowledgements; References; 2: Significance of Biocontrol Agents of Phytonematodes; 2.1 Introduction; 2.2 Nematophagous and Endophytic Fungi  
2.2.1 Mode of parasitism 2.2.2 Significance in biocontrol of phytonematodes; 2.3 Nematophagous Bacteria; 2.3.1 Mode of parasitism; 2.3.2 Significance in biocontrol of phytonematodes; 2.4 Predatory Nematodes; 2.4.1 Mode of parasitism; 2.4.2 Significance in biocontrol of phytonematodes; 2.5 Predaceous Mites; 2.5.1 Mode of parasitism; 2.5.2 Significance in biocontrol of phytonematodes; 2.6 Viruses; 2.6.1 Mode of parasitism; 2.6.2 Significance in biocontrol of phytonematodes; 2.7 Conclusions; Acknowledgements; References;  
Part II: Nematophagous Fungi  
3: Nematophagous Fungi as Biocontrol Agents of Phytonematodes 3.1 Introduction; 3.2 Nematophagous Fungi; 3.2.1 Isolation techniques; 3.2.2 Observation of living materials; 3.2.3 Temporary and permanent mounts; 3.2.4 Identification; 3.3 Nematode-trapping Fungi; 3.3.1 Taxonomy and morphology; 3.3.2 Mode of action; 3.3.3 Ecology and distribution; 3.3.4 Effect on phytonematodes; 3.3.5 Formulation and commercialization; 3.4 Endoparasitic Fungi; 3.4.1 Taxonomy and morphology; 3.4.2 Mode of infection; 3.4.3 Ecology and distribution; 3.4.4 Effect on phytonematodes  
3.4.5 Formulation and commercialization

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Sommario/riassunto

Highlighting the use of biocontrol agents as an alternative to chemical pesticides in the management of plant parasitic nematodes, this book reviews the current progress and developments in the field. Tactful and successful exploitation of each biocontrol agent, i.e. nematophagous fungi, parasitic bacteria, predaceous mites, rhizobacteria, mycorrhiza and predaceous nematodes, has been described separately. The contributors are 23 eminent nematologists and their information has been compiled in 19 chapters.

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