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Nota di contenuto	NEOTYPHODIUM IN COOL-SEASON GRASSES; CONTENTS; Preface; SECTION I: CURRENT TRENDS IN NEOTYPHODIUM RESEARCH AND APPLICATION; 1 Neotyphodium Research and Application; 1.1 Current Trends in the USA; 1.2 Current Trends in Europe; 1.3 Current Trends in New Zealand; 1.4 Current Trends in Australia; 1.5 Current Trends in Japan; 1.6 Current Trends in South America; SECTION 11: MOLECULAR BIOLOGY OF NEOTYPHODIUM; 2 Biosynthesis of Ergot and Loline Alkaloids; Ergot Alkaloids; Loline Alkaloids; 3 Molecular and Genetic Analysis of Lolitrem and Peramine Biosynthetic Pathways in Epichloe festucae Endophyte Synthesis of Bioprotective MetabolitesGenetic Analysis of Endophytes; Genetics and Molecular Cloning of a Peramine Biosynthesis Gene Cluster; Molecular Cloning and Genetic Analysis of a Gene Cluster for Paxilline Biosynthesis; Molecular Cloning and Genetic Analysis of a Gene Cluster for Lolitrem Biosynthesis; 4 Gene Discovery and Microarray-Based Transcriptome Analysis of the Grass-Endophyte

Association; Biology of Grass-Endophyte Symbioses; Fungal Genomics; Gene Discovery in Epichloae-Neotyphodium Endophytes; Discovery of EST-Derived SSR and SNP Markers; Fungal Transcriptomics  
Microarray-Based Transcriptome Analysis  
5 Molecular Genetic Marker-Based Analysis of the Grass-Endophyte Symbiosis; Development and Characterization of SSR Systems; Analysis of Intraspecific Genetic Diversity; Phylogenetic Analysis; Co-Genotyping of Grass-Endophyte Symbioses; SECTION 111: ECOLOGY AND AGRONOMY; 6 A Hierarchical Framework for Understanding the Ecosystem Consequences of Endophyte-Grass Symbioses; A Hierarchical Approach to Endophyte Impacts on Ecosystem Functioning; Endophyte Effects at the Host Plant Level; Endophyte-Driven Dynamics at the Neighborhood Level  
Endophyte Impacts on Community-Level Dynamics  
Future Challenges; 7 Biotic Responses in Endophytic Grasses; Biotic Responses in Wild Grasses; Invertebrate Responses in Forage and Turf Grasses; Plant Pathogen Responses in Turf and Forage Grasses; Multitrophic Interactions; Factors Affecting Biotic Responses; 8 Abiotic Stresses in Endophytic Grasses; Drought Stress; Light Stress; Mineral Stress; Novel Endophytes and Abiotic Stress Tolerance in Cool-Season Grasses; 9 Growth and Management of Endophytic Grasses in Pastoral Agriculture; Endophyte Contamination in Pastures  
Sources of Contamination with Toxic Endophyte-Infected Perennial Ryegrass and Tall Fescue  
Factors to Consider in Selecting the Right Endophyte Option; SECTION IV: ANIMAL TOXICOSES; 10 Managing Ryegrass-Endophyte Toxicoses; Confusing the Safety and Animal Productivity on ARI Pastures; Ryegrass Staggers in the Absence of Lolitrem B; Managing Risk; Minimizing the Impact of Endemic Endophyte in Grazing Systems; 11 Interaction between Thermal Stress and Fescue Toxicosis: Animal Models and New Perspectives; Relationship between Fescue Toxicosis and Environmental Conditions  
Thermoregulatory Terminology

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Sommario/riassunto

Divided into logical easy-to-use sections, *Neotyphodium in Cool-Season Grasses* is an up-to-date anthology of the latest knowledge on the genus *Neotyphodium*. This thorough text covers the molecular biology of *Neotyphodium* endophytes and their effects on grass hosts, invertebrate and vertebrate herbivores, and the plant communities in which they interact. The expert editors also include information on the commercial uses of endophytes in livestock and turf industries. Researchers and teachers in grass research, extension, agronomy, and animal toxicology, and university

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