

1. Record Nr.	UNINA9911137557203321
Titolo	Current advances in molecular mycology / / Youssuf Gherbawy, Robert Ludwig Mach and Mahendra Rai, editors
Pubbl/distr/stampa	New York, : Nova Science Publishers, c2009
ISBN	1-60876-370-6
Edizione	[1st ed.]
Descrizione fisica	1 online resource (411 p.)
Altri autori (Persone)	GherbawyYoussuf MachRobert Ludwig RaiMahendra
Disciplina	572.8/295
Soggetti	Fungal molecular biology Phytopathogenic fungi Fungal diseases of plants - Molecular aspects Fungi - Genetics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""CURRENT ADVANCES IN MOLECULAR MYCOLOGY ""; ""CONTENTS ""; ""CONTRIBUTING AUTHORS ""; ""PREFACE ""; ""WHERE ARE THE SEQUENCES THAT CONTROL MULTICELLULAR DEVELOPMENT IN FILAMENTOUS FUNGI? ""; ""ABSTRACT""; ""INTRODUCTION ""; ""AUTOMATED GENOMIC DATA MINING ""; ""ADVANTAGES OF WEB AGENTS OVER MANUAL SEARCHING""; ""COMPARISON OF THE OCCURRENCE OF DEVELOPMENTAL GENE SEQUENCES IN THE GENOMES OF EUKARYOTES ""; ""OVERALL CONCLUSIONS""; ""REFERENCEES ""; ""JOURNEY OF PHYTOPATHOGENIC FUNGI FROM GENETICS TO GENOMICS ""; ""ABSTRACT""; ""INTRODUCTION "" ""GENE-FOR-GENE INTERACTIONS IN THE EVOLUTION OF FUNGAL PATHOGENS """"FUNCTIONAL GENOMICS APPROACHES TO EXPLORE FUNGAL PATHOGENESIS IN PLANTS ""; ""PERSPECTIVE ""; ""REFERENCES""; ""IN SILICO TOOLS TO STUDY PHYTOFUNGI ""; ""ABSTRACT ""; ""INTRODUCTION ""; ""1. SOME IMPORTANT WEBSITES AND DATABASES""; ""2. MORPHOLOGICAL AND MOLECULAR IDENTIFICATION ""; ""3. THE CURRENT STATUS OF FUNGAL GENOMICS ""; ""4. ELECTRONIC JOURNALS AND BIBLIOGRAPHIC DATABASES ""; ""5. OTHER

APPLICATIONS OF BIOINFORMATICS""; ""6. VIEWPOINT ""; ""REFERENCES ""

""FUSARIA: MYCOTOXIN PRODUCTION AND SPECIES DIFFERENTIATION BY MOLECULAR MARKERS""""ABSTRACT ""; ""INTRODUCTION ""; ""MOLECULAR DETECTION OF FUSARIUM ""; ""MYCOTOXINS ""; ""CONCLUSION""; ""REFERENCES ""; ""FUSARIUM DNA LEVELS IN FINNISH CEREAL GRAINS ""; ""ABSTRACT ""; ""INTRODUCTION ""; ""MATERIALS AND METHODS ""; ""DNA LEVELS IN CEREAL GRAINS IN FIELD SAMPLES DURING 2003-2006 ""; ""CORRELATION BETWEEN FUSARIUM DNA FROM GRAIN SURFACES AND MYCOTOXIN LEVELS IN GRAINS""; ""FUSARIUM DNA LEVELS ON GRAIN SURFACES AS COMPARED TO GROUND GRAINS "" ""CORRELATION BETWEEN FUSARIUM DNA AND MYCOTOXIN LEVELS IN GROUND GRAINS """"DNA LEVELS IN OATS AND BARLEY BETWEEN FLOWERING AND HARVESTING ""; ""EFFECT OF TILLAGE AND FUNGICIDE TREATMENT ON FUSARIUM DNA LEVELS ""; ""DISCUSSION ""; ""FUTURE PERSPECTIVES ""; ""ACKNOWLEDGEMENTS ""; ""REFERENCES ""; ""MOLECULAR MARKERS FOR FUSARIUM OXYSPORUM FORMAE SPECIALES CHARACTERIZATION ""; ""ABSTRACT""; ""FUSARIUM OXYSPORUM ""; ""FORMAE SPECIALES AND RACES ""; ""MOLECULAR MARKERS ""; ""CONCLUSION""; ""REFERENCES""; ""MORPHOLOGY AND MOLECULAR BIOLOGY OF PHOMA ""; ""ABSTRACT ""; ""INTRODUCTION "" ""COMPARATIVE MORPHOLOGICAL AND CULTURAL STUDIES"" ""CONIDIAL ONTOGENY ""; ""BIOCHEMICAL CHARACTERISTICS ""; ""SELECTED PHOMA SPECIES ""; ""MOLECULAR BIOLOGY OF PHOMA ""; ""SOME INTERESTING FINDINGS""; ""TRANSLATION ELONGATION FACTOR ""; ""ITS SEQUENCES""; "" β -TUBULIN SEQUENCES ""; ""CONCLUSIONS""; ""REFERENCES ""; ""GENE REGULATION OF HYDROLASE EXPRESSION: LESSONS FROM THE INDUSTRIALLY IMPORTANT FUNGUS TRICHODERMA REESEI (HYPOCREA JECORINA)""; ""ABSTRACT ""; ""INTRODUCTION""; ""REFERENCES "" ""PH-RELATED TRANSCRIPTIONAL REGULATION OF LIGNOCELLULOLYTIC ENZYMES AND VIRULENCE FACTORS GENES IN FUNGI ""

Sommario/riassunto

Molecular mycology has been playing a pivotal role in 21st century. It is emerging with full impact. It is multi-disciplinary and includes molecular markers, recombinant DNA techniques, cloning, phylogeny and bioinformatics. Varying in application of concepts, practice, scale, style and substance, molecular mycology is amongst the latest globalising frontiers of the corporate world. This branch is being regarded as a core subject in many colleges and universities. In the book, various topics on molecular mycology are uniquely combined to provide a complete overview of the subject. The book addresses the role of molecular and bioinformatics tools in solving the problems of identification of fungi and discusses current trends in Molecular Mycology.