Record Nr. UNINA9910781932103321 Autore Maheshwari Ramesh Titolo Fungi: experimental methods in biology / / Ramesh Maheshwari Pubbl/distr/stampa Boca Raton:,: CRC Press,, 2012 **ISBN** 0-429-10652-1 1-283-35027-0 9786613350275 1-4398-3904-2 Edizione [2nd ed.] Descrizione fisica 1 online resource (354 p.) Mycology series;; 28 Collana Disciplina 571.2/95 Fungi - Research Soggetti Fungi Mycology - Experiments Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Cover: Contents: Preface to the First Edition: Preface to Second Edition; About the Author; Chapter 1: The Hyphal Mode of Life; Chapter 2: The Multinuclear Condition; Chapter 3: Spores: Their Dormancy, Germination, and Uses: Chapter 4: Fungi as Scavengers: Chapter 5: Fungi as Symbiotic Partners; Chapter 6: Fungi as Plant Pathogens; Chapter 7: Fungi as Chemical Factories; Chapter 8: Transformation and Discovery of Gene-Silencing Phenomena; Chapter 9: Yeast: A Unicellular Paradigm for Complex Biological Processes; Chapter 10: Neurospora: A Gateway to Biology Chapter 11: Aspergillus nidulans: A Model for Study of Form and Asexual ReproductionChapter 12: Ustilago maydis and Other Fungi as Models of Sexual Reproduction; Chapter 13: Photoresponses and Circadian Rhythm; Chapter 14: Thermophilic Fungi: Eukaryotic Life at High Temperature; Chapter 15: Species: Their Diversity and Populations; Chapter 16: Senescence; A Glossary of Mycological and Interdisciplinary Terms; Appendix: Naming, Defining, and Broadly

Classifying Fungi; Back Cover

Sommario/riassunto

Fundi are now at the forefront of research on mechanisms in gene

silencing, biological rhythm, mating processes, biogenesis of

intracellular organelles, adaptations to hostile habitats, structure of natural populations, and speciation. Because of their small genomes, fungi are being used in ""systems biology"" to understand the connections between genes, proteins, and metabolic and signaling pathways. The ease with which yeasts and fungi can be cultivated in simple nutritive media has also made these eukaryotic organisms the choice material for basic and applied research. Fung