

1. Record Nr.	UNINA9910954263103321
Autore	Kurtzman C. P
Titolo	The Yeasts : A Taxonomic Study
Pubbl/distr/stampa	Burlington, : Elsevier Science, 2011
ISBN	9786612954221 9781282954229 1282954229 9780080931272 0080931278
Edizione	[5th ed.]
Descrizione fisica	1 online resource (2362 p.)
Altri autori (Persone)	FellJack W BoekhoutTeun
Disciplina	579.562
Soggetti	Fungi -- Classification Yeast fungi -- Classification Botany Earth & Environmental Sciences Fungi & Algae
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di contenuto	e9780444521491v1; Front Cover; The Yeasts, a Taxonomic Study, Volume 1; Copyright Page; Contents; Preface; Contributors; Acknowledgments; Use of this Book; 1. Introductory Chapters; 2. Descriptions of Genera and Species; 3. Yeast-like Taxa; 4. Species Summary Table and Key to All Taxa; 5. Glossary; 6. Indexes to Taxa; 7. References; Part I: Classification of Yeasts; Chapter 1. Definition, Classification and Nomenclature of the Yeasts; 1. Definition and classification of the yeasts; 2. Taxonomy; Part II: Importance of Yeasts; Chapter 2. Yeasts Pathogenic to Humans 1. Introduction to the medically important yeasts 2. Ascomycetous yeasts of clinical significance 3. Basidiomycetous yeasts of clinical significance 4. Medically-important dimorphic fungi 5. Other yeast-like mycotic agents 6. Summary; Chapter 3. Yeast Biotechnology; 1. Introduction 2. Historical Highlights 3. Overview of the Industrial

Importance of Yeasts; 4. Principal Yeast Species of Industrial Importance; 5. Traditional Food Fermentations; 6. Food and Feed Yeasts; 7. Bioethanol and Biodiesel; 8. Food and Agricultural Yeast Enzymes  
9. Biocatalysts for Pharmaceutical and Fine Chemical Production  
10. Yeast Metabolites and Bulk Chemicals; 11. Heterologous Protein Production in Yeasts; 12. Secondary Metabolites, Non-Protein Pharmaceuticals, and Fine Chemicals from Yeasts; 13. Probiotics and Prebiotics; 14. Yeast Glucans and Cell Wall Polysaccharides; 15. Degradation of Pollutants, Xenobiotics, and Roles in Bioremediation; 16. Yeasts for Functional Testing of Human Genes and Disease Discovery; 17. Genomes of Yeasts and their Industrial Relevance; 18. Functional Genomics, Metabolic Engineering, and Systems Biology of Yeasts  
19. Summary and Perspectives

**Chapter 4. Agriculturally Important Yeasts: Biological Control of Field and Postharvest Diseases Using Yeast Antagonists, and Yeasts as Pathogens of Plants;** Introduction; 1. Reduction of soil-borne fungal plant diseases using yeasts; 2. Introduction to yeast pathogens of plants; Chapter 5. Yeast Spoilage of Foods and Beverages; Introduction; 1. Recognition of yeast spoilage and its ecological study; 2. The diversity of yeasts causing food and beverage spoilage; 3. Yeasts and food safety; 4. Factors affecting the growth and survival of yeasts in foods and beverages  
5. New processing technologies  
6. Microbial interactions; 7. Biochemistry and physiology of food spoilage by yeasts; 8. Stress, adaptation, and genomics; 9. Isolation, enumeration, and identification; 10. Quality assurance and control; Chapter 6. Yeast Ecology; 1. Introduction; 2. The Niche and the Habitat of Yeasts; 3. Symbiosis; 4. The Killer Yeast Phenomenon; 5. Yeast Community Ecology; 6. Concluding Remarks; Part III: Phenotypic, Ultrastructural, Biochemical and Molecular Properties Used for Yeast Classification  
Chapter 7. Methods for Isolation, Phenotypic Characterization and Maintenance of Yeasts

---

#### Sommario/riassunto

Fully revised, updated and offered in a new three-volume format, *The Yeasts: A Taxonomic Study*, 5th Edition remains the most comprehensive presentation of yeast taxonomy and systematics available. Nearly 1500 species of ascomycete and basidiomycete yeasts are included, each description offering not only standard morphological and physiological characters, but also information on systematics, habitat, ecology, agricultural and biotechnological applications and clinical importance. Extensive introductory chapters discuss clinical aspects of yeasts, their role in biotechnolog

---