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## 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

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### 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

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