
Contents

Traditional Food and Beverage Fermentation

1 Production of Bread, Cheese and Meat M. JAKOBSEN, M. DINES LARSEN, and L. JESPERSEN (With 4 Figures)	3
2 Asian Fungal Fermented Food M.J.R. NOUT and K.E. AIDOO (With 15 Figures)	23
3 Production of Beer and Wine W. HARTMEIER and M. REISS (With 5 Figures)	49

Metabolites and Enzymes

4 β -Lactam Antibiotics: Aspects of Manufacture and Therapy F.R. SCHMIDT (With 8 Figures)	69
5 Non- β -Lactam Antibiotics T. ANKE and G. ERKEL (With 10 Figures)	93
6 Insecticidal and Nematicidal Metabolites from Fungi H. ANKE and O. STERNER (With 6 Figures)	109
7 Immunosuppressants H. KÜRNSTEINER, M. ZINNER, and U. KÜCK (With 11 Figures)	129
8 Ergot Alkaloids U. KELLER and P. TUDZYNSKI (With 8 Figures)	157
9 Biosynthesis, Biological Role and Application of Fungal Phytohormones B. TUDZYNSKI and A. SHARON (With 5 Figures)	183
10 Production of Organic Acids by Fungi G.J.G. RUIJTER, C.P. KUBICEK, and J. VISSER (With 6 Figures)	213
11 Vitamins K.-P. STAHHMANN (With 6 Figures)	231
12 Fungal Carotenoids G. SANDMANN and N. MISAWA (With 5 Figures)	247
13 Plant Cell Wall Degrading Enzymes Produced by <i>Aspergillus</i> R.P. DE VRIES, J.A.E. BENEN, L.H. DE GRAAFF, and J. VISSER (With 3 Figures)	263

Conversion of Substrates and Recovery of Metals from Solutions

14 Industrial Biotransformation With Fungi T. ZELINSKI and B. HAUER (With 6 Figures)	283
15 Biodegradation by White-Rot Fungi J.P. RALPH and D.E.A. CATCHESIDE (With 4 Figures)	303
16 Biodegradation by Brown Rot Fungi S.T. BAGLEY and D.L. RICHTER (With 2 Figures)	327
17 Bioconversion of Coal by Fungi D.E.A. CATCHESIDE and J.P. RALPH (With 4 Figures)	343
18 Biosorption of Metals M. ZIMMERMANN and K. WOLF	355

Recent Developments and Strategies

19 Genetic Improvement of Bioherbicides A.L. PILGERAM, L.D. CARSTEN, and D.C. SANDS	367
20 Formulating Mycoherbicides D.J. DAIGLE and W.J. CONNICK, JR.	375
21 Heterologous Protein Production in Mycelial Fungi F.H.J. SCHUREN (With 2 Figures)	389
Biosystematic Index	405
Subject Index	411