
Contents

Life History and Genetic Strategies

- 1 Evolutionary Ecology of the First Fungi
J.H. ANDREWS, R.F. HARRIS 3
- 2 Molecular Approaches for Studying Fungi in the Environment
K. BRUNNER, S. ZEILINGER, R.L. MACH 17

Determinants of Fungal Communities

- 3 Disturbance in Natural Ecosystems:
Scaling from Fungal Diversity to Ecosystem Functioning
S.J. MORRIS, C.F. FRIESE, M.F. ALLEN 31
- 4 Fungal Responses to Disturbance: Agriculture and Forestry
R.M. MILLER, D.J. LODGE 47
- 5 Fungi and Industrial Pollutants
G.M. GADD 69
- 6 Fungi in Extreme Environments
N. MAGAN 85
- 7 Biogeography and Conservation
E.J.M. ARNOLDS 105

Fungal Interactions and Biological Control Strategies

- 8 Plant Disease Biocontrol and Induced Resistance via Fungal Mycoparasites
A. VITERBO, J. INBAR, Y. HADAR, I. CHET 127
- 9 Antagonism of Plant Parasitic Nematodes by Fungi
S. CASAS-FLORES, A. HERRERA-ESTRELLA 147
- 10 Entomopathogenic Fungi and Their Role in Pest Control
A.K. CHARNLEY, S.A. COLLINS 159
- 11 Bacterial Weapons of Fungal Destruction: Phyllosphere-Targeted
Biological Control of Plant Diseases, with Emphasis on Sclerotinia Stem Rot
and Blackleg Diseases in Canola (*Brassica napus* L.)
W.G.D. FERNANDO, R. RAMARATHNAM, T. DE KIEVIT 189

12	Effects of Animals Grazing on Fungi T.P. MCGONIGLE	201
13	Fungal Endophytes P. BAYMAN	213
14	Mycorrhizal Fungi: Their Habitats and Nutritional Strategies M. GIRLANDA, S. PEROTTO, P. BONFANTE	229
15	Applications of Fungal Ecology in the Search for New Bioactive Natural Products J.B. GLOER	257

Decomposition, Biomass and Industrial Applications

16	Nutrient Cycling by Saprotrophic Fungi in Terrestrial Habitats J. DIGHTON	287
17	Fungal Decomposers of Plant Litter in Aquatic Ecosystems M.O. GESSNER, V. GULIS, K.A. KUEHN, E. CHAUVET, K. SUBERKROPP	301
18	Degradation of Plant Cell Wall Polymers by Fungi C. GAMAUF, B. METZ, B. SEIBOTH	325
	Biosystematic Index	341
	Subject Index	345