

Contents

1 Recent Developments in the Molecular Taxonomy of Fungi	1
ROLAND W.S. WEBER	
2 <i>Sordaria macrospora</i> , a Model System for Fungal Development	17
ULRICH KÜCK, STEFANIE PÖGGELER, MINOU NOWROUSIAN, NICOLE NOLTING, INES ENGH	
3 Inteins – Selfish Elements in Fungal Genomes	41
SKANDER ELLEUCHE, STEFANIE PÖGGELER	
4 Apoptosis in Fungal Development and Ageing	63
DIANA BRUST, ANDREA HAMANN, HEINZ D. OSIEWACZ	
5 Communication of Fungi on Individual, Species, Kingdom, and Above Kingdom Levels	79
URSULA KÜES, MÓNICA NAVARRO-GONZÁLEZ	
6 Yeast Killer Toxins: Fundamentals and Applications	107
FRIEDHELM MEINHARDT, ROLAND KLASSEN	
7 Evolutionary and Ecological Interactions of Mould and Insects	133
MARKO ROHLFS, MONIKA TRIENENS, ULRIKE FOHGRUB, FRANK KEMPEN	
8 Endophytic Fungi, Occurrence and Metabolites	153
DANIELA WEBER	
9 Fungal Origin of Ergoline Alkaloids Present in Dicotyledonous Plants (Convolvulaceae)	197
ECKHARD LEISTNER, ULRIKE STEINER	
10 Secondary Metabolites of Basidiomycetes	209
ANJA SCHÜFFLER, TIMM ANKE	
11 Identification of Fungicide Targets in Pathogenic Fungi	233
ANDREW J. FOSTER, ECKHARD THINES	
12 Helminth Electron Transport Inhibitors Produced by Fungi	247
ROKURO MASUMA, KAZURO SHIOMI, SATOSHI ÔMURA	
13 Cyclic Peptides and Depsipeptides from Fungi	273
HEIDRUN ANKE, LUIS ANTELO	

14 Fungal Genome Mining and Activation of Silent Gene Clusters	297
AXEL A. BRAKHAGE, SEBASTIAN BERGMANN, JULIA SCHUEMANN, KIRSTIN SCHERLACH, VOLKER SCHROECKH, CHRISTIAN HERTWECK	
15 Non-Ribosomal Peptide Synthetases of Fungi	305
KATRIN EISFELD	
16 Biosynthesis of Fungal Polyketides	331
JULIA SCHUEMANN, CHRISTIAN HERTWECK	
17 Physiological and Molecular Aspects of Ochratoxin A Biosynthesis	353
ROLF GEISEN, MARKUS SCHMIDT-HEYDT	
18 Genetic and Metabolic Engineering in Filamentous Fungi	377
JOCHEN SCHMID, ULF STAHL, VERA MEYER	
Biosystematic Index	393
Subject Index	401