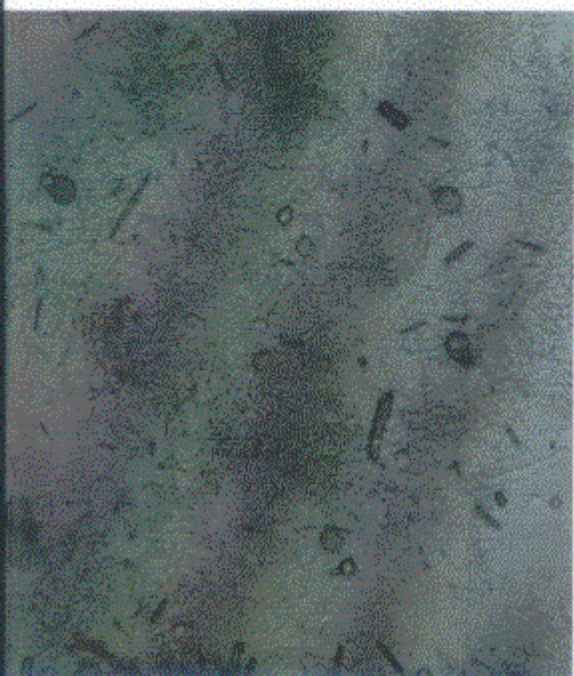


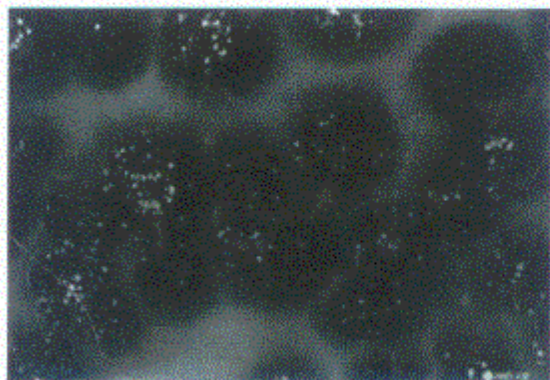
Aspergillus

Molecular Biology and Genomics



The aspergilli are a fascinating group of fungi exhibiting immense ecological and metabolic diversity. These include notorious pathogens such as *Aspergillus flavus*, which produces aflatoxin, one of the most potent naturally occurring compounds known to man. Conversely, also included are other fungi, such as *A. oryzae*, involved in the industrial production of soy sauce and sake, or *A. niger*, used for the production of citric acid and enzymes such as glucose oxidase and glucoamylase. Such is the interest in *Aspergillus* that, to date, the sequences of 15 different *Aspergillus* genomes have been determined, providing scientists with an exciting resource to improve the understanding of *Aspergillus* molecular genomics and act as a springboard for mining for new metabolites and novel genes of industrial or medical importance.

In this book, leading *Aspergillus* researchers review and summarize the most important aspects of *Aspergillus* molecular biology and genomics. The book opens with a fascinating overview of the genus *Aspergillus*. This is followed by in-depth reviews of the *Aspergillus* molecular systematics, comparative genomics, bioinformatics and systems biology of *Aspergillus*, transcriptional regulation, genetics and genomics of sexual development of *A. nidulans*, genomics and secondary metabolism, ecology, development and gene regulation in *A. flavus*, functional systems biology, and novel industrial applications of *A. oryzae* genomics. This book is essential reading for anyone with an interest in *Aspergillus* and related fungi.



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