Aspergillus and Penicillium in the Post-genomic Era

The availability of genome sequences has revolutionized the study of all classes of organisms, including filamentous fungi. The Aspergillus and Penicillium genera contain species that are among the most widely used industrial microorganisms and others that are serious pathogens of plants, animals, and humans. These genera are at the forefront of fungal genomics with many genome sequences available and a whole genus genome sequencing project in progress for Aspergillus.

This book highlights some of the changes in the studies into these fungi, since the availability of genome sequences. The contributions vary from insights into the taxonomy of these genera, use of genomics for forward genetics and genomic adaptations, to specific stories addressing virulence, carbon starvation, sulphur metabolism, feruloyl esterases, secondary metabolism and pH modulation, to the development of novel methodology for use in parallel to genome sequencing. It therefore provides a taste of the current status of research in Penicillium and Aspergillus and a promise of many more things to come.

An essential reference for everyone working with Aspergillus and Penicillium and other filamentous fungi and the book is also recommended reading for everyone with an interest in fungal genomics.

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