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Nota di contenuto	Front matter -- Preface -- Contents -- List of contributing authors -- 1. Introduction / Jones, E. B. Gareth / Hyde, Kevin D. / Pang, Ka-Lai -- Phylogeny of freshwater fungi -- 2. Phylogeny of the Dothideomycetes and other classes of freshwater fissitunicate Ascomycota / Shearer, Carol A. / Pang, Ka-Lai / Suetrong, Satinee / Raja, Huzefa A. -- 3. The molecular phylogeny of freshwater Sordariomycetes and discomycetes / Cai, Lei / Hu, Dian-Ming / Liu, Fang / Hyde, Kevin D. / Jones, E. B. Gareth -- 4. Freshwater Basidiomycota / Jones, E. B. Gareth / Southworth, Darlene / Libkind, Diego / Marvanová, Ludmila -- 5. Taxonomy of filamentous asexual fungi from freshwater habitats, links to sexual morphs and their phylogeny / Hu, Dian-Ming / Cai, Lei / Jones, E. B. Gareth / Zhang, Huang / Boonyuen, Nattawut / Hyde, Kevin D. -- 6. Phylogeny and characterization of freshwater Chytridiomycota (Chytridiomycetes and Monoblepharidomycetes) / Powell, Martha J. / Letcher, Peter M. -- Phylogeny of fungus-like organisms -- 7. Microsporidia / Kearney, Ray / Gleason, Frank H. -- 8. Phylogenetic relationships of Pythiales and Peronosporales (Oomycetes, Straminipila) within the "peronosporalean galaxy" / Gleason, Frank H. / Souza, Jose I. de -- Biodiversity of freshwater fungi -- 9. The ecological and

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Sommario/riassunto

The available literature on freshwater fungi is limited. Over the subsequent years a considerable volume of scientific papers have appeared scattered throughout numerous journals. There is therefore no recent synthesis of the subject and this is the objective of the proposed book. Freshwater habitats are rich in fungi with some 3,000 described species, most of papers focusing on their identification, substrata they grow on and world distribution. However, these fungi play an important role in the freshwater ecosystem, and are primarily involved in the breakdown of leaf litter contributing food for detritus feeders. Our book will bring together a wide range of acclaimed mycologists to review recent developments on the biology and ecology of freshwater fungi, particularly their molecular phylogeny, biodiversity, causative diseases of freshwater amphibians, fishes and invertebrate animals, decomposition of leaf litter, stream pollution and their potential role in bioremediation.