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Nota di contenuto	The Fungal endophytes a dilemma -- Endophytic fungi from lichens and non-flowering plants Biodiversity and Ecological Prospects -- Diversity and distribution patterns of Endolichenic fungi -- Diversity of Endophytic Fungi of Saxicolous Lichens -- Endolichenic fungi the lesser known fungal associates of lichens -- Diversity of Culturable Endophytic Fungi Associated with Bryophytes -- The diversity of endophytic fungi in the Lycopodium species -- Fungal Endophytes a continuous interaction with Land Plant Evolution -- Discovery of Endo

Fungi within Water Ferns Community Analyses Based on High Throughput Sequencing -- Diversity of aquatic hyphomycetes as root endophytes hosted Pteridophytic plants Arbuscular mycorrhiza of Pteridophytes and Gymnosperms diversity and plant microbes interaction -- Exploring Endophytic Fungal Biodiversity in Different Coniferous Species -- Temporal variations in endophytic fungal assemblages of Ginkgo biloba -- Diversity of Endophytic Fungi of Common Yew Taxus baccata L -- Biodiversity of Algicolus Fungi Related with Macroalgae Seaweeds -- Effect of Host Environment and climate change on Fungal Endophytic Communities appealing.

Sommario/riassunto

Advances in Lichens and Non-Flowering Plants Fungal Endophytes Research provides a better understanding of endophytic fungal diversity from lichens and non-flowering plants, and their applications. Beneficial plant-colonizing fungi deliver benefits to their hosts by promoting growth, producing secondary metabolites, and enhancing resistance to biotic and abiotic stresses. Mycorrhizae and endophytic fungi are the hidden companions of plants, living a mutually beneficial life inside the host plant. With the development of techniques of molecular biology, it has become possible to establish the correct identity of these fungi, and to know their interactions with the host and other micro-organisms. The unique attributes of fungi thus herald great promise for their application in biotechnology and industry. Fungi can be grown with relative ease, making production at scale viable. The search for fungal biodiversity, and the constructionof a living fungi collection, have both incredible economic potential in locating organisms with novel biotechnological uses that will lead to novel products. Fungi have provided the world with penicillin, lovastatin, and other globally significant medicines, and they remain an untapped resource with enormous industrial potential. Advances in Lichens and Non-Flowering Plants Fungal Endophytes Research, Volume 1 explores the biodiversity and the ecological perspective of these fungi. It includes discussion of distribution patterns, saxicolous lichens, lesser-known lichens, fungi in the Amazon forest, hosted medical ferns, conifers, aquatic plants, gymnosperm trees, as well as specific studies on Ginkgo biloba, and the common Yew. A companion Volume 2 discusses bioprospecting for biomolecules and their applications in the medical, agricultural, and food industries. It should be useful to researchers and students studying fungal biology,biotechnology, microbiology, agriculture, molecular biology, environmental biology, and related subjects.