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Anna Maria Pirttilä
A. Carolin Frank *Editors*

Endophytes of Forest Trees

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Diversity of Fungal Endophytes in Tropical Trees

Trichur S. Suryanarayanan

Abstract Our knowledge of the taxonomic diversity of fungi is not commensurate with their importance in ecosystem functions and biotechnology. While fungi may not be as appealing as some of the charismatic species, it is imperative that we get at least a near-real estimate of global fungal species diversity as early as possible to facilitate conservation and take full advantage of their technological potential. As indicator and surrogate species are used for estimating the diversity of species-rich groups such as fungi, their fidelity in reporting the diversity has to be confirmed before relying on them. In this context, tropical endophytes have been used as a reporter group to estimate global fungal diversity. I discuss here the diversity and host specificity of tropical foliar endophytes and the suitability of this ecological group of fungi as indicators of global fungal biodiversity.

Abbreviations

(DT)	dry thorn forest
(EG)	montane evergreen forest
(DD)	dry deciduous forest
(MD)	moist deciduous forest
CE-SSCP	(capillary electrophoresis single-stranded conformation polymorphism)
CE-FLA	(capillary electrophoresis fragment length polymorphism)
(ITS rDNA)	internal transcribed spacer region
(DGGE)	denaturing gradient gel electrophoresis

T.S. Suryanarayanan (✉)
Vivekananda Institute of Tropical Mycology (VINSTROM), Ramakrishna Mission Vidyapith,
Chennai, 600004 India
e-mail: t_sury2002@yahoo.com

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