



## Arbuscular Mycorrhizal Fungal Diversity Associated with *Catharanthus roseus* along an Altitudinal Gradient in Shimla Hills

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### Keywords

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**ABSTRACT:** Physiological performance of plants, particularly plant productivity and crops quality depend on the rhizospheric characteristic feature, an area of huge relevance to plants, producers, consumers and environmental health. Among the rhizosphere components, arbuscular mycorrhizae fungi (AMF) are one of the most common types of symbiotic associations between some rhizosphere microorganisms and plants roots. The present study was conducted to investigate the comparative analysis of fungal status in rhizosphere of *Catharanthus roseus* from three selected sites in Shimla (HP). AM root colonization ranged from 53 to 63.3% and AM spore count in rhizospheric soil varied from 85 to 115. Maximum AM colonization and spore count were observed at Site-III (2300mts) i.e., 63.3 and at Site-I (2200mts) i.e., 115, respectively. Fourteen different of species of AM fungi belonging to five genera i.e., *Glomus*, *Acaulospora*, *Sclerocystis*, *Endogone*, *Dentiscutata* were reported. The study confirmed diversity of AMF in *C. roseus* along different altitude. © 2016 iGlobal Research and Publishing Foundation. All rights reserved.

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