



**Lake 2016: Conference on Conservation and Sustainable Management
of Ecologically Sensitive Regions in Western Ghats**

[THE 10TH BIENNIAL LAKE CONFERENCE]

Date: 28-30th December 2016, <http://ces.iisc.ernet.in/energy>

Venue: V.S. Acharya Auditorium, Alva's Education Foundation, Sundari Ananda Alva Campus, Vidyagiri, Moodbidri, D.K. Dist., Karnataka, India – 574227

**STUDY ON FUNGAL DIVERSITY OF RHIZOSPHERE SOIL
IN DIFFERENT MONOCULTURE PLANTATIONS.**

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Abstract

Different plants are known to have different soil microbial communities associated with them. Microbial population and activity can be influenced by changes in the physical and chemical conditions of the soil. Soil microorganisms such as bacteria and fungi play an important role in soil fertility and promoting plant health. Soil fungal communities, which contribute towards nutrient cycling and interact with other microorganisms in below ground systems. Fifteen soil samples of different monoculture plantations (*Areca catechu*, *Cocos nucifera*, *Anacardium occidentale*, *Hevea brasiliensis*, *Acacia sp*) in and around Kedambady Village, Puttur Taluk were investigated for diversity among fungi. A total of 9 different genera of fungi were isolated by using soil dilution technique on Sabourauds agar media supplemented with antibiotic streptomycin. Identification and characterization of mycoflora were done with the help of manuals of fungi. The predominant genera in all monoculture plantations were *Aspergillus*, *Penicillium*, *Mucor* *Fusarium* and *Rhizopus* species.

Keywords: Diversity, Monoculture plantation, Fungi, Microbial community, Kedambady village, Puttur Taluk , *Areca catechu*, *Cocos nucifera*, *Anacardium occidentale*, *Hevea brasiliensis*, *Acacia sp*.