

Isolation and Study of Myco and Micro Diversity in Mangrove Forest in Mumbai Suburban Region

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Abstract: *Bacteria has a main role in the food chain and waters productivity. Bacteria in the Mangrove ecosystem mostly are from litter, sediment, and sea waters. Mangrove ecosystems provide important ecological benefits and eco-System services, including carbon storage and coastline stabilization, but they also suffer great anthropogenic pressures. Microorganisms associated with mangrove sediments and the rhizosphere play key roles in this ecosystem and make essential contributions to its productivity and carbon budget. Understanding this nexus and moving from descriptive studies of microbial taxonomy to hypothesis driven field and lab studies will facilitate a mechanistic understanding of mangrove ecosystem interaction webs and open opportunities for microorganism mediated approaches to mangrove protection and rehabilitation. Such an effort calls for a multidisciplinary and collaborative approach, involving chemists, ecologists, evolutionary biologists, microbiologists, oceanographers, plant scientists, conservation biologists, and stakeholders, and it requires standardized methods to support reproducible experiments.*

Keywords: Mangrove ecosystem, anthropogenic pressure, rhizosphere, microbial taxonomy, rehabilitation etc