

**RHIZOSPHERE FUNGAL DIVERSITY OF *BRUGUIERA*
GYMNORRHIZA IN MAG-ABA, PANDAN, ANTIQUE**

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ABSTRACT

Fungi are popularly known to be both ecologically and economically important but knowledge about its diversity particularly fungi located in the rhizosphere of mangroves is poorly known. Fungal population in rhizosphere are closely linked to plant health and growth, function as decomposers of plant residues, antagonize pathogens, and provider of nutrients. However, few studies have been done on this group in the mangroves. The study aimed to assess the rhizosphere fungal diversity of *Bruguiera gymnorhiza* in Mag-aba, Pandan, Antique. Specifically, it aimed to (1) isolate, characterize, identify and classify the fungi collected, (2) determine the overall species composition and (3) quantify fungal load in terms of colony forming units (CFU/g). A total of 16 morphological species were identified belonging to four genera namely *Aspergillus*, *Penicillium*, *Acremonium*, *Neosartorya* and five unknown species of Hyphomycetes. The frequently occurring species in this study were similar to the findings from previous studies such as *Aspergillus* and *Penicillium* species. Fungal load (CFU/g) was quantified using two types of media, Corn meal agar and Potato dextrose agar. Both culture media obtained a high fungal load quantity (5.0×10^4) which is near the typical fungal load of a healthy fertile soil. Shannon-Weiner, Shannon's equitability and Simpson diversity were 2.20, 0.92 and 0.90, respectively. The results suggest that there is a low diversity consistent with previous reports. Thus, more studies should be conducted in other mangrove areas to have a more comprehensive assessment of the diversity and status of rhizosphere fungi in mangrove ecosystems.