

Fungal Pathogens Associated with *Sonneratia alba*:  
A Comparative Study between Oiled and Unoiled Sites  
within Taklong Island National Marine Reserve (TINMAR),  
Nueva Valencia, Guimaras

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By:

MAY THERESE F. ALBACETE

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Abstract of Thesis titled

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Submitted by

May Therese Albacete

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Majority of researches on impacts of oil spills on mangroves focused on the immediate post-spill acute effects. However, the persistence of oil in sediments at oil spill sites has been reported in a number of published works. As such, this remaining oil could serve as source of stress to mangroves resulting into the expression of sub-lethal effects such as changes in foliage and canopy, abnormalities in reproductive structures among others. Furthermore, oil in mangroves also has the potential of increasing fungal attacks due to their impairment of natural defense mechanisms such as salt removal from leaves and trunks. Thus, this study was conducted to determine if there was a difference in fungal species composition and frequency of occurrence of fungal population of mangrove leaves collected in oiled and unoiled areas within Taklong Island National Marine Reserve, Nueva Valencia, Guimaras following the spill that occurred in August 11, 2006. Fungi from diseased leaves of *Sonneratia alba* were isolated and characterized using Acidified Potato Dextrose Agar (APDA) for samples collected in January 2009 only. A total of 7 and 6 species were identified from among the isolates in oiled and unoiled sites. Although there is a little difference in species composition, almost all the isolated species was frequently occurring in both oiled and uncoiled sites. *Gliomastix morurom* (5.8%) in the unoiled site was only frequently occurring. The results may imply that difference in frequency of occurrence of certain species might be an indicator for sub-lethal effects of oil but needs further investigations to consider environmental factors among other factors.