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MARINE FUNGI FROM SONNERATIA ALBA OF ANDAMAN ISLAND (INDIA)

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ABSTRACT:

The present paper deals with marine fungi from Sonneratia alba of Andaman Island (India). Samples of drift wood and intertidal wood samples of Sonneratia alba were collected randomly during low tide period from different coastal areas of Andaman Island. These samples examined for colonization of marine fungi. Twelve species of marine fungi were isolated and illustrated. Out of these marine fungi 7 species of Ascomycetes (i.e. Biatriospora marina, Halorosellinia oceanica, Verruculina enalia, Savoryella paucispora, Salsuginea ramicola, Pleospora pelagica and Morosphaeria velataspora) and 5 species of Mitosporic fungi (i.e. Camarosporium palliatum, Cirrenalia macrocephala, Clavatospora bulbosa, Periconia prolifica and Phoma sp.) were encountered. Out of these fungi Halorosellinia oceanica is very common fungi reported from most of the wood samples of Sonneratia alba.

Keywords: Mitosporic, Ascomycetes, Marine fungi, drift wood, intertidal wood, Sonneratia alba, Andaman Island.

INTRODUCTION:

Marine fungi play an important role in nutrient generation cycles as decomposers of dead and decaying organic matter. Although mangroves are the dominant features of Indian coastline and provide niches and habitats for many marine organisms. Mangrove forests are the hot spots of biodiversity and also for marine fungi. Marine fungi are the important micro biota in the transfer of nutrients from organic matters to higher tropic levels in the sea (Hyde and Lee, 1995). Number of species of marine fungi from mangroves have been reported in recent years [Borse and Borse (2005), Kohlmeyer and Kohlmeyer (1979), Kohlmeyer (1984), Kohlmeyer (1985), Kohlmeyer and Volkmann- Kohlmeyer (1987), Hyde, (1988), Hyde and Mouzouras (1988), Hyde and Jones (1989), Kohlmeyer and Volkmann- Kohlmeyer (1990), Scott (1988), Hyde and Lee (1995), Sridhar and Prasannaraj (2001), Borse and Borse (2005) and Borse et. al (2012)]. To some extent Chinnaraj (1993) reported some marine fungi from different coastal area of Andaman Islands. Twelve species of marine fungi Sonneratia alba were isolated illustrated in this paper.

MATERIALS AND METHODS:

The samples of dead and decaying substrates of Sonneratia alba were collected from Andaman coast- India. All the collected samples were observed directly for the fungal fructification under microscope and incubated in plastic boxes. Incubated material was periodically

examined for the occurrence of fungi.The permanent slides were prepared as per suggested by (Volkmann- Kohlmeyer and Kohlmeyer, 1996; Kohlmeyer Kohlmeyer and 1972). measurements of various parts of fungi were taken with the help of ocular micrometer and stage micrometer. The photomicrographs were taken. The identification of the fungi were made with the help of Kohlmeyer and Kohlmeyer, 1979; Kohlmeyer and Volkmann-Kohlmeyer, 1991; Hyde and Sarma 2000; Hyde et al., 2000 and other relevant literature.

RESULT & DISCUSSION:

During the present work twelve species of marine fungi were isolated and illustrated. Out of these marine fungi 7 species of Ascomycota, these are Biatriospora marina K. D. Hyde and Borse, Halorosellinia oceanica (Schatz) Whalley, Jones, Hyde and Laessoe, Verruculina enalia (Kohlm) Kohlm and Volkm-.Kohlm, Savoryella paucispora (Cribb and Cribb) Koch, Salsuginea ramicola Pleospora pelagica T. W. Jonson, Hyde, Morosphaeria velataspora (K. D. Hyde and Borse) Suetrong et al. While 5 species from Mitosporic fungi were Camarosporium palliatum Kohlm. and E. Kohlm, Cirrenalia macrocephala (Kohlmeyer) Meyer and R.T. Moore, Clavatospora bulbosa (Anastasiou) Nakagiri and Tubaki, Periconia prolifica Anastasiou and Phoma sp. Out of these fungi Halorosellinia oceanica is very common fungi reported from most of the wood samples. Chinnaraj (1993) isolated 63 marine fungi from mangroves of Andaman Islands.

CONCLUSION:

The results of our investigation total 12 species of marine fungi (7 species of Ascomycetes

and 5 species of Mitosporic fungi) from *Sonneratia alba* were encountered. Out of these fungi *Halorosellinia oceanica* is very common fungus reported from most of the wood samples of Sonneratia alba from Andaman Islands.

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Marine Ascomycetes Fungi















Marine Mitosporic fungi









