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New saprobic marine fungi and a new combination

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Abstract: This paper documents five new saprobic marine fungi occurring on various substrata in the marine environment. *Bacuspheeria nypae* gen. et sp. nov. was discovered on bases of fronds of *Nypa fruticans* in Malaysia and phylogenetically, it belongs to the Tirisporellaceae (Tirisporellales, Diaporthomycetidae, Sordariomycetes) based on 18S and 28S rDNA. *Cryptovalsa avicenniae*, *Ceriosporopsis minuta* and *Jattaea mucronata* also belong to the Sordariomycetes; *Cr. avicenniae* was saprobic on *Avicennia marina* collected in Saudi Arabia, *J. mucronata* on

intertidal decaying bark of *Rhizophora mucronata* while *Ce. minuta* was found on driftwood collected on a sandy beach in Japan. Phylogeny based on 18S and 28S rDNA placed *Cr. avicenniae* with other *Cryptovalsa* species in the Diatrypaceae. *Jattaea mucronata* groups well in the Calosphaeriales and is closely related to *J. algeriensis* based on a phylogeny using ITS and 28S rRNA and *RPB2* genes. *Aegeanispora elanii* gen. et sp. nov. is an asexual fungus which produces pycnidia on decaying driftwood collected in the Aegean Sea. Combined 18S and 28S rDNA phylogenetic analyses suggest that it is a member of the Pleosporales, Dothideomycetes. *Ceriosporopsis minuta* resembles *C. capillacea* with its tubular, long polar appendages of ascospores but dimensions of ascomata and ascospores for the former species are considerably smaller. *Ceriosporopsis* is considered the best genus to accommodate *C. minuta* without support from sequence data. *Sammeyersia* is established as a new genus to accommodate *Lulworthia grandispora*, a species unrelated to *Lulworthia fucicola*, the type species. The diagnostic characteristic for the genus is a melanized region at the base of the neck of the ascomata.

Keywords: estuarine palm; Halosphaeriaceae; mangrove; Microascales; wood.

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Introduction

Jones et al. (2015) provided an updated number of 1112 species of marine fungi while Jones (2011) estimated that there could be as many as 10,000 species of marine fungi. Most of the marine fungi recorded were described between 1960 and 2000 when there was an active scientific community examining marine fungi on various substrates including driftwood, salt marsh plants and mangrove wood (Jones et al. 2009). However, after 2000, there was a sharp decrease in the number of marine fungi described (Jones et al. 2009). Jones (2011) suggested that wider sampling locations and broader substrate types could yield new marine fungi. Recently, marine fungi have been discovered from various geographical locations and substrates and are described here as new. New collections and sequences have been generated for *Lulworthia grandispora* Meyers for a phylogenetic study and a new taxonomic combination is also made here.