

# Classification and novel lineages of marine Ascomycota

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## ABSTRACT:

The recent classification of marine Ascomycota logged in the marine fungi website, marinefungi.org, is discussed and updated in the present work. Currently, marine Ascomycota includes 1,509 species wherein Sordariomycetes is the speciose class (583 species), followed by Dothideomycetes (390 species), Eurotiomycetes (264 species), and Saccharomycetes (182 species). Other classes have less than 50 species reported: Leotiomycetes (35), Orbiliomycetes (23), Lichinomycetes (3), Arthoniomycetes (*Halographis runica*), Laboulbeniomycetes (*Laboulbenia marina*), Pezizomycetes (*Orcadia ascophylli*). The most speciose order is Pleosporales (279), followed by Eurotiales (201), Saccharomycetales (181), Microascales (171) and Hypocreales (130). Our studies on lignicolous marine fungi in Thailand, Sweden, and the UK resulted in the collection of four novel species (*Halobyssothecium versicolor*, *H. phragmitis*, *Parahelicomyces dictyosporus*, *Okeanomyces marinus*), and one novel genus *Pseudophialocephala*. Detailed descriptions, illustrations, taxonomic notes, and updated backbone tree of each novel taxa are provided in the present study.

## KEYWORDS:

Ascomycota; lineage; marine fungi