

In this issue

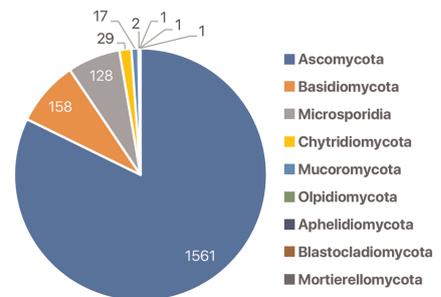
Mark S. Calabon, E.B. Gareth Jones, Ka-Lai Pang, Mohamed A. Abdel-Wahab, Jing Jin, Bandarupalli Devadatha, Resurreccion B. Sadaba, Carlo Chris Apurillo and Kevin D. Hyde

Updates on the classification and numbers of marine fungi

<https://doi.org/10.1515/bot-2023-0032>
Botanica Marina 2023; 66(4): 213–238

Review: This article revises the documented diversity of known marine fungi from nine phyla, 33 classes, 107 orders, 273 families, 767 genera and 1898 species reported worldwide, with four new combinations (*Stigmatodiscus mangrovei*, *Diaporthe krabiensis*, *D. xylocarpi*, *Halosphaeriopsis alopallonella*).

Keywords: aquatic fungi; fungal systematics; fungal taxonomy; marine biodiversity; microbial ecology



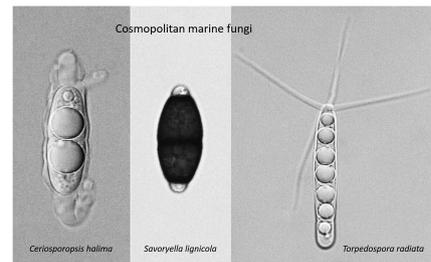
Ka-Lai Pang, E. B. Gareth Jones, Mohamed A. Abdel-Wahab, Sarah J. Adams, Artur Alves, Egídia Azevedo, Ali H. Bahkali, Margarida Barata, Gaëtan Burgaud, Maria Filomena Caeiro, Mark S. Calabon, Bandarupalli Devadatha, Joëlle Dupont, Sally C. Fryar, Maria C. González, Jing Jin, Mohamed Mehiri, Laurence Meslet-Cladière, Soizic Prado, Teppo Rämä, Marlis Reich, Catherine Roullier, Vemuri Venkateswara Sarma, Leif Tibell, Sanja Tibell, Patricia Velez and Allison K. Walker

Recent progress in marine mycological research in different countries, and prospects for future developments worldwide

<https://doi.org/10.1515/bot-2023-0015>
Botanica Marina 2023; 66(4): 239–269

Review: Active marine mycologists from twenty different countries in Africa, Asia, Americas, Australasia and Europe have written on the history and current state of marine fungal research of their respective countries, highlighting their strength in the subject, and this represents a first step towards a collaborative inter- and transdisciplinary research strategy.

Keywords: Ascomycota; Basidiomycota; ecology; ecosystem; fungal community

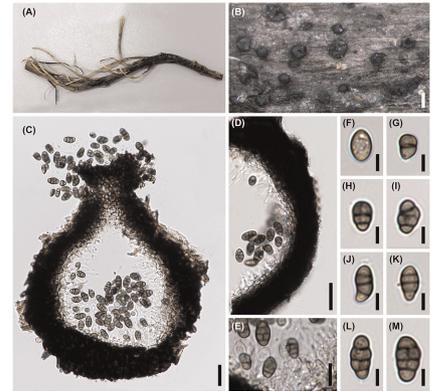


Chasika Prematunga,
Saranyaphat Boonmee, E. B. Gareth Jones
and Mark S. Calabon
Neocamarosporium aquaticum
(Neocamarosporiaceae,
Dothideomycetes), a novel fungus from
salt marsh habitats

<https://doi.org/10.1515/bot-2022-0071>
Botanica Marina 2023; 66(4): 271–279

Research Article:
Neocamarosporium aquaticum is a novel salt marsh fungus, supported by morphology and multi-locus phylogenetic analyses, and characterized by conidia that are initially hyaline, aseptate, with longitudinal and transverse septa when matured, muriform, and becoming brown to dark brown on maturity.

Keywords: aquatic fungi;
halophytes; Kench Nature Reserve;
marine fungi; salt marsh

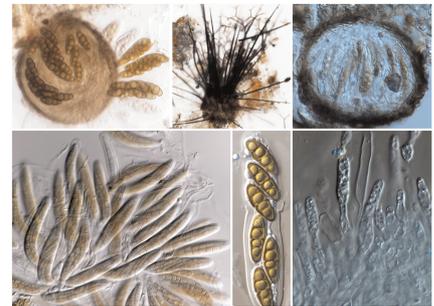


Bandarupalli Devadatha, E. B. Gareth Jones,
Dhanushka N. Wanasinghe, Ali H. Bahkali
and Kevin D. Hyde
Characterization of novel estuarine
Ascomycota based on taxonomic and
phylogenetic evaluation

<https://doi.org/10.1515/bot-2022-0085>
Botanica Marina 2023; 66(4): 281–300

Research Article: This study introduces two new marine microfungal species, *Paraloratospora marina* (Phaeosphaeriaceae) and *Tremateia phragmitis* (Didymosphaeriaceae) based on morphological comparisons and multi-gene phylogenetic analyses.

Keywords: *Paraloratospora*;
Phragmites; Pleosporales; salt
marsh plants; *Tremateia*



Ami Shaumi, U-Cheang Cheng,
Sheng-Yu Guo, E.B. Gareth Jones,
Tin-Yam Chan and Ka-Lai Pang
Diversity of fungi isolated from carapace
and gut of the marine crab *Portunus*
***sanguinolentus* in northern waters of**
Taiwan

<https://doi.org/10.1515/bot-2022-0081>
Botanica Marina 2023; 66(4): 301–307

Research Article: The fungal community associated with *Portunus sanguinolentus* belongs to the Ascomycota and the Basidiomycota, and the dominant species were *Candida tropicalis* (45.70 %, percentage occurrence), *Apiotrichum lignicola* (8.98 %) and *Rhodotorula* sp. (8.20 %).

Keywords: Crustacea; Decapoda;
epibiont/endobiont; marine fungi;
Saccharomycetales

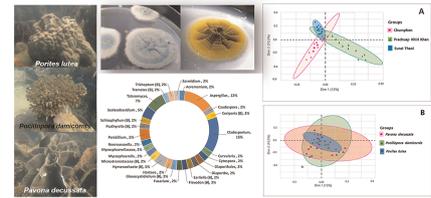


Sirapong Papan, Sita Preedanon, Supicha Saengkaewsuk, Anupong Klaysuban, Noppol Kobmoo, Sittiporn Pengsakun, Thamasak Yeemin, Satinee Suetrong and Jariya Sakayaroj
Genetic diversity of culturable fungi associated with scleractinian corals in the Gulf of Thailand

<https://doi.org/10.1515/bot-2022-0082>
 Botanica Marina 2023; 66(4): 309–318

Research Article: The culturable fungal communities of the coral species *Pavona decussata*, *Pocillopora damicornis*, and *Porites lutea* collected in the southern Gulf of Thailand belonged to Ascomycota and Basidiomycota with *Cladosporium*, *Aspergillus*, *Talaromyces*, and *Penicillium* as the most common and diverse genera.

Keywords: fungal community; *Pavona*; *Pocillopora*; *Porites*; ribosomal DNA



Sarah J. Adams and Allison K. Walker
Diversity of fungi from marine inundated wood from the Bay of Fundy, Nova Scotia, Canada

<https://doi.org/10.1515/bot-2023-0005>
 Botanica Marina 2023; 66(4): 319–329

Research Article: Marine inundated wood from the intertidal zone was sampled for fungi from 30 sites along the Bay of Fundy coastline, Nova Scotia, Canada.

Keywords: biodiversity; lignicolous; marine fungi; wood inhabiting

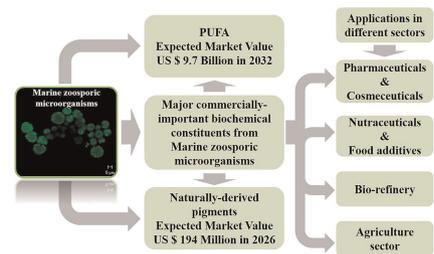


Diganta Kumar Saikia, Channakeshavaiah Chikkaputtaiah and Natarajan Velmurugan
A review of polyunsaturated fatty acids (PUFA) of marine zoosporic microorganisms and their commercialization

<https://doi.org/10.1515/bot-2022-0073>
 Botanica Marina 2023; 66(4): 331–344

Review: Major commercially important biochemical constituents derived from marine zoosporic microorganisms, their recent market values and potential applications in different industrial sectors.

Keywords: *Halophytophthora*; Labryinthulomycetes; low-cost bioprocessing; SARS-CoV-2; strain improvement



Sheng-Yu Guo, E.B. Gareth Jones,
Michael W.L. Chiang and Ka-Lai Pang

Salinity and temperature affect growth rate of *Alphamyces chaetifer* and *Gorgonomyces haynaldii* (Chytridiomycota) isolated from coastal habitats of Taiwan

<https://doi.org/10.1515/bot-2023-0011>
Botanica Marina 2023; 66(4): 345–352

Research Article: These results agree with previous research that chytrids are sensitive to salinity, and may explain why only 27 culturable Chytridiomycota species and allied taxa have been documented from the marine environment.

Keywords: coastal fungi; ecophysiology; rDNA; Rhizophydiales; zoosporic fungi

