ISOLATION OF LIGNICOLOUS MARINE FUNGUS FROM MANGROVE COMMUNITY IN EAST COAST OF PENINSULAR MALAYSIA

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FAKULTI SAINS DAN TEKNOLOGI
KOLEJ UNIVERSITI SAINS DAN TEKNOLOGI MALAYSIA

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Lihat sebelah

ISOLATION OF MANGLICOLOUS MARINE FUNGUS FROM MANGROVE COMMUNITY IN EAST COAST OF PENINSULAR MALAYSIA

By

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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: ISOLATION OF MANGLICOLOUS MARINE FUNGUS FROM MANGROVE COMMUNITY IN EAST COAST OF PENINSULAR MALAYSIA oleh HAZARINNA BINTI ALI, No. Matrik UK 7783 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Biologi sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Muda Sains Gunaan (Pemuliharaan dan Pengurusan Biodiversiti), Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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Hazarinna Ali

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LIST OF ABBREVIATIONS

ANOVA	-	Analysis of Variance
cm	-	centimeter
E	-	East
F/O	-	Frequency of Occurrence
mm	-	millimeter
N	-	North
PDA	-	Potato Dextrose Agar
S.I.	-	Similarity Index
SWA	-	Sea Water Agar
Tg.	-	Tanjung
°	-	degree
°C	-	degree Celcius
'	-	minute
>	-	more
<	-	less
%	-	percent

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ABSTRACT

Various substrates from selected mangrove stands of Kelantan, Terengganu and Pahang were screened for the presence of manglicolous fungus. A total of 65 fungal taxa were recorded from this study, comprising 20 ascomycetes, four basidiomycetes, 12 deuteromycetes, two zygomycetes and 27 unidentified species from various substrates in all study sites. Ascomycetes were the most frequently present group of fungus in all study sites. The highest number of isolates and diversity were shown by fungus that colonizing wood samples compare to leaf and root substrates. The diversity and occurrence of manglicolous fungi at all study sites were compared and discussed. Substrate preference, fungal colonization and techniques to study mangrove filamentous fungi also were highlighted.

PEMENCILAN KULAT MANGLICOLOUS DARIPADA KOMUNITI HUTAN PAYA LAUT PANTAI TIMUR SEMENANJUNG MALAYSIA

ABSTRAK

Pelbagai substrata dari dirian hutan paya laut terpilih Kelantan, Terengganu dan Pahang telah ditinjau bagi mengesan kehadiran kulat manglicolous. Sejumlah 65 taksa kulat telah direkodkan dalam kajian ini, terdiri daripada 20 ascomycetes, empat basidiomycetes, 12 deuteromycetes, dua zygomycetes dan 27 spesies yang tidak dapat dikenalpasti dari pelbagai jenis substrata dari kesemua lokasi kajian. Ascomycetes merupakan kumpulan kulat yang paling kerap hadir di kesemua lokasi kajian. Pemencilan dan kepelbagaian yang paling tinggi ditunjukkan oleh kulat yang mengkoloni sampel kayu berbanding daun dan akar. Kepelbagaian dan kemunculan kulat manglicolous di kesemua lokasi kajian dibandingkan dan dibincangkan. Kecenderungan substrata, pengkolonian fungi dan teknik-teknik mengkaji kulat hutan paya laut juga diberikan penekanan.