

THE IMPACT OF FLOODS ASSOCIATED WITH
GULF OF GUJERAT IN EAST COAST OF
PENINSULAR MALAYSIA

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THE ABUNDANCE OF FUNGUS ASSOCIATED WITH MANGROVE
COMMUNITY IN EAST COAST OF PENINSULAR MALAYSIA

By

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**PENGAKUAN DAN PENGESAHAN LAPORAN
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Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: THE ABUNDANCE OF FUNGUS ASSOCIATED WITH MANGROVE COMMUNITY IN EAST COAST OF PENINSULAR MALAYSIA oleh Nur Shadilla bte Mohammad, no. matrik UK 9198 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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LIST OF ABBREVIATIONS

%	-	percent
e	-	exponent
Σ	-	sigma
°c	-	degree Celsius
mp	-	mega pixels

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ABSTRACT

This report describes the study of frequency of occurrences of mangrove-associated fungus in four mangrove stands in East Coast of Peninsular Malaysia namely, Tok Bali, Kelantan, Kemaman and Setiu in Terengganu and Kuantan, Pahang. A total of 57 species of fungus were recorded in this study including 27 unidentified species were collected from four types of substrates which were woody, root, leaves and *Nypa* (palmae). Most frequently sampled fungi were from woody substrates. *Clavatospora* sp. (Deuteromycotina) the most frequently sampled fungus followed by *Humicola alopallonella* (Ascomycotina) and *Digitatispora marina* (Basidiomycotina). Kemaman mangrove stand showed the higher diversity of fungus followed by Tok Bali, Kuantan and Setiu. Evenness index shows the similarity between Tok Bali and Kemaman mangrove stand, more than Kuantan and Setiu mangrove. Isolation mangrove-associated fungus was higher from submerge compare to emerge substrates. Contributing factors to the above is discussed.

KELIMPAHAN FUNGUS YANG BERASOSIASI DENGAN KOMUNITI PAYA LAUT DI EMPAT LOKASI PANTAI TIMUR, SEMENANJUNG MALAYSIA.

ABSTRAK

Kajian ini menerangkan mengenai kehadiran fungus yang berasosiasi dengan vegetasi paya laut di empat lokasi di Pantai Timur Semenanjung Malaysia iaitu Tok Bali di Kelantan, Kemaman dan Setiu di Terengganu dan Kuantan di Pahang. Sebanyak 57 spesies fungus telah direkodkan termasuk 27 spesies yang tidak dapat di kenalpasti dipencilkan daripada empat jenis substratum berkayu, akar, daun dan nipah. *Clavatospora* sp. (Deuteromycotina) adalah merupakan sampel terkerap dipencilkan diikuti oleh *Humicola alopallonella* (Ascomycotina) dan *Digitatispora marina* (Basidiomycotina). Kawasan kajian di Kemaman menunjukkan diversiti fungus yang paling tinggi diikuti oleh Tok Bali, Kuantan dan Setiu. Indeks kesetaraan menunjukkan persamaan antara kawasan paya laut di Tok Bali and Kemaman dan lebih tinggi daripada kawasan Kuantan and Setiu. Pemencilan fungus daripada substratum tenggelam adalah menunjukkan keputusan lebih tinggi berbanding substratum yang timbul. Faktor-faktor menyumbang yang kepada keputusan diatas dibincangkan.