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## Taxonomical and distribution study on the algal division cyanophyta and rhodophyta in selected areas of Johor / Amyra Suryatie Kamaruzzan.

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PENGAKUAN DAN PENGESAHAN LAPORAN  
PROJEK PENYELIDIKAN I DAN II

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: Taxonomical and Distribution Study on the Algal Cyanophyta and Rhodophyta in selected areas of Johor oleh Amyra Suryatie bt Kamaruzzan, No. Matrik, UK 10685 telah diperiksa dan semua pembetulan disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Samudera sebagai memenuhi sebahagian daripada keperluan memperolehi Ijazah Sarjana Sains (Biologi Marin), Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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## LIST OF ABBREVIATIONS/ SYMBOLS

%	-	Percent
°C	-	Celcius
µm	-	Micrometer
%o	-	Part per thousand
cm	-	Centimeter
mm		millimeter
g	-	Gram
g/L	-	Gram per Liter
km	-	Kilometer
km <sup>2</sup>	-	Square kilometer
L	-	Liter
m	-	Meter
m <sup>2</sup>	-	Square meter
mg	-	Milligram
mg/L	-	Milligram per Liter
ms/cm	-	Millisecond per centimeter
mL	-	Milliliter
mm	-	Millimeter
nm	-	Nanometer
Temp.	-	Temperature
T.D.S.	-	Total dissolved solid
D.O.	-	Dissolved oxygen
Cond.	-	Conductivity
Sal.	-	salinity
sp.	-	Species
Kg.	-	Kampung
Tk.	-	Teluk
Tg.	-	Tanjung
Sg.	-	Sungai
Pt.	-	Pantai

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## **ABSTRAK**

Kajian yang dijalankan untuk merekod spesies rumpai laut yang terdapat di sekitar perairan , Johor yang telah dibahagikan kepada tiga kawasan utama. Daripada kajian ini, sebanyak 84 taxa telah dikaji dari divisi Cyanophyta and Rhodophyta dari 40 stesen. Dari divisi Cyanophyta sebanyak empat order, tujuh famili dan 25 spesies telah dikenalpasti. Manakala untuk divisi Rhodophyta, lapan order, 16 famili dan 62 spesies telah dikaji. Spesies yang paling banyak adalah dari divisi Rhodophya iaitu sebanyak 71.3 %. !7 spesies telah direkodkan sebagai spesies baru dari divisi Cyanophyta dan 7 spesies dari divisi Rhodophyta. Secara keseluruhan, spesies yang paling dominant untuk kajian ini adalah *Gracilaria edulis* dengan 47.5 % untuk divisi Rhodophyta dan *Lyngbya majuscula* dengan 32.5 % untuk divisi Cyanophyta. Jumlah bilangan spesies yang paling banyak direkodkan adalah Tg. Penawar (stesen 38). Manakala tiada spesies direkodkan di Muara Sg. Muar (stesen 1) and Segenting (stesen 5).

## ABSTRACT

This research was carried out to record seaweeds communities on the intertidal and subtidal zone of east, west and south Johor. From this study, 87 taxa were identified belonging to the divisions Cyanophyta and Rhodophyta from 40 stations. From the division Cyanophyta, four orders, seven families and 25 species were identified. While, in the division Rhodophyta, eight orders, 16 families and 62 species were identified. The most abundant seaweeds were from division Rhodophyta which was 71.3 %. There were 17 species as new records from division Cyanophyta, and 7 species from division Rhodophyta. Overall, the dominant species in the whole study area was *Gracilaria edulis* which was found 47.5 % for division Rhodophyta and *Lynghya majuscula* with 32.5 % for division Cyanophyta. The total number of species highest in Tg. Penawar (station 38). While, no species were recorded in Estuary of. Sg. Muar (station 1) and Segenting (station 5).