

IDENTIFICATION AND DISTRIBUTION OF  
SEAWEEDS IN NEERING COAST, JHARKH

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**IDENTIFICATION AND DISTRIBUTION OF SEAWEEDS IN MERSING  
COAST, JOHOR**

**By  
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**PENGAKUAN DAN PENGESAHAN LAPORAN  
PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk: Identification and Distributrion of Seaweeds in Mersing Coast, Johore oleh Nur Wahidah Bt. Atarhim, No. Matrik, UK 7892 telah diperiksa dan semua pembetulan disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Samudera sebagai memenuhi sebahagian daripada keperluan memperoleh Ijazah Sarjana Sains (Biologi Marin), Fakulti Sains dan Teknologi, Kolej Universiti Sains dan Teknologi Malaysia.

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## LIST OF ABBREVIATIONS/ SYMBOLS

%	-	Percent
×	-	Multiplication
°C	-	Celcius
μm	-	Micrometer
‰	-	Part per thousand
cm	-	Centimeter
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
mL	-	Milliliter
mm	-	Millimeter
nm	-	Nanometer
sp.	-	Species

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## ABSTRACT

This research was carried out to record seaweeds communities on the intertidal and subtidal zone of Mersing coast, Johore. A total of 57 taxa: two taxa from Division Cyanophyta, 15 taxa from Division Chlorophyta, seven taxa from Division Heterokontophyta, and 33 taxa from Division Rhodophyta were recorded. There were 32 species of Rhodophyta (56% of the total), 16 species of Chlorophyta (26% of the total), six species of Heterokontophyta (16% of the total) and two species of Cyanophyta (5%). In terms of number of species, seaweeds of Mersing coast, Johore represented 65% of total species recorded in Malaysia. 20 taxa were new records for Malaysia and 41 taxa new records for east coast, Malaysia. *Laurencia*, *Liagora* (Rhodophyta); *Sargassum*, *Padina* (Heterokontophyta) and *Brachytricia* (Cyanophyta) formed the dominant communities in the studied area. Luxuriant growth of seaweeds could be found in rocky shore area. In addition to physical factor, the distribution and density of macroalgae were also influenced by environmental factors.

## ABSTRAK

Kajian yang dijalankan untuk merekod spesies rumpai laut yang terdapat di sekitar perairan Mersing, Johor Darul Takzim. Sebanyak 57 taxa telah direkod iaitu: dua taxa daripada Divisi Cyanophyta, 15 taxa daripada Divisi Chlorophyta, tujuh taxa daripada Divisi Heterokontophyta, and 33 taxa daripada Divisi Rhodophyta. Ini ditunjukkan dengan 32 spesis daripada Rhodophyta (56% daripada jumlah keseluruhan), 16 spesis daripada Chlorophyta (26% daripada jumlah keseluruhan), enam spesis daripada Heterokontophyta (16% daripada jumlah keseluruhan) dan spesis daripada Cyanophyta (5%). Spesis yang telah direkodkan di Pantai Mersing, Johor Darul Takzim merupakan 65% daripada jumlah spesis di Malaysia manakala 41 spesies rekod baru bagi pantai timur Semenanjung Malaysia. Manakala rekod baru untuk Malaysia ialah 20 spesis semuanya. komuniti paling dominan di tempat kajian ialah *Liagora* (Rhodophyta); *Sargassum*, *Padina* (Heterokontophyta) dan *Brachytricia* (Cyanophyta). Pertumbuhan rumpai laut adalah subur di kawasan pantai berbatu. Selain itu, faktor fizikal juga diambil kira.