

IDENTIFICATION AND DISTRIBUTION OF
SEAWEEDS IN PENANG ISLAND, PERANG MARINE
PARK, PERANGGANI

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FAKULTI SAINS DAN TEKNOLOGI
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**IDENTIFICATION AND DISTRIBUTION OF
SEAWEEDS IN PENANG ISLAND, REDANG MARINE
PARK, TERENGGANU**

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MALAYSIA
2005**

IDENTIFICATION AND DISTRIBUTION OF SEA WEEDS IN PENANG ISLAND,
REDANG MARINE PARK, TERENGGANU

By

Antonia Alexandra Jikiun

Research Report submitted in partial fulfilment of
the requirements for the degree of
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**JABATAN SAINS SAMUDERA
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**PENGAKUAN DAN PENGESAHAN LAPORAN
PROJEK PENYELIDIKAN I DAN II**

Adalah ini diakui dan disahkan bahawa laporan penyelidikan bertajuk:

Identification and Distribution of Seaweeds in Penang island, Redang Marine Park, Terengganu

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LIST OF ABBREVIATIONS

BF	Brown filamentous
CA	Coralline Algae
CR	Coral Rubble
DC	Dead Coral
Ep	Epiphytes
GF	Green Filamentous
LC	Life Coral
RBG	Red Blue-Green Algae
RCK	Rocks
S	Sand

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ABSTRACT

A total of 31 species of seaweeds from 22 genera and 14 families were collected and recorded from Penang island, Redang Marine Park in the state of Terengganu. The Chlorophyta (green algae) formed the dominant group represented by 14 species from 10 genera followed by Rhodophyta (red algae) and Heterokontophyta, class Phaeophyceae (brown algae) with 14 species and 3 species, respectively. Three specimens from division Rhodophyta were unidentified. This study was mainly done in five selected stations which were located at two different areas. Stations 1 to 4 were at the back beach of the Penang island while station 5 was located at the front beach of the same island. Seaweed distribution was studied by using a 100-metre transect line where the presence of seaweeds were observed. Most seaweeds found were smaller in size and grew abundantly on sandy-coral substrates. The dominant seaweeds of Penang island were the Chlorophytes *Acetabularia*, *Boodlea*, *Caulerpa*; the Rhodophytes *Acanthophora*, *Polysiphonia* and the Phaeophyceae *Lobophora* and *Padina*.

ABSTRAK

TAJUK : PENGENALPASTIAN DAN TABURAN RUMPAI LAUT DI PULAU PENANG, TAMAN LAUT REDANG, TERENGGANU

Sebanyak 31 spesies rumpai laut daripada 22 genus dan 14 famili telah dikumpul dan direkod dari Pulau Penang, Redang Taman Laut di negeri Terengganu. Rumpai laut daripada divisi Chlorophyta (alga hijau) merupakan kumpulan yang terbesar dengan jumlah 14 spesis daripada 10 genera diikuti dengan divisi Rhodophyta (alga merah) dan juga dengan divisi Heterokontophyta, kelas Phaeophyceae (alga perang) masing-masing diwakili oleh 14 spesis dan 3 spesis. Terdapat 3 spesis dari divisi Rhodophyta tidak dapat dikenalpasti. Kajian dibuat di lima stesen berlainan di dua kawasan yang berbeza. Stesen 1 hingga 4 adalah di bahagian pantai belakang manakala stesen 5 pula terletak di bahagian pantai hadapan pulau tersebut. Kaedah yang digunakan dalam menentukan taburan umum rumpai laut adalah dengan menggunakan 100 meter tali transek dimana kehadiran rumpai laut dicatatkan. Kebanyakan tumbuhan yang dijumpai adalah yang bersaiz kecil sahaja dimana terdapat di kawasan pasir dan terumbu karang. Antara rumpai laut yang dominan di perairan Pulau Penang adalah dari divisi Chlorophyta seperti *Acetabularia*, *Boodlea*, *Caulerpa*; divisi Rhodophyta *Acanthophora*, *Polysiphonia* dan divisi Heterokontophyta *Lobophora* dan *Padina*.