

GENERAL DISTRIBUTION OF MICROBENTHOS  
ALONG THE WEST COAST OF MALAYSIA

THE EPHEMERAL RECORD

FACULTY OF MARITIME STUDIES AND MARINE SCIENCE  
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**A STUDY ON DISTRIBUTION OF MACROBENTHOS IN MANGROVES  
AREA AT TUMPAT, KELANTAN**

**By**

**Nur Erina Binti Mohd Ali**

**Research Report submitted in partial fulfillment of  
The requirements for the degree of  
Bachelor of Science (Marine Biology)**

**Department of Marine Science  
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## LIST OF ABBREVIATIONS

$\mu\text{m}$	Micrometer
mm	Millimeter
m	Meter
cm	Centimeter
$^{\circ}\text{C}$	Degree Celsius
'	Minute
$^{\circ}$	Degree
N	North
E	East
%	Percentage
$\text{H}_2\text{O}_2$	Hydrogen peroxide
g	Gram
DO	Dissolved Oxygen
‰	Salinity
mg/l	Milligram per litre
ind/m <sup>2</sup>	Individual per meter square
Q1	First quadrat
Q2	Second quadrat
Q3	Third quadrat
T1	First transect
T2	Second transect
T3	Third transect
$\emptyset$	Phi

## LIST OF ABBREVIATIONS

R'	Species Richness
J'	Species Evenness
H'	Species Diversity
ppt	Part per thousand
PSA	Particle Size Analysis
±	Plus-Minus Sign

## ABSTRACT

Studies on distribution and abundance of macrobenthos have successfully been done at mangrove area of Tumpat, Kelantan on September 2006. The aim of this study is to determine the group composition of macrobenthos in mangrove area of Tumpat, Kelantan and to compare the species distribution of macrobenthos between mangroves replanted area, cleared area and natural mangrove forest. A total of 6714 individuals of macrobenthos from 135 cores were collected. There are seven taxonomic groups of macrobenthos found at study sites, namely Molluska, Annelida, Gastropoda, Branchyura, Bivalves, Sipuncula and Crustacea. Gastropoda is the most dominant taxonomic group and are present in all five sampling stations. Diversity ( $H'$ ) is highest at Pulau Mas reaching the value of 2.043. The highest of macrobenthos Richness ( $R'$ ) is also found at Pulau Mas with  $d=1.352$  and Evenness ( $J'= 1.613$ ) is higher at Pulau Layang-Layang. Environmental factors and sediment size analysis that might affect their abundance and distribution of macrobenthos is discussed in the thesis proper.