SIZE AT MATURITY AND BIOLOGICAL INFORMATION OF MUD CRAB, *S. olivacea* (HERBST 1796) FROM KEDAH COASTAL WATER

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Lihat sebelah

SIZE AT MATURITY AND BIOLOGICAL INFORMATION OF MUD CRAB, *S.olivacea* (HERBST 1796) FROM KEDAH COASTAL WATER

By

Hafizani bt Zainudin

Research Report submitted in partial fulfillment of

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DEPARTMENT OF MARINE SCIENCE
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE

DECLARATION AND VERIFICATION REPORT

FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled: **Size at Maturity and Biological Information of Mud crab *S. Olivacea* (Herbst, 1796) From Kedah Coastal Water.** By **Hafizani bt Zainudin** Matric No. **UK7232** have been examined and all errors identified have been corrected. This report is submitted to the Department of Marine Science as partial fulfillment towards obtaining the Degree in **Bachelor of Science (Marine Biology)** Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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LIST OF ABREVATIONS

Cm	-	Centimeter
%	-	Percent
CW_{50}	-	Size when 50% crab at maturity
BW	-	Body weight
CW	-	Carapace Width
Sp.	-	Species

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ABSTRACT

The study objective are to investigate size at maturity of *S. olivacea*, to determine relationships between carapace width (CW) (cm) – body weight (BW) (g) of *S. olivacea* and to determine the size distribution of the mud crab, *S. olivacea* from the Kuala Kedah coastal water, Kedah conducted to deceive the size at maturity (CW_{50}) of mud crab. The study area is Kedah coastal water. The type of mudcrab that had been studied is *Scylla olivacea* from Kedah coastal water. The number of crabs that were collected since July 2011 to December 2011 in determining the size at maturity is 821 for both sex and 371 males mud crab and 450 females mud crab. The size at maturity (CW_{50}) was determine for both male and female with the presence of both mature and immature crab. The size at maturity recorded in this case was 8.8cm CW for female and 7.5cm for male crab. From this study sex ratio for *S. olivacea* is 1:0.82(female: male) and it also show that the crab carapace width was increase more than their body weight.

. The biological information which includes carapace width-body weight relationship, size distribution, sex ratio and size at maturity gathered from this study is important in management and in ensuring the fishery resources are sustainable and appropriate exploitation.

Saiz peringkat matang dan maklumat biologi ketam nipah spesie S. olivacea (Herbst, 1796) dari perairan laut Kedah

ABSTRAK

Objektif kajian adalah untuk mengkaji dan menentukan tahap kematangan dan juga menentukan hubungan di antara berat badan ketam nipah dengan kelebaran cengkerang ketam. Ketam nipah daripada spesis *Scylla olivacea* telah dipilih untuk dijadikan bahan sampel kajian. Kawasan perairan Kedah telah dipiih sebagai tempat kajian. Ketam nipah ini diambil dari penjual ketam nipah sekitar Kuala Kedah, Kedah. Kajian ini dijalankan diantara bulan Julai hingga bulan Disember 2010. Kesseluruhan ketam yang dikaji adalah sebanyak 821 ekor dan sebanyak 371 ekor adalah ketam jantan dan 450 ekor adalah ketam betina . Kesemua ketam ini telah dipilih secara rawak untuk dikaji, semua ketam ini diukur dan ditentukan tahap kematangannya. Saiz matang pada (CW50) bagi betina adalah 8.8cm dan saiz matang (CW50) untuk ketam jantan adalah 7.5cm. saiz matang bagi ketam jantan adalah 7.5am dan saiz matang bagi katam betina adalah 8.8 cm. nisbah ketam betina kepada ketam jantan adalah 1:0.82. Kajian juga menunjukkan peningkatan saiz ecngkerang adalah lebih cepat berbanding berat ketam.

Maklumat biologi kajian ketam ini adalah penting dalam pengurusan dan dalam memastikan keseimbangan sumber perikanan.