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FOOD PREFERENCES AND ECOLOGY OF GROUPERS (SERRANIDAE) OF PULAU BIDONG, TERENGGANU

by:

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Research Report submitted in partial fulfillment of The requirement for the degree of Bachelor of Science Marine Biology

Department of Marine Science Faculty of Maritime Study and Marine Science UNIVERSITY MALAYSIA TERENGGANU

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Food preference and ecology of groupers (Serranidae) of Pulau Bidong oleh Khairul Azlan bin Abd Aziz, No. Matrik UK10492 telah diperiksa dan semua pembetulan yang disarankan telah dilakukan. Laporan ini dikemukakan kepada Jabatan Sains Marin sebagai memenuhi sebahagian daripada keperluan memperolehi ijazah Sarjana Muda Sains Biologi Marin ,Fakulti Pengajian Maritim dan Sains Marin, Universiti Malaysia Terengganu.

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LIST OF ABBREVIATIONS

No. Number

Kg Kilogram

G Gram

Cm Centimeter

F% Frequency of occurrence

N% Percentage by number

W% Percentage by weight

IRI Index of relative importance

TL Total length

e Empty

g Gorged

W Weight

L Length

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ABSTRACT

This is study is conducted to gather data on the food preferences of grouper species of Pulau Bidong which is located off the shore of Kuala Terengganu, east coast of peninsular Malaysia. Two sampling session has been conducted in September 2006 and March 2007 using the sling spear and fishing with hook and lines to obtain samples. Thirty two individuals of four species (Ephinephelus areolatus, Cephalopolis cyanostigma, Cephalopolis boenak and Cephalopolis Formosa) were obtained. C.formosa was excluded from analysis because of insignificant number of individuals obtained. The size of the samples ranges from 12cm to 32.7cm. All the three species has significant length and weight relationship. The stomachs content of these fishes were examined and qualitative and quantitative analysis was done to understand the preference and importance of prey of the three species. The three species of grouper consumes a wide range of prey with fish dominating the prey item. Highest occurring family of fish prey is of the family Apogonidae. Other important food items include shrimps and crabs.