

ASPECTS OF FOOD AND FEEDING BY THE CORAL,  
*Favites abdita* IN REDANG ISLAND, TERENGGANU

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**ASPECTS OF FOOD AND FEEDING BY THE CORAL, *Favites abdita*  
IN REDANG ISLAND, TERENGGANU**

**By**

**Woo Sau Hoong**

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

**Department of Marine Sciences  
Faculty of Science and Technology  
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**JABATAN SAINS SAMUDERA  
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## LIST OF ABBREVIATIONS

$\chi^2$	Chi-square
$\alpha$	alpha
$^{\circ}\text{C}$	Degrees Celcius
p	probability
‰	Parts per thousand
$\pm$	plus, minus

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## ABSTRACT

The variety of food eaten by the coral *Favites abdita* and their rate of digestion at the Marine Park, Pulau Redang were described, as well as the effects of artificial light on feeding at night. The method used was a slight modification of that by Porter (1974). Zooplanktons found in the guts of *Favites abdita* were decapods, copepods, cumaceans, polychaetes, amphipods and ostracods. The rate of digestion in 1½ hour showed 60.6% of the food in the gut had been digested. Within this duration, no new ingestion happened. Zooplankton were attracted using underwater torchlight in order to concentrate the water column with zooplankton. Several treatments were applied to test the effects of artificial light to the feeding of corals at night namely no light, direct light and indirect light. Indirect light provided the highest gut enrichment ( $2.8 \pm 1.568$  zooplankton per polyp). Based on the highly variable amount of zooplankton in the guts, corals are flexible in their utilization of zooplankton as a source of nutrient and energy.

## ABSTRAK

Kepelbagaian zooplankton yang dimakan oleh coral jenis spesies, *Favites abdita* bersama dengan kadar pencernaannya dipelajari di Taman Laut, Pulau Redang. Tambahan pula, tindakbalas coral terhadap cahaya tiruan juga mempengaruhi pemakanannya. Kaedah yang digunakan di dalam eksperimen merupakan pengubahsuaian daripada kaedah Porter (1974). Antara zooplankton yang dijumpai di dalam perut terumbu karang spesies ini melalui projek saya adalah decapod, copepod, cumecea, polychaete, amphipods dan ostracod. Kadar pencernaan dalam tempoh 1½ jam menunjukkan sebanyak 60.6% zooplankton yang dimakan telah dicernakan. Dalam jangkamasa ini, kemungkinan besar terumbu karang ini tidak makan lagi kerana zooplankton yang dijumpai pada akhir experiment adalah kecil dan jumlahnya sedikit. Cahaya dapat menumpu zooplankton. Dengan kevariasiaan zooplankton yang dijumpai melalui experiment yang dijalankan, terbukti karang menggunakan baik zooplankton sebagai sumber tenaga.