

COMPARING THE RATES OF CALCIFICATION FOR  
THE SAME/DIFFERENT SPECIES OF CORAL

*Zaharuddin Bin Badaruddin*

FAKULTI PERIKANAN DAN SAINS SAMUDRA  
UNIVERSITI PERTANIAN MALAYSIA  
SERDANG, SELANGOR.  
1986/87



1000382920

ark

LP 18 FPSS 1 1987



1000382920

Comparing the rates of calcification for the same/different species of coral / Zaharuddin Badaruddin.

LP  
42

PERPUSTAKAAN  
KOLEJ UNIVERSITI SAINS & TEKNOLOGI MALAYSIA  
21030 KUALA TERENGGANU

30 SEP, 1996

<b>1000382920</b>		

Lihat sebelah

PERPUSTAKAAN KUSTEM

LP  
18  
FPSS  
1  
1987

Comparing the rates of calcification for  
the same/different species of coral.

BY

Zaharuddin bin Badaruddin

A project report submitted in partial fulfillment of  
the requirement for the Degree of Science ( Fisheries ).

FACULTY OF FISHERIES AND MARINE SCIENCES  
UNIVERSITY OF AGRICULTURE MALAYSIA

1986/87

1000382920

## ACKNOWLEDGEMENT

In the name of ALLAH the Most Gracious, the Most Merciful

I would like to express my sincere gratitude to En. Ridzwan Abdul Rahman as supervisor and mentor in this project. My appreciation is also extended to lecturers of the Faculty of Fisheries and Marine Sciences, University of Agriculture Malaysia, all of whom have made it possible for me to come this far.

A special thank you to my diving 'buddies', En. Husni Jalaluddin, En. Muhammad b. Muda and the crew members of the UNIPERTAMA III. And also to individuals and classmates who have helped me in one way or another.

Last but not least, to my beloved family for their understanding and support throughout my years of study.

Zaharuddin b. Badaruddin

## ABSTRACT

The calcification rates of three species of coral of genus Acropora were determined using the Alizarin staining technique. Two sites were selected for this study spanning a period of two months. The calcification rates were to be correlated with environmental parameters as proposed i.e. light intensity, temperature, depth and water movement ( current ). Due to poor tagging technique, only four samples were retrieved out of thirty-two tagged samples. Of these, three were Acropora intermedia, Figure. 1(a) & 1(b) and one, Acropora tenuis, Figure. 2(a) & 2(b). Their means and ranges in growth rates were as follows ;  
18.27 mg/mm/month ( 12.3 - 28.2 mg/mm/month ) for Acropora intermedia  
and 16.7 mg/mm/month ( 12.5 - 21.8 mg/mm/month ) for Acropora tenuis.  
( see Table. 1 )

## Abstrak

Kadar kalsifikasi dikenalpasti untuk tiga spesies batu karang dari genus Acropora dengan menggunakan kaedah pewarnaan Alizarin. Dua kedudukan dikenalpasti bagi kajian ini yang mengambil tempoh dua bulan untuk dijalankan. Hubungan antara kadar kalsifikasi dikorelasikan dengan parameter-parameter persekitaran iaitu intensiti cahaya, suhu, kedalaman dan arus. Oleh kerana kaedah penandaan yang tidak sesuai digunakan cuma empat sampel sahaja dapat dikesan dan dari ini, tiga terdiri daripada Acropora intermedia dan satu dari Acropora tenuis. Nilai purata dan julat masing-masing adalah 18.27 mg/mm/bulan ( 12.3 - 28.2 mg/mm/bulan ) dan 16.7 mg/mm/bulan ( 12.5 - 21.8 mg/mm/bulan ). ( lihat jadual 1 )