

BUTTERFLYFISH AS BIOINDICATOR OF
CORAL REEF HEALTH AT LANG TENGAH
ISLAND, TERENGGANU

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FACULTY OF MARITIME STUDIES AND MARINE SCIENCE
UNIVERSITI MALAYSIA TERENGGANU

2010

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UNIVERSITI MALAYSIA TERENGGANU
2010**



DEPARTMENT OF MARINE SCIENCE

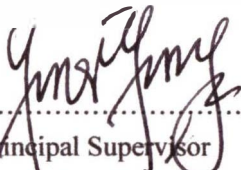
FACULTY OF MARITIME STUDIES AND MARINE SCIENCE

DECLARATION AND VERIFICATION REPORT

FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled:
**BUTTERFLYFISH AS BIOINDICATOR OF CORAL REEF HEALTH AT LANG
TENGAH ISLAND, TERENGGANU**
by Yew Min Terk, Matric No. UK 14665 have been examined and all errors identified
have been corrected. This report is submitted to the Department of Marine Science as
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ACKNOWLEDGEMENT

First of all, I would like to express my gratitude to my scuba diving instructor Mr. Tee Kok Yau from Scuba Amigo Dive Center, Lang Tengah Island for sponsoring me scuba equipments and helping out during the survey. Not forgotten other staffs including Desmond, William and Simon for helping out during the survey of this project.

A token of appreciation to my supervisor, Mr. Yusri Yusuf and Mr. Liew Hork Chark. I was grateful to have such knowledgeable and supportive supervisors. Thank you for the advice and comment. Thanks also go to En. Sainol Aimi Saidin for providing pictures of coral reef fishes for my survey.

Last but not least special thanks to my dad and mum for always stand by me and giving me moral and financial support in this project.

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LIST OF ABBREVIATIONS

S	Station
SPSS	Statistical Package for Social Sciences.
ANOVA	Analysis of Variance

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ABSTRAK

Ikan bagang-bagang di Indo-Pasifik secara luas telah dikaji oleh saintis di seluruh dunia untuk menilai kualiti terumbu karang kerana kebergantungan butterflyfish pada karang sebagai makanan. Corallivore butterflyfish ini banyak dipengaruhi oleh liputan terumbu karang.

Kajian ini dijalankan di Pulau Lang Tengah, Terengganu dengan tujuan untuk menilai kesesuaian kaedah ini dan kualiti terumbu karang. Bilangan ikan bagang-bagang dan bentuk hidup benthos dicatat dengan menggunakan kaedah "transect belt". Hasilnya menunjukkan bahawa corallivore butterflyfish-*Chaetodon octofaciatus* adalah butterflyfish yang paling dominan di Pulau Lang Tengah. Berdasarkan keputusan, terumbu karang di Pulau Lang Tengah umumnya dikategorikan dalam keadaan kurang baik kerana kekurangan kepelbagaian butterflyfish dan liputan karang keras.

Korelasi yang signifikan wujud antara liputan karang keras dan kelimpahan semua ikan bagang-bagang ($r = 0.70$, $P < 0.01$) dan ikan bagang-bagang corallivore ($r = 0.74$, $P < 0.01$). Corallivore *Chaetodon octofaciatus* yang ditemui adalah bioindicator yang paling sesuai untuk mengaji tahap kesihatan terumbu karang kerana ikan ini

hanya memakan polip terumbu *Acropora* bercabang dan mudah dikesan di Pulau Lang Tengah.