THE STATES OF Expanding of the recombination of the second second

2481451E 4300128450 @ ATATG

FROUDTH OF AGRETECHTOLOGY AND FOOD SCIENCE MOLECULOGY AND FOOD SCIENCE TOLOGY AND FOOD SCIENCE ACCIDENTAL AND FOOD SCIENCE ACCIDENT ACCIDE

PERPUSTAKAAN KOLEJ UNIVERSITI SAINS & TEKNOLOGI MALAYSIA 21030 KIJALA TERENOGANII

 21030 KUAL	A TEREN	IGGANU	
1100	0024	933	
 		_	
		- 1	
		_	
		_	
		- 1	
 1			

Lihat sebelah

HAK MILIK PERPUSTAKAAN KUSTEM

werpustakaan ta: Universiti Sains Dan Teknoloai Malavsia (KUST

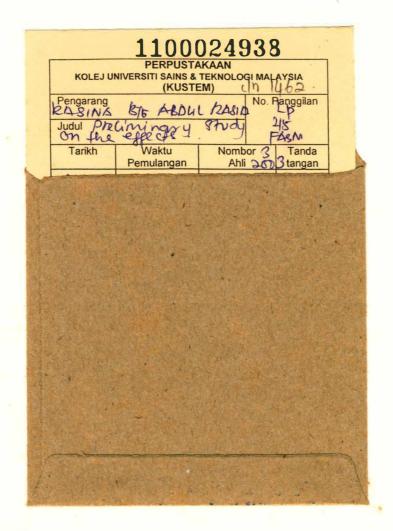
CN 1462

LP 47 FASM 3 2003

1100024938

Preliminary study on the effects of thyroxine on the late stages Macrobrachium rosenbergii larval development / Rasida Abdul Rasid @ Awang.





45 FASM 3

PRELIMINARY STUDY ON THE EFFECTS OF THYROXINE ON THE LATE STAGES OF *Macrobrachium rosenbergii* LARVAL DEVELOPMENT

By

RASINA BTE ABDUL RASID @ AWANG

This project report is submitted in partial fulfillment of the requirements for the Degree of Bachelor of Agrotechnology (Aquaculture)

Faculty of Agrotechnology and Food Science
UNIVERSITY COLLEGE OF SCIENCE AND TECHNOLOGY
MALAYSIA

2003

TITLE:

PRELIMINARY STUDY ON THE EFFECTS OF THYROXINE ON THE LATE STAGES OF *Macrobrachium rosenbergii* LARVAL DEVELOPMENT

This project report should be cited as:

Rasina, R. 2003. Preliminary study on the effects of thyroxine on the late stages of
Macrobrachium rosenbergii larval development. Undergraduate thesis, Bachelor
of Agrotechnology in Aquaculture, Faculty of Agrotechnology and Food Science,
University College of Science and Technology Malaysia, Terengganu. 75 p.

No part of this project report may be reproduce by any mechanical, photographic, or
electronic process, or in the form of phonographic recording, nor may it be stored in a
retrieval system, transmitted, or otherwise copied for public or private use, without
written permission from the author and the supervisor of the project.

ACKNOWLEGDMENT

Bismillahirahmannirohim, my deepest gratitude to Allah s.w.t as I was able to finish this project and report in the time period to enable me to graduate.

I would like to extend my gratitude and deepest appreciation to my supervisor, Dr Paymon Roustaian for his invaluable comments, guidance, patience and time throughout my final years in University College of Science and Technology Malaysia. Truthfully, without his assistance and supervision, this project would not have been possible.

I would also like to thank Mr. Yacob and associations for their kindness and technical assistance for helping and providing the necessary equipment for my project. I am grateful to Mr. Zan for his assistance at the biology lab. I am also indebted to Mr. Soon and friends for sharing their knowledge throughout the project.

My deepest gratitude goes out to my entire family, Daddy, Mommy, Rasita, Rasima and Siti Aisyah for their endless love and moral support, for understanding and being patience with me throughout the years. Special thanks to 'Mr. Bean'-"Car of the Year".

Last but not least, I would also like to express my heartfelt thanks to my teammates and housemates, Bb, Nani, Shafini, Wani, Sulas and Wan who tolerated my craziness, for all their helps and giving me the emotional support I needed throughout the project. All the wonderful memories we shared will always be in my heart.

ABSTRACT

PRELIMINARY STUDY ON THE EFFECTS OF THYROXINE ON THE LATE STAGES OF Macrobrachium rosenbergii LARVAL DEVELOPMENT

Rasina Abdul Rasid @ Awang

Supervisor: Dr. Paymon Roustaian

This research was carried out to study the effects of thyroxine hormone immersion

treatments, administration at a single dose, on the late development stages (stage 8

onward) of Macrobrachium rosenbergii larvae for a period of twenty-one day. Twenty

days old larvae (stage 8) were immersed in thyroxine hormone solution at concentrations

of 0.001, 0.01, 0.1, 1.0 ppm and control (0.00 ppm), each with three replicate. The larvae

were reared in 2 liter transparent aquarium tank at the density of 40 larvae per tank (20

larvae.liter⁻¹). They were fed Artemia nauplii twice daily. At the termination of the

experiment, 0.1 ppm treatment showed highest post larvae production (13.5 PL.liter⁻¹),

followed by 0.01 ppm (10.5 PL.liter-1), 0.001ppm and 1.0 ppm (10 PL.liter-1

respectively). Post larvae production for control was 4.5 PL.liter⁻¹. The highest growth (in

term of mean development stage) and dry weight was achieved for treatment 1.0 ppm

whereas treatment 0.1 ppm resulted the highest survival.

ii