

THE EFFECT OF EYESTALK ABLATION ON THE GROWTH OF GIANT
FRESHWATER PRAWN *Macrobrachium rosenbergii* de Man

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**THE EFFECT OF EYESTALK ABLATION ON THE GROWTH OF GIANT
FRESHWATER PRAWN *Macrobrachium rosenbergii* de Man**

By

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**Research Report submitted in partial fulfillment of
the requirements for the degree of
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**Department of Marine Science
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DEPARTMENT OF MARINE SCIENCE
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DECLARATION AND VERIFICATION REPORT
FINAL YEAR RESEARCH PROJECT

It is hereby declared and verified that this research report entitled:

The Effect of Eyestalk Ablation on The Growth of Giant Freshwater Prawn, *Macrobrachium rosenbergii* de Man by Mohd Safwan Bin Rosmadi, Matric No. UK 18018 have been examined and all errors identified have been corrected. This report is submitted to the Department of Marine Science as partial fulfillment towards obtaining the Degree of Science (Marine Biology), Faculty of Maritime Studies and Marine Science, Universiti Malaysia Terengganu.

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LIST OF ABBREVIATIONS

g	-	gram
%	-	percent
ppt	-	part per thousand
cm	-	centimeter
SD	-	standard deviation
mg	-	milligram
L	-	liter
°C	-	degree Celsius
km	-	kilometer

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ABSTRACT

This study is to examine the effect of eyestalk ablation on the growth rates of Giant Freshwater Prawn, *Macrobrachium rosenbergii* de Man. A study was conducted over 91 days showed different results on two different groups of prawns. One group is the normal group and no such treatment of a subject, while another group is a group of prawns that received treatment. The results showed that the method of ablate the eye of prawn has been stimulating the growth of prawns. The main objective of this study was conducted to determine the effect of eyestalk ablation on the growth of prawns. Besides that, this study aims to investigate the pitch between the frequencies of prawn to molt on growth rates. According to the facts and the results of previous studies that have been done by many researchers, the animals under the 'crustacean' capable of molting more frequently than normal rate of growth and development that are rated at a faster than normal when cut or the eyes blinded. In addition, this study was conducted to investigate the difference between growth rates of male and female prawns. This study clearly shows that male and female, which kept the effects of ablation on the eye, resulting in a higher growth rates and this could significantly impact economic growth in the cultures and sales of prawns.

KESAN ABLASI TANGKAI MATA KEATAS KADAR TUMBESARAN UDANG GALAH

ABSTRAK

Kajian ini adalah untuk melihat kesan menggunakan kaedah mengablasi mata udang keatas kadar tumbesarannya. Kajian yang dijalankan selama 91 hari telah menunjukkan hasil yang berbeza keatas dua kumpulan udang yang berbeza rawatan. Salah satu kumpulan merupakan kumpulan normal dan tiada apa-apa rawatan dikenakan manakala satu kumpulan lagi adalah kumpulan udang yang menerima rawatan dengan dipanaskan sebelah matanya. Hasil menunjukkan kaedah ablasi iaitu dengan memanaskan sebelah mata udang-udang tersebut telah merangsang pertumbuhan mereka. Objektif utama daripada kajian yang dilakukan ini adalah untuk menentukan kesan ablasi mata ke atas kadar tumbesaran udang. Selain daripada itu juga, kajian ini bertujuan mengkaji kelangsingan antara kekerapan udang untuk bersalin kulit keatas kadar tumbesarannya. Mengikut fakta dan juga hasil kajian sebelum ini yang telah dilakukan oleh ramai saintis, binatang yang berada di bawah kumpulan 'crustacean' mampu bertindak balas untuk bersalin kulit dengan lebih cepat dari kadar biasa dan tumbesaran yang mempunyai kadaran yang lebih cepat dari normal apabila matanya dipotong atau dibutakan. Disamping itu, kajian ini juga adalah dijalankan bagi mengkaji perbezaan antara kadar tumbesaran udang jantan dan udang betina. Kajian ini boleh membantu dalam bidang penternakan udang galah sekaligus dapat menjamin ekonomi negara.