# LARVAL SURVIVAL, GROWTH & POST-LARVAE PRODUCTION OF MACROBRACHIUM ROSENBERGII (DE MAN) REARED ON DIETS CONTAINING DIFFERENT AMOUNT OF COOKED BEEF LIVER

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MACROBRACHIUM ROSENBERGII (DE MAN) REARED ON DIETS

CONTAINING DIFFERENT AMOUNT OF COOKED BEEF LIVER

## BY

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This project report is submitted in partial fulfilment of the requirements for the Degree of Bachelor Fisheries Science

## FACULTY OF SCIENCE AND TECHNOLOGY UNIVERSITY PUTRA MALAYSIA TERENGGANU

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## Abstrak

Eksperimen ini dijalankan untuk menilai keberkesanan penggunaan hati lembu di dalam ternakan larva udang galah, *Macrobrachium rosrnbergii* (De man) dari segi kadar kemandirian, tumbesaran dan penghasilan post larva. Lima jenis makanan telah digunakan dalam kajian ini, iaitu (I) 0% hati lembu + 100% kasterd telur + *Artemia* (sebagai rujukan). (II) 25%hati lembu + 75% kasterd telur + *Artemia*. (III). 50% hati lembu + 50% kasterd telur + *Artemia*. (IV). 75% hati lembu + 25% kasterd telur + *Artemia*. (V) 100% hati lembu + 0% kasterd telur + *Artemia*. Kadar kemandirian adalah menurun berikutan dengan pertambahan paras kandungan hati lembu. Walau bagaimanapun, purata perkembangan peringkat larva udang galah, penghasilan post larva dan peratusan metamorfosis menunjukkan nilai yang tinggi pada paras kandungan hati lembu sebanyak 25%. Kajian yang selanjutnya mengenai ternakan larval udang galah secara komersial dengan menggunakan hati lembu perlu diberi tumpuan.

### Abstract

This experiment was conduted to evaluate the effect of cooked beef liver in larviculture of Giant Freshwater Prawn, *Macrobrachium rosenbergii* in terms of larval survival, growth and post-larvae production. Five feeding treatments were evaluated: (I) 0% of beef liver + 100% of egg custard + *Artemia* (as reference), (II) 25% of beef liver + 75% of egg custard + *Artemia*, (III) 50% of beef liver + 50% of egg custard + *Artemia*, (IV) 75% of beef liver + 25% of egg custard + *Artemia*, (V) 100% beef liver + 0% egg custard + *Artemia*. Survival decreased with increasing level of cooked beef liver in test diets. However, Mean Development Stage (MDS), post-larvae production and percentage metamorphosed showed an asymptotic curve pattern with highest value at 25% of beef liver. Large –scale testing and an economic analysis are also needed to determine if this diet is practical for commercial freshwater prawn larval culture.