

DEPARTMENT OF AGRICULTURE AND FOOD SCIENCE
GENERAL INVESTIGATION REPORT
FASMA

ANNUAL REPORT 2007

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Effects of dietary coconut meal on water stability, protein digestion and protein utility. / Mardiah Mohd Zain.

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HAK MILIK
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**EFFECTS OF DIETARY COCONUT MEAL ON WATER STABILITY,
PROTEIN DIGESTION AND PROTEIN UTILITY**

Mardhiah Binti Mohd Zain

**This project report is submitted in partial fulfillment of the requirement of the
degree of Bachelor of Science in Agrotechnology
(Aquaculture)**

**FACULTY OF AGROTECHNOLOGY AND FOOD SCIENCE
UNIVERSITI MALAYSIA TERENGGANU**

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ACKNOWLEDGEMENTS

First and foremost, I acknowledge to God for the blessing and give me fully strength to complete this project and not forgotten to all people that involved to this study directly or indirectly. With their contribution, this project done greatly without any problems that cannot be solved.

I express my truly sincere to Mr Masduki Mohammad Momi as my final year project supervisor for his guidance, help ness, supervision, supports, ideas and many more. My appreciation also goes to Pn Nur Asma Ariffin as my coordinator and not forgotten to Mr Raja, Mr Aziz, Mr Sharol and Mrs Faridah who always guide me about apparatus and equipments in freshwater hatchery and laborotary.

I am also indebted my sincere gratitude to my lovely parents, Tuan Haji Mohd Zain bin Taib and Puan Hajjah Saadah binti Jaafar and all my sisters, Marini, Martini and Mazila for their full supportive from all aspects like spirit, money, courage and so on. My heartfelt gratitude also goes to all my colleagues for being so supportive and understanding.

Finally, I extend my thankful to all people including that I may not have mentioned above. Hopefully this study can give benefits to aquaculture fields for the time being and in the future. Thank you.

ABSTRACT

Determination effects of dietary coconut meal on water stability, protein digestion and protein utility was conducted in this study. In feed formulation, it were prepared by the replacement of soybean meal by coconut meal according to the ratio 3:0 in Diet 1 (D1), 2:1 in Diet 2 (D2) followed by 1:2 and 0:3 in Diet 3 (D3) and Diet 4 (D4) respectively. The proximate analysis of each treatment diet were done to know the nutritional content of each diet that may varying according to the amounts of coconut meal that were used. Protein content of faeces had been analyze to know the digestibility of the protein meanwhile initial weight, final weight and feed intake had been taken along the study as the way to determine protein utility. From the result, it clearly stated that there are significant differences in water stability and but insignificant differences for protein digestion and protein utility. It shown that fish fed with Diet 2 (D2) have better digestibility of protein and can utilize high amount of protein for specific purposes without affecting the percentage of dry matter of the pellet remaining after periods of immersion in water. It can concluded based on the result that the use of soybean meal and coconut meal with ratio 2:1 give proper protein and energy levels in feed influence for better growth and body composition of fish without infecting the water stability.