EVALUATION OF THE PROPERTIES OF MENTARANG (*PHOLAS ORIENTALIS*) PROTEIN HYDROLYSATE

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Final Year Project Report Submitted in Partial Fulfilment of the Requirements for the Degree of Bachelor of Science (Hons.) Environmental Technology In the Faculty of Applied Sciences Universiti Teknologi MARA

JANUARY 2012

This Final Year Project entitled "Evaluation on the Properties of Mentarang (*Pholas orientalis*) Protein Hydrolysate" was submitted by Nurfazlika Nashrah Binti Mohd Pauzi, in partial fulfilment of the requirements for the Degree of Bachelor of Science (Hons.) Food Science and Technology, in the Faculty of Applied Sciences and was approved by

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ACKNOWLEDGEMENTS

In the name of Allah, The Most Merciful and The Most Gracious.

I begin in the name of Allah S.W.T, who sent prophets and the seal of prophets. First of all, I would like to express my appreciation as well as gratitude sincerely to my supervisor, Dr. Normah Ismail for her encouragement and advice throughout my study and valuable comment and supportable critics to ensure this final year project completed successfully.

Thousands of thanks extended to Mrs. Siti Marhani Mardi, Mrs. Norahiza Abdul Soheh, Ms. Khairiah, and Mr. Osman Abdul Rahman, the laboratory staffs of Food Science and Technology for their assistance and cooperation.

Special thanks and appreciation to all my friends from Bachelor of Science (Hons.) Food Science and Technology for their concern, encouragement and unforgettable support towards the success of this study.

I would also like to convey my sincere gratitude to all my family member that always be with me and lend their ears to hear about my problems arose during the course of completing this thesis successfully. Lastly millions of thanks to everyone who involved directly or indirectly in helping me to complete this study. I really appreciate all the bless and moral support. Thank you very much.

May Allah bless all of you, Ameen Thank you, Nurfazlika Nashrah Mohd Pauzi

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ABSTRACT

EVALUATION OF THE PROPERTIES OF MENTARANG (Pholas orientalis) PROTEIN HYDROLYSATE

Properties of a protein hydrolysate prepared from mentarang (*Pholas orientalis*) mince, using Alcalase 2.4L were determined. Hydrolysis was performed using the pH-stat method. The protein hydrolysate had high protein content (43.0%) and a high yield (11.03%). It was yellowish in colour ($L^* = 72.98$, $a^* = 0.42$, $b^* = 15.15$). The protein hydrolysate contain high amount of essential amino acids (44.87%) and had Alanine and Serine as the dominant amino acids. The protein hydrolysate had an excellent solubility (92.32%). Other than that, emulsifying stability index of powdered mentarang is 36.13 min. Meanwhile, foaming properties decrease with increasing time of foam (p<0.05). These results suggested that mentarang (*Pholas orientalis*) hydrolysates have the potential for application as an additive in the food.