

DEVELOPMENT OF MICROBIAL LEVOR FROM EEL
(*Levometabolus* sp. n.)

SITI ZULHARAH BINTI ROSLI

FACULTY OF TECHNOLOGY, BIOPROCESS AND FOOD SCIENCE
UNIVERSITI TEKNOLOGI MALAYSIA

WILAYAH PERSEKUTUAN KUALA LUMPUR

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DEVELOPMENT OF KERPOK LEKOR FROM EEL
(*Monopterus albus*)

By

SITI ZAHARAH BINTI ROSLI

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UNIVERSITY MALAYSIA TERENGGANU (UMT)
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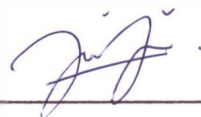
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DECLARATION

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any degree at UMT or other institutions.



SITI ZAHARAH BINTI ROSLI**Date:** 24 JUNE 2007**Approved by**

(DR. AMIR IZZWAN BIN ZAMRI)**Date:**

(CIK NORIZAH BT SARBON)**Date :**

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DEVELOPMENT OF KEROPOK LEKOR BELUT (*Monopterus albus*)

ABSTRACT

Keropok lekor is a popular and most favorite snack eaten as fried snack. *Monopterus albus* also known as asian swamp eel, rice eel, eel or paddy field eel. This species typically lives in freshwater area, but it also can be found in sea area is generally known as delicacies food and have high nutritional value. This study was carried out to produce keropok lekor from eel (*Monopterus albus*) by the combination between of eel fillet, sago flour and starch flour as main ingredient. The interrelations of the proximate analysis, physical analysis and sensory evaluation have been studied. There were five formulations with level of percentage of *Monopterus albus* fillet (50.4 %, 58.8 %, 67.2 % ,75.6 %eel with 24.4% , and 84 %) and five level of percentages of mixed flour (49.6%, 41.2 %, 32.8%, 24.4% and 16 %) used this study. The result for proximate analysis showed that moisture content, ash content, crude fat content, and protein content increased with the increased proportion of eel fillet. On the other hand, the physical analysis was colour and texture analysis. The result for colour analysis showed no significant different ($p>0.05$) between each sample. The result of texture analysis showed no significant difference ($p>0.05$) between the attribute firmness and toughness in the sample A.B and E. However, there were significantly difference ($p<0.05$) between sample C and D. The sensory evaluation shows that the most acceptances sample compared to others was sample D. There were high acceptance level for each attribute being test and the product has high potential for commercialization.

PENGHASILAN KEROPOK LEKOR DARIPADA BELUT (*Monopterus albus*)

ABSTRAK

Keropok lekor adalah merupakan snek yang paling popular dan digemari dan biasanya digoreng. *Monopterus albus* juga dikenali sebagai belut paya atau belut sawah, Kebiasaannya spesies ini hidup di kawasan air tawar tetapi ia juga boleh dijumpai di laut. Umumnya, belut ini dianggap sebagai makanan yang istimewa dan mempunyai nilai pemakanan yang baik. Kajian ini dijalankan untuk menghasilkan keropok lekor daripada belut (*Monopterus albus*) dengan kombinasi diantara isi belut, tepung sagu, dan tepung kanji sebagai bahan utama.. Perkaitan diantara analisis proksimat, analisis fizikal, dan penilaian sensori telah dikaji. Terdapat lima formulasi dengan aras peratusan isi belut *Monopterus albus* (50.4 %, 58.8 %, 67.2 %, 75.6 % dan 84 %) dengan lima aras peratusan campuran tepung (49.6%, 41.2 %, 32.8%, 24.4% dan 16 %) diguna dalam kajian ini. Hasil bagi proksimat analisis menunjukkan kandungan kelembapan, abu, lemak kasar, dan protein kasar meningkat dengan peningkatan isi belut. Sementara itu, analisis fizikal dijalankan adalah analisis warna dan analisis tekstur. Keputusan analisis bagi analisis warna menunjukkan tiada perbezaan yang signifikan ($p > 0.05$) diantara setiap sampel. Hasil analisis bagi analisis tekstur menunjukkan tiada perbezaan yang signifikan ($p > 0.05$) diantara atribut kekenyalan dan kekerasan diantara sampel A, B, dan E. Namun terdapat perbezaan yang signifikan ($p < 0.05$) diantara sampel C dan D. Penilaian sensori dijalankan untuk mengetahui tahap penerimaan bagi setiap atribut yang diuji menunjukkan sampel D paling digemari. Selain itu, hasil analisis menunjukkan tahap kesukaan yang sangat tinggi menunjukkan produk ini digemari dan berpotensi untuk dikomersilkan.