

DEVELOPMENT OF JUJUBE FROM JACKFRUIT  
(*Artocarpus heterophyllus*) PAGES

ING SEW MING

FACULTY OF AGRICULTURE AND FOOD SCIENCE  
UNIVERSITI MALAYSIA TERENGGANU  
MENGARAB SELATAN

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DEVELOPMENT OF MUFFIN FROM JACKFRUIT  
(*Artocarpus heterophyllus*) RAGS

LING SIEW YING

RESEARCH PROJECT submitted in partial fulfillment of the requirement  
for the Degree of Bachelor Food Science  
(Food Service and Nutrition)

FACULTY OF ARGOTECHNOLOGY AND FOOD SCIENCE  
UNIVERSITY MALAYSIA TERENGGANU  
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## DECLARATION

I hereby declare that this research project is based on my original work except for quotations and summaries which have been duly acknowledged.

28 June 2007



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LING SIEW YING  
UK 10417

28 June 2007

Approved by,



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DR. AMIR IZZWAN ZAMRI  
(Supervisor)

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## DEVELOPMENT OF MUFFIN FROM JACKFRUIT

*(Artocarpus heterophyllus)* RAGS

### ABSTRACT

This study was conducted to determine the effect of incorporating different level of jackfruit rags flour on muffin quality in term of texture analysis (firmness), moisture content, colour measurement and sensory evaluation. Muffins incorporated with 10 % to 50 % of jackfruit rags flour (JRF) were used in muffin making. As incorporation level of JRF increased, the moisture content, carbohydrate and protein were decreased. Beside that, the *L* value and *a* value were increased as the amount of JRF was increased. However, the *b* value was decreased as the amount of JRF was increased. On the contrary, the fibre content increased as the level of formulation of JRF increased. Sensory evaluation of the muffins using affective test showed significant differences ( $p < 0.05$ ) for eight sensory evaluations such as colour, aroma, firmness, oiliness, stickiness, sweetness, moistness and overall acceptance. The overall acceptability for muffin made from 10 % of JRF was rated higher as compared to control muffin.

## PEMBUATAN MUFFIN BERASAKAN EMPULUR

### NANGKA (*Artocarpus heterophyllus*)

#### ABSTRAK

Kajian ini dijalankan untuk menentukan kesan penambahan bagi tepung empulur nangka (JRF) ke atas kualiti muffin iaitu analisis tekstur (kekerasan), kandungan kelembapan, penentuan warna dan penilaian sensori. Formulasi muffin bertambah dengan 10 % hingga 50 % digunakan. Apabila kuantiti tepung empulur nangka (JRF) meningkat, kandungan kelembapan, karbohidrat dan protein menurun. Selain itu, nilai  $L$  dan  $a$  meningkat apabila kuantiti JRF meningkat. Walaubagaimanapun,  $b$  menurun apabila kuantiti JRF meningkat. Sebaliknya, kandungan fibre meningkat apabila JRF meningkat. Penilaian sensori muffin yang menggunakan ujian afektif menunjukkan perbezaan yang signifikan ( $p < 0.05$ ) bagi warna, bau, kekerasan, keminyakan, kelekitan, kemanisan, kelembapan dan penerima keseluruhan. Penerima keseluruhan bagi muffin dibuat daripada 10 % JRF mempunyai min yang lebih tinggi berbanding dengan muffin kawalan.