

EFFECT OF GSEB (*Rachyscentrum canadense*) FLESH
INCORPORATION ON PHYSICO-CHEMICAL,
MICROBIAL AND SENSORIAL
ACCEPTANCE OF BASTA

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Effect of cobia (*Rachycentrum canadum*) flesh incorporation on the physicochemical, microbial and sensory acceptance of pasta /
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**EFFECT OF COBIA (*Rachycentrum canadum*) FLESH INCORPORATION ON THE
PHYSICOCHEMICAL, MICROBIAL AND SENSORY ACCEPTANCE OF PASTA**

**By
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Bachelor of Food Science (Food Service and Nutrition)

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ENDORSEMENT

To project report entitled **Effect of Cobia (*Rachyentron Canaduinordinm*) Flesh Incorporation on the Physicochemical, Microbial and Sensory Acceptance of Pasta** by **Nor Fatin Adila binti Parinordin, UK16800** has been reviewed and corrections have been made according to the recommendations by examiners. This report is submitted to the Department of Food Science in partial fulfilment of the requirement of the degree of Food Science (Food Service and Nutrition), Faculty of Agrotechnology and Food Science, University Malaysia Terengganu.



(Associate Professor Dr. Amiza Binti Mat Amin)


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DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledge

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ABSTRACT

A study was conducted to determine the effects of incorporating cobia (*Rachycentron canadum*) (0%, 5%, 10%, 15%, 20%, 25%) into pasta formulation. Finished product was evaluated for protein content, texture (hardness, firmness and tensile strength), color, cooking quality, shelf life and sensory evaluation. The addition cobia flesh as an ingredient in pasta has increased the protein content pasta. Moreover, increasing of cobia flesh caused decrease in hardness, cooking loss and cooking time. Furthermore, addition of cobia flesh increased the growth of bacteria and lowers the growth of yeast and mould. However, cobia flesh incorporation did not affect colour parameters, firmness and tensile strength of the pasta. All sensory evaluation attributes (colour, smoothness of surface, firmness, chewiness, aroma, taste and overall acceptance) showed a significant difference between formulations except for taste ($p < 0.05$). The most acceptable formulation was pasta with 5% incorporation of cobia flesh.

ABSTRAK

Satu kajian telah dijalankan untuk menilai kesan penambahan isi ikan aruan tasek (*Rachycentron canadum*) (0%, 5%, 10%, 15%, 20%, 25%) ke dalam formulasi pasta. Produk akhir pasta telah dinilai berdasarkan kandungan protein, tekstur (kekerasan, firmness dan kekuatan tegangan), warna, kualiti masakan, jangka hayat dan penilaian deria produk. Penambahan isi aruan tasek telah meningkatkan kandungan protein pasta. Selain itu, penambahan isi aruan tasek juga mengakibatkan penurunan kekerasan, kehilangan memasak dan masa memasak. Walau bagaimana pun, penambahan isi aruan tasek tidak mempengaruhi warna, firmness dan kekuatan tegangan. Penambahan isi ikan meningkatkan pertumbuhan bakteria dan merendahkan pertumbuhan yis dan kulat. Semua atribut penilaian deria (warna, kelicinan permukaan, kekerasan, kekenyalan, aroma, rasa dan penerimaan keseluruhan) menunjukkan perbezaan yang signifikan antara formulasi pasta kecuala rasa ($p < 0.05$). Formulasi yang paling diterima ialah pasta dengan penambahan isi ikan aruan tasek sebanyak 5%.