

DEVELOPMENT OF *MONG* (*STENOCHLAENA
PALUSTRIS*) CRACKERS

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DEVELOPMENT OF MIDING (*STENOCHLAENA PALUSTRIS*) CRACKERS

By
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UNIVERSITI MALAYSIA TERENGGANU**

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

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ABSTRACT

Development of Miding cracker is a study about the incorporation of Miding either in chopped form or extracts form into plain cracker. Six formulations were produced that is 5%, 10%, and 15% of Miding for chopped Miding and also for extract Miding beside the plain cracker as the control. Miding or its scientific name *Stenochlaena Palustris* is a type of fern that is can be found abundantly but the usefulness of it is not diversified. The unique characteristic of it is the pinkish colour of the juvenile leaves that is immature leaves that used for this study. It contains important micronutrient and also macronutrient like water, protein, and also fiber. This study will determine the effect of incorporation of Miding into cracker in terms of chemical analysis that is protein, fat, fiber, carbohydrate, moisture and ash and for physical; it will be tested in term of colour, and texture that is for hardness and fracturability value. The acceptability of this cracker will be tested in term of its appearance, colour, smell, fracturability, flavor and also overall acceptance. The result suggest that the addition of Miding gives significant differences ($p < 0.05$) for almost of the attribute and parameter tested. From sensory, it shows that the acceptance of chopped Miding is almost the same with control cracker.

ABSTRAK

Penghasilan Miding kraker ialah suatu kajian tentang penambahan tumbuhan yang dikenali sebagai Miding samada dalam bentuk yang telah dicincang ataupun dijadikan dalam bentuk ekstrak. Sebanyak 6 formulasi telah dihasilkan iaitu 5%, 10%, and 15% Miding samada Miding yang dicincang ataupun dalam bentuk ekstrak, termasuklah kraker kosong sebagai rujukan. Miding ataupun nama saintifiknya iaitu *Stenochlaena Palustris* adalah sejenis paku pakis yang boleh didapati di banyak kawasan, tetapi ia hanya sedikit sahaja digunakan dan tidak pelbagai. Keunikan tumbuhan ini terletak pada daunnya yang berwarna kemerahan pada peringkat pra-matang dimana ia juga yang digunakan dalam projek ini. Miding mengandungi pelbagai makronutrien dan juga mikronutrien seperti air, protein dan juga fiber. Kajian ini akan menentukan kesan penambahan Miding kepada kraker dari segi analisis kimia iaitu protein, fat, fiber, karbohidrat, kandungan kelembapan dan juga abu, manakala dari segi analisis fizikal, ia akan dianalisis dari segi warna dan teksur iaitu kekerasan dan kerangupan. Tahap penerimaan kraker ini juga dijalankan melalui penilaian sensori dari segi ciri rupabentuk, warna, bau, kerangupan, rasa dan juga penerimaan keseluruhan. Hasil kajian mendapati bahawa penambahan Miding memberi perbezaan yang bernilai ($p < 0.05$) bagi hampir semua ciri dan parameter yang di analisis. Bagi penilaian sensori, didapati bahawa penerimaan kraker menggunakan Miding yang dicincang adalah hampir sama dengan penerimaan kraker rujukan.