EFFECT OF [illegible] MOSA [illegible] LEAVES EXTRACTION ON [illegible] PELLET PRODUCTION

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Lihat Sebelah

EFFECT OF BANANA *(MUSA SPP.)* LEAVES EXTRACTION ON 'KUIH TEPUNG PELITA' PRODUCTION

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RESEARCH PROJECT in partial fullfillment of the requirement for the Bachelor Degree of Food Science (Foodservice and Nutrition)

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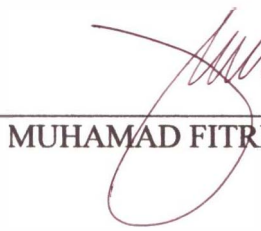
Decralation

I hereby declare that this thesis is based on my original work except for the quotations and citations, which have been duly acknowledge.



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EFFECT OF BANANA *(MUSA SPP.)* LEAVES EXTRACTION ON 'KUIH TEPUNG PELITA' PRODUCTION

ABSTRACT

This study was done to produce the extract of banana *(Musa spp.)* leaves from genus Awak *(Musa Sapientum cv.Awak)* and Abu *(Musa Sapientum cv.Abu)* and its effects of applying 2% and 4% for both banana leaves extract on kuih tepung pelita production. Determination of vitamin C of the banana leaves extract and determination of colour and pH of Kuih Tepung Pelita was done. Quantitative Descriptive Analysis (QDA) for kuih tepung pelita that involved 8 trained panels also was done. Extraction using steam distillation method was used to get the extract of banana leaves. The determination of vitamin C for banana leaves extract shows that it contains very low L-ascorbic acid which are 0.64 ± 0.46 mg/100g for Awak banana leaves while 0.57 ± 0.41 mg/100g for Abu banana leaves. All samples were in weak acidity form which the pH value range between 6.19 ± 0.06 to 6.65 ± 0.16. Applying the extract of banana leaves to kuih tepung pelita have no effect on its colour. There are significant different at $p<0.05$ for odour and taste of banana leaves attributes which Awak banana leaves extract have stronger odor and taste of banana leaves than Abu banana leaves extract. This study also shows that banana leaves extract may replace the function of banana leaves on kuih tepung pelita production. The samples that contain extract of banana leaves were better than control sample which wrapped by banana leaves. So, this shows that banana leaves extract was improved the attributes structure of kuih tepung pelita.

KESAN PENGGUNAAN EKSTRAK DAUN PISANG *(MUSA SPP.)* KE ATAS PENGHASILAN KUIH TEPUNG PELITA

ABSTRAK

Kajian ini dijalankan untuk menghasilkan ekstrak daun pisang *(Musa spp.)* dari jenis Awak *(Musa Sapientum cv.Awak)* dan Abu *(Musa Sapientum cv.Abu)* serta kesan penggunaan sebanyak 2% dan 4% ekstrak kedua-dua jenis daun pisang ke atas penghasilan kuih tepung pelita. Penentuan kandungan vitamin C terhadap ekstrak daun pisang dan penentuan warna serta pH terhadap kuih tepung pelita telah dijalankan. Analisis Deskriptif Kuantitatif (ADK) bagi kuih tepung pelita pula telah melibatkan 8 orang panel terlatih. Kaedah pengekstrakan melalui penyulingan stim digunakan untuk mendapatkan aroma daun pisang. Hasil penentuan vitamin C menunjukkan bahawa ekstrak daun pisang mempunyai kandungan L-asid askorbik yang sangat rendah iaitu 0.64 ± 0.46 mg/100g bagi daun pisang Awak manakala 0.57 ± 0.41 mg/100g bagi daun pisang Abu. Kedua-dua ekstrak ini bersifat asid lemah dengan nilai pH di antara 6.19 ± 0.06 hingga 6.65 ± 0.16. Penggunaan ekstrak daun pisang juga didapati tidak memberi kesan kepada warna kuih tepung pelita. Terdapat perbezaan yang signifikan pada $p<0.05$ bagi atribut bau dan rasa daun pisang di mana ekstrak daun pisang Awak mempunyai bau dan rasa yang lebih kuat berbanding ekstrak daun pisang Abu. Kajian ini juga menunjukkan bahawa penggunaan ekstrak daun pisang mampu menggantikan daun pisang sebenar dalam penghasilan kuih tepung pelita. Sampel yang mengandungi ekstrak daun pisang juga didapati lebih baik daripada sampel kawalan yang dibungkus menggunakan daun pisang. Maka, ini menunjukkan bahawa ekstrak daun pisang memperbaiki struktur atribut-atribut kuih tepung pelita.