

The Effect Of The Comparison Between Modified Cassava Flour And Fermented Soy Bean Flour ‘Tempe’ On The Characteristics Of Crackers

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ABSTRACT

The aimed of this research are to determine the effect of the comparison between Mocaf and fermented soy bean flour (Tempe flour) on the characteristics of crackers, to get the best treatment of the comparison between Mocaf and Tempe flour for making crackers, and to determine acceptance of panelist with sensory test. This researched used a completely randomized design with 5 treatments and 3 replications. The Treatment from the research is mixing mocaf and tempe flour. The formulation is A (100%: 0%), B (80%: 20%), C (70%: 30%), D (60%: 40%) and E (50%: 50%). The data were analyzed by using analysis of variance (ANOVA) and if there were found significant difference, there were analyzed with Duncan's New Multiple Range Test (DNMRT) in significance level 5%. The results of the research showed that mixing Mocaf and tempe flour was significantly to moisture content, ash content, protein content, fat content, free fatty acid content, carbohydrates content, water absorption and hardness value. Crackers with treatment E (50%: 50%) is the best treatment, the characteristics' quality of the water content 2.59%, ash content of 1.92%, protein content 20.59%, fat content 20.59%, free fatty acids 0.23%, carbohydrates 54.32%, water absorption 173.95%, hardness value of 121.62 N / cm², the energy value of 523.89 kcal / 100 g, total plate count 1.3 x 10², estimation of shelf life during 8.13 months. Treatment E is also the most preferred treatment by panelists in terms of the colour acceptance by sensory test with a score 3.9, the taste 3.9, the aroma 3.6 and the texture 4.2. The addition of tempe flour to crackers improve the quality.

Keyword: Characteristics, Crackers, Mocaf, Tempe Flour

Pengaruh Perbandingan Tepung Mocaf (*Modified Cassava Flour*) dengan Tepung Tempe Kedelai Terhadap Karakteristik *Crackers*

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ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh perbandingan tepung Mocaf dan tepung tempe kedelai terhadap karakteristik *crackers*, mendapatkan perlakuan tingkat perbandingan Mocaf dan tepung tempe kedelai yang terbaik dalam pembuatan *crackers* dan mengetahui tingkat penerimaan panelis terhadap *crackers* Mocaf dengan uji organoleptik. Penelitian menggunakan rancangan acak lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan penelitian adalah pencampuran tepung Mocaf dan tepung tempe kedelai. Formulasi tersebut adalah A(100% : 0%), B (80% : 20%), C (70% : 30%), D(60% : 40%) dan E (50% : 50%). Data yang diperoleh dianalisa menggunakan analisis sidik ragam dan jika berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa *crackers* dengan pencampuran tepung Mocaf dan tepung tempe kedelai berpengaruh nyata terhadap karakteristik *crackers*. *Crackers* dengan perlakuan E (50% : 50%) adalah perlakuan terbaik, dengan karakteristik mutu kadar air 2.59%, kadar abu 1.92%, kadar protein 20.59%, kadar lemak 20.59%, asam lemak bebas 0.23%, kadar karbohidrat 54.32%, daya serap air 173,95%, nilai kekerasan 121.62 N/cm², nilai energi 523.89 kkal/100 gram, angka lempeng total 1.3×10^2 , pendugaan umur simpan selama 8.13 bulan. Perlakuan E juga merupakan perlakuan paling disukai oleh panelis dari segi organoleptik dengan skor penerimaan warna 3.9, rasa 3.9, aroma 3.6 dan tekstur 4.2. Penambahan tepung tempe kedelai memperbaiki mutu *crackers* yang dihasilkan.

Keyword : *Crackers*, Karakteristik Mutu, Mocaf, Tepung Tempe Kedelai