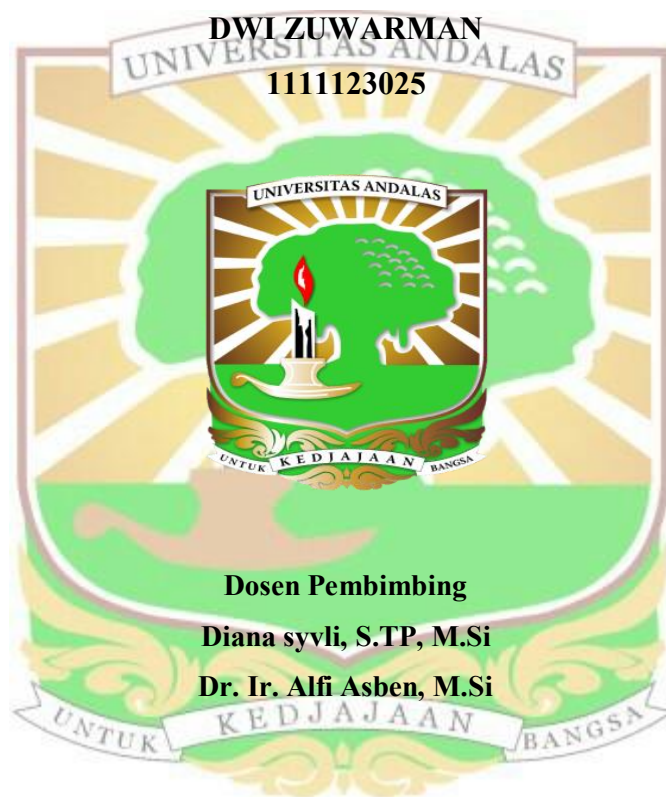


**PENGARUH PENAMBAHAN TEPUNG TEMPE (*GLYCINE
MAX*) TERHADAP *COOKIES* TEPUNG PISANG RAJA
(*MUSAPARADISIACA*, L.)**



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The Influences of Addition Tempe Flour (*Glycine max*) to
PisangRaja Flour(*Musa paradisiaca*L.) Cookies

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ABSTRACT

This research aims to study about the influences of addition Tempe flour (*Glycine max*) on PisangRaja flour (*Musa paradisiaca* L.) cookies concerned to the characteristic quality of cookies physically and chemically. This research used randomized completely design (RAL) consisting of 5 treatments and 3 repetitions. The data analysis statistically by using ANOVA and proceed with a test Data were analyze using ANOVA and continued with Duncan's New Multiple Range Test (DNMRT) at degree 5%. The treatment of this research was the addition A (100% pisang raja flour with 0% addition of tempe flour), B (95% pisang raja flour with 5% addition of tempe flour), C (90% pisang raja flour with 10% addition of tempe flour), D (85% pisang raja flour with 15% addition of tempe flour), and E (80% pisang raja flour with 20% addition of tempe flour). The observations on cookies products produces for physical analysis that was sensory analysis (aroma, color, taste and texture), water absorption, hardness while Chemical analysis which observed are moisture content, ash content, fat content, protein content, carbohydrate content, free fatty acid (FFA), and microbiological analysis total plate count. The result of this research shown that the difference additions of tempe flour significantly affect as analysis moisture content, ash content, fat content, protein content, carbohydrate content and non-significant of water absorption, hardness and free fatty acid levels. The best product based on sensory analysis cookies was cookies on treatment B (addition 95% PisangRaja flour: 5 % tempe flour) because it has been contained enough nutrition and in terms of sensory analysis can still accepted as preferred product. The result of the treatment B obtained an average water content (4, 39%), ash content (1, 44%), protein content (5, 40%), fat content (12, 67%), carbohydrate content (76, 09%), hardness (211, 16 N/cm²), the water absorption (76, 52%), fatty acids free (0, 46%) and total plate count 2, 1 x 10⁻³ cfu/ml.

Keyword –pisang raja flour, tempe flour, cookies

Pengaruh Penambahan Tepung Tempe (*glycine max*) terhadap Cookies Tepung Pisang Raja (*Musa paradisiaca* L.)

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ABSTRAK

Penelitian ini bertujuan untuk mempelajari pengaruh penambahan tepung Tepung Tempe (*glycine max*) terhadap cookies pisang raja (*Musa paradisiaca* L.) terhadap karakteristik mutu cookies secara fisik dan kimia. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) terdiri dari 5 perlakuan dan 3 kali ulangan. Data dianalisa secara statistik dengan menggunakan ANOVA dan dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5%. Perlakuan pada penelitian ini adalah A (100% tepung pisang raja dengan 0% penambahan tepung tempe), B (95% tepung pisang raja dengan 5% penambahan tepung tempe), C (90% tepung pisang raja dengan 10% penambahan tepung tempe), D (85% tepung pisang raja dengan 15% penambahan tepung tempe), dan E (80% tepung pisang raja dengan 20% penambahan tepung tempe). Pengamatan pada produk cookies yang dihasilkan adalah untuk analisa fisik yaitu uji organoleptik (aroma, warna, rasa dan tekstur), daya serap air, kekerasan sedangkan analisa kimia yang diamati antara lain kadar air, kadar abu, kadar lemak, kadar protein, kadar karbohidrat, kadar asam lemak bebas (ALB), serta analisis mikrobiologi yaitu uji lempeng total. Hasil penelitian menunjukkan bahwa perbedaan penambahan tepung tempe berpengaruh nyata terhadap analisis kadar air, kadar abu, kadar lemak, kadar protein, kadar karbohidrat, daya serap air, kekerasan dan kadar asam lemak bebas. Produk terbaik berdasarkan uji organoleptik cookies adalah produk cookies pada perlakuan B (95% Tepung pisang raja : 5% Tepung tempe) merupakan produk terbaik karena memiliki kandungan gizi yang cukup dan dari segi organoleptik masih dapat diterima sebagai produk yang disukai. Hasil pengujian terhadap perlakuan B diperoleh rata-rata nilai kadar air (4,39 %), kadar abu (1,44 %), kadar protein (5,40 %), kadar lemak (12,67 %), kadar karbohidrat (76,09 %), uji kekerasan (211,16 N/cm²), daya serap air (76,52%) asam lemak bebas (0,46%) dan angka lempeng total $2,1 \times 10^{-3}$ cfu/ml.

Kata Kunci : tepung pisang raja, tepung tempe, cookies