#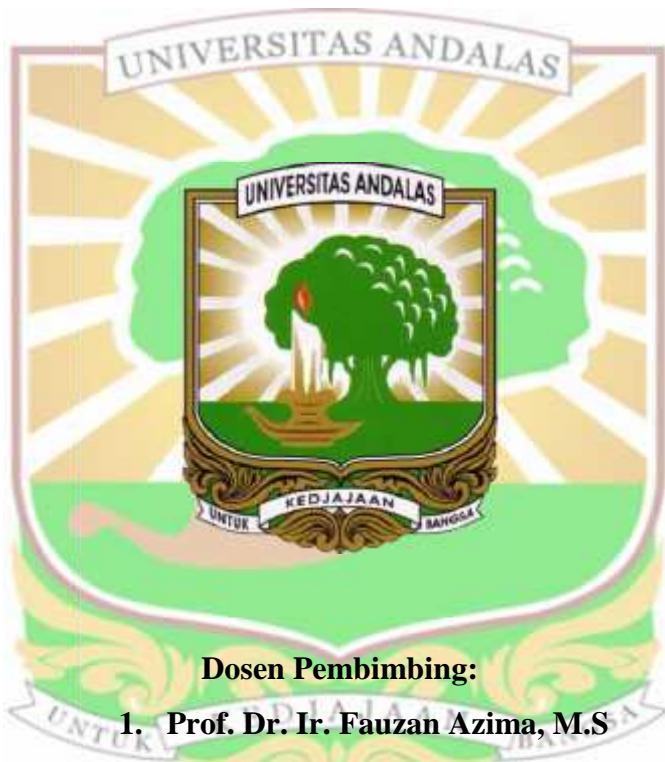 PENGARUH PERBANDINGAN TEPUNG KACANG MERAH (*Phaseolus vulgaris* L.) DAN TEPUNG JAGUNG (*Zea mays*) TERHADAP KARAKTERISTIK *COOKIES*

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FAKULTAS TEKNOLOGI PERTANIAN

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Pengaruh Perbandingan Tepung Kacang Merah *(Phaseolus vulgaris* L.*)* dan Tepung Jagung *(Zea mays)* terhadap Karakteristik *Cookies*

Ridha Yasmin, Fauzan Azima, Kesuma Sayuti

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh perbandingan tepung kacang merah dan tepung jagung terhadap karakteristik *cookies*. Rancangan percobaan yang digunakan pada penelitian ini yaitu Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Perlakuan yang digunakan yaitu perbandingan tepung kacang merah dengan tepung jagung yaitu; A (100% Tepung Kacang Merah : 0% Tepung Jagung), B (90% Tepung Kacang Merah : 10% Tepung Jagung), C (80% Tepung Kacang Merah : 20% Tepung Jagung), D (70% Tepung Kacang Merah : 30% Tepung Jagung), dan E (60% Tepung Kacang Merah : 40% Tepung Jagung). Data hasil penelitian dianalisis dengan ANNOVA dan jika berpengaruh nyata maka dilanjutkan dengan uji DNMRT pada taraf 5%. Pengamatan yang dilakukan diantaranya kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar serat kasar, aktivitas antioksidan, nilai energi, kekerasan (*hardness*), dan uji organoleptik dengan uji skala hedonik meliputi warna, aroma, rasa, dan tekstur pada *cookies*. Hasil penelitian menunjukkan bahwa perbandingan tepung kacang merah dan tepung jagung berpengaruh nyata terhadap kadar air, kadar abu, kadar protein, kadar serat kasar, aktivitas antioksidan, nilai energi, kekerasan dan organoleptik warna, rasa, dan tekstur. Tetapi berpengaruh tidak nyata terhadap kadar lemak, kadar karbohidrat dan organoleptik aroma. Berdasarkan perlakuan terbaik adalah perlakuan C (80% Tepung Kacang Merah : 20% Tepung Jagung). Dengan analisis kimia yaitu kadar air 3,50%, kadar abu 2,22%, kadar protein 11,00%, kadar lemak 22,95%, kadar karbohidrat 60,33%, serat kasar 2,08%, nilai energi 494,127 kkal/100g, aktivitas antioksidan 18,46%, kekerasan 46,39 N/cm^2 dan penilaianorganoleptik dengan nilai warna 3,75 (suka) aroma 3,65 (suka), rasa 3,40 (suka), dan tekstur 3,65 (suka).

Kata Kunci : kacang merah, cookies, tepung jagung, karakteristik

The effect of the ratio of red bean flour (*Phaseolus vulgaris* L.) and corn flour (*Zea mays*) on the characteristics of cookies

Ridha Yasmin, Fauzan Azima, Kesuma Sayuti

ABSTRACT

This study aims to determine the effect of the ratio of red bean flour (*Phaseolus vulgaris* L.) and corn flour (*Zea mays*) on the characteristics of cookies. The research method used a Completely Randomized Design (CRD) with 5 treatments and 3 replications. The treatments used were the ratio of red bean flour with corn flour, namely; A (100% Red Bean Flour : 0% Corn Flour), B (90% Red Bean Flour : 10% Corn Flour), C (80% Red Bean Flour : 20% Corn Flour), D (70% Red Bean Flour : 30% Corn Flour), and E (60% Red Bean Flour : 40% Corn Flour). The research data were analyzed by ANNOVA and if it had a significant effect, then continued with Duncan's New Multiple Range Test (DNMRT) at the 5%. Observations made were water content, ash content, protein content, fat content, carbohydrate content, crude fiber content, antioxidant activity, energy, hardness, and organoleptic tests (color, aroma, taste, and texture) with hedonic scale. The results showed that the ratio of red bean flour and corn flour had a significant effect on water content, ash content, protein content, crude fiber content, antioxidant activity, energy, hardness and organoleptic color, taste, and texture. But the effect is not significant on fat content, carbohydrate content and aroma organoleptic. Based on the best treatment is treatment C (80% Red Bean Flour: 20% Corn Flour). By chemical analysis, the water content is 3.50%, ash content is 2.22%, protein content is 11.00%, fat content is 22.95%, carbohydrate content is 60.33%, crude fiber is 2.08%, energy value is 494.127 kcal. /100g, antioxidant activity 18.46%, hardness 46.39 N/cm2 and organoleptic score color value 3.75, aroma3.65, taste 3.40, and texture 3.65.

Keywords : kidney beans, cookies, corn flour, characteristics