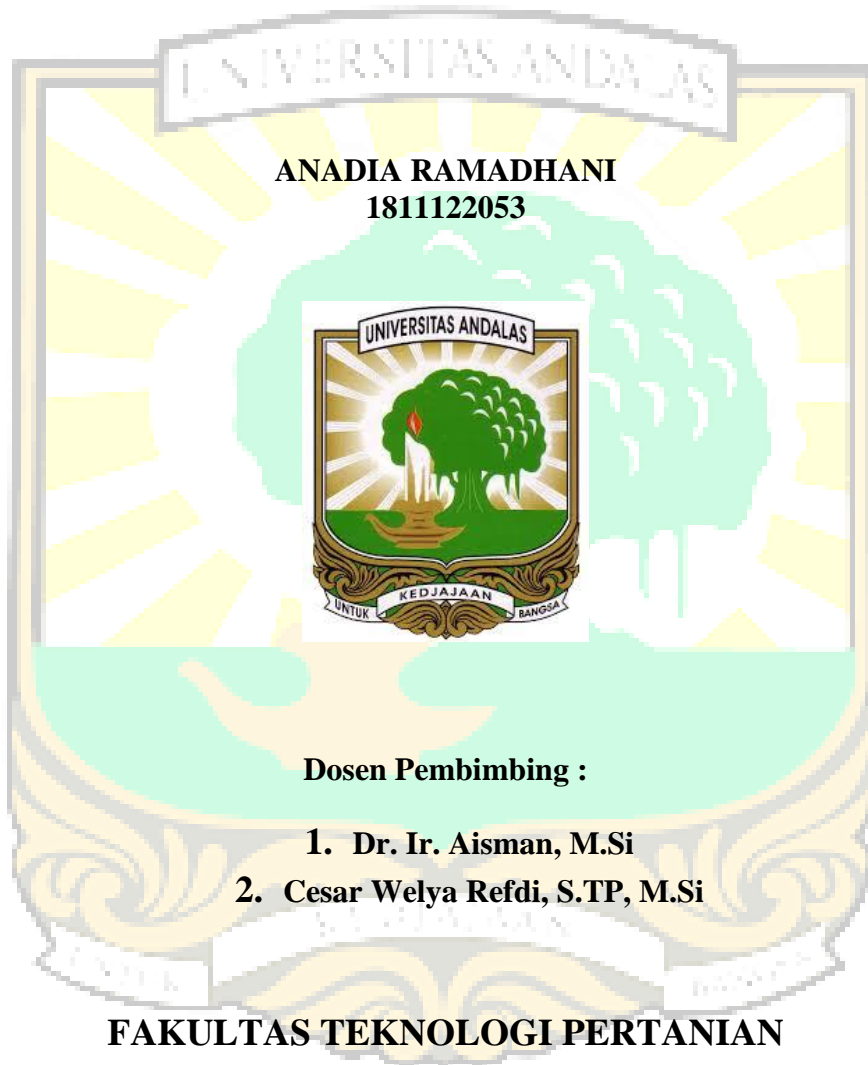


**SUBSTITUSI TEPUNG TERIGU DENGAN TEPUNG SORGUM
(*Sorghum bicolor* (L.) Moench) TERHADAP KARAKTERISTIK
MUTU ROTI MANIS UBI JALAR UNGU (*Ippomea batatas* L.
Poiret)**



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Substitusi Tepung Terigu dengan Tepung Sorgum (*Sorghum bicolor* (L.) Moench) terhadap Karakteristik Mutu Roti Manis Ubi Jalar Ungu (*Ippomea batatas* L. Poiret)

Anadia Ramadhani¹, Aisman², Cesar Welya Refdi³

ABSTRAK

Roti manis merupakan roti yang memiliki rasa manis, bertekstur empuk, berbentuk menarik dan dapat ditambahkan dengan berbagai macam isian. Penelitian ini bertujuan untuk mengetahui substitusi tepung terigu dengan tepung sorgum terhadap karakteristik mutu roti manis. Roti manis dibuat dari 15% bagian tepung ubi jalar ungu dan 85% kombinasi perlakuan antar tepung terigu dengan tepung sorgum. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 3 ulangan. Data yang diperoleh dianalisis menggunakan ANOVA dan uji lanjut dengan DNMRT pada taraf nyata 5%. Perlakuan yang digunakan adalah substitusi tepung terigu dengan tepung sorgum yaitu : A (85% Tepung Terigu : 0% Tepung Sorgum), B (80% Tepung Terigu : 5% Tepung Sorgum), C (75% Tepung Terigu : 10% Tepung Sorgum), D (70% Tepung Terigu : 15% Tepung Sorgum), dan E (65% Tepung Terigu : 20% Tepung Sorgum). Hasil penelitian menunjukkan bahwa substitusi tepung terigu dengan tepung sorgum pada berbagai konsentrasi memberikan pengaruh nyata taraf 5% terhadap kadar air, protein, total gula, serat kasar, aktivitas antioksidan, derajat pengembangan adonan, warna, organoleptik (tekstur) dan tingkat perbedaan tepung terigu dengan tepung sorgum tidak berbeda nyata taraf 5% terhadap kadar abu, kadar lemak, karbohidrat dan uji organoleptik (rasa, warna dan aroma). Berdasarkan analisis kimia dan organoleptik didapatkan perlakuan terbaik adalah roti manis dengan perlakuan D (70% Tepung Terigu : 15% Tepung Sorgum) dengan nilai analisis kimia yaitu kadar air 27,55%, kadar abu 1,33%, kadar protein 7,58%, kadar lemak 11,10%, kadar karbohidrat 52,43%, kadar total gula 8,11%, kadar serat kasar 8,28%, aktivitas antioksidan 70,56%, derajat pengembangan adonan 175,44%, warna 82,86 Hue (*yellow-red*) dan analisis sensori adalah warna 3,60 (suka), aroma 3,68 (suka), rasa 4,00 (suka), dan tekstur 4,64 (sangat suka).

Kata kunci : roti manis, tepung sorgum, tepung terigu, karakteristik, mutu roti manis.

Substitution of Wheat Flour with Sorghum Flour (*Sorghum bicolor* (L.) Moench) on the Quality Characteristic of Purple Potato (*Ippomea batatas* L. Poiret) Sweet Bread

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ABSTRACT

Sweet bread is bread that has a sweet taste, soft texture, attractive shape and can be added with various fillings. The research aims to determine substitution of wheat flour with sorghum flour on the characteristics of the sweet bread. Sweet bread was made from 15% portion of purple sweet potato flour and 85% combination of treatment between wheat flour and sorghum flour. This research used a completely randomized design (CRD) with 5 treatments and 3 replications. This result were analyzed using ANOVA and continued with DNMRT at the 5% significant level. The treatments used were A (85% wheat flour : 0% sorghum flour), B (80% wheat flour : 5% sorghum flour), C (75% wheat flour : 10% sorghum flour), D (70% wheat flour : 15% sorghum flour), E (65% wheat flour : 20% sorghum flour). Based on this research, there was a significant difference at the 5% level on the analysis of moisture content, protein content, total sugar content, crude fiber content, antioxidant activity, dough development degree, color, organoleptic (texture) and not significantly different at 5% level on analysis of ash content, fat content, carbohydrate content and organoleptic test (taste, color and aroma). Based on chemical analysis and organoleptic on the receipt of the sweet bread product, the best is sweet bread with addition of D (70% wheat flour : 15% sorghum flour : 15% purple sweet potato flour) with chemical analysis value of 27.5% water content; ash content of 1.33%; protein content of 7.58%; fat content of 11.10%; carbohydrate content of 52.43%; total sugar content of 8.11%; crude fiber content of 8.28%; antioxidant activity of 70.56%; dough development degree of 175.44%, color of 82.86 Hue (*yellow red*) and sensory analysis are color 3.60 (like), aroma 3.68 (like), taste 4.00 (like), and texture 4.64 (very like).

Keywords : sweet bread, shorgum flour, wheat flour, characteristic, quality of sweet bread.