

# **Pengaruh Perbandingan Terigu dengan Parutan Bengkuang (*Pachyrhizus erosus*) Terhadap Mutu dan Karakteristik Cookies yang Dihasilkan**

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## **ABSTRAK**

Penelitian ini bertujuan untuk mempelajari pengaruh penambahan parutan bengkuang (*Pachyrhizus erosus*) terhadap mutu dan karakteristik *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 kombinasi antara terigu dan parutan bengkuang yaitu sebesar 70%:30%, 60%:40%, 50%:50%, 40%:60% dan 30%:70%. Pengamatan pada produk *cookies* yang dihasilkan adalah analisa sifat fisik yaitu kekerasan analisa kimia (kadar air, kadar abu, kadar protein, kadar lemak, kadar asam lemak bebas, kadar serat kasar, kadar karbohidrat dan kadar inulin), uji mikrobiologi, uji daya simpan dan organoleptik (warna, aroma, rasa, tekstur). Hasil penelitian menunjukkan bahwa penambahan parutan bengkuang berpengaruh nyata terhadap kekerasan, kadar air, kadar abu, kadar protein, kadar asam lemak bebas (asam oleat) dan kadar inulin, tetapi tidak memberikan pengaruh nyata terhadap kadar lemak, kadar serat kasar dan kadar karbohidrat. Produk terbaik berdasarkan uji organoleptik adalah *cookies* pada perlakuan A (penambahan 30% parutan bengkuang) dengan rata-rata hasil analisis kandungan kimia pada produk terbaik yaitu: kadar air (2,78%), kadar abu (1,96 %), kadar protein (7,03%), kadar lemak (25,41%), asam lemak bebas (0,29%), kadar serat kasar (1,74 %), karbohidrat (64,30%) dan kadar inulin (8,61%). Untuk analisis fisiknya yaitu kekerasan ( $178,49 \text{ N/cm}^2$ ) dan uji mikrobiologi angka lempeng total ( $2,4 \times 10^3 \text{ cfu/g}$ ).

**Kata Kunci :** *Terigu, Parutan Bengkuang, Cookies*

# **The Effect Comparison Wheat Flour with Bengkuang Rasp (*Pachyrhizus erosus*) to The Quality and Characteristics of Cookies**

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## **ABSTRACT**

The purpose of this research is to study about The Effect of Addition Bengkuang rasp (*Pachyrhizus erosus*) to the quality and characteristics of cookies physically and chemically. This research used randomized completely design (RAL) consisting of 5 treatments and 3 repetitions. Data analyzed statistically using ANOVA and continued with Duncan's New Multiple Range Test (DNMRT) at degree 5%. The treatment in this research combination of wheat flour with Bengkuang rasp were 70%:30%, 60%:40%, 50%:50%, 40%:60% and 30%:70%. The observations on cookies products for physical analysis is hardness, chemical analysis (water content, ash content, protein content, fat content, free fatty acid content, crude fiber content and carbohydrate content), microbiological analysis, shelf life analysis and organoleptic (color, aroma, flavor, texture). The result of this research show additions Bengkuang rasp significant to hardness, water content, ash content, protein content and free fatty acid content but non significant to fat content, crude fiber content and carbohydrate content. The best products based on organoleptic test are cookies in treatment A (addition 30% bengkuang rasp) with the average result of chemical analysis in product that is water content (2,78%), ash content (1,96%), protein content (7,03%), fat content (25,41%), free fatty acid content (0,29%), crude fiber content (1,74%), carbohydrate content (64,30%) and inulin content (8,61%). Physical analysis of product is hardness ( $178,49 \text{ N/cm}^2$ ) and total plate count ( $2,4 \times 10^3 \text{ cfu/g}$ ).

**Keywords :** Wheat flour, Bengkuang rasp, Cookies