

**PENGARUH SUBSTITUSI TERIGU DENGAN TEPUNG
TAPAI UBI KAYU (*Manihot esculenta*, Crantz) TERHADAP
KARAKTERISTIK *CRACKERS***



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Pengaruh Substitusi Terigu dengan Tepung Tapi Ubi kayu (*Manihot esculenta*, Crantz) terhadap Karakteristik *Crackers*

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ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui konsentrasi substitusi tepung tapi terbaik dalam pembuatan *crackers*. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) terdiri dari 5 perlakuan perbedaan konsentrasi substitusi tepung tapi dengan 3 pengulangan. Perlakuan dalam penelitian ini konsentrasi substitusi tepung tapi A (0%), B (15%), C (30%), D (45%) dan E (60%). Pengamatan yang dilakukan terhadap bahan baku dan produk *crackers* yang meliputi; kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar alkohol, kekerasan, uji organoleptik dan angka lempeng total. Hasil penelitian ini menunjukkan substitusi tepung tapi terhadap terigu dalam pembuatan *crackers* berpengaruh nyata terhadap kadar air, kadar abu, kadar protein, kadar karbohidrat, nilai kekerasan, nilai organoleptik warna, rasa dan tekstur, tetapi berpengaruh tidak nyata terhadap kadar lemak nilai organoleptik aroma. Produk yang terbaik adalah perlakuan C yaitu *crackers* dari substitusi tepung tapi konsentrasi 30%. Karakteristik perlakuan C adalah kadar air 5,33%, kadar abu 2,53%, kadar protein 8,21%, kadar lemak 13,95%, kadar karbohidrat 69,59%, nilai kekerasan 96,30 N, angka lempeng total $1,3 \times 10^4$ cfu/g, nilai organoleptik warna 3,80, aroma 3,63, rasa 3,50 dan tekstur 3,37.

Kata kunci - tepung tapi ubi kayu, terigu, substitusi, *crackers*

The Effect Substitution of Wheat Flour with Tapi of Cassava (*Manihot esculenta*, Crantz) Flour Toward The Characteristics of Crackers

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ABSTRACT

The purpose of this study was to determine the effect of wheat flour substitution with tapi of cassava flour in the producing of crackers. This research used *Completely Randomized Design* (CRD) consist of 5 treatments and 3 repetitions. The treatments of this research was concentration substitution of tapi of cassava flour were; A (0%), B (15%), C (30%), D (45%) dan E (60%). Evaluation are conducted on the characteristics of raw materials and crackers products which include; water content, ash content, protein content, fat content, carbohydrate content, alcohol content, hardness, total plate count and organoleptic test. This study showed that the substitution of tapi of cassava flour on wheat flour in crackers producing had significant effect on water content, ash content, protein content, carbohydrate content, hardness value, organoleptic such as color, taste and texture, but does not have significant effect on fat content and aroma. The best product is C treatment using 30% concentration of fermented cassava flour substitution. Characteristics of C treatment were 5.33% of moisture content, 2.53% of ash content, 8.21% of protein content, 13.95% of fat content, 69.59% of carbohydrate content, 96.30 N of hardness, 1.3×10^4 cfu/g of total plate count and organoleptic value consist of 3.80 of color, 3.63 of aroma, 3.50 of taste and 3.37 of texture.

Keywords- tapi of cassava flour, wheat flour, substitution, crackers.