

PENGARUH SUBSTITUSI TEPUNG DAUN SUKUN (*Artocarpus altilis*) TERHADAP KADAR FLAVONOID, KADAR PROKSIMAT, DAN SIFAT ORGANOLEPTIK PADA CRACKERS

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Abstrak

Daun sukun memiliki beragam kandungan antioksidan seperti flavonoid sehingga banyak dikonsumsi untuk kesehatan termasuk menurunkan glukosa darah pada penyandang DM Tipe 2. Penelitian ini bertujuan mengetahui pengaruh substitusi tepung daun sukun terhadap kadar flavonoid, kadar proksimat, dan sifat organoleptik crackers serta menentukan formulasi terbaik. Penelitian ini menggunakan desain penelitian eksperimental dengan Rancangan Acak Lengkap (RAL) menggunakan 3 formulasi tepung daun sukun : tepung terigu (F) yaitu F1 (1% : 99%); F2 (2% : 98%); F3 (3% : 97%) dengan 3 kali pengulangan. Data hasil uji kadar flavonoid dan proksimat dianalisis dengan analisis keragaman (ANOVA) sedangkan data uji proksimat dianalisis dengan uji Kruskal-Wallis Hasil penelitian menunjukkan bahwa substitusi tepung daun sukun berpengaruh nyata ($p<0,05$) terhadap kadar air, kadar abu, kadar protein, kadar lemak, dan kadar karbohidrat tetapi tidak berpengaruh nyata ($p>0,05$) terhadap kadar flavonoid. Substitusi tepung daun sukun berpengaruh nyata ($p<0,05$) terhadap parameter warna, tekstur, aroma, dan keseluruhan tetapi tidak berpengaruh nyata ($p>0,05$) terhadap rasa. Formula 2 (2% : 98%) merupakan formula terpilih dengan kadar air 8,58%; kadar abu 1,21%; kadar protein 9,08%; kadar lemak 9,44%; kadar karbohidrat 71,6%; kadar flavonoid 17,8 mg QE/g.

Kata kunci : crackers; daun sukun; flavonoid; kadar proksimat

THE EFFECT OF BREADFRUIT (*Artocarpus altilis*) LEAF FLOUR SUBSTITUTION ON FLAVONOID VALUE, NUTRITIONAL VALUE, AND ORGANOLEPTIC PROPERTIES OF CRACKERS

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Abstract

Breadfruit leaves, rich in antioxidants like flavonoids, are commonly consumed for health reasons, particularly to reduce blood glucose levels in Type 2 diabetes patients. The study's goal was to determine the effect of the substitution of breadfruit leaf flour on the levels of flavonoids, nutritional value, and organoleptic properties of crackers, as well as the best formulation. The study used an experimental study design with a Complete Random Design (CRD) using 3 formulations of breadfruit leaf flour: flour F1 (1% : 99%); F2 (2% : 98%); F3 (3% : 97%) with 3 repetitions. Flavonoid and nutritional value results were analyzed with diversity analysis (ANOVA) while organoleptic data were analyzed with the Kruskal-Wallis test. The results of the study showed that the substitution of breadfruit leaf flour had a significant effect ($p<0,05$) on water, ash, protein, fat, and carbohydrate content but had no significant effect ($p>0,05$) on flavonoids. Substitution of breadfruit leaf flour had significant effect ($p<0,05$) on color, texture, aroma and overall value but no significant effect on taste value. Formula 2 (2%: 98%) is a chosen formula with a water content 8,58%; ash content 1.21%; protein content 9.08%; fat content 9.44%; carbohydrate content 71.6%; flavonoid content 17.8 mg QE/g.

Keywords : breadfruit leaves; crackers; flavonoid; nutritional value