

**PENGARUH SUBSTITUSI TEPUNG TERIGU
DENGAN CAMPURAN MOCAF (*MODIFIED
CASSAVA FLOUR*) DAN TEPUNG RUMPUT
LAUT TERHADAP KARAKTERISTIK ROTI
TAWAR YANG DIHASILKAN**



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Dosen Pembimbing :
Prof. Dr. Ir. Aisman, M.Si
Dr. Ir. Hasbullah, M.S

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Yulizar Ilshanti, Aisman, Hasbullah

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung terigu dengan campuran mocaf dan tepung rumput laut terhadap karakteristik roti tawar dan mengetahui formulasi terbaik substitusi tepung terigu dengan campuran mocaf dan tepung rumput laut terhadap karakteristik roti tawar. Rancangan yang digunakan untuk penelitian ini adalah Rancangan Acak Lengkap (RAL) dengan lima perlakuan dengan rasio tepung terigu : mocaf : tepung rumput laut (A: 100% : 0% : 0%, B: 80% : 18% : 2%, C: 80% 16% : 4%, D: 80% 14% : 6%, E: 80% 12% : 8%) dan tiga kali ulangan. Data penelitian dianalisis secara statistik menggunakan *Analysis of Variance* (ANOVA) dan jika hasil yang diperoleh berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT) pada taraf nyata 5%. Hasil penelitian menunjukkan bahwa substitusi terigu dengan campuran mocaf dan tepung rumput laut berpengaruh nyata terhadap derajat pengembangan, kekerasan, kadar air, kadar abu, kadar lemak, kadar protein, kadar karbohidrat, kadar serat kasar, dan organoleptik (aroma, rasa dan tekstur). Perlakuan terbaik adalah perlakuan B (80% tepung terigu : 18% mocaf : 2% tepung rumput laut) dengan derajat pengembangan 121,58%, porositas 38%, kekerasan 16,54 N/cm², kadar air 34,57%, kadar abu 0,89%, kadar lemak 5,22%, kadar protein 6,76%, kadar karbohidrat 52,56%, kadar serat kasar 3,36%, angka lempeng total 1,5 x 10⁶ CFU/g, dan nilai organoleptik warna 4,16 (suka), aroma 4,2 (suka), rasa 4,16 (suka), dan tekstur 4,08 (suka).

Kata kunci: roti tawar, tepung terigu, mocaf, tepung rumput laut

THE EFFECT OF WHEAT FLOUR SUBSTITUTION WITH A MIXTURE OF MOCAF (MODIFIED CASSAVA FLOUR) AND SEAWEEDS FLOUR ON THE CHARACTERISTICS OF THE PRODUCED WHITE BREAD

Yulizar Ilshanti, Aisman, Hasbullah

ABSTRACT

This study aims to determine the effect of wheat flour substitution with a mixture of mocaf and seaweed flour on the characteristics of white bread and to determine the best formulation of wheat flour substitution with a mixture of mocaf and seaweed flour on the characteristics of white bread. The design used for this study was a Completely Randomized Design (CRD) with five treatments of the ratio of wheat flour: mocaf: seaweed flour (A: 100%: 0%: 0%, B: 80%: 18%: 2%, C: 80%: 16%: 4%, D: 80%: 14%: 6%, E: 80%: 12%: 8%) and three replications. The research data were analyzed statistically using Analysis of Variance (ANOVA) and if the results obtained were significantly different, it was continued with the Duncan's New Multiple Range Test (DNMRT) at a significance level of 5%. The results showed that wheat substitution with a mixture of mocaf and seaweed flour had a significant effect on the degree of development, hardness, water content, ash content, fat content, protein content, carbohydrate content, crude fiber content, and organoleptic (aroma, taste and texture). The best treatment was treatment B (80% wheat flour: 18% mocaf: 2% seaweed flour) with a degree of expansion of 121.58%, porosity of 38%, hardness of 16.54 N/cm², water content of 34.57%, ash content of 0.89%, fat content of 5.22%, protein content of 6.76%, carbohydrate content of 52.56%, crude fiber content of 3.36%, total plate count of 1.5 x 10⁶ CFU/g, and organoleptic values of color 4.16 (like), aroma 4.2 (like), taste 4.16 (like), and texture 4.08 (like).

Keywords: white bread, wheat flour, mocaf, seaweed flour