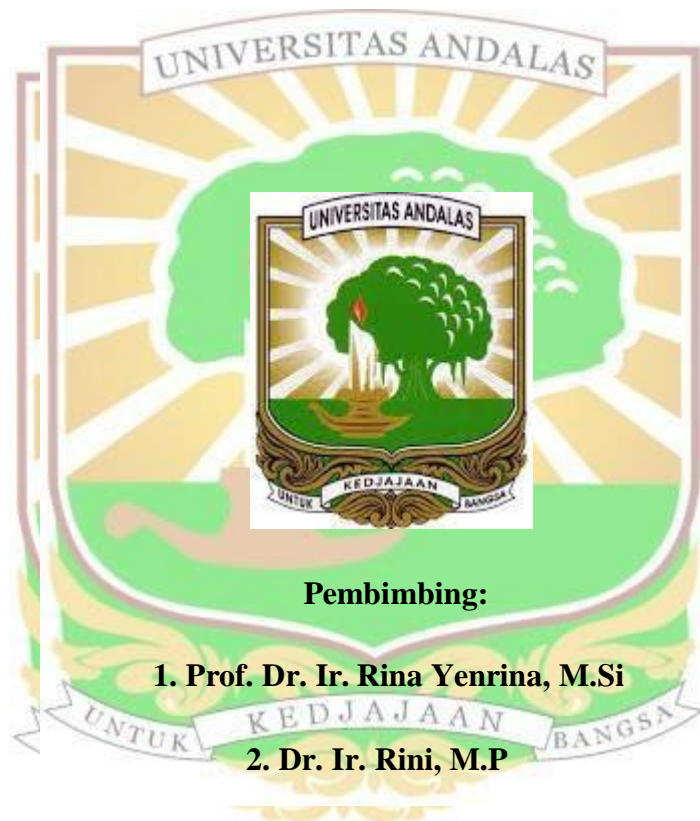


**PENGARUH PENAMBAHAN BUBUK KAYU MANIS
(*Cinnamomum burmanii*) TERHADAP KARAKTERISTIK
COOKIES BEBAS GLUTEN BERBAHAN DASAR TEMPE
DAN TEPUNG MOCAF**

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Pengaruh Penambahan Bubuk Kayu Manis (*Cinnamomum burmannii*) terhadap Karakteristik *Cookies* Bebas Gluten Berbahan Dasar Tempe dan Tepung Mocaf

Nori Pratiwi¹, Rina Yenrina², Rini³

Tujuan penelitian ini adalah mengetahui karakteristik *cookies* bebas gluten berbahan dasar tempe dan tepung mocaf dengan penambahan bubuk kayu manis dan mengetahui formulasi dengan perlakuan yang tepat. Rancangan penelitian yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan lima perlakuan dan tiga kali ulangan. Analisis data menggunakan *Analisis Of Variant* (ANOVA) dan hasil yang berbeda nyata dilanjutkan dengan uji DNMRT (*Duncan's New Multiple Range Test*) pada taraf 5%. Pengamatan yang dilakukan adalah uji kekerasan (*hardness*), kadar air, kadar abu, kadar protein, kadar lemak, kadar karbohidrat, kadar asam amino, kadar serat kasar dan kadar asam lemak bebas, uji aktivitas antioksidan, uji lemak trans, nilai energi dan uji organoleptik (warna, aroma, rasa dan tekstur). Perlakuan terbaik yang diperoleh pada perlakuan pemberian bubuk kayu manis sebesar 0,32%. Hasilnya adalah tingkat kekerasan *cookies* sebesar 48,15 N/cm², kadar air *cookies* 3,45%, kadar abu *cookies* 0,50%, protein 6,70%, lemak 37,0 %, karbohidrat 52,35%, serat kasar 0,04%, asam lemak bebas 0,87%, aktivitas antioksidan 31,82%, energi 569,09 kkal/100g. Hasil dari uji organoleptik didapatkan aroma 3,75, rasa 3,50, warna 4,05 dan tekstur 3,65. Skor kimia *cookies* tersebut adalah 15 dengan asam amino pembatas utama adalah metionin (metionin+sistin) dan asam amino pembatas kedua adalah lisin.

Kata kunci: Asam Amino, Bebas Gluten, *Cookies*, Kayu Manis, Karakteristik dan Tempe



Characteristics Of Gluten Free *Cookies* Made From Tempe and Mocaf Flour Addition With Cinnamon Powder (*Cinnamomum burmanii*)

The aim of the research to determine the characteristics of gluten free *cookies* made from tempe and mocaf flour with the addition of cinnamon powder and to determine the formulation with proper treatment. The research design was a completely randomized design (CRD) with five treatments and three replications. Data analysis used Analysis of Variant (ANOVA) and the results were significantly different, followed by the DNMRT (Duncan's New Multiple Range Test) test at the 5% level. The observations made were hardness test, water content, ash content, protein content, fat content, carbohydrate content, amino acid content, crude fiber content and free fatty acid content, antioxidant activity test, and organoleptic test (color, scent, flavor and texture). The best treatment obtained in the treatment of giving cinnamon powder was 0,32%. The results are *cookies* hardness level of 48,15 N/cm², *cookies* moisture content 3,45%, ash content of *cookies* 0,50%, protein 7,90%, fat 37,0%, carbohydrates 51,15%, crude fiber 0,04%, FFA 0,87%, antioxidant activity 31,82%, energy 569,20 kkal/100g. The results of the organoleptic test showed that the scent was 3,75, flavor was 3,50, the color was 4.05 and the texture was 3.65. The lowest amino acid is methionine (methionine+cystine) which is 15, while the second lowest number is lysine, which is 43. This means that the chemical score of the protein sample is 15 with the main limiting amino acid being methionine (methionine+cystine) and the second limiting amino acid is lysine.

Keyword : Amino Acid, Gluten free, *Cookies*, Cinnamon, Additional Characteristics, Tempe

