

**OPTIMASI PARAMETER SUHU PENGERINGAN TERHADAP  
KARAKTERISTIK FISIKO-KIMIA PADA PRODUksi BERAS  
ANALOG SKALA GANDA**

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**ABSTRAK**

Beras analog adalah salah satu produk diversifikasi pangan yang berbentuk menyerupai butiran beras namun terbuat dari bahan pangan non beras dan telah terdapat beberapa penelitian skala laboratorium yang menghasilkan beras analog dengan berbagai formulasi bahan salah satunya yaitu pengembangan beras analog berbahan tepung mocaf, tepung pisang, dan tepung sagu. Namun untuk mendapatkan beras analog yang siap untuk diindustrialisasikan, perlu dilakukan pengembangan dan analisa proses produksi skala ganda. Tujuan penelitian ini adalah untuk menganalisis karakteristik fisiko-kimia beras analog berbahan baku ubi kayu, pisang dan sagu pada proses produksi skala ganda dengan variasi temperatur proses pengeringan. Parameter kualitas yang diamati meliputi warna, uji hedonik rasa dan parameter proksimat. Penelitian menggunakan Rancangan Acak Lengkap dengan perlakuan variasi pada variabel uji suhu pengovenan ( $70^{\circ}\text{C}$ ,  $80^{\circ}\text{C}$ ,  $90^{\circ}\text{C}$ ,  $100^{\circ}\text{C}$ ), serta variable kontrol berupa perlakuan proses dan ratio formulasi bahan (1:1:1). Dari hasil penelitian diperoleh kesimpulan bahwa perlakuan terbaik pada pengujian kadar air, kadar abu, kadar serat, kadar karbohidrat, kadar protein yaitu suhu  $100^{\circ}\text{C}$  dengan hasil 4,87%, 1,73%, 0,54%, 85,67%, 6,46% dan perlakuan terbaik pada pengujian kadar lemak yaitu suhu  $70^{\circ}\text{C}$  dengan hasil 2,37%. Selain itu, beras dengan suhu pengeringan  $70^{\circ}\text{C}$  memiliki nilai L(kecerahan) yang paling tinggi. Serta uji ONE WAY ANOVA dan uji Duncan menunjukkan tidak ada perbedaan yang signifikan antara preferensi rasa pada uji hedonik dari 4 varian sampel beras analog.

**Kata kunci :** *beras analog, ubi kayu, pisang, sagu*

**OPTIMIZATION OF DRYING TEMPERATURE ON PHYSICO-CHEMICAL CHARACTERISTIC IN DOUBLE SCALE ANALOG RICE PRODUCTION**

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**ABSTRACT**

*Analog rice is one of the diversification food products are shaped like rice grains but made from non-rice food ingredients and there are several laboratory-scale studies that have produced analog rice with various ingredient formulations, one of which is the development of analog rice made from mocaf flour, banana flour, and sago flour. However, to get analog rice that is ready to be industrialized, it is necessary to develop and analyze the double-scale production process. The purpose of this study was to analyze the physico-chemical characteristics of analog rice made from cassava, banana and sago in a double-scale productionprocess with variations in the drying process temperature. The quality parameters observed included color, taste hedonic test and proximate parameters. The study used a completely randomized design with variations in the oven temperature test variables (70 C, 80 C, 90 C, 100 °C), as well as control variables in the form of process treatment and material formulation ratio (1:1:1). From the results of the study, it was concluded that the best treatment for testing water content, ash content, fiber content, carbohydrate content, protein content was a temperatureof 100 °C with the results of 4.87%, 1.73%, 0.54%, 85.67% , 6,46% and the best treatment on the fat content test is a temperature of 70°C with a result of 2,37% and One Way ANOVA hedonic test. effect on panelists' preference for analog rice taste and Duncan's further test showed that there was no significant difference between the assessment of taste preferences through the hedonic rating test of the four samples of analog rice sample variants and analog rice with a drying temperature of 70°C has the highest L(brightness) level.*

*Keywords:* *analog rice, cassava, banana, sago*