ABSTRACT

Rizky Susetyowati. B.1711062. Physicochemical and organoleptic characteristic of analog rice based on purple yam flour (*Dioscorea alata*) with the addition of mung bean flour (*Vigna radiata* L.). Supervised by Distya Riski Hapsari and Tiana Fitrilia.

Analog rice is artificial rice made from materials other than rice but has characteristics similar torice. This study aims to increase the protein content of analog rice based on purple yam flour with the addition of mung bean flour. This study used a factorial Completely Randomized Design (CRD) with one factor, namely the concentration of purple yam flour and mung bean flour hijau (80:20, 70:30, 60:40) with two replications. Product analysis includes chemical analysis in the from of protein and water content test and physical analysis in the form of kamba density and water absorption to determine the selected product. Chemical analysis of ash content, fat content, carbohydrate content, crude fiber content, and sensory and hedonic quality test carried out on selected products.The data analysis used was ANOVA with Duncan's Advanced Test with a confidence interval of 95%. The results showed that the selected analog rice was analog rice with a ratio of 60% purple yam flour and 40% mung bean flour. The selected analog rice has protein content of 17.265%, water content of 4.460%, ash content of 2.575%, fat content of 1.365%, carbohydrate content of 74.235%, and crude fiber content of 12.090% with a kamba density of 0.6 g/mL and water absorption of 119%. The results of the sensory test showed that the selected rice analog has a dark brown color, the aroma is not smell unpleasant, a slightly savory sweet taste, and the texture is not fluffier with the highest preference value on the parameters of taste, aroma, and overall.

Keywords: Analog rice, purple yam flour, mung bean flour.

ABSTRAK

Rizky Susetyowati. B.171102. Karakteristik Fisikokimia dan Organoleptik Beras Analog Berbasis Tepung Uwi Ungu (*Disocorea alata*) dengan Tambahan Tepung Kacang Hijau (*Vigna radiata L*.). Di bawah bimbingan Distya Rizki Hapsari dan Tiana Fitrilia.

Beras analog merupakan beras tiruan yang terbuat dari bahan selain beras namun memiliki karakteristik menyerupai beras padi. Penelitian ini bertujuan untuk meningktakan kadar protein beras analog berbahan dasar tepung uwi ungu dengan penambahan tepung kacang hijau. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) satu faktor yaitu perbandingan tepung uwi ungu dan tepung kacang hijau (80:20, 70:30, 60:40) dengan dua kali ulangan. Analisis produk meliputi analisis kimia berupa uji kadar protein dan uji kadar air serta analisis fisik berupa uji densitas kamba dan daya serap air untuk menentukan produk terpilih. Kemudian dilakukan analisis kimia kadar abu, kadar lemak, kadar karbohidrat, dan kadar serat kasar serta uji mutu hedonik dan mutu sensori pada produk terpilih. Analisis data yang digunakan adalah ANOVA dengan Uji lanjut Duncan pada selang kepercayaan 95%. Hasil penelitian menunjukkan bahwa beras analog terpilih adalah beras analog dengan perbandingan tepung uwi ungu 60% dan tepung kacang hijau 40%. Beras analog terpilih memiliki kadar protein 17,265%, kadar air 4,460%, kadar abu 2,575%, kadar lemak 1,365%, kadar karbohidrat 74,235%, dan kadar serat kasar 12,090% dengan densitas kamba sebesar 0,6 g/mL dan daya serap air sebesar119%. Hasil uji sensori nasi beras analog terpilih menunjukkan bahwa beras analog memiliki warna coklat gelap, aroma tidak langu, rasa manis sedikit gurih, dan tekstur tidak pulen dengan nilai kesukan tertinggi pada parameter rasa, aroma dan *overall*.

Kata Kunci: Beras analog, tepung uwi ungu, tepung kacang hijau.