

ABSTRACT

ENCAPSULATION OF SIGER RICE MAKING FROM CASSAVA (*Manihot esculenta*) USING SOYBEAN LECITHIN

By

MELA GUSTIANA

The level of cassava production is quite abundant in Lampung Province, reaching 8,038,963 tons (BPS, 2016). Cassava has great potential to be developed into a source of food other than rice, namely siger rice. Siger rice is an artificial of the Lampung people that has white color and granular forms such as rice. The study aimed to obtain the best sensoric properties of siger rice from cassava with the addition of the appropriate concentration of soybean lecithin. The treatment was arranged non-factoria in a Complete Randomized Block Design (RAKL) with 7 treatments and 4 replications. The treatment in this study was the concentration of soybean lecithin 0%, 0.25%, 0.5%, 0.75%, 1%, 1.25% and 1.5%. The data were tested for similarity in variance with Barlett test and data addition by Tuckey test and further analyzed by Honestly Significant Difference Test (BNJ) level of 5%. The results of this study indicate that the concentration of soybean lecithin has a significant effect on the texture, color, taste and aroma, and overall acceptance of

siger rice. The addition of 0.75% soybean lecithin concentration produces the best sensory properties of siger rice with a texture score of 3.35 (same as white rice), 3.50 color (rather yellowish white), taste and aroma 3.32 (rather like), and overall acceptance 3.53 (rather like). This siger rice contains water 12.45%, ash 0.37%, protein 0.68%, fat 0.38%, crude fiber 2.03%, carbohydrate 86.12%, and HCN 17 mg/ kg.

Keywords: cassava, siger rice, soybean lecithin

ABSTRAK

ENKAPSULASI PEMBUATAN BERAS SIGER DARI UBI KAYU (*Manihot esculenta*) MENGGUNAKAN LESITIN KEDELAI

Oleh

MELA GUSTIANA

Tingkat produksi ubi kayu jumlahnya cukup melimpah di Provinsi Lampung yaitu mencapai 8.038.963 ton (BPS, 2016). Ubi kayu memiliki potensi besar untuk dikembangkan menjadi sumber bahan pangan selain padi, yaitu beras siger. Beras siger adalah beras tiruan masyarakat Lampung yang memiliki warna putih dan bentuk butiran seperti beras padi. Penelitian bertujuan untuk mendapatkan sifat kimia dan sensori nasi siger terbaik dari ubi kayu dengan penambahan konsentrasi lesitin kedelai yang tepat. Perlakuan disusun secara non faktorial dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan 7 perlakuan dan 4 ulangan. Perlakuan dalam penelitian ini adalah konsentrasi lesitin kedelai 0%, 0,25%, 0,5%, 0,75%, 1%, 1,25% dan 1,5%. Data yang diperoleh diuji kehomogenannya dengan uji Bartlett dan kemenambahan data dengan uji Tuckey dan dianalisis lebih lanjut dengan Uji Beda Nyata Jujur (BNJ) taraf 5%. Hasil penelitian menunjukkan bahwa konsentrasi lesitin kedelai berpengaruh nyata terhadap tekstur, warna, rasa dan

aroma, serta penerimaan keseluruhan nasi siger. Penambahan konsentrasi lesitin kedelai 0,75% menghasilkan sifat sensori nasi siger terbaik dengan skor tekstur 3,35 (sama dengan nasi putih), warna 3,50 (agak putih kekuningan), rasa dan aroma 3,32 (agak suka), serta penerimaan keseluruhan 3,53 (agak suka). Beras siger ini mengandung kadar air 12,45%, abu 0,37%, protein 0,68%, lemak 0,38%, serat kasar 2,03%, karbohidrat 86,12%, dan HCN 17 mg/kg.

Kata kunci: ubi kayu, beras siger, lesitin kedelai