

## EVALUASI SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN BUBUR INSTAN CAMPURAN LABU KUNING DAN BERAS HITAM SERTA SUHU PENDINGINAN

Bubur instan merupakan produk olahan pangan yang cukup digemari berbagai kalangan. Indonesia memiliki ragam jenis tanaman fungsional. Labu kuning salah satu pangan fungsional yang mengandung antioksidan penting yaitu  $\beta$ -karoten. Beras hitam memiliki pigmen antosianin berkonsentrasi tinggi dan menjadi indikator antioksidan yang tinggi. Penelitian ini bertujuan untuk mengetahui pengaruh campuran labu kuning dan beras hitam serta suhu pendinginan terhadap sifat fisik, kimia, dan tingkat kesukaan bubur instan.

Penelitian ini menggunakan Rancangan Acak Kelompok 2 faktor perlakuan, yaitu variasi suhu pendinginan ( $150^{\circ}\text{C}$ ,  $160^{\circ}\text{C}$ , dan  $170^{\circ}\text{C}$ ) dengan campuran labu kuning dan beras hitam (75:25, 50:50, dan 25:75). Analisis yang dilakukan adalah sifat fisik (warna, densitas kamba, rehidrasi, kapasitas penyerapan air, kapasitas penyerapan minyak, rehidrasi), sifat kimia (kadar air, kadar abu, protein, lemak,  $\beta$ -karoten, aktivitas antioksidan, fenol, karbohidrat *by difference*), dan uji tingkat kesukaan. Data yang diperoleh di analisis secara statistik dengan *Univariate Analysis of Variance* dan apabila  $\alpha < 0,05$  dilakukan uji beda nyata dengan uji DMRT pada tingkat signifikansi 95%.

Hasil penelitian menunjukkan bahwa campuran labu kuning dan beras hitam serta suhu pendinginan berpengaruh terhadap sifat fisik, kimia, dan tingkat kesukaan. Bubur instan yang paling disukai adalah pada suhu pendinginan  $150^{\circ}\text{C}$  dengan campuran labu kuning dan beras hitam 75:25. Bubur instan terbaik memiliki kadar air 2,61%, kadar abu 3,09%, protein, 14,08%, lemak 5,52%,  $\beta$ -karoten 584,51  $\mu\text{g/g}$ , aktivitas antioksidan 50,48 %RSA, dan fenol 2873,61 mg GAE/g dan karbohidrat *by difference* 74,3%.

**Kata Kunci:** bubur instan, labu kuning, beras hitam, antioksidan

## **EVALUATION OF THE PHYSICAL, CHEMICAL PROPERTIES, AND PREFERENCE LEVELS OF INSTANT PORRIDGE MIXED PUMPKIN AND BLACK RICE WITH DRYING TEMPERATURE**

Instant porridge is a food processed product that is quite popular with various groups. Indonesia has a wide variety of functional plants. Pumpkin is one of the functional foods containing important antioxidants, namely  $\beta$ -carotene. Black rice has a high concentration of anthocyanin pigments and is a high indicator of antioxidants. This study aims to determine the effect of a mixture of pumpkin and black rice and drying temperature on the physical, chemical, and preference level of instant porridge. This study used a completely randomized design with 2 treatment factors, namely variations in drying temperature ( $150^{\circ}\text{C}$ ,  $160^{\circ}\text{C}$ , and  $170^{\circ}\text{C}$ ) and variations in the ratio of pumpkin: black rice (75:25, 50:50, and 25:75). The analysis carried out were physical properties (color, density of kamba, rehydration, water absorption capacity, oil absorption capacity, rehydration), chemical properties (moisture content, ash content, protein, fat,  $\beta$ -carotene, antioxidant activity, phenols, carbohydrate by difference), and the preference level test. The data obtained were analyzed statistically with Univariate Analysis of Variance and if  $\alpha > 0.05$ , a significant difference test was carried out with the DMRT test at the 95% significance level. The results showed that the mixture of pumpkin and black rice and the drying temperature had an effect on physical, chemical and preference levels. The most preferred instant porridge is at a drying temperature of  $150^{\circ}\text{C}$  with a mixture of pumpkin and black rice 75:25. The best instant porridge has moisture content 2.61%, ash content 3.09%, protein, 14.08%, fat 5.52%,  $\beta$ -carotene 584.51  $\mu\text{g} / \text{g}$ , antioxidant activity 50.48 %RSA, and phenol 2873.61 mg GAE / g and carbohydrate by difference 7,3%.

**Keywords:** instant porridge, pumpkin, black rice, antioxidants