

# **PENGARUH RASIO BERAS MERAH, LABU KUNING (*Cucurbita moschata*), DAN KACANG TUNGGAK SERTA SUHU PENGERINGAN TERHADAP SIFAT FISIK, KIMIA DAN TINGKAT KESUKAAN BUBUR INSTAN**

## **INTISARI**

Bubur instan merupakan bubur yang telah mengalami proses pengolahan lebih lanjut sehingga dalam penyajiannya tidak diperlukan proses pemasakan. Penyajian bubur instan dapat dilakukan hanya dengan menambahkan air panas. Pemanfaatan beras merah, labu kuning dan kacang tunggak sebagai bahan baku pembuatan bubur instan merupakan alternatif diversifikasi pangan instan yang mengandung beta karoten, antioksidan, karbohidrat dan protein. Tujuan penelitian ini adalah mengetahui pengaruh rasio beras merah, labu kuning, dan kacang tunggak serta suhu pengeringan terhadap sifat fisik, kimia dan tingkat kesukaan bubur instan dan menentukan rasio beras merah, labu kuning, dan kacang tunggak serta suhu pengeringan yang tepat sehingga dihasilkan bubur instan yang mempunyai sifat fisik, kimia yang memenuhi syarat dan disukai panelis.

Penelitian ini menggunakan rancangan acak lengkap pola faktorial 2 faktor dengan 2 kali ulangan. Faktor pertama adalah rasio beras merah, labu kuning dan kacang tunggak dengan perbandingan 1:1:1, 1:2:1, dan 1:3:1. Faktor kedua adalah suhu pengeringan sebanyak 3 taraf yaitu 130°C, 140°C, dan 150°C. Bubur instan campuran beras merah, labu kuning dan kacang tunggak dilakukan uji fisik, tingkat kesukaan dan analisis kimia. Uji fisik pada bubur instan terdiri atas rendemen, kapasitas penyerapan minyak, kapasitas penyerapan air, densitas kamba, rehidrasi dan warna. Uji kesukaan terdiri atas parameter warna, aroma, rasa, kekentalan dan keseluruhan. Analisis kimia terdiri atas kadar air, abu, protein, lemak, aktivitas antioksidan, total fenol dan beta karoten. Data yang diperoleh dihitung menggunakan metode statistik ANOVA, apabila ada perbedaan nyata antar perlakuan dilakukan dengan uji beda nyata duncan's multiple range test (DMRT) pada tingkat kepercayaan 95% ( $\alpha=5\%$ ).

Hasil penelitian menunjukkan bahwa, ada pengaruh rasio beras merah, labu kuning, dan kacang tunggak serta suhu pengeringan terhadap sifat fisik, kimia dan tingkat kesukaan bubur instan, yaitu penurunan rendemen, penurunan densitas kamba dan penurunan intensitas warna.

Bubur instan yang paling disukai panelis adalah bubur instan dengan rasio beras merah, labu kuning, dan kacang tunggak 1:2:1 serta suhu pengeringan 140°C yang memiliki kadar air 5,69%, kadar abu 2,34%, kadar protein 14,48%, kadar lemak 4,17%, aktivitas antioksidan 26,46% RSA, total fenol 11,52 mg EAG/g dan kadar beta karoten 127,5 µg/g.

**Kata Kunci:** Bubur instan, beras merah, labu kuning, kacang tunggak

**THE EFFECT OF THE RATIO OF RED RICE, PUMPKIN (*Cucurbita moschata*),  
COWPEA AND DRYING TEMPERATURE ON PHYSICAL, CHEMICAL  
PROPERTIES AND PREFERENCE LEVEL OF INSTANT PORRIDGE**

**ABSTRACT**

Instant porridge is a porridge that has undergone further processing so that in its presentation, no cooking process is required. Serving instant porridge can be done simply by adding hot water. The utilization of red rice, pumpkin, and cowpea as raw materials for instant porridge is an alternative to instant food diversification containing beta carotene, antioxidants, carbohydrates, and protein. The purpose of this study was to determine the effect of the ratio of red rice, pumpkin, cowpea, and drying temperature on the physical, chemical, and preference levels of instant porridge and determine the ratio of red rice pumpkin, and cowpea as well the proper drying temperature to produce instant porridge, which has physical, chemical properties that meet the requirements and are preferred by panelists.

This study used a completely randomized design with a 2-factor factorial pattern with two replications. The first factor is the ratio of brown rice, pumpkin, and cowpea with 1:1:1, 1:2:1, and 1:3:1. The second factor is the drying temperature of 3 levels, namely 130°C, 140°C, and 150°C. Instant porridge mixed with red rice, pumpkin, and cowpeas were subjected to physical tests, preference level, and chemical analysis. Physical tests on instant porridge consisted of yield, oil absorption capacity, water absorption capacity, density of kamba, rehydration, and color. The preference test consists of color, aroma, taste, viscosity, and overall parameters. The chemical analysis consisted of water content, ash, protein, fat, antioxidant activity, total phenol, and beta carotene. The data obtained were calculated using the ANOVA statistical method. If there was a significant difference between treatments, it was carried out using duncan's multiple range test (DMRT) at a 95% confidence level ( $\alpha=5\%$ ).

The results showed that there was an effect of the ratio of red rice, pumpkin, and cowpea as well as drying temperature on the physical, chemical, and preference levels of instant porridge, namely a decrease in yield, a decrease in density of kamba, and a decrease in color intensity.

The instant porridge that the panelists preferred was instant porridge with a ratio of red rice, pumpkin, and cowpea 1:2:1 and a drying temperature of 140°C, which had a moisture content of 5.69%, ash content 2.34%, protein content 14.48%, fat content 4.17%, antioxidant activity 26.46% RSA, total phenol 11.52 mg EAG/g and beta carotene content 127.5 g/g.

**Keywords:** Instant porridge, red rice, pumpkin, cowpea