

FORMULASI *RICE MILK* BERAS COKELAT DAN *RICE MILK* BERAS MERAH DENGAN TAMBAHAN TEPUNG KACANG HIJAU DAN ISOLAT PROTEIN KACANG POLONG DI GASOL PERTANIAN ORGANIK

INTISARI

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Penelitian ini dilakukan karena adanya peluang besar di pasar untuk minuman berbahan dasar beras sebagai alternatif dari susu sapi di Indonesia. Penggunaan beras pada penelitian ini didasari oleh beras yang dianggap hipoalergenik, membuat produk *rice milk* cocok untuk dikonsumsi oleh berbagai orang dengan gaya hidup dan tipe diet yang berbeda. Penelitian ini bertujuan untuk memperoleh formula terbaik dan menganalisis karakteristik kimiawi dan sensoris dari produk *rice milk* berbahan dasar beras cokelat dan *rice milk* berbahan dasar beras merah di Gasol Pertanian Organik. Penelitian ini dibagi menjadi tiga tahap, yaitu formulasi, analisis kimia, dan uji sensoris *rice milk*. Formulasi *rice milk* dilakukan dengan menyusun formula dasar yang akan dikembangkan lebih lanjut sembari dilakukan uji sensoris di setiap tahapan. Analisis kimia pada *rice milk* dilakukan untuk mengetahui kadar air, abu, protein, lemak, dan karbohidrat dalam *rice milk* berbahan dasar beras cokelat dan *rice milk* berbahan dasar beras merah. Setelah itu, uji sensoris dilakukan untuk memperoleh pendapat panelis terhadap produk. Formula terbaik berdasarkan uji sensoris untuk *rice milk* berbahan dasar beras cokelat adalah 20 g *slurry* cokelat, 120 g air suhu 70°C, 5 g minyak bunga matahari, 4 g isolat protein kacang polong, dan 0,1 g garam. Karakteristik kimiawi dari produk tersebut adalah kadar air 85,72±0,05%, kadar abu 0,21±0,02%, kadar protein 3,06±1,36%, kadar lemak 0,07±0,01%, dan kadar karbohidrat 10,94±1,34%. Formula terbaik berdasarkan uji sensoris untuk *rice milk* berbahan dasar beras merah adalah 20 g *slurry* merah, 120 g air suhu 70°C, 5 g minyak bunga matahari, 4 g tepung kacang hijau, dan 0,1 g garam. Karakteristik kimiawi dari produk tersebut adalah kadar air 86,94±0,37%, kadar abu 0,18±0,04%, kadar protein 1,72±0,85%, kadar lemak 0,07±0,02%, dan kadar karbohidrat 11,09±1,11%. Produk *rice milk* yang terpilih setelah melalui uji sensoris adalah *rice milk* beras cokelat dengan tambahan isolat protein kacang polong dan *rice milk* beras merah dengan tambahan tepung kacang hijau.

Kata kunci: *rice milk*, beras cokelat, beras merah, tepung kacang hijau, isolat protein kacang polong

FORMULATION OF BROWN RICE MILK AND RED RICE MILK WITH MUNG BEAN FLOUR AND PEA PROTEIN ISOLATE ADDITION IN GASOL PERTANIAN ORGANIK

ABSTRACT

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This research was conducted due to a great opportunity in the market for rice-based beverages as cow's milk alternative in Indonesia. The usage of rice in this research was based on rice's hypoallergenicity, making rice milk suitable to be consumed by people with different lifestyles and diets. This research aim to obtain the best formula and analyze the chemical and sensory characteristics of rice milk made from brown rice and red rice at Gasol Pertanian Organik. The study was divided into three stages: formulation, chemical analysis, and sensory testing of the rice milk. The formulation of rice milk involved developing a base formula, which was further refined while conducting sensory tests at each stage. Chemical analyses of the rice milk were performed to determine the moisture, ash, protein, fat, and carbohydrate content in the rice milk made from brown rice and red rice. Following this, sensory testing was conducted to gather panelists' opinions on the products. The best formula based on sensory testing for rice milk made from brown rice consisted of 20 g of brown rice slurry, 120 g of water at 70°C, 5 g of sunflower oil, 4 g of pea protein isolate, and 0.1 g of salt. The chemical characteristics of the product were moisture content of 85.72±0.05%, ash content of 0.21±0.02%, protein content of 3.06±1.36%, fat content of 0.07±0.01%, and carbohydrate content of 10.94±1.34%. The best formula based on sensory testing for rice milk made from red rice consisted of 20 g of red rice slurry, 120 g of water at 70°C, 5 g of sunflower oil, 4 g of mung bean flour, and 0.1 g of salt. The chemical characteristics of the product were moisture content of 86.94±0.37%, ash content of 0.18±0.04%, protein content of 1.72±0.85%, fat content of 0.07±0.02%, and carbohydrate content of 11.09±1.11%. The rice milks that were chosen to be the final products are brown rice milk with pea protein isolate addition and red rice milk with mung bean flour addition.

Keywords: rice milk, brown rice, red rice, mung bean flour, pea protein isolate