

ABSTRAK

KARAKTERISTIK FISIKOKIMIA DAN ANALISIS PROKSIMAT KEFIR BERAS PUTIH VARIETAS MEKONGGA BERDASARKAN VARIASI WAKTU FERMENTASI

Gaya hidup sehat mendorong masyarakat untuk memilih pangan yang tidak hanya mengenyangkan tetapi juga menyehatkan. Salah satu produk pangan fungsional yang berkembang adalah kefir, minuman fermentasi yang mengandung probiotik. Penelitian ini bertujuan untuk mengevaluasi karakteristik fisikokimia dan kandungan proksimat dari kefir berbahan dasar beras putih varietas Mekongga sebagai alternatif minuman fungsional *non-dairy* berbasis lokal. Fermentasi dilakukan dengan menambahkan 15% kefir grains ke dalam larutan beras, difermentasi selama 72 jam (12 jam suhu ruang, 60 jam suhu 7 °C). Parameter fisikokimia meliputi pengukuran pH, kadar alkohol, total asam tertitiasi (TAT) menggunakan metode titrasi, serta total bakteri asam laktat (BAL) menggunakan metode *Total Plate Count* (TPC). Analisis proksimat meliputi kadar karbohidrat (metode *Luff-Schoorl*), protein (metode Bradford), dan lemak (metode ekstraksi-gravimetri). Hasil menunjukkan pH akhir 3,51; kadar alkohol 0,1379%; TAT 0,4712%; dan total BAL $1,7 \times 10^8$ CFU/mL. Kadar karbohidrat 1,2313%, kadar lemak 0,1822%, dan kadar protein 1,5249 mg/L. Kefir beras Mekongga memiliki karakteristik yang mendukung sebagai minuman probiotik fungsional alternatif non-susu berbasis bahan pangan lokal.

Kata kunci: Beras Mekongga, fermentasi, kefir, metode analisis, minuman probiotik



ABSTRACT

PHYSICOCHEMICAL CHARACTERISTICS AND PROXIMATIC ANALYSIS OF MEKONGGA VARIETY OF WHITE RICE KEFIR BASED ON FERMENTATION TIME VARIATIONS

A healthy lifestyle encourages people to choose foods that are not only filling but also beneficial to health. One of the emerging functional food products is kefir, a fermented beverage containing probiotics. This study aimed to evaluate the physicochemical characteristics and proximate composition of kefir made from white rice of the Mekongga variety as a non-dairy, locally sourced functional beverage alternative. The kefir was produced by adding 15% kefir grains into the rice solution, followed by fermentation for 72 hours (12 hours at room temperature and 60 hours at 7°C). Physicochemical parameters included measurements of pH, alcohol content, titratable acidity (TAT) using titration, and total lactic acid bacteria (LAB) using the Total Plate Count (TPC) method. Proximate analysis included carbohydrate content (Luff-Schoorl method), protein (Bradford method), and fat (gravimetric extraction method). The results showed a final pH of 3.51, alcohol content of 0.1379%, TAT of 0.4712%, and total LAB of 1.7×10^8 CFU/mL. Carbohydrate, fat, and protein contents were 1.2313%, 0.1822%, and 1.5249 mg/L, respectively. Mekongga rice kefir demonstrated characteristics that support its potential as a non-dairy probiotic functional beverage derived from local food ingredients.

Keywords: *Mekongga rice, fermentation, kefir, analytical methods. , probiotic beverage*

