

ABSTRAK

ANALISIS FISIKOKIMIA DAN PROKSIMAT PADA KEFIR BERAS COKELAT (*Oryza sativa L.*)

Salah satu pangan fungsional yang populer saat ini adalah kefir. Namun, kefir tidak dapat dikonsumsi oleh semua kalangan khususnya penderita *lactose intolerant*. Keberagaman jenis ragi dalam kefir grains membuka peluang kefir dibuat dari bahan baku lain seperti beras cokelat yang kaya akan zat gizi. Penelitian ini bertujuan untuk mengeksplorasi potensi kefir beras cokelat sebagai inovasi pangan fungsional. Kefir beras cokelat dianalisis kualitas fisikokimia dan proksimat. Pengujian fisikokimia meliputi uji derajat keasaman, kadar alkohol, total asam tertitiasi dengan metode titrasi, total BAL (Bakteri Asam Laktat) dengan metode *Total Plate Count* (TPC). Pengujian proksimat meliputi uji kadar karbohidrat dengan metode *Luff-Schoorl*, uji kadar protein dengan metode Bradford dan uji kadar lemak dengan ekstraksi-gravimetri. Hasil penelitian diperoleh nilai derajat keasaman pada kefir beras cokelat 3,5. Kadar alkohol mencapai 0,1379%, total asam tertitiasi mencapai 0,4712% dan total BAL sebanyak $1,7 \times 10^8$ CFU/mL. Hasil pengujian proksimat menunjukkan kadar karbohidrat, lemak, dan protein berturut-turut 1,2313% ; 0,1822% dan 1,5249 mg/L.

Kata-kata kunci : beras cokelat; fermentasi; kefir; lactose intolerant; pangan fungsional.



ABSTRACT

PHYSICOCHEMICAL AND PROXIMATE ANALYSIS OF BROWN RICE KEFIR (*Oryza sativa* L.)

One of the popular functional foods today is kefir. However, kefir cannot be consumed by everyone, especially individuals with lactose intolerant. The diversity of yeast in kefir grains opens opportunities to produce kefir from alternative raw materials such as brown rice, which is have a good nutrients. This study aimed to explore the potential of brow rice kefir as functional food innovation. The brown rice kefir was analyzed for its physicochemical and proximate qualities. The physicochemical analysis included tests for pH level, alcohol content, total titratable acidity using the titration method, and total lactic acid bacteria (LAB) using the Total Plate Count (TPC) method. The proximate analysis included carbohydrate content using the Luff-Schoorl method, protein content using the Bradford method, and fat content using gravimetric extraction.. The results showed that brown rice kefir had a pH of 3.5. The alcohol content reached 0.1379%, total titratable acidity was 0.4712%, and total LAB count was 1.7×10^8 CFU/mL. The proximate analysis showed carbohydrate, fat, and protein contents of 1.2313%, 0.1822%, and 1.5249 mg/L, respectively.

Keywords: brown rice; fermentation; kefir; lactose intolerant; functional food.

