

OPTIMASI SINBIOTIK KEFIR KACANG KORO BENGUK (*Mucuna pruriens* L. DC) UNTUK PRODUK MINUMAN PROBIOTIK

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ABSTRAK

Kefir biasanya berbahan dasar susu hewani, akan tetapi terdapat kekhawatiran bagi penderita intoleransi laktosa dan meningkatnya golongan vegetarian sehingga susu nabati berpotensi menjadi bahan baku alternatif produksi kefir. Kacang koro benguk memiliki kandungan gizi yang tinggi dan belum banyak dimanfaatkan dalam produksi pangan. Sementara itu, susu skim merupakan susu rendah lemak yang jika dikombinasikan pada saat fermentasi dapat memenuhi kebutuhan nutrisi kefir *grains*. Tujuan dari penelitian ini yaitu untuk menentukan formulasi optimal kefir kacang koro benguk dengan beragam konsentrasi susu skim (0, 4 dan 8%) yang terbaik dan menganalisis kadar nutrisi berdasarkan Standar Nasional Indonesia (SNI) 7552:2009 serta mengukur daya terima masyarakat. Metode yang digunakan yaitu eksperimen menggunakan Rancangan Acak Lengkap (RAL) dengan membuat susu kacang koro benguk dilanjutkan dengan pembuatan kefir. Terdapat empat variasi perlakuan (K0 = Kontrol (susu kacang koro benguk), KI = susu kacang koro benguk + gula 10%, K2 = susu kacang koro benguk + gula 10% + susu skim 4% dan K3 = susu kacang koro benguk + gula 10% + susu skim 8%) kemudian ditambahkan kefir *grains* 5% dan diinkubasi selama 48 jam pada suhu 10 °C. Parameter pengujian meliputi uji total bakteri asam laktat, pH, total asam tertitrasi, kadar alkohol/etanol, organoleptik dan proksimat yang dianalisis dengan uji ANOVA dan nonparametrik *Kruskal Wallis* pada taraf signifikansi 5%. Hasil penelitian menunjukkan formulasi terbaik yang memenuhi Standar Nasional Indonesia (SNI) 7552:2009 yaitu kefir kacang koro benguk dengan penambahan susu skim 8%. Penambahan susu skim juga berpengaruh signifikan terhadap daya terima organoleptik dan kadar nutrisi kefir kacang koro benguk sehingga perlakuan tersebut lebih banyak disukai panelis.

Kata Kunci: kacang koro benguk, kefir, susu skim

OPTIMIZATION OF VELVET BEAN (*Mucuna pruriens* L. DC) KEFIR SYNBIOTIC FOR PROBIOTIC BEVERAGE PRODUCT

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ABSTRACT

Kefir is usually made from animal milk, however, there are concerns for those with lactose intolerance and the increasing number of vegetarians, making plant-based milk a potential alternative raw material for kefir production. Meanwhile, skim milk is a low-fat milk that, when combined during fermentation, can fulfill the nutritional requirements of kefir grains. This research aimed to determine the optimal formulation of velvet bean kefir with varying concentrations of skim milk (0, 4 and 8%) that best and to analyze nutritional content based on the Indonesian National Standard (SNI) 7552:2009 as well as to measure consumer acceptability. The method used was an experiment approach using a Completely Randomized Design (CRD) which involving the production of velvet bean milk followed by the making of kefir. There were four treatment variations (K0 = Control (velvet bean milk), K1 = velvet bean milk + 10% sugar, K2 = velvet bean milk + 10% sugar + 4% skim milk, and K3 = velvet bean milk + 10% sugar + 8% skim milk), and then 5% kefir grains were added, and the mixture was incubated for 48 hours at 10 °C. The testing parameters included total lactic acid bacteria count, pH, total titratable acidity, alcohol/ethanol content, organoleptic and proximate properties analyzed with ANOVA and the nonparametric Kruskal Wallis test at a 5% significance level. The results indicated that the best formulation meeting the Indonesian National Standard (SNI) 7552:2009 was velvet bean kefir with the addition of 8% skim milk. The addition of skim milk also significantly influenced velvet bean kefir's organoleptic acceptability and nutritional content, making this treatment more preferred by panelists.

Keywords: kefir, skim milk, velvet beans