

ABSTRAK

KARAKTERISTIK MIKROBIOLOGI, KIMIA, DAN SENSORI MINUMAN SINBIOTIK SUSU KAMBING ETAWA DENGAN PENAMBAHAN MANGGA KWENI DAN MADU RANDU

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Minuman sinbiotik merupakan minuman hasil fermentasi yang mengombinasikan probiotik dan prebiotik, sehingga mampu meningkatkan kesehatan usus. Minuman sinbiotik dapat dikombinasikan dengan prebiotik madu randu dan probiotik *Lactobacillus casei* berbasis susu kambing etawa yang memiliki banyak keunggulan. Penelitian bertujuan untuk mengetahui formulasi antara mangga kweni dan madu randu yang menghasilkan minuman sinbiotik susu kambing etawa dengan karakteristik terbaik sesuai SNI 7552:2018. Penelitian menggunakan Rancangan Acak Kelompok Lengkap (RAKL) dengan 1 faktor tunggal, 6 taraf, dan 4 ulangan. Data yang diperoleh dianalisis secara statistik dengan menggunakan uji Barlett dan Tukey lalu dilanjutkan dengan uji ANOVA dan uji BNT pada taraf 5%. Berdasarkan hasil penelitian, minuman sinbiotik dengan penambahan 15% sari mangga kweni dan 10% madu randu merupakan perlakuan terbaik yang memiliki total BAL 9,31 log CFU/mL, total asam laktat 0,85%, pH 3,73, kadar air 82,56%, kadar abu 0,89%, kadar protein 1,72%, kadar lemak 4,78%, kadar karbohidrat 10,05%, skor uji skoring warna 4,92 (oranye), skor uji skoring aroma 4,21 (khas mangga kweni), skor uji skoring rasa 4,19 (asam), skor uji hedonik warna 4,15 (suka), skor uji hedonik aroma 4,19 (suka), skor uji hedonik rasa 4,01 (suka), dan skor uji hedonik penerimaan keseluruhan 4,08 (suka).

Kata kunci : minuman sinbiotik, mangga kweni, madu randu, probiotik.

ABSTRACT

MICROBIOLOGY, CHEMICAL, AND SENSORIC CHARACTERISTICS OF THE ETAWA GOAT'S MILK SYNBIOTIC DRINK WITH THE ADDITION OF KWENI MANGO AND RANDU HONEY

By

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Synbiotic drinks are fermented drinks that combine probiotics and prebiotics, so they can improve gut health. Synbiotic drink can be combined with prebiotic honey and probiotic *Lactobacillus casei* based on Etawa goat milk which has many advantages. The aim of this study was to determine the formulation between kweni mango and randu honey which produces a synbiotic drink from etawa goat milk with the best characteristics according to SNI 7552:2018. The study used a Completely Randomized Block Design (RAKL) with 1 single factor, 6 levels, and 4 replications. The data obtained were analyzed statistically using the Barlett and Tukey tests and then continued with the ANOVA test and LSD test at the 5% level. Based on the results of the study, the synbiotic drink with the addition of 15% kweni mango extract and 10% cotton honey was the best treatment which had a total BAL of 9.31 log CFU/mL, 0.85% total lactic acid, pH 3.73, water content 82, 56%, ash content 0.89%, protein content 1.72%, fat content 4.78%, carbohydrate content 10.05%, color scoring test score 4.92 (orange), aroma testing score 4.21 (typical mango kweni), taste scoring test score 4.19 (sour), color hedonic test score 4.15 (like), aroma hedonic test score 4.19 (like), taste hedonic test score 4.01 (like), and overall acceptance hedonic test score of 4.08 (likes).

Keywords: synbiotic drink, kweni mango, randu honey, probiotic.