

ABSTRAK

KARAKTERISTIK MIKROBIOLOGI, KIMIA, DAN SENSORI MINUMAN SINBIOTIK SUSU KAMBING ETAWA DENGAN PENAMBAHAN KULIT PISANG KEPOK DAN EKSTRAK JAHE PUTIH KECIL

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Minuman sinbiotik merupakan minuman yang mengandung bakteri probiotik dan prebiotik. Tujuan penelitian adalah untuk mengetahui formulasi antara kulit pisang kepok dan jahe putih kecil yang menghasilkan minuman sinbiotik susu kambing etawa dengan karakteristik terbaik sesuai SNI 7552:2018. Penelitian ini disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan tujuh perlakuan dan empat ulangan. Perlakuan perbandingan ekstrak kulit pisang kepok dan ekstrak jahe putih kecil terdiri dari tujuh taraf yaitu A1 (6% : 0%); A2 (5% : 1%); A3 (4% : 2%); A4 (3%:3%); A5 (2% 4%); A6 (1% : 5%); A7 (0% : 6%). Data yang diperoleh dilakukan analisis ragam dan diuji lanjut dengan uji BNT (Beda Nyata Terkecil) pada taraf 5%.

Hasil penelitian menunjukkan bahwa minuman sinbiotik susu kambing etawa dengan penambahan ekstrak kulit pisang kepok dan ekstrak jahe putih kecil terbaik adalah perlakuan A4 (3% kulit pisang kepok dan 3% jahe putih kecil). Minuman sinbiotik susu kambing etawa perlakuan terbaik (A4) memiliki nilai total BAL 9,09 log koloni/mL; total asam laktat 0,75%; pH 3,89; kadar air 85,95%; kadar abu 0,56%; kadar protein 2,49%; kadar lemak 4,22%; kadar karbohidrat sebesar 6,78%; skor uji skoring rasa 3,67 (asam); skor uji skoring aroma 3,63 (khas jahe); skor kesukaan rasa 3,61 (suka); skor kesukaan aroma 3,59 (suka), skor kesukaan warna 4,00 (suka), dan skor penerimaan keseluruhan 3,79 (suka).

Kata kunci : Minuman sinbiotik, ekstrak Kulit pisang kepok, ekstrak Jahe putih kecil, probiotik, prebiotik

ABSTRACT

MICROBIOLOGY, CHEMICAL, AND SENSORIC CHARACTERISTICS OF THE ETAWA GOAT'S MILK SYNBIOTIC DRINK WITH THE ADDITION OF KEPOK BANANA SKIN EXTRACT AND SMALL WHITE GINGER EXTRACT

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Sinbiotic drinks are drinks that contain probiotic and prebiotic bacteria. The aim of the research was to find out the formulation between kepok banana skin and small white ginger which produces a synbiotic drink of Etawa goat milk with the best characteristics according to SNI 7552:2018. This study was arranged in a Complete Randomized Block Design (RAKL) with seven treatments and four replications. The comparison of kepok banana skin extract and small white ginger extract consisted of seven levels, namely A1 (6% : 0%); A2 (5% : 1%); A3 (4% : 2%); A4 (3%:3%); A5 (2% 4%); A6 (1% : 5%); A7 (0% : 6%). The data obtained were analyzed for variance and further tested with the LSD (Lessest Significant Difference) test at the 5% level.

The results showed that the best synbiotic drink of Etawa goat milk with the addition of kepok banana skin extract and small white ginger extract was the best treatment A4 (3% kepok banana peel and 3% small white ginger). The best treated etawa goat milk synbiotic drink (A4) had a total LAB value of 9.09 log colonies/mL; total lactic acid 0.75%; pH 3.89; water content 85.95%; ash content 0.56%; protein content 2.49%; fat content 4.22%; carbohydrate content 6,78%; taste test scoring score 3.67 (sour); aroma test score 3.63 (typical ginger); score taste preference score 3.61 (like); the scent preference score is 3.59 (likes), the color preference score is 4.00 (likes), and the overall acceptance score is 3.79 (likes).

Keywords : Sinbiotic drink, kepok banana peel extract, small white ginger extract, probiotics, prebiotics