ABSTRACT

MICROBIOLOGICAL STATUS OF GOAT MILK YOGHURT WITH THE ADDITION OF RED GINGER EXTRACT

By

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This research aims to determine the best dose of red ginger extract on the microbiological status of goat's milk yogurt. This research was carried out in September 2021 at the Animal Production Laboratory of the Department of Animal Husbandry, Faculty of Agriculture, University of Lampung for yogurt making, and at the Agricultural Product Technology Laboratory of the Lampung State Polytechnic. The experimental design used was a completely randomized design (CRD) with 5 treatments and 4 replications. The treatments given were the addition of 0% red ginger extract (P0), the addition of 1% red ginger extract (P1), the addition of 2% red ginger extract (P2), the addition of 3% red ginger extract (P3), and the addition of 4% red ginger extract. The data obtained were analyzed using analysis of variance with a significance level of 5% and continued with the smallest significant difference test (BNT).

The results showed that the addition of red ginger extract had a significant effect ($P<0.05$) on total LAB and total microbes in milk yogurt. The optimum dose of red ginger extract on total LAB was 3% and total microbes was 4%.

Keywords: concentration, goat's milk, total microbes, total LAB, red ginger extract, yogurt.

ABSTRAK

STATUS MIKROBIOLOGIS YOGHURT SUSU KAMBING DENGAN PENAMBAHAN EKSTRAK JAHE MERAH

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Penelitian ini bertujuan untuk mengetahui dosis terbaik pemberian ekstrak jahe merah terhadap status mikrobiologis yoghurt susu kambing. Penelitian ini dilaksanakan pada September 2021 di Laboratorium produksi ternak Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung untuk pembuatan yoghurt, dan di Laboratorium Teknologi Hasil Pertanian Politeknik Negeri Lampung. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 4 ulangan. Perlakuan yang diberikan yaitu penambahan ekstrak jahe merah 0% (P0), penambahan ekstrak jahe merah 1% (P1) penambahan ekstrak jahe merah 2% (P2), penambahan ekstrak jahe merah 3% (P3), dan penambahan ekstrak jahe merah 4%. Data yang diperoleh dianalisis menggunakan analisis ragam dengan taraf nyata 5% dan dilanjutkan uji beda nyata terkecil (BNT). Hasil penelitian didapatkan penambahan ekstrak jahe merah berpengaruh nyata ($P<0,05$) terhadap total BAL dan mikroba total yoghurt susu kambing. Dosis ekstrak jahe meraht optimum pada total BALyaitu 3% dan mikroba total adalah 4%.

Kata Kunci: ekstrak jahe merah, konsentrasi, mikroba total, susu kambing, total BAL, yoghurt.