ABSTRACT

CHEMICAL QUALITY OF COW'S MILK YOGHURT WITH THE ADDITION OF WHITE TARO STARCH STABILIZER (*Colocasia esculenta (l.)* schott)

By

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This research aims to determine the effect of taro starch addition on the chemical quality of yoghurt, including protein content, fat content, and water content. This research was conducted in January 2023 at the Laboratory of Animal Husbandry Production, Faculty of Agriculture, University of Lampung, and Laboratory of Agricultural Product Technology, Lampung State Polytechnic. This research was conducted using a completely randomized design (CRD) with 5 treatments and 4 replications. The treatments carried out were: P0; control (cow's milk yoghurt without the addition of white taro starch), P1; cow's milk yoghurt with the addition of 1% White Taro Starch, P2 cow's milk yoghurt with the addition of 2% White Taro Starch, P3; cow's milk yoghurt with the addition of 3% White Taro Starch, and P4; cow's milk yoghurt with the addition of 4% white taro starch. The data obtained were analyzed for variance at the 5% level and the BNT follow-up test. The results of this study showed that the treatment had a very significant effect ($P<0.01$) on the water content and fat content of yoghurt, but had no significant effect on the protein content of yoghurt. The best percentage of giving white taro starch to the water content and fat content of yoghurt is 4%.

Keywords: cow's milk, yoghurt, white taro, protein content, fat content, water content.

ABSTRAK

KUALITAS KIMIA YOGHURT SUSU SAPI DENGAN PENAMBAHAN *STABILIZER* PATI TALAS PUTIH (*Colocasia esculenta (l.)*** schott**)**

Oleh

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Penelitian ini bertujuan untuk mengetahui pengaruh penambahan pati talas terhadap kualitas kimia yoghurt, meliputi kadar protein, kadar lemak, dan kadar air. Penelitian ini dilaksanakan pada Januari 2023 di Laboratorium Produksi ternak Jurusan Peternakan, Fakultas Pertanian, Universitas Lampung, dan Laboratorium Teknologi Hasil Pertanian, Politeknik Negeri Lampung. Penelitian ini dilakukan menggunakan Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 4 ulangan. Perlakuan yang dilakukan yaitu: P0; kontrol (yoghurt susu sapi tanpa penambahan Pati talas Putih), P1; yoghurt susu sapi dengan penambahan Pati Talas Putih 1%, P2 yoghurt susu sapi dengan penambahan Pati Talas Putih 2%, P3; yoghurt susu sapi dengan penambahan pati talas putih 3%, dan P4; yoghurt susu sapi dengan penambahan Pati Talas Putih 4%. Data yang diperoleh dianalisis ragam pada taraf 5% dan uji lanjut BNT. Hasil dari penelitian ini menunjukkan bahwa perlakuan berpengaruh sangat nyata ($P<0,01$) terhadap kadar air dan kadar lemak yoghurt, tetapi tidak berpengaruh nyata terhadap kadar protein yoghurt. Persentase terbaik pemberian pati talas putih terhadap kadar air dan kadar lemak yoghurt yaitu 4%.

Kata kunci: susu sapi, yoghurt, talas putih, kadar protein, kadar lemak, kadar air.