

PENGARUH SUHU PEMANASAN DAN LAMA SIMPAN TERHADAP KUALITAS FISIK SUSU KAMBING PERANAKAN ETAWA (PE)

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INTISARI ^{*)}

Penelitian ini bertujuan untuk mengetahui interaksi antara suhu pemanasan dan lama simpan terhadap kualitas fisik susu kambing Peranakan Etawa. Penelitian dilaksanakan pada bulan Mei sampai Juni 2019 di Laboratorium Nutrisi Progam Studi Peternakan Fakultas Agroindustri Universitas Mercu Buana Yogyakarta. Rancangan percobaan menggunakan Rancangan Acak Lengkap (RAL) pola faktorial 3 X 5 dengan 3 kali ulangan. Faktor pertama terdiri dari 3 perlakuan suhu pasteurisasi T1 (tidak dipanaskan), T2 *Low Temperature Long Time* (LTLT), dan T3 *High Temperature Short Time* (HTST). Faktor kedua lama simpan selama S1 (0 hari), S2 (10 hari), S3 (20 hari) S4 (30 hari) dan S5 (40 hari). Data dianalisis menggunakan *Analysis of Variance* (ANOVA), jika ada perbedaan nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Variabel kualitas susu yang diamati yaitu Uji Reduktase, Derajat Keasaman, Uji Alkohol, Uji Masak, Warna, Bau, dan Rasa. Hasil penelitian menunjukkan bahwa terdapat pengaruh interaksi antara suhu pemanasan dan lama simpan terhadap Derajat Asam susu, Uji Alkohol, Bau, dan Rasa. Suhu pemanasan berpengaruh nyata pada uji reduktase susu, sedangkan lama simpan tidak berpengaruh terhadap kualitas fisik susu kambing Peranakan Etawa. Dari hasil penelitian dapat disimpulkan bahwa kualitas fisik susu kambing Peranakan Etawa yang terbaik pada perlakuan T2 yaitu *Low Temperature Long Time* (LTLT) dengan lama simpan sampai 20 hari.

Kata kunci: Susu kambing Peranakan Etawa, kualitas fisik, suhu pemanasan, lama simpan

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THE EFFECT OF HEATING TEMPERATURE AND STORAGE TIME ON THE MILK PSYSICAL QUALITY OF ETAWA CROOSBREED GOAT

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ABSTRACT^{*)}

This study aimed to determine the interaction between heating temperature and storage time on the milk physical quality of Etawa Croosbreed Goat. This research was conducted in May-June 2019 at the Laboratory of Nutrition Study Program of Animal Husbandry Faculty of Agroindustry University of Mercu Buana Yogyakarta. This study used a Completely Randomized Design factorial pattern 3 X 5 with 3 repetition. The first factor of treatment consisted of 3 pasteurization T1 (temperature no heated), T2 *Low Temperature Long Time* (LTLT), T3 *High Temperature Short Time* (HTST) and the second factor is storage time for S1 (0 days) S2 (10 days), S3 (20 days), S4 (30 days), and S5 (40 days). Data were analyzed using Analysis of Variance (ANOVA), in which if there were significant differences, it would be followed by Duncan's New Multiple Range Test (DMRT). Variable observed were Reductase test, Acidity test, Akohol Test, Cooking Test, Color, odor and Taste. The result showed that there was an interaction between heating temperature and shelf life on the Acidty Alcohol Test. Smell and Taste. Heating temperature has a significant effect on the milk reductase test, while the self life has no effect on the milk physical quality of etawa crossbreed goat. From the results of the study it can be concluded that the best milk physical quality of Etawa Crossbreed Goat is in the treatment of T2 *Low Temperature Long Time* (LTLT) with a long shelf life of up to 20 days.

Keyword: Etawa Croosbreed Goat, Milk Physical Quality, Heating Temperature, Storage Time.

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