

ANALISIS KUALITAS SUSU KAMBING PERANAKAN ETAWA SEGAR DI UMKM PENGOLAHAN SUSU KAMBING ETAWA MAJU MAPAN, GUNUNG KIDUL

INTISARI

Kualitas susu segar yang baik dapat ditentukan berdasarkan komponen penyusunnya. Sifat fisik dan kimia merupakan faktor yang dapat digunakan dalam menentukan kualitas susu. Sebagai industri pengolahan susu sangat penting untuk mengetahui kualitas dari produk yang dihasilkan agar aman dikonsumsi oleh masyarakat dan terhindar dari hal yang membahayakan. Tujuan dilakukan penelitian ini adalah untuk mengetahui kualitas fisik dan kimia susu kambing sudahkah sesuai dengan SNI dan mengetahui konsistensi kualitas susu kambing segar yang di hasilkan oleh UPH Maju Mapan dengan parameter pengujian yaitu pH, alkohol 70%, reduktase *methylene blue*, berat jenis, kadar lemak, kadar protein, dan kadar air. Metode penelitian yang digunakan adalah statistik kuantitatif *Two-Way ANOVA* untuk parameter pH, berat jenis, reduktase *methylene blue*, kadar lemak, kadar protein, dan kadar air. Lalu deskriptif kuantitatif untuk parameter alkohol 70%. Pengujian kualitas susu ini berdasarkan pada parameter SNI 3141-01:2011. Sampel susu diambil sebanyak 150 ml pada 4 kambing dengan 2 kali pengambilan dan diberi jeda waktu 2 minggu untuk setiap pengambilan. Setiap sampel yang diuji akan dilakukan pengulangan sebanyak dua kali. Berdasarkan hasil penelitian menggunakan alkohol 70% terdapat satu sampel positif masing-masing periode pengambilan, sehingga tidak sesuai dengan standar SNI 3141-01:2011. Kemudian hasil rerata pengambilan pertama dan kedua secara berturut-turut untuk nilai pH adalah 6,7 dan 6,65; reduktase *methylene blue* adalah 8 dan 9 jam; berat jenis adalah 1,067 dan 1,089; kadar lemak adalah 4,9% dan 5,3%; kadar protein adalah 5,3% dan 5,5%; dan kadar air adalah 81,5% dan 82,4%. Hasil tersebut telah sesuai dengan standar SNI 3141-01:2011. Berdasarkan uji *Two-Way ANOVA*, nilai pH, kadar lemak, protein, dan air tidak terdapat perbedaan yang nyata antara pengambilan pertama dan kedua. Kemudian antara susu kambing tidak terdapat perbedaan nyata pada reduktase *methylene blue* dan kadar protein. Tidak terdapat perbedaan yang nyata antara interaksi pengambilan dan susu kambing pada reduktase *methylene blue*. Secara keseluruhan, kualitas susu kambing PE dari UPH Maju Mapan telah memenuhi standar SNI 3141-01:2011. Namun, terdapat potensi masalah berdasarkan uji alkohol 70% yang memerlukan perhatian lebih dalam penanganan dan kebersihan saat pemerahan. Dengan adanya hasil pengujian kualitas susu kambing ini diharapkan dapat menjadi pertimbangan bagi industri untuk lebih memperhatikan dan menjaga kualitas produk susu yang dihasilkan.

Kata Kunci : *susu segar , kualitas, kambing PE*

ANALYSIS OF THE MILK QUALITY OF FRESH ETAWA CROSSBREED GOAT IN UMKM ETAWA GOAT MILK PROCESSING MAJU MAPAN, GUNUNG KIDUL

ABSTRACT

The good quality of fresh milk can be determined based on its constituent components. Physical and chemical properties are factors that can be used in determining the quality of milk. As a milk processing industry, it is very important to know the quality of the products produced so that they are safe for consumption by the public and avoid harmful things. The purpose of this study is to determine whether the physical and chemical quality of goat milk is in accordance with SNI and to determine the consistency of the quality of fresh goat milk produced by UPH Maju Mapan with testing parameters such as pH, 70% alcohol, methylene blue reductase, specific gravity, fat content, protein content, and moisture content. The research method used was Two-Way ANOVA quantitative statistics for pH parameters, specific gravity, methylene blue reductase, fat content, protein content, and moisture content. Then quantitative descriptive for the 70% alcohol parameter. This milk quality test is based on the parameters of SNI 3141-01:2011. Milk samples were taken as much as 150 ml in 4 goats with 2 stakes and given a 2-week time gap for each sitting. Each sample tested will be repeated twice. Based on the results of the study using 70% alcohol, there was one positive sample for each collection period, so it was not in accordance with the SNI 3141-01:2011 standard. Then the average results of the first and second intakes respectively for pH values were 6.7 and 6.65; the reductase of methylene blue is 8 and 9 hours; specific gravity was 1,067 and 1,089; fat content is 4.9% and 5.3%; protein content is 5.3% and 5.5%; and the moisture content was 81.5% and 82.4%. The results are in accordance with the SNI 3141-01:2011 standard. Based on the Two-Way ANOVA test, there was no significant difference between the first and second intake of pH values, fat, protein, and water. Then between goat milk there was no real difference in methylene blue reductase and protein content. There was no significant difference between the interaction of intake and goat's milk in methylene blue reductase. Overall, the quality of PE goat milk from UPH Maju Mapan has met the SNI 3141-01:2011 standard. However, there are potential problems based on the 70% alcohol test that require more attention to handling and hygiene during milking. With the results of the goat milk quality test, it is hoped that it can be a consideration for the industry to pay more attention to and maintain the quality of the milk products produced.

Keywords : *fresh milk, quality, PE goat*