PERBEDAAN KOMPOSISI SUSU SAPI PERAH MENJELANG WAKTU PENGERINGAN DENGAN FREKUENSI PEMERAHAN YANG BERBEDA DI PETERNAK ANGGOTA KOPERASI DI KECAMATAN CANGKRINGAN, SLEMAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui komposisi susu menjelang waktu pengeringan dengan frekuensi pemerahan yang berbeda, pada sapi perah peternak anggota koperasi susu di Kecamatan Cangkringan, Sleman. Penelitian dilakukan di kelompok ternak Ngudi Makmur dan Ploso Kerep, Cangkringan, Sleman, Yogyakarta. Penelitian ini menggunakan 12 sapi perah yang memasuki umur kebuntingan 7 bulan dengan umur 3 sampai 6 tahun yang diberi pakan hijauan dan konsentrat sesuai manajemen peternak. Frekuensi pemerahan yang diterapkan yaitu dua kali (kelompok A) dan satu kali (kelompok B) perhari selama seminggu sebelum masa kering. Parameter yang diukur yaitu produksi susu, kadar lemak, kadar protein, kadar laktosa, padatan total, bahan kering tanpa lemak (BKTL), dan mineral total susu. Analisis komposisi susu dilakukan secara langsung setelah koleksi sampel susu selesai. Analisis sampel dilakukan di Laboratorium Ilmu Ternak Perah dan Industri Persusuan, Fakultas Peternakan, Universitas Gadjah Mada. Data yang diperoleh dianalisis statistik dengan *independent sample t-test*. Hasil penelitian menunjukkan kadar lemak, kadar laktosa, dan BKTL antara kedua kelompok tidak menunjukkan perbedaan nyata ($P>0,05$), sedangkan kadar protein, padatan total, dan mineral susu menunjukkan perbedaan nyata ($P<0,05$). Komposisi susu kelompok A dan kelompok B adalah kadar lemak 2,57±0,64% dan 2,93±0,91%; kadar protein 3,25±0,69% dan 4,09±0,58%; kadar laktosa 5,05±1,57% dan 4,82±1,94%; padatan total 11,79±1,12% dan 13,29±2,80%; BKTL 9,04±2,12% dan 9,63±1,71%; dan mineral susu 0,72±0,09% dan 0,84±0,56%. Kesimpulan dari penelitian ini adalah perbedaan frekuensi pemerahan selama proses pengeringan mempengaruhi komposisi susu.

Kata kunci: Sapi perah, Komposisi susu, Frekuensi pemerahan, Masa kering

DIFFERENCES OF DAIRY COWS MILK COMPOSITION BEFORE DRY OFF WITH DIFFERENT MILKING FREQUENCY IN THE DAIRY COW IN FARMERS COOPERATIVE IN CANGKRINGAN DISTRICT, SLEMAN

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ABSTRACT

This study aims to determine the composition of milk before drying off with different milking frequencies, in dairy cows of dairy cooperative farmers in Cangkringan District, Sleman. The study was conducted in the Ngudi Makmur and Ploso Kerep Smallholder, Cangkringan District, Sleman, Yogyakarta. This study used 12 dairy cows that entered 7 months of gestation with ages 3 to 6 years which were fed forage and concentrate according to farmer management. The frequency of milking applied was twice daily milking (group A) and once daily milking (group B) for a week before dry periode. The parameters measured were fat, protein, lactose, total solids, solid non fat (SNF), and minerals in milk. Milk composition was analyzed directly after milk collection. Sample was analyzed at the Laboratory of Dairy Science and Milk Industry, Faculty of Animal Science, Universitas Gadjah Mada. The data obtained were statistically analyzed by an independent sample t-test. The results showed that fat, lactose, and SNF in milk between the two groups did not show significant differences ($P>0.05$), while protein, total solids, and mineral in milk showed significant differences ($P<0.05$). The composition of the milk of group A and group B were fat of 2.57±0.64% and 2.93±0.91%; protein 3.25±0.69% and 4.09±0.58%; lactose 5.05±1.57% and 4.82±1.94%; total solids 11.79±1.12% and 13.29±2.80%; SNF 9.04±2.12% and 9.63±1.71%; and minerals in milk 0.72±0.09% and 0.84±0.56%. The conclusion of this study is that the difference in milking frequency during the drying process affect the composition of the milk.

Keywords: Dairy cows, Milk composition, Milking frequency, Drying off