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PENGARUH PEMBERIAN JERAMI PADI AMONIASI UREA SEBAGAI PENGGANTI RUMPUT GAJAH  
TERHADAP PRODUKSI DAN  
KADAR LEMAK SUSU SAPI PERAH PERANAKAN FRIESIAN HOLSTEIN  
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**THE EFFECT OF UREA AMMONIATION ON RICE STRAW AS ELEPHANT  
GRASS SUBSTITUTE ON PRODUCTION AND FAT PERCENTAGE OF  
MILK OF THE FRIESIAN HOLSTEIN GRADE DAIRY COWS**

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**ABSTRACT**

The experiment was conducted to study the effect of urea ammoniation on rice straw as elephant grass substitute on production and fat percentage of milk. The six lactating dairy cows of approximately 281 to 410 kg live weight, 8.50 to 12.00 litres/ day of milk production was used in this experiment. They were divided equally into 3 groups (G-1, G-2, and G-3) according to average of live weight and milk yield, each group was 2 lactating dairy cows. The experiment treated for 3 periods (P-1, P-2, and P-3). Each period consisted of 5 weeks (including 2 weeks of adjustment). The statistical design of *Complete block change over* was used in this experiment, which in P-1, G-1 was considered a treatment A (elephant grass +concentrate), G-2 was a treatment B (the straw ammoniated +concentrate), G-3 was a treatment C (the straw ammoniated+concentrate+A vitamin). In P-2 and P-3 the treatment were crossed for each group and was given all treatments. The result were not significantly different to treatment on fat (3.54%; 3.45%; 3.41%), and milk production (9.49, 9.56, and 9.67 litres/ head/ day). The period of milk production for periods 1, 2, and 3 showed very significantly difference i.e. 10.14; 9.48 and 9.11 litres/ head/ day. With Duncan's test, P-1 dairy cows different with P-2 and P-3 dairy cows, for P-2 and P-3 not different. From this experiment was concluded that the rice straw ammoniated by urea 4% could substituted elephant grass for maintaining production and fat percentage of milk of dairy cows that had been lactating for 3 to 4 month with the production level was between 8.50 to 12.00 litres/ head/ day, for 15 weeks experiments .

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(Key Words: Elephant grass, Friesian Holstein Grade, Milk production, Fat and Straw ammoniated).

PENGARUH PEMBERIAN JERAMI PADI AMONIASI UREA SEBAGAI PENGGANTI RUMPUT GAJAH TERHADAP PRODUKSI DAN KADAR LEMAK SUSU SAPI PERAH PERANAKAN FRIESIAN HOLSTEIN

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INTISARI

Penelitian telah dilakukan untuk meneliti pengaruh pemberian derami padi amoniasi urea sebagai pengganti rumput gadah terhadap produksi dan kadar lemak susu sapi perah Peranakan Friesian Holstein (PFH) selama 15 minggu. Enam ekor sapi laktasi dengan berat 281 sampai dengan 410 kilogram, produksi susu 8,50 sampai dengan 12,00 liter/ hari digunakan dalam penelitian ini. Mereka dibagi menjadi tiga kelompok (K-1, K-2, K-3) secara seimbang berdasarkan rerata berat hidup dan produksi susu, masing-masing kelompok terdiri dari dua ekor. Penelitian dilakukan 3 periode dan setiap periode dilakukan selama 5 minggu (termasuk periode penyesuaian masing-masing 2 minggu). Analisis statistik *Complete block change over* digunakan didalam penelitian ini, yang mana dalam P-1, K-1 diberi perlakuan A (rumput gadah+konsentrat), K-2 diberi perlakuan B (derami padi amoniasi+konsentrat), K-3 diberi perlakuan C (derami padi amoniasi+konsentrat+vitamin A). Pada P-2 dan P-3 pemberian ransum digeser dan semua kelompok mendapat semua perlakuan. Hasil penelitian menunjukkan beda tidak nyata antara ransum A, B, dan C untuk kadar lemak susu (%) masing-masing 3,54; 3,45; 3,41, dan produksi susu 9,49; 9,56; 9,67 liter/ ekor/ hari. Periode produksi susu menunjukkan beda sangat nyata ( $P < 0,01$ ) masing-masing 10,14; 9,48; 9,11 liter/ ekor/ hari. Setelah diuji Duncan's, sapi-sapi P-1 berbeda nyata dengan sapi-sapi P-2 dan P-3, sedangkan untuk P-2 dan P-3 tidak berbeda nyata. Dari hasil penelitian dapat disimpulkan bahwa amoniasi derami padi dengan urea 4% dapat digunakan untuk mengganti rumput gadah dalam mempertahankan produksi dan kadar lemak susu sapi perah, pada sapi perah yang telah laktasi selama 3 sampai 4 bulan dengan tingkat produksi susu antara 8,50 sampai 12,00 liter/ ekor/ hari selama 15 minggu penelitian.

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(Kata Kunci : Rumput gadah, Sapi perah PFH, Produksi susu, Kadar lemak susu dan Jerami padi amoniasi).