

**PRODUKSI, KUALITAS SUSU DAN KINERJA REPRODUKSI SAPI
PERAH PERANAKAN FRIESIAN HOLSTEIN YANG DIBERI
TAMBAHAN SUSU BUBUK AFKIR DALAM PAKAN
KONSENTRAT DI KELOMPOK TERNAK
MURTEN WARGA MULYA**

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INTISARI

Penelitian ini dilakukan untuk mengetahui efek penambahan susu bubuk afkir terhadap produksi, kualitas susu dan penampilan reproduksi sapi perah Peranakan Friesian Holstein (PFH). Penelitian ini dilaksanakan di Kelompok Ternak Murten Warga Mulya, Kabupaten Sleman, Yogyakarta pada bulan Januari sampai Juli 2010. Enam ekor sapi PFH laktasi dibagi menjadi 2 kelompok sehingga tiap kelompok terdiri dari 3 ekor sebagai kontrol (tanpa diberi suplemen) dan 3 ekor sebagai perlakuan (dengan pemberian suplemen), yang memiliki masa laktasi seragam yakni masa laktasi III dan umur berkisar 4 sampai 4^{1/2} tahun. Air diberikan secara *ad libitum*. Pakan yang diberikan adalah hijauan dan konsentrat, untuk perlakuan ditambah suplemen yang diberikan selama 100 hari penelitian. Suplemen yang digunakan yaitu susu bubuk afkir diberikan sebanyak 3% dari total pemberian konsentrat pada setiap individu ternak. Perbedaan dari data yang diperoleh dianalisis dengan menggunakan *t-test*. Parameter yang diukur adalah produksi, kualitas susu yang meliputi kadar lemak, kadar bahan kering tanpa lemak, kadar laktosa, kadar bahan kering dan kadar protein, serta kinerja reproduksi yang meliputi *post partum mating*, *service per conception* dan *days open*. Hasil penelitian menunjukkan bahwa produksi susu, kadar lemak, kadar bahan kering tanpa lemak, kadar laktosa, kadar bahan kering, kadar protein, *post partum mating*, *service per conception* dan *days open* antara kontrol dengan perlakuan tidak menunjukkan perbedaan yang nyata ($P > 0,05$), produksi susu 15,96±2,46 vs 20,92±5,17 liter/hari; kadar lemak susu 3,95±0,22 vs 3,97±0,20%; kadar bahan kering tanpa lemak 7,57±0,22 vs 7,66±0,28%; kadar laktosa 4,19±0,12 vs 4,18±0,13%; kadar bahan kering 11,50±0,43 vs 11,63±0,18%; kadar protein 3,19±0,09 vs 3,26±0,19%; *post partum mating* 99,75±21,45 vs 88,00±9,27 hari; *service per conception* 1,25±0,50 vs 1,00±0,00 dan *days open* 126,75±41,69 vs 88,00±9,27 hari. Disimpulkan bahwa penambahan susu bubuk afkir dalam pakan konsentrat dengan kadar 3% tidak berpengaruh secara statistik terhadap produksi, kualitas susu dan kinerja reproduksi sapi perah PFH, walaupun demikian pemberian tambahan susu bubuk afkir ada tendensi naik dari semua parameter yang diukur.

(Kata Kunci: Susu bubuk afkir, Produksi dan kualitas susu, Kinerja reproduksi, Sapi perah laktasi)

**PRODUCTION, MILK QUALITY AND REPRODUCTION
PERFORMANCE OF FRIESIAN HOLSTEIN CROSSBRED DAIRY COW
WITH SUPPLEMENTATION OUTDATED MILK POWDER OF
CONCENTRATES FEED IN MURTEN WARGA MULYA
LIVESTOCK GROUP**

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ABSTRACT

This research was conducted to study the effect of supplementation outdated milk powder of concentrates feed on milk production and quality and reproduction performance of Friesian Holstein Crossbred Dairy Cattle (PFH). This research was done in Murten Warga Mulya Livestock Group, Kabupaten Sleman, Yogyakarta from January until July 2010. Six PFH lactation dairy cattle were divided into two groups of 3 animal as control (without supplement addition) and another group as treatment object (with supplement addition). The animals have same lactation period those are third lactation, are 4 to 4^{1/2} year old lactation. Water was given by ad libitum. The feed given was forages and concentrates, supplement was added for treatment for 100 days. Supplement given was outdated milk powder at level 3% of total concentrates for each individual animal. The differences were analyzed by t-test analysis. Parameters measured were of production, milk quality (milk fat, solid non fat, lactose, total solid and milk protein), reproduction performance (post partum mating, service per conception and days open). Results indicated that milk production, milk fat, solid non fat, lactose, total solid, milk protein, post partum mating, service per conception and days open between controls and treatments were not significant ($P>0,05$), milk production $15,96\pm 2,46$ vs $20,92\pm 5,17$ liter/day; milk fat $3,95\pm 0,22$ vs $3,97\pm 0,20\%$; solid non fat $7,57\pm 0,22$ vs $7,66\pm 0,28\%$; lactose $4,19\pm 0,12$ vs $4,18\pm 0,13\%$; total solid $11,50\pm 0,43$ vs $11,63\pm 0,18\%$; milk protein $3,19\pm 0,09$ vs $3,26\pm 0,19\%$; post partum mating $99,75\pm 21,45$ vs $88,00\pm 9,27$ day; service per conception $1,25\pm 0,50$ vs $1,00\pm 0,00$ and days open $126,75\pm 41,69$ vs $88,00\pm 9,27$ day. It can be concluded that supplementation of outdated milk powder in concentrates feed in the ration did not have any significant effect on production, milk quality and reproduction performance PFH dairy cattle, although the addition of outdated milk powder had tendency increases of all measured parameters.

(Key Word: Outdated milk powder, Milk Production and quality, Reproduction performance, Dairy cattle of lactation)