KONSUMSI PAKAN, PRODUKSI SUSU DAN HUBUNGAN ANTARA KONSUMSI NUTRIEN DENGAN PRODUKSI SUSU SAPI PERANAKAN *FRIESIAN HOLSTEIN MID* LAKTASI DI KELOMPOK NGUDI MAKMUR, CANGKRINGAN, YOGYAKARTA

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INTISARI

Penelitian ini bertujuan untuk mengetahui konsumsi pakan dan produksi susu sapi perah Peranakan *Friesian Holstein mid* laktasi di Kelompok Ngudi Makmur, Cangkringan, Sleman, Yogyakarta. Analisis sampel dilaksanakan di Laboratorium Ilmu Makanan Ternak dan Laboratorium Ilmu Ternak Perah dan Industri Persusuan, Fakultas Peternakan, Universitas Gadjah Mada. Penelitian ini menggunakan 12 ekor sapi perah PFH periode laktasi ke-1 sampai 3 fase *mid* laktasi dengan rata-rata bobot badan 484,33±67,75 kg dan nilai *body condition score* (BCS) antara 2,25 sampai 3,5. Pakan yang diberikan adalah hijauan dan konsentrat dengan perbandingan 40:60 sesuai dengan kebiasaan peternak. Air minum diberikan secara *ad libitum.* Variabel yang diamati meliputi kandungan nutrien bahan pakan, konsumsi pakan (BK, BO, PK, SK, TDN), produksi dan komposisi susu (lemak, protein, laktosa, *solid non fat, total solid)*. Analisis data menggunakan metode analisis deskriptif dan hubungan antara konsumsi BK dan TDN dengan produksi susu serta konsumsi PK dengan kadar protein susu dianalisis dengan analisis regresi. Hasil penelitian menunjukkan konsumsi BK adalah 15,43±1,25 kg BK/ekor/hari, BO 12,90±1,18 kg BK/ekor/hari, PK 2,25±0,22 kg BK/ekor/hari, SK 3,03±0,48 kg BK/ekor/hari, dan TDN 9,66±0,99 kg BK/ekor/hari. Produksi susu rata-rata harian adalah 14,31±0,24 L/ekor/hari dengan kadar lemak 3,84±0,11%, protein 3,13±0,03%, laktosa 4,61±0,14%, SNF 8,51±0,04% dan total solid 12,35±0,17%. Konsumsi BK berpengaruh 43,9% terhadap produksi susu dengan nilai signifikansi 0,001 ($P<0,05$). Konsumsi TDN berpengaruh 32,65% terhadap produksi susu dengan nilai signifikansi 0,0001 ($P<0,05$). Dapat disimpulkan konsumsi nutrien berpengaruh terhadap produksi susu sapi perah Peranakan *Friesian Holstein* mid laktasi.

Kata kunci: Komposisi susu, Konsumsi pakan, *Mid* laktasi, Peternakan rakyat, Produksi susu

FEED INTAKE, MILK PRODUCTION AND RELATION BETWEEN NUTRIEN INTAKE AND MILK PRODUCTION OF MID LACTATION FRIESIAN HOLSTEIN CROSSBRED AT NGUDI MAKMUR SMALLHOLDER DAIRY GROUP, CANGKRINGAN, YOGYAKARTA

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ABSTRACT

The aim of this study was to know the feed intake and milk production of mid lactation Friesian Holstein Crossbred dairy cows at Ngudi Makmur Dairy Smallholder Group, Koperasi Samesta, Cangkringan, Sleman, Yogyakarta. Sample were analyzed at Laboratory of Feed Science and Laboratory of Dairy Science and Milk Industry, Faculty of Animal Science, Universitas Gadjah Mada. This study used 12 Friesian Holstein Crossbred Dairy Cows in 1st-3rd period of lactation at mid lactation phase with average weight 484,33±67,75 kg and body condition score within 2,25-3,5 were fed forages and concentrates with 40:60 ratio as the farmer usually offered. Water offered by *ad libitum* method. Variable observed are feed nutrient, feed consumption (DM, OM, CP, CF, TDN), milk production and composition (fat, protein, lactose, solid non fat, total solid). Data were analyzed with descriptive method continued with regression. The result of the study showed that DM intake was 15,43±1,25 kg DM/head/day, OM was 12,90±1,18 kg DM/head/day, CP was 2,25±0,22 kg DM/head/day, CF was 3,03±0,48 kg DM/head/day, and TDN 9,66±0,99 kg DM/head/day. The average of daily milk production was 14,31±0,24 l/head/day with fat milk 3,84±0,11, milk protein 3,13±0,03%, milk lactose 4,61±0,14%, SNF 8,51±0,04% and total solid 12,35±0,17%. DM intake affect 43,9% of milk production with significance value 0,001 (P<0,05). TDN intake affect 32,65% of milk production with significance value 0,0001 (P<0,05). It can be concluded that nutrien intake affected milk production of mid lactation friesian holstein crossbred dairy cow.

Keyword: Milk composition, Feed consumption, Mid lactation, Dairy smallholder group, Milk production