



KONSUMSI NUTRIEN SAPI PERAH FRIESIAN HOLSTEIN PERIODE KERING DI KELOMPOK PETERNAK NGUPOYO MAKMUR KEPUHARJO, KECAMATAN CANGKRINGAN, SLEMAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui konsumsi nutrien sapi perah pada periode kering di kelompok peternak Ngupoyo Makmur, Kepuharjo, Cangkringan, Sleman, Yogyakarta. Penelitian ini menggunakan 16 ekor sapi perah Friesian Holstein periode kering pada laktasi 2 sampai 4. Pakan yang diberikan pada sapi yaitu hijauan dan konsentrat berupa pollard, konsentrat dan *lactoplus*, dengan proporsi 71:29. Air minum diberikan secara *ad libitum*. Variabel yang diamati adalah komposisi nutrien, konsumsi bahan kering (BK), bahan organik (BO), protein kasar (PK), serat kasar (SK), dan *total digestible nutrient* (TDN), perubahan berat badan, data fisiologis ternak dan nilai *heat tolerance coefficient* (HTC). Pengamatan dilakukan mulai kebuntingan 7 bulan selama masa kering hingga ternak melahirkan. Data yang terkumpul dianalisis dengan metode analisis deskriptif. Selanjutnya data konsumsi BK dengan perubahan berat badan dan nilai HTC ternak dilakukan analisis korelasi dan regresi. Hasil penelitian berupa data konsumsi BK fase *far-off* sebesar $9,50 \pm 1,03$ kg/ekor/hari, fase *close-up* sebesar $11,75 \pm 1,45$ kg/ekor/hari. Rata-rata berat badan fase *far-off* adalah $488,01 \pm 43,25$ kg dan fase *close-up* adalah $506,81 \pm 50,40$ kg. Rata-rata nilai HTC fase *far-off* adalah $2,52 \pm 0,29$ dan nilai HTC fase *close-up* adalah $2,58 \pm 0,19$. Berdasarkan uji korelasi dan regresi Konsumsi BK tidak berkorelasi terhadap bobot badan selama fase *far-off* dan *close-up*. Berdasarkan uji korelasi dan regresi nilai *heat tolerance coefficient* tidak berkorelasi terhadap konsumsi BK selama fase *far-off* dan *close-up*. Kesimpulan dari penelitian ini adalah status nutrisi sapi perah periode kering selama fase *close up* sudah memenuhi kebutuhan ternak namun selama fase *far-off* kebutuhannya belum terpenuhi. Konsumsi BK tidak memiliki korelasi terhadap bobot badan selama fase *far-off* dan *close up*. Nilai *heat tolerance coefficient* selama fase *far-off* dan *close-up* tidak memiliki korelasi terhadap konsumsi BK.

Kata kunci: Berat badan, Fisiologis ternak, *Friesian Holstein*, Konsumsi pakan, *Heat Tolerance Coefficient*, Sapi perah periode kering.



**NUTRIEN CONSUMPTION OF FRIESIAN HOLSTEIN DAIRY CATTLE
FOR DRY PERIOD IN NGUPOYO MAKMUR SMALLHOLDERS GROUP,
KEPUHARJO, CANGKRINGAN DISTRICT, SLEMAN**

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ABSTRACT

This study aims to determine the nutrient consumption of dairy cows in the dry period in Ngupoyo Makmur smallholders group, Kepuharjo, Cangkringan, Sleman, Yogyakarta. This study used 16 dry period Friesian Holstein dairy cows at lactation 2 to 4. The feed given to the cows was forage and concentrate in the form of pollard, concentrate and lactoplus. with a proportion of 71:29. Drinking water is provided ad libitum. The variables observed were nutrient composition, dry matter (BK) consumption, organic matter (BO), crude protein (PK), crude fiber (SK), and total digestible nutrients (TDN), changes in body weight, livestock physiological data and heat values. tolerance coefficient (HTC). Observations were made from 7 months of pregnancy during the dry period until the cattle gave birth. The collected data were analyzed by descriptive analysis method. Furthermore, the data on BK consumption with changes in body weight and HTC values of livestock were analyzed by correlation and regression. The results of the study were data on BK consumption in the far-off phase of 9.50 ± 1.03 kg/head/day, the close-up phase of 11.75 ± 1.45 kg/head/day. The average body weight of the far-off phase was 488.01 ± 43.25 kg and the close-up phase was 506.81 ± 50.40 kg. The average HTC value for the far-off phase is 2.52 ± 0.29 and the HTC value for the close-up phase is 2.58 ± 0.19 . Based on the correlation test and regression, BK consumption was not correlated with body weight during the far-off and close-up phases. Based on correlation and regression tests, the heat tolerance coefficient does not correlate with BK consumption during the far-off and close-up phases. The conclusion of this study is that the nutritional status of dry period dairy cows during the close-up phase has met the needs of livestock but during the far-off phase their needs have not been met. BK consumption has no correlation with body weight during the far-off and close-up phases. The value of heat tolerance coefficient during the far-off and close-up phases has no correlation with BK consumption.

Key words: Body weight, Dry period dairy cattle, Feed consumption, Friesian Holstein, Animal Physiology.