

PREDIKSI STATUS NUTRISI KAMBING PERAH LAKTASI PADA *CURRENT FEEDING SYSTEM* BERDASARKAN KANDUNGAN PROTEIN SUSU DAN *MILK UREA NITROGEN* DI KEMIRI, PAKEM, SLEMAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui status nutrisi kambing perah laktasi berdasarkan kandungan protein susu dan *milk urea nitrogen* (MUN). Penelitian ini dilaksanakan di peternakan rakyat, Dusun Kemiri, Desa Purwobinangun, Kecamatan Pakem, Kabupaten Sleman pada bulan September 2021 sampai April 2022. Materi yang digunakan dalam penelitian ini adalah 18 ekor kambing perah Peranakan Ettawa (PE) laktasi dengan periode laktasi bulan ke-1 sampai 2, bobot badan rata-rata $47,30 \pm 7,05$ kg dan nilai *body condition score* (BCS) 2,5 sampai 3. Pakan yang diberikan sesuai dengan pemberian pakan yang dilakukan oleh peternak sehari-hari (*current feeding system*). Variabel yang diamati meliputi konsumsi bahan kering (BK), bahan organik (BO), protein kasar (PK), serat kasar (SK), *acid detergent fiber* (ADF), *neutral detergent fiber* (NDF), lemak kasar (LK) dan *total digestible nutrient* (TDN), produksi susu, kadar protein susu dan kadar *milk urea nitrogen* (MUN). Data yang diperoleh dianalisis secara deskriptif. Hasil penelitian menunjukkan konsumsi BK $2.329,12 \pm 275,06$ g/ekor/hari, BO $2.109,31 \pm 48,14$ g BK/ekor/hari, PK $296,80 \pm 38,90$ g BK/ekor/hari, SK $553,51 \pm 72,36$ g BK/ekor/hari, LK $49,49 \pm 4,79$ g BK/ekor/hari, ADF $718,75 \pm 93,35$ g BK/ekor/hari, NDF $1.210,44 \pm 154,92$ g BK/ekor/hari dan TDN $1.499,33 \pm 174,45$ g BK/ekor/hari. Data pemenuhan nutrien berupa BK (+) $421,36$ g/ekor/hari, PK (+) $120,65$ g BK/ekor/hari, TDN (+) $438,32$ g BK/ekor/hari, kadar protein $3,90 \pm 0,25\%$ dan MUN $12,87 \pm 2,74$ mg/dL. Hasil penelitian dapat disimpulkan bahwa status nutrisi kambing perah laktasi di peternakan rakyat, Dusun Kemiri, Desa Purwobinangun, Kecamatan Pakem, Kabupaten Sleman berdasarkan kadar protein susu dan *milk urea nitrogen* sudah sesuai kebutuhan.

Kata kunci: *Current feeding system*, Kambing perah laktasi, *Milk urea nitrogen*, Protein susu, Status nutrisi

NUTRITIONAL STATUS PREDICTION OF LACTATING DAIRY GOATS WITH CURRENT FEEDING SYSTEM BASED ON MILK PROTEIN AND MILK UREA NITROGEN IN KEMIRI, PAKEM, SLEMAN

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ABSTRACT

This study aimed to determine the nutritional status of lactating dairy goats based on milk protein and milk urea nitrogen at local dairy farmers, Kemiri Village, Purwobinangun Urban village, Pakem Sub-district, Sleman Regency. The study was conducted from September 2021 until April 2022. This study used 18 lactating Etawah Crossbred goats in the first to the second period of lactation, average body weight 47.30 ± 7.05 kg, and body condition score (BCS) 2.5 to 3. The goats were fed with forages and concentrates as the farmers usually offered (current feeding system). The variables measured were intake of dry matter (DM), organic matter (OM), crude protein (CP), crude fiber (CF), acid detergent fiber (ADF), neutral detergent fiber (NDF), extract ether (EE) and total digestible nutrient (TDN), milk production, milk protein and milk urea nitrogen (MUN). The variables that have been collected were analyzed descriptively. The results of this study showed that DM intake $2,329.12 \pm 275.06$ g/head/day, OM intake $2,109.31 \pm 48.14$ g DM/head/day, CP intake 296.80 ± 38.90 g DM/head/day, CF intake 553.51 ± 72.36 g DM/head/day, ADF intake 718.75 ± 93.35 g DM/head/day, NDF $1,210.44 \pm 154.92$ g DM/head/day, TDN intake $1,499.33 \pm 174.45$ g DM/head/day, DM (+) 421.36 g/head/day, CP (+) 120.65 g DM/head/day and TDN (+) 438.32 g DM/head/day, milk protein $3.90 \pm 0.25\%$ and MUN 12.87 ± 2.74 mg/dL. It can be concluded that the nutritional status prediction of lactating dairy goats based on milk protein and milk urea nitrogen was according to needs.

Keywords: Current feeding system, Nutritional status, Milk protein, Milk urea nitrogen, Lactating dairy goats.