

STATUS NUTRISI, HEMATOLOGI DAN BIOKIMIA DARAH KAMBING PERAH PERANAKAN ETTAWA LAKTASI DI KEMIRI, PAKEM, SLEMAN

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INTISARI

Penelitian ini bertujuan untuk mengetahui status nutrisi kambing perah laktasi dengan pemberian pakan yang dilakukan oleh peternak berdasarkan nilai hematologi dan profil biokimia darah. Penelitian ini dilaksanakan pada bulan September 2021 sampai Maret 2022 di peternak rakyat Kemiri, Pakem, Sleman. Penelitian ini menggunakan 18 ekor induk kambing perah laktasi PE periode laktasi ke-1 sampai 2 dengan rata-rata bobot badan $47,30 \pm 7,05$ kg dan nilai *body condition score* (BCS) berkisar antara 2,5 sampai 3. Pakan yang diberikan berdasarkan kebiasaan yang dilakukan sehari-hari oleh peternak. Variabel yang diamati meliputi komposisi bahan pakan, konsumsi Bahan Kering (BK), Bahan Organik (BO), Protein Kasar (PK), *Total Digestible Nutrient* (TDN), nilai hematologi darah dan profil biokimia darah. Analisis sampel dilakukan di Laboratorium Teknologi Makanan Ternak dan Laboratorium Biokimia Nutrisi, Fakultas Peternakan, serta Laboratorium Penelitian dan Pengujian Terpadu, Universitas Gadjah Mada, Yogyakarta. Data yang telah terkumpul dianalisis dengan metode deskriptif. Hasil penelitian menunjukkan pemenuhan nutrisi berupa BK (+)421,36 g/ekor/hari, PK (+)120,65 g BK/ekor/hari dan TDN (+)438,32 g BK/ekor/hari. Data hasil analisis nilai hematologi meliputi kadar sel darah merah $3,74 \pm 0,97 \times 10^6/\mu\text{L}$, sel darah putih $17,51 \pm 6,47 \times 10^3/\mu\text{L}$, hemoglobin $10,10 \pm 2,61$ g/dL, hematokrit $34,93 \pm 10,63\%$ dan trombosit $1170,65 \pm 420,07 \times 10^3/\mu\text{L}$. Data hasil analisis biokimia darah meliputi kadar glukosa $59,11 \pm 8,62$ mg/dL, urea $39,23 \pm 15,45$ mg/dL dan total kolesterol $99,49 \pm 18,17$ mg/dL. Berdasarkan hasil penelitian dapat disimpulkan bahwa pakan yang diberikan oleh peternak telah memenuhi kebutuhan ternak.

Kata kunci: Biokimia darah, Hematologi, Kambing perah laktasi, Peranakan Ettawa, Status nutrisi

NUTRITIONAL STATUS, HEMATOLOGICAL AND BLOOD BIOCHEMICAL OF LACTATING ETTAWA CROSSBREED DAIRY GOATS IN KEMIRI, PAKEM, SLEMAN

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ABSTRACT

The aim of this study to determine the nutritional status of lactating Ettawa Crossbreed based on hematological value and blood biochemical profile. The study was conducted in September 2021 until March 2022 in dairy farmer Kemiri, Purwobinangun, Pakem, Sleman. This study used 18 Ettawa Crossbreed in the lactating period 1 to 2 with a body weight 47.30 ± 7.05 kg and body condition score (BCS) ranging from 2.5 until 3. The goats were fed with forages and concentrates based on farmers usually gave. Data collected were the composition of feed ingredients, dry matter (DM) intake, organic matter (OM), crude protein (CP), total digestible nutrient (TDN), hematological and blood biochemical profile. Samples were analyzed in the Laboratory of Animal Feed Technology and Laboratory of Nutritional Biochemistry, Faculty of Animal Science and The Integrated Laboratory for Researching and Testing, Universitas Gadjah Mada, Yogyakarta. The obtained data were analyzed descriptively. Nutrient fulfillment data showed that intake of DM (+)421.36 g/head/day, PK (+)120.65 g DM/head/day and TDN (+)438.32 g DM/head/day. The results of hematological analysis showed that red blood cell was $3.74 \pm 0.97 \times 10^6/\mu\text{L}$, white blood cell $17.51 \pm 6.47 \times 10^3/\mu\text{L}$, hemoglobin 10.10 ± 2.61 g/dL, hematocrit $34.93 \pm 10.63\%$ and platelet $1170.65 \pm 420.07 \times 10^3/\mu\text{L}$. The results of blood biochemical profile analysis showed that glucose was 59.11 ± 8.62 mg/dL, urea 39.23 ± 15.45 mg/dL and total cholesterol 99.49 ± 18.17 mg/dL. Based on the results of the study, it can be concluded that the feed given by the farmer has fulfilled the needs of lactating goats.

Keywords: Blood biochemical, Hematological, Lactating dairy goats, Ettawa Crossbreed, Nutritional status