ABSTRAK

Penelitian ini bertujuan untuk mengkaji pengaruh fortifikasi mineral Magnesium (Mg) dan Magnesium (Mg) + Sulfur (S) dalam pakan terhadap konsumsi dan kecernaan serat kasar pakan domba lokal, dan dilaksanakan pada 16 Mei - 18 September 2024. Materi yang digunakan yaitu 18 ekor domba lokal jantan berumur 10-12 bulan dengan bobot badan domba rata-rata 24,2 ± 2,2 kg. Pakan basal yang diberikan terdiri dari jerami padi amoniasi (JPA) dan konsentrat dengan perbandingan 25% : 75%, pemberian berdasarkan 4,5% bahan kering (BK) dari bobot badan. Metode yang digunakan adalah eksperimen *in vivo* dengan Rancangan Acak Lengkap (RAL) pola satu arah. Tiga perlakuan diuji, yaitu P1 = Jerami Padi Amoniasi (JPA) (25%) + konsentrat (75%), P2 = P1 + Mg (0,005%) dari Bobot Badan (BB) domba, P3 = P2 + S (0,83%) dari Bahan Kering (BK) pakan. Setiap perlakuan diulang sebanyak 6 kali. Variabel yang diukur yaitu konsumsi dan kecernaan serat kasar (SK), data yang diperoleh kemudian dianalisis menggunakan analisis variansi (ANAVA). Hasil penelitian menunjukkan bahwa fortifikasi mineral Mg dan Mg + S tidak meningkatkan konsumsi serat kasar secara signifikan (P>0,05) dengan rata-rata konsumsi adalah (P1) 121,42 ± 22,99 g/ekor/hari, (P2) 133,71 ± 15,43 g/ekor/hari, dan (P3) 147,70 ± 31,96 g/ekor/hari. Fortifikasi mineral Mg dan Mg + S tidak meningkatkan kecernaan serat kasar secara signifikan (P>0,05) dengan rata-rata kecernaan adalah (P1) 72,59 ± 1,45 %, (P2) 72,05 ± 3,23 %, dan (P3) 69,22 ± 2,26 %. Fortifikasi mineral Magnesium 0,005% dan Sulfur 0,83% dalam pakan belum mampu meningkatkan kecernaan serat kasar (SK) domba lokal.

Kata kunci: Mineral, Sulfur, Serat Kasar, Fortifikasi, Domba, Pakan

ABSTRACT

This study aims to examine the effect of magnesium (Mg) and magnesium (Mg) + sulfur (S) fortification in feed on the consumption and digestibility of crude fiber in local sheep feed, and was conducted from May 16 to September 18, 2024. The materials used were 18 male local sheep aged 10–12 months with an average body weight of 24.2 ± 2.2 kg. The basal diet consisted of ammoniated rice straw (ARS) and concentrate in a 25%:75% ratio, administered at 4.5% of dry matter (DM) based on body weight. The experimental design was a completely randomized design (CRD) with a one-way layout. Three treatments were tested: P1 = Ammoniated Rice Straw (ARS) (25%) + concentrate (75%), P2 = P1 + Mg (0.005%) of sheep body weight (BW), and P3 = P2 + S (0.83%) of feed dry matter (DM). Each treatment was replicated six times. The measured variables were crude fiber (CF) intake and digestibility, and the data obtained were analyzed using analysis of variance (ANOVA). The results showed that mineral fortification with Mg and Mg + S did not significantly increase crude fiber intake (P > 0.05), with average intake being (P1) 121.42 ± 22.99 g/head/day, (P2) 133.71 ± 15.43 g/head/day, and (P3) 147.70 ± 31.96 g/head/day. Mineral fortification with Mg and Mg + S did not significantly increase crude fiber digestibility (P > 0.05), with average digestibility being (P1) 72.59 ± 1.45%, (P2) 72.05 ± 3.23%, and (P3) 69.22 ± 2.26%. Mineral fortification with magnesium at 0.005% of sheep body weight and sulfur at 0.83% in feed was unable to increase digestibility of crude fiber (CF) in local sheep.

Keywords: Minerals, Sulfur, Crude Fiber, Fortification, Sheep, Feed