

EVALUASI KECERNAAN NUTRIEN RANSUM SILASE CAMPURAN GAMA UMAMI KALIANDRA DAN RANSUM KANGKUNG KERING PADA DOMBA EKOR TIPIS

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INTISARI

Penelitian ini bertujuan untuk mengevaluasi dan membandingkan kecernaan nutrien ransum silase campuran gama umami (*Pennisetum purpureum* cv. Gama Umami) dan kaliandra (*Calliandra calothyrsus*) dengan ransum berbasis kangkung kering (*Ipomoea aquatica*) yang umum digunakan, guna memberikan bukti ilmiah apakah silase ini dapat menjadi pakan alternatif yang lebih unggul bagi peternak domba ekor tipis. Uji dilakukan dengan membagi 20 ekor domba ekor tipis ke dalam dua kelompok. Domba yang digunakan merupakan domba betina berumur 10 sampai 12 bulan dengan bobot rata-rata $15,19 \pm 1,37$ kg. Kelompok pertama (P1) diberi ransum dengan komposisi kangkung kering (40%) dan konsentrat (60%). Kelompok kedua (P2) diberi ransum dengan komposisi silase campuran gama umami dan kaliandra (40%), serta konsentrat (60%). Formulasi silase campuran gama umami dan kaliandra menggunakan perbandingan 70:30. Domba diberi pakan *complete feed* sebanyak 3,3% dari bobot badan (%BK) dan diberi minum secara *ad libitum*. Penelitian ini dilakukan selama 52 hari dengan 14 hari masa adaptasi dan 10 hari periode koleksi sampel. Variabel yang diamati berupa bahan kering (BK), bahan organik (BO), lemak kasar (LK), serat kasar (SK), protein kasar (PK), bahan ekstrak tanpa nitrogen (BETN), dan *total digestible nutrients* (TDN). Data yang diperoleh dari hasil laboratorium dianalisis dengan menggunakan metode T-test. Hasil penelitian menunjukkan bahwa terdapat perbedaan konsumsi nutrien (g) ($P < 0,05$), dimana ransum silase campuran gama umami dan kaliandra lebih unggul. Tidak ada perbedaan koefisien cerna (%) di antara kedua ransum ($P > 0,05$) kecuali pada koefisien cerna BETN ($P < 0,05$), dimana ransum silase campuran rumput gama umami dan kaliandra lebih unggul. Selain itu terdapat perbedaan nutrien tercerna (g) ($P < 0,05$) kecuali pada SK tercerna ($P > 0,05$), dimana ransum silase campuran lebih unggul. Sehingga sapat disimpulkan bahwa ransum silase campuran gama umami dan kaliandra dapat dijadikan sebagai pakan alternatif yang lebih unggul dari ransum kangkung kering.

(Kata Kunci: Kecernaan, Silase, Rumput gama umami, Kangkung kering, Domba ekor tipis)

NUTRIENT DIGESTIBILITY EVALUATION OF MIXED GAMA UMAMI-KALIANDRA SILAGE RATION AND DRIED WATER SPINACH RATION IN THIN-TAILED SHEEP

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ABSTRACT

This study aimed to evaluate and compare the nutrient digestibility of a mixed silage ration of gama umami (*Pennisetum purpureum* cv. Gama Umami) and kaliandra (*Calliandra calothyrsus*) with a ration based on commonly used dried water spinach (*Ipomoea aquatica*), to provide scientific evidence on whether this silage can be a superior alternative feed for thin-tailed sheep farmers. The test was conducted by dividing 20 thin-tailed sheep into two groups. The sheep used were females aged 10 to 12 months with an average body weight of $15,19 \pm 1,37$ kg. The first group (P1) was fed a ration composed of dried water spinach (40%) and concentrate feed (60%). The second group (P2) was fed a ration composed of mixed gama umami and kaliandra silage (40%) and concentrate feed (60%). The formulation of the mixed gama umami and kaliandra silage used a 70:30 ratio. The sheep were fed complete feed at 3.3% of their body weight (%DM) and provided water *ad libitum*. This research was conducted over 52 days, with 14 days of adaptation and a 10-day sample collection period. The observed variables were dry matter (DM), organic matter (OM), crude fat (CF), crude fiber (CF), crude protein (CP), nitrogen-free extract (NFE), and total digestible nutrients (TDN). Data obtained from laboratory results were analyzed using the T-test method. The results showed significant differences in nutrient intake (g) ($P < 0.05$), where the mixed gama umami and kaliandra silage ration was superior. There was no significant difference in digestibility coefficients (%) between the two rations ($P > 0.05$), except for the NFE digestibility coefficient ($P < 0.05$), where the mixed gama umami and kaliandra grass silage ration was superior. Furthermore, there were significant differences in digested nutrients (g) ($P < 0.05$), except for digested crude fiber ($P > 0.05$), where the mixed silage ration was superior. Therefore, it can be concluded that the mixed gama umami and kaliandra silage ration can be used as a superior alternative feed compared to the dried water spinach ration.

(Keywords: Digestibility, Silage, Gama umami grass, Dried water spinach, Thin-tailed sheep)