

EVALUASI DAUN LAMTORO, POLONG BIJI LAMTORO, DAUN WARU, DAUN ASAM JAWA, DAN DAUN KETELA POHON SECARA IN SACCO RUMEN

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INTISARI

Penelitian ini bertujuan untuk mengetahui degradasi bahan kering (BK), bahan organik (BO) dan protein kasar (PK) sampel pakan hijauan yang biasa diberikan peternak. Dalam penelitian ini digunakan 5 macam sampel pakan hijauan yaitu daun lamtoro (LM), polong biji lamtoro (PL), daun asam jawa (AJ), daun waru (WR), dan daun ketela pohon (KP). Penentuan kecepatan degradasi suatu bahan pakan ditentukan berdasarkan laju degradasinya dengan metode *in sacco* rumen. Data yang diambil adalah kecernaan nutrisi residu rumen meliputi BK, BO, dan PK. Sampel yang diinkubasi dalam rumen ternak yang berfistula dengan interval waktu yang berbeda, titik inkubasi: 2, 4, 8, 12, 16, 24, 36 dan 48 jam. Data yang diperoleh dianalisis menggunakan analisis variansi sesuai design Rancangan Acak Lengkap CRD pola searah dan rerata perlakuan yang berbeda diuji dengan *Duncan's New Multiple Range Test*. Berdasarkan hasil perhitungan *Degradasi Teori (DT)* dari BK bahan pakan hijauan didapatkan nilai *DT* sebesar LM 49,57%, PL 48,15%, WR 43,37%, AJ 56,20%, KP 63,47%. Sedangkan hasil perhitungan nilai *DT* dari BO sebesar LM 47,30%, PL 43,32%, WR 41,88%, AJ 54,59%, KP 62,45%. Hasil perhitungan nilai *DT* dari PK sebesar LM 55,61%, PL 75,77%, 31,62%, 46,50%, 71,05%. Hasil analisis variansi yang di uji pola searah didapatkan nilai fraksi masing-masing *DT* dari BK, BO, PK bahan pakan hijauan adalah terdapat perbedaan tidak nyata ($P > 0,05$) dan berbeda nyata ($P < 0,05$) dari masing-masing sampel hijauan pakan. Nilai *Degradasi Teori (DT)* tertinggi (BK, BO) adalah KP, sedangkan untuk sampel pakan LM, PL dan AJ memiliki nilai *DT* yang relatif tinggi pada degradasi PK dibandingkan dengan sampel pakan KP dan WR.

Kata kunci: Hijauan, Degradasi, *In sacco*, Rumen, Waktu inkubasi, Kecernaan nutrisi

IN SACCO EVALUATION OF LEUCAENA LEAF, SEEDPODS OF LEUCAENA, HIBISCUS LEAF, TAMARIND LEAF, AND CASSAVA LEAF IN THE RUMEN

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ABSTRACT

This study was conducted to determine the degradation of dry matter (DM), organic matter (OM) and crude protein (CP) of forage samples that are usually fed to livestock. Five different samples of forage feed, leucaena leaf (LM), seedpods of leucaena (PL), tamarind leaf (AJ), hibiscus leaf (WR), and cassava leaf (KP). Determination of the rate of degradation of a feed material is based on the rate of degradation, this is determined by the *in sacco* method. The data retrieved is the residue of rumen digestibility of nutrients includes DM, OM, and CP. Samples were incubated in the rumen of fistulated cattle with different incubation periods: 2, 4, 8, 12, 16, 24, 36 and 48 hours. The data obtained were analyzed using analysis of variance according to Randomized Complete Design (CRD) patterns and the mean values of the different treatments were tested with Duncan's New Multiple Range Test. Calculations based on the Degradation Theory (*DT*) of DM value of forage feedstuffs obtained were LM 49.57%, PL 48.15%, WR 43.37%, AJ 56.20%, and KP 63.47%. While the results of the calculation of the *DT* value of OM were LM 47.30%, PL 43.32%, WR 41.88%, AJ 54.59%, and KP 62.45%. The results of the calculation of the value of *DT* were LM 55.61%, PL 75.77%, WR 31.62%, AJ 46.50%, KP 71.05%. The results of analysis of variance in test pattern obtained in the value of the fraction of each *DT* from DM, OM, CP forage feed ingredients had not significant difference ($P > 0.05$) and significantly different ($P < 0.05$) from each forage samples. The value of the highest Degradation Theory (*DT*) (DM, OM) was the KP, whereas for the value of *DT* of feed samples LM, PL and AJ had a relatively high value on the degradation of crude protein (CP) compared with samples of feed WR and KP.

Key words: Forage, Degradation, *In Sacco*, Rumen, Incubation time, Nutrient digestibility