

DEGRADASI IN SACCO PAKAN BASAL TUMPI JAGUNG DAN KULIT KOPI YANG MENDAPAT SUPLEMENTASI SUMBER PROTEIN DAN ENERGI TERDEGRADASI LAMBAT

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INTISARI

Penelitian ini bertujuan untuk mengetahui degradasi bahan kering (BK) dan bahan organik (BO) pakan basal tumpi jagung dan kulit kopi yang mendapat suplementasi sumber protein terdegradasi lambat (PDL) dan energi terdegradasi lambat (EDL). Perlakuan pakan dibagi menjadi enam perlakuan: T1 (tumpi jagung 80% + kulit kopi 20% / T8K2), T2 (tumpi jagung 60% + kulit kopi 40% / T6K4), T3 (T8K2 + tepung daun lamtoro + ampas pati aren), T4 (T8K2 + tepung daun lamtoro + dedak jagung), T5 (T6K4 + tepung daun lamtoro + ampas pati aren), dan T6 (T6K4 + tepung daun lamtoro + dedak jagung). Kantong nilon diinkubasikan dengan kinetika 3, 6, 9, 12, 24, 48, dan 72. Kehilangan bahan kering dan bahan organik pada setiap titik inkubasi digunakan untuk menentukan nilai a, b, dan c dengan bantuan *Neway Excel*. Data a, b, c, dan degradasi teori yang diperoleh dianalisis dengan rancangan acak lengkap pola searah dan perbedaan yang ada diuji *Duncan multiple range test (DMRT)*. Hasil penelitian menunjukkan bahwa degradasi bahan kering T6 (44,86%) adalah yang tertinggi ($P < 0,05$) dari pada T1 (35,67%) dan T3 (34,72%). Nilai (a) pada T3 (37,68%) adalah yang tertinggi dibanding perlakuan lainnya. Fraksi (b) pada T4 (43,58%) adalah yang tertinggi dibanding perlakuan lainnya. Nilai degradasi teori bahan kering T6 (44,86%/jam) adalah yang tertinggi ($P < 0,05$) dibanding perlakuan lainnya. Degradasi bahan organik tertinggi diperoleh pada T6 (44,51%) dan T4 (48,62%) dari pada T1 (32,14%) dan T2 (31,83%). Nilai (a) pada T6 (26,42%) adalah yang tertinggi dibanding perlakuan lainnya. Fraksi (b) pada T4 (47,12%) dan T6 (45,16%) nyata lebih tinggi dibanding perlakuan lainnya. Nilai degradasi teori bahan organik T6 (44,51%/jam) lebih tinggi ($P < 0,05$) dibanding perlakuan lainnya. Disimpulkan bahwa suplementasi tepung daun lamtoro dan dedak jagung pada pemberian pakan basal tumpi jagung dan kulit kopi dapat meningkatkan degradasi bahan kering dan organik, dan lebih baik daripada yang diberi tepung daun lamtoro dan ampas pati aren.

(Kata Kunci : Pakan Basal, Suplementasi, Degradasi *In Sacco*)

IN SACCO DEGRADATION OF CORN LEATHER WASTE AND COFFEE PULP BASAL DIET SUPPLEMENTED BY SLOWLY DEGRADED PROTEIN AND ENERGY FEEDSTUFFS

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ABSTRACT

This study was conducted to determine the *in sacco* dry matter and organic matter degradabilities of corn husk and coffee pulp basal diet which supplemented by slowly degraded protein (PLD) and slowly degraded energy (ELD) feedstuffs. The ration consisted of six treatments: T1 (80% corn leather waste + 20% of coffee pod / T8K2); T2 (60% corn leather waste + 40% of coffee pod / T6K4); T3 (T8K2 + *Leucaena leucocephala* leaf powder + sugar palm stem waste); T4 (T8K2 + *Leucaena leucocephala* leaf powder + corn brand); T5 (T6K4 + *Leucaena leucocephala* leaf powder + sugar palm stem waste); T6 (T6K4 + *Leucaena leucocephala* leaf powder + corn brand). Incubation times were 3, 6, 9, 12, 24, 48, and 72 hours. Dry and organic matter disappearances in each incubation time were used to determine the fraction values of a, b, c, and theoretical degradation were analyzed statistically by one-way completely randomized design and followed by Duncan's new multiple range test for any differences. The result of this research showed that dry matter degradation of T6 (44.86%) was the highest ($P < 0.05$) compared to the others, while the fraction value (a) of T6 was also highest ($P < 0.05$) than the others. The fraction value (b) of T4 (43.58%) were higher than other treatments. The theoretical degradation value of dry matter of T6 (44.86%/hours) was highest ($P < 0.05$) than the others. The higher degradation of organic matter was found in the T6 (44.51%) and T4 (38.62%), compared to T1 (32.14%) and T2 (31.83%). The fraction value (a) of T6 was highest ($P < 0.05$) than the other treatments. The fraction value (b) of T4 (47.12%) and T6 (45.16%) which were higher than other treatments. The theoretical degradation value of organic matter of T6 (44.51%/hours) was highest ($P < 0.05$) than the others. It was concluded that supplementation of *Leucaena leucocephala* leaf powder and corn brand on diet based on corn leather waste and coffee pulp could improve degradation of dry matter and organic matter, which was better than those that supplemented by *Leucaena leucocephala* leaf powder and sugar palm stem waste.

(Key Words : Basal feed, Supplementation, *In Sacco* Degradation)