

PEMGARUH CARA PENGERINGAN HIJAUAN LEGUMINOSA, JERAMI LEGUMINOSA DAN HIJAUAN NON LEGUMINOSA TERHADAP DEGRADASINYA DI DALAM RUMEN DAN KECERNAAN DI DALAM INTESTINUM SECARA *INSACCO*

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INTISARI

Penelitian ini bertujuan untuk mengetahui perbedaan cara pengeringan terhadap degradasi di dalam rumen dan pencernaan di dalam Intestinum dan *Giiricidia maculate* (G), *Desmodium rensonii* (M), jerami kacang tanah (K), jerami kedelai (D) dan daun angka (N) dengan menggunakan metode *in sacco mobile*. Tiga ekor sapi *Friesian-Holstein* yang berfistula pada bagian rumen dan kanula duodenum (369 kg  $\pm$  73.6 kg) digunakan dalam penelitian ini. Sampel dikeringkan secara oven (O) pada suhu 80°C dan secara beku (*fyophilisasi*) (F) pada suhu -40 °C sebelum diinkubasikan di dalam rumen. Residu sampel, setelah inkubasi rumen pada 2, 4, 8, 16, 24, dan 48 Jam diambil dan dihitung dan kemudian diinkubasikan di dalam intestinum. Data yang di dapatkan digunakan untuk menghitung kinetika degradasi [ $Y = a + b(1 - e^{-ct})$ ], dan nilai degradasi [ $DT = a + (b \times c) / (c + Kp)$ ] serta pencernaan BK, PK di dalam intestinum [ $dT = (Krf - KrdyKrf) \times 100 \%$ ]. Hasil menunjukkan bahwa cara O menurunkan DT fraksi BK, PK, NDF pada G secara berturut-turut sebesar -7,094 poin, -3,792 poin, -8,125 poin; M sebesar -4,257 poin, -4,114 poin, -4,503 poin; K sebesar -5,636 poin, -10,23 poin, -5,657 poin; D sebesar -0,946 poin, -5,44 poin, -8,182 poin. Kemudian terjadi pula penurunan dT fraksi BK, PK G secara berturut-turut -4,984 poin; -10,09 poin dan yang lolos (rumen-intestinum) meningkat sebesar 6,912 poin (BK) dan 4,547 poin (PK). Pada D hanya fraksi PK yang mengalami penurunan dT dan peningkatan fraksi yang lolos sebesar -5,24 poin dan 4,146 poin. Dengan demikian cara O menurunkan DT fraksi BK, PK, NDF di dalam rumen pada beberapa hijauan kecuali pada daun angka. Cara O juga menurunkan dT dan meningkatkan fraksi BK dan PK yang lolos (rumen-intestinum) pada G dan hanya fraksi PK saja pada D.

Kata kunci : degradasi, pencernaan, Seguminosa, *in sacco*, *Friesian-Holstein*.

INFLUENCE OF DRYING METHODS ON *IN SACCO* DEGRADATION IN THE RUMEN AND DIGESTIBILITY IN THE INTESTINE OF LEGUME AND NON LEGUME FORAGE, AND LEGUME STRAW

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ABSTRACT

The objectives of the research was to study the influence of drying methods on degradation in the rumen and digestibility in the intestine of *GliricifMa maculate* (G), *DesmocSium rensonii* (M), peanut straw (K), soybean straw (D) and jackfruit leaves (N) using *in sacco* mobile methods. Three rumen fistulated and duodenal canulated Friesian-Hoistein cows (369 kg  $\pm$  73, 6 kg) were used. Samples were dried (O) at 60 °C or freeze dried (F) at -40 °C before incubated in the rumen. Sample residues, after incubation, for 2, 4, 8, 16, 24 and 48 h were recovered and measured and subsequently incubated in the intestine. Data obtained were calculated for kinetics [ $Y=a + b(1-e^{-ct})$ ] and theoretical [ $ID = a + (b \times c)/(c + Kp)$ ] degradation in the rumen, and digestibility [ $TD = (Krf - Krd/Krf) \times 100 \%$ ] of DM and CP in the intestine. The result showed that O decreased ID of DM, CP and NDF of G at -7.094 points, -3.792 and -8.125 points respectively ; M at -4.257 points , -4.114 points, -4.503 points ; K at -5.636 points, -10.23 points, -5.65? points ; D at -0.946 points, -5.44 points, -8.182 points. There were decreased ID of DM and CP fraction of G at -4,984 points, -10.09 points respectively, and the escaping fraction (rumen-intestinum) increased at 6.912 points (DM) and 4,547 points (CP). Soybean straw feed, it is only CP fraction that decreased in ID and the increased of the escaping fraction at -5.24 points and 4.146 points respectively. Thus the method O decreased TD of DM, CP and NDF fraction in rumen for some forages except jackfruit leaves. Method O also decreased ID and increased DM and CP fraction that escaping (rumen-intestinum) in G and only CP in D.

Keywords : degradation, digestibility, leguminous, *in sacco*, Friesian-Hoistein.