

**DEGRADASI IN SACCO BAHAN ORGANIK DAN PROTEIN KASAR JERAMI  
KACANG TANAH, RUMPUT RAJA, DEDAK HALUS DAN BUNGKIL KELAPA  
DI DALAM RUMEN SAPI PERANAKAN FRIESIAN HOLSTEIN**

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**INTISARI**

Empat ekor sapi Peranakan Friesian Holstein (PFH) betina tidak berproduksi yang telah difistula pada bagian rumen dipergunakan dalam penelitian yang bertujuan untuk mengetahui degradasi *in sacco* bahan organik (BO) dan protein kasar (PK) empat bahan pakan. Pakan yang diberikan terdiri dari empat perlakuan yaitu rumput Raja, jerami kacang tanah, campuran rumput Raja + bungkil kelapa dan campuran jerami kacang tanah + dedak halus denganimbangan 55% :45%. Pakan yang diuji yaitu jerami kacang tanah, rumput Raja, dedak halus dan bungkil kelapa dimasukkan ke dalam kantong nilon dan diinkubasikan dalam rumen selama 2, 4, 8, 16, 24 dan 48 jam. Setiap waktu inkubasi dilakukan replikasi untuk mendapatkan residu sebanyak 10 g, kemudian residu tersebut dianalisis kandungan BO dan PKnya. Data yang diambil adalah data kinetika degradasi dan nilai degradasi teori (DT) dari PK dan BO,  $DT = a + ((bc/(c+0,06))$ . Nilai DT dianalisis variansi untuk rancangan Latin Square 4x4 dan dilanjutkan uji DMRT (*Duncan's New Multiple Range Test*). Hasil penelitian menunjukkan bahwa nilai DT BO bungkil kelapa (94,40%) tertinggi ( $P < 0,01$ ) kemudian jerami kacang tanah (76,72%), rumput Raja (66,13%) dan dedak halus (56,16%), sedangkan DT PK jerami kacang tanah (86,42%) lebih tinggi ( $P < 0,05$ ) daripada dedak halus (74,63%) dan rumput Raja (74,34%), tetapi bungkil kelapa (76,15%) berbeda tidak nyata dengan bahan pakan yang lain. Terdapat variasi DT BO dan DT PK dari bahan pakan yang diuji.

**Kata Kunci:** Degradasi *in sacco*, Jerami Kacang Tanah, Rumput Raja, Dedak Halus, Bungkil Kelapa, Sapi Peranakan Friesian Holstein

**IN SACCO DEGRADATION OF ORGANIC MATTER AND CRUDE PROTEIN  
OF PEANUT STRAW, KING GRASS, RICE BRAN, AND COPRA MEAL IN  
THE RUMEN OF FRIESIAN HOLSTEIN CROSSBRED COWS**

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**ABSTRACT**

Four rumen fistulated non lactating cows of Friesian Holstein Crossbred were used in this experiment to study the *in sacco* degradation of organic matter (OM) and crude protein (CP) of four kinds of feed. The animals were fed four kinds of feed treatments: King grass, peanut straw, King grass + copra meal, peanut straw + rice bran with a ratio of 55% : 45% respectively for Latin Square design. The samples of feeds were peanut straw, King grass, rice bran, and copra meal were filled into nylon bags and incubated in the rumen for 2, 4, 8, 16, 24 and 48 hours. Each incubation time was replicated to get residual samples of 10 g. The residual samples were analyzed for organic matter and crude protein. Kinetic degradation of OM and CP were adjusted to the model of  $DT = a + (b/(c+0,06))$ . The DT value were analyzed by analysis variance using Latin Square design of 4x4 and the differences between mean were tested by Duncan's New Multiple Range Test. The results of this experiment showed that the DT OM of copra meal (94.40%) was higher (P<.01) than peanut straw (76.72%), than king grass (66.13%) and than rice bran (56.16%), however the DT CP of peanut straw (86.42%) was higher (P<.05) than rice bran (74.34%) and King grass (74.34%), and the value of DT CP of copra meal (76.15%) was not significantly different with the others. There were a variation for DT OM and DT CP from feeds used in this experiment.

Key Words : *In sacco* Degradation, Peanut Straw, King Grass, Rice Bran, Copra Meal, Friesian Holstein Crossbred Cow