

DEGRADASI *IN SACCO* JERAMI PADI  
PADA SAPI PERANAKAN ONGOLE DAN KERBAU LUMPUR  
YANG MENDAPAT PAKAN BERBEDA

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INTISARI

Penelitian ini bertujuan untuk mengetahui degradasi *in sacco* bahan kermg (BK) dan bahan organik (BO) jerami padi pada sapi peranakan Ongole dan kerbau Lumpur yang mendapat pakan berbeda. Tiga ekor sapi peranakan Ongole betna dan 1 ekor kerbau lumpur jantan serta 1 betna umur 3 sampai 5 tahun pada tahap 1 diberi pakan tunggal jerann padi yang disemprot dengan urea 1% BK untuk menambah defisiensi N secara *ad libitum* dan pada tahap 2 semua temak diberi pakan standar (rumput raja dan konsentrat 70%:30%) sebanyak 3% berat badan. Fase adaptasi pada masing-masing pakan selama 11 hari. Sampel jerami padi dnnkubasikan dalam rumen selama 4, 8, 16, 24, 48, 72 dan 96 jam. Degradasi teori (DT) dihitung dengan rumus  $DT=a+(bxc/c+kp)$ . Pada awal koleksi dilakukan pengambilan cairan rumen untuk mengetahui kinetika pH dan  $NH_3$  rumen. Data yang diperoleh dianalisis variansi dengan pola faktoral 2x2. Hasil analisis data menunjukkan bahwa pH pada pakan tunggal jerami padi lebih trnggi ( $P<0,01$ ) dibanding pakan standar yaitu masing-masing 7,27 vs 6,73 sedangkan pada sapi dan kerbau tidak berbeda. Konsentrasi  $NH_3$  pada pakan tunggal lebih rendah ( $P<0,05$ ) dibanding pakan standar yaitu masing-masing 12,96 mg/100 ml vs 18,97 mg/100 ml sedangkan pada sapi dan kerbau tidak berbeda. Nilai DT BK dan BO pada pakan tunggal lebih tmggi ( $P<0,01$ ) dibanding pakan standar yaitu masing-masing 41,15 vs 35,35 dan 44,78 vs 38,90, sedangkan DT BK dan BO sapi lebih tinggi ( $P<0,01$ ) dibanding kerbau yaitu masing-masing 39,04 vs 37,46 dan 42,62 vs 41,07. Hasil penelitian dapat disimpulkan bahwa degradasi *in sacco* jerami padi yang diinkubasikan pada pakan tunggal lebih tmggi dibanding pakan standar, sedangkan degradasi *in sacco* jerami padi pada sapi lebih tinggi dibanding kerbau. Terdapatnya interaksi antara pakan dan spesies terhadap nilai DT BK dan BO.

Kata Kunci: (Jerami Padi, Pakan Standar, Sapi Peranakan Ongole, Kerbau Lumpur, Degradasi *In sacco*)

## IN SACCO DEGRADATION OF RICE STRAW IN ONGOLE CROSSBRED CATTLE AND SWAMP BUFFALO FED DIFFERENT RATION

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### ABSTRACT

This experiment was done to determine rice straw in sacco degradation of dry matter (DM) and organic matter (OM) in Ongole crossbred cattle and Swamp buffalo fed different ratio. Three female Ongole crossbred cattle, one male and one female Swamp buffalo aged 3 to 5 years were given rice straw sprayed 1% urea (DM basis) to correct N deficiency as sole feed (*ad libitum*). In first step and the second period all animals were given standard feed (King grass and concentrate of 70%:30%) in sum 3% of body weight. The adaptation phase in each period was 11 days. Samples of rice straw were then incubated in the rumen for 4, 8, 16, 24, 24, 48, 72 and 96 hours. Degradation theory (DT) was calculated by  $DT=a+(bxc/c+kp)$ . Ammonia and pH rumen data were calculated to determine their kinetic during the treat. Analys of variance was used to determine the effect of treatment using 2x2 factorial design. The results showed that pH of rice straw as sole feed was higher ( $P<.01$ ) than standard feed of (7.27 vs 6.73) while in cattle and buffalo was not significant. Ammonia concentration in sole feed was lower ( $P<.05$ ) than in standard feed of (12.96 mg/100 ml vs 18.97 mg/100 ml) on the other hand there wasnot significant difference between cattle and buffalo. The DT of DM and OM in sole feed was higher ( $P<.01$ ) than standard feed of (41.15 vs 35.35 and 44.78 vs 38.90) respectively, while DT of DM and OM in cattle was higher ( $P<.01$ ) than buffalo of (39.04 vs 37.46 and 42.62 vs 41.07) respectively. It can be concluded that in sacco degradation of rice straw on sole feed higher than that of standard feed and in sacco degradation of rice straw in cattle was higher than that in buffalo. There was an interaction between feed and spesies for DT of DM and OM.

(Key Words: Rice Straw, Standard Feed, Ongole Crossbred Cattle, Swamp Buffalo, In Sacco degradation).