

DEGRADASI IN SACCO JERAMI RADI AMONIASI
PADA SAPI PERANAKAN ONGOLE DAN KERBAU
YANG MENDAPAT PAKAN BERBEDA

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INTISARX

Penelitian ini bertujuan untuk mengetahui nilai degradasi *in sacco* BK dan BO jerami padi amoniasi pada Sapi PO dan kerbau dengan pakan yang berbeda. Ternak yang digunakan adalah tiga ekor sapi betina dan sepasang kerbau berumur 3 sampai 5 tahun dan difistula bagian rumennya. Penelitian ini meliputi dua periode, pada periode pertama semua ternak diberikan pakan tunggal jerami padi amoniasi dengan urea 4% BK (*ad libitum*) dan periode kedua pakan standar (rumput raja dan konsentrat dengan imbang 70:30%) sebanyak 3% berat hidup ternak. *In sacco* jerami padi amoniasi diinkubasi di dalam rumen selama 4,8,16,24,48,72 dan 96 jam inkubasi. Dilakukan koleksi cairan rumen selama 8 jam di akhir periode untuk menentukan pH dan konsentrasi amonia. Nilai DT ditentukan dengan model eksponensial $P=a+b(1-\exp^{-ct})$ dan dianalisis variansi dengan model faktorial 2x2 (faktor spesies dan pakan) selanjutnya diuji Duncant multiple range test untuk data yang berbeda nyata. Hasil analisis statistik menunjukkan nilai DT BK dan BO pakan tunggal lebih tinggi ($P<0,05$) dibanding pakan standar (2,46 vs 39,60 dan 44,60 vs 42,07); nilai DT BK sapi lebih tinggi ($P<0,05$) dibanding kerbau (41,65 vs 40,41) sedangkan DT BO antara kedua ternak tidak berbeda nyata serta terdapat interaksi antara kedua faktor pada nilai DT BK dan BO. Sehingga dapat disimpulkan bahwa degradasi *in sacco* jerami padi amoniasi pakan tunggal lebih tinggi dibanding pakan standar dan degradasi *in sacco* jerami padi amoniasi pada sapi lebih tinggi dibanding kerbau serta degradasi *in sacco* ternak sapi yang mendapatkan pakan tunggal lebih tinggi daripada interaksi lainnya.

(Kata kunci: Pakan jerami padi amoniasi, Pakan standar, Sapi, Kerbau dan *In sacco*)

**IN SACCO DEGRADATION OF RICE STRAW TREATED BY FOUR
PERCENT UREA (DM BASIS) IN ONGOLE CROSSBRED CATTLE
AND BUFFALO FED DIFFERENCE RATION**

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ABSTRACT

The aim of this experiment was to evaluate the In sacco degradation of rice straw treated urea (4% DM asIs) on dry matter (IMJ and organic matter COM} Ongoie Crossbred cattle and buffalo fed with difference ration. Three female Ongoie Crossbred cattle, a female buffalo and a male buffalo aged 3 until 5 years old and fitted rumen cannulae were. This experiment was devided into two periods, in which animal used in this experiment were fed rice straw treated urea (4% DM basis} as sole feed in the first period and in second period they were given standard feed (King Grass and concentrate ration of 70:30%) in sum 3% body weight. Ammoniated of rice straw in sacco were incubated in the rumen for 4,8,16,24,48,72, and 96 hours. The rumen fluid was collected for 8 hours at the end of period to determine pH and ammonia concentration. Degradation theory (BT) was calculated by exponential model $P = a+b(1-\exp^{-ct})$. Factorial design of 2x2, two species and two feeds were used. Data were analysed by analysis of variance and the difference were tested by Duncant multiple range test. The results showed that the degradation in sole feed on DM and OM was higher ($P<0.05$) than standard feed (2.46 vs 39.60 and 44.60 vs 42.07); the OT of DM in cattle was higher ($p<0.05$) than buffalo (41.65 vs 40.61) whereas the BT of OM between them did not show any differences. There were several interaction between feed and species for BT of DM and OM. It can be concluded that in sacco degradation of aramoniated of rice straw as sole feed was higher than that of standard feed and in sacco degradation of ammoniated of rice straw in cattle was higher than that of buffalo. In sacco degradation of ammonlated rice straw in cattle as sole feed was the highest.

(Key words: Rice straw treated 4% urea (DM basis}, Standard feed, Cattle, Buffalo, In sacco degradation)