

**PENGARUH PENAMBAHAN DEDAK HALUS PADA PAKAN
RUMPUT GAJAH TERHADAP NERACA NITROGEN
SAPIPERANAKAN ONGOLE**

Sapto Andi pamungkas

(3548/PT)

INTISARI

Penelitian dilakukan untuk mengetahui nilai neraca nitrogen pada sapi PO jantan yang diberi pakan tunggal rumput gajah dan pakan campuran rumput gajah dan dedak halus. Empat ekor sapi PO jantan dengan umur berkisar 5,5 – 6 tahun, berat badan rata-rata 420 kg ditempatkan pada kandang metabolis. Rumput gajah umur 49 hari diberikan sebagai pakan tunggal dan pakan campuran bersama dedak halus dengan perbandingan 70 : 30 dalam BK berdasarkan *voluntary intake* selama periode pendahuluan. Air minum diberikan secara *ad libitum*. Penelitian meliputi periode adaptasi selama 11 hari dan periode koleksi selama 10 hari. Konsumsi pakan dicatat setiap hari. Pada periode koleksi sampel pakan dan sisa pakan diambil dan dianalisis kandungan bahan kering (BK) dan kadar nitrogennya (N). Produksi total feses dan urin dicatat dan diambil sampelnya setiap hari. Sampel urin dianalisis kandungan N, sedangkan sampel feses dianalisis kandungan BK dan N. Neraca N dihitung berdasarkan jumlah konsumsi N dan jumlah N yang diekskresikan melalui feses dan urin. Data yang diperoleh dianalisis statistik menggunakan uji-t. Dari hasil analisis statistik menunjukkan bahwa konsumsi BK sapi PO pada perlakuan pakan tunggal rumput gajah dan pakan campuran rumput gajah dan dedak halus tidak berbeda nyata ($P < 0,05$), sedangkan konsumsi N berbeda nyata ($P < 0,05$). Ekskresi N melalui feses berbeda sangat nyata ($P < 0,01$) sedangkan ekskresi N melalui urin tidak berbeda nyata ($P < 0,05$). Neraca N yang dihasilkan berbeda sangat nyata ($P < 0,01$). Besarnya konsumsi BK, konsumsi N, ekskresi N melalui feses dan ekskresi N melalui urin pada perlakuan pakan tunggal rumput gajah berturut-turut sebesar 63,88; 1,06; 0,32 dan 0,48 g/kg BBM/hari, sedangkan pada pakan campuran rumput gajah dan dedak halus adalah 66,68; 1,19; 0,25 dan 0,44 g/kg BBM/hari. Neraca N pada kedua perlakuan bernilai positif, namun neraca N pada perlakuan pakan campuran mempunyai nilai yang lebih tinggi yaitu 0,50 g/kg BBM/hari sedangkan pada perlakuan pakan tunggal rumput gajah sebesar 0,26 g/kg BBM/hari. Dengan demikian dapat disimpulkan bahwa pemberian pakan campuran rumput gajah dan dedak halus pada sapi PO dapat menghasilkan retensi N yang lebih tinggi dibanding pakan tunggal rumput gajah.

Kata kunci : Neraca N, Sapi Peranakan Ongole, Rumput gajah , Dedak halus

**THE EFFECT OF RICE BRAN ADDITION IN ELEPHANT GRASS
AS SINGLE FEED ON NITROGEN BALANCE
OF ONGOLE CROSSBRED**

Sapto Andi pamungkas

(3548/PT)

ABSTRACT

The experiment was conducted to determine the value of nitrogen (N) balance of male Ongole Crossbred (OC) cattle fed with Elephant grass as single feed and Elephant grass mix with rice bran as mixed feed. Four OC cattle of about 5,5 – 6 years old and body weight average 420 kg were used in this experiment. The cattle were placed in individual metabolism cages, fed with elephant grass 49 days old as single feed and mix with rice bran as mixed feed on the proportion of 70 : 30 dry matter (DM). Water was supplied *ad libitum* basis. This experiment was conducted in adaptation period for 11 days and collection period for 10 days. Feed consumption was recorded everyday. At the collection period, the feed and refused feed sample were collected for DM and N contents analysis. The amount of feces and urine were recorded everyday. Urine samples were analyzed for N content, while feces samples were analyzed for DM and N contents. The value of nitrogen balance was calculated based on N consumption and N excreted through feces and urine. The data were analyzed using t – test. The results of the experiment showed that DM intake was not significant ($P < 0,05$), whereas N intake was significantly different ($P < 0,05$). N excreted through feces was significantly different ($P < 0,01$), whereas N excreted through urin was not significant ($P < 0,05$). The value of N balance was significantly different ($P < 0,01$). The amount of DM intake, N intake, N excreted through feces and N excreted through urine of single feed Elephant grass are 63,88; 1,60; 0,32 and 0,48 g/kg metabolic body weight/day, while mixed feed Elephant grass and rice bran are 66,68; 1,19; 0,25 and 0,44 g/kg metabolic body weight/day. The value of N balance for mixed feed is higher than single feed, they are 0,50 g/kg metabolic body weight/day for mixed feed and 0,26 g/kg metabolic body weight/day for single feed. It showed that Elephant grass and rice bran as mixed feed was more capable to increase the nitrogen retention for OC cattle than Elephant grass as single feed.

Key words : N balance, OC cattle, Elephant grass, Rice bran