

KONSUMSI DAN KECERNAAN *IN VIVO* JERAMI KACANG TANAH SEBAGAI PAKAN TUNGGAL PADA SAPI PERANAKAN ONGOLE DAH KERBAU LUMPUR

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INTISARI

Penelitian ini bertujuan untuk mengetahui konsumsi dan pencernaan *in vivo* jerami kacang tanah sebagai pakan tunggal pada sapi Peranakan Ongole dan kerbau lumpur. Ternak yang digunakan adalah 6 ekor sapi PO betina dan 6 ekor kerbau lumpur betina yang berumur 1,5 - 2 tahun dan mempunyai rata-rata berat badan berturut-turut $226 \pm 09,36$ kg dan $242 \pm 22,68$ kg. Penelitian ini dilaksanakan selama 31 hari meliputi periode adaptasi selama 15 hari, periode pendahuluan selama 8 hari dan periode koleksi selama 8 hari. Pakan jerami kacang tanah dan air minum diberikan secara *ad libitum*. Pemberian pakan, sisa pakan, dan feses dicatat dan diambil sampelnya selama periode koleksi. Sampel pakan, sisa pakan, dan feses dianalisis kandungan bahan kering (BK), bahan organik (BO), protein kasar (PK), serat kasar (SK), dan ekstrak eter (EE) dengan metode AOAC, NDF dan ADF dianalisis dengan metode Goering dan Van Soest. Kecernaan dihitung dengan metode *in vivo* koleksi total. Data yang diperoleh dianalisis statistik menggunakan *t-test* untuk mengetahui perbedaan antara kedua spesies ternak. Hasil penelitian menunjukkan bahwa konsumsi BK dan BO berbeda sangat nyata ($P < 0,01$) untuk kedua spesies ternak (berturut-turut untuk sapi PO 61,84 dan 53,57 g/kg $BB^{0,75}$ /hari, untuk kerbau lumpur 84,06 dan 74,42 g/kg $BB^{0,75}$ /hari). Kecernaan BK, BO, SK, NDF, dan ADF berbeda sangat nyata ($P < 0,01$) untuk kedua spesies ternak (berturut-turut untuk sapi PO 55,80%; 59,11%; 52,82; 44,87% dan 29,34%, untuk kerbau lumpur 65,63%; 70,45%; 62,09; 60,96% dan 51,49%). Kecernaan PK berbeda nyata ($P < 0,05$) untuk kedua spesies ternak (66,96% untuk sapi PO dan 69,03% untuk kerbau lumpur). Hasil penelitian ini dapat disimpulkan bahwa konsumsi dan pencernaan BK dan BO jerami kacang tanah sebagai pakan tunggal yang diberikan secara *ad libitum* pada kerbau lumpur lebih tinggi dibanding oleh sapi PO.

(Kata kunci: Konsumsi, Kecernaan *in vivo*, Jerami kacang tanah, Sapi PO, Kerbau lumpur)

VOLUNTARY FEED INTAKE AND *IN VIVO* DIGESTIBILITY
OF GROUND PEANUT STRAW AS SINGLE FEED ON
ONGOLE GRADE CATTLE AND SWAMP BUFFALO

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ABSTRACT

The experiment was conducted to determine voluntary feed intake and *in vivo* digestibility of ground peanut straw as single feed on Ongole grade cattle and Swamp buffalo. Six female Ongole grade cattle and six female Swamp buffalo aged 1,5 - 2 years and having average body weight of $226 \pm 09,36$ kg and $242 \pm 22,68$ kg respectively were used to measured *in vivo* digestibility of ground peanut straw. It's measurement was consist of three periods of 31 days: a 15 days adaptation period, a 8 days pre collection period, and a 8 days collection period. Ground peanut straw and water were given *ad libitum*. Data of feed offered, feed refusal and faeces were recorded and were collected during collection period. These samples were analized for dry matter (DM), organic matter (OM), crude protein (CP), extract eter (EE), crude fiber (CF) according to method of AOAC, neutral detergent fiber (NDF) and acid detergent fiber (ADF) were analized by the method given by Goering and Van Soest. Digestibilities were determined by *in vivo* total collection method. Obtained data were subjected to t-test to determine the significant difference among two species animals used in this study. The result showed that feed intake DM and OM were significantly different ($P < 0.01$) between two species (61.84 and 53.57 g/kg $W^{0.75}$ vday for Ongole grade cattle respectively, 84.06 and 74.42 g/kg $W^{0.75}$ vday for Swamp buffalo). The digestibility of DM, OM, CF, MDF, and ADF were significantly different ($P < 0,01$) between two species (55.80% ; 59.11% ; 52.82% ; 44.87% dan 29.34% for Ongole grade cattle respectively, 65.63% ; 70.45% ; 62.09% ; 60.96% and 51.49% for Swamp buffalo). Digestibility of CP was significantly different ($P < 0,05$) between two species (66.96% for Ongole grade cattle dan 69.03% for Swamp buffalo). It can be concluded that feed intake and digestibility DM and OM of ground peanut straw as single feed which were given *ad libitum* on Swamp buffalo were higher than that of Ongole grade cattle.

(Key words: Feed intake, *In vivo* digestibility, Ground peanut straw, Ongole grade cattle, Swamp buffalo)