

## KECERNAAN *IN VITRO* RANSUM RUMINANSIA YANG MENGANDUNG JERAMI PADI, TEPUNG GAPLEK, DAN DAUN KETELA POHON PADA IMBANGAN YANG BERBEDA

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### INTISARI

Penelitian ini bertujuan untuk mengetahui imbangan terbaik antara jerami padi, tepung gaplek, dan daun ketela pohon dalam ransum ruminansia berdasarkan pada hasil kecernaan *in vitro*. Metode yang dilakukan adalah metode analisis kecernaan *in vitro* 2-tahap dengan lima kombinasi perlakuan: 20% jerami padi + 80% tepung gaplek (J2G8K0), 20% jerami padi + 70% tepung gaplek + 10% daun ketela pohon (J2G7K1), 20% jerami padi + 60% tepung gaplek + 20% daun ketela pohon (J2G6K2), 20% jerami padi + 50% tepung gaplek + 30% daun ketela pohon (J2G5K3), dan 20% jerami padi + 40% tepung gaplek + 40% daun ketela pohon (J2G4K4). Urea sebanyak 1% dari total ransum ditambahkan dalam setiap campuran pakan. Variabel yang diamati adalah komposisi nutrisi bahan pakan, komposisi nutrisi ransum perlakuan, kecernaan bahan kering (KcBK), kecernaan bahan organik (KcBO), dan kecernaan protein kasar (KcPK). Desain penelitian yang digunakan adalah rancangan acak lengkap pola searah. Data komposisi nutrisi bahan pakan dan ransum perlakuan dianalisis secara deskriptif. Data kecernaan *in vitro* dianalisis dengan analisis variansi, dan perbedaan yang terdapat pada antar kelompok perlakuan diuji lanjut dengan uji *Duncan's multiple range test*. Hasil penelitian menunjukkan bahwa imbangan 20% jerami padi, 70% tepung gaplek, dan 10% daun ketela pohon menghasilkan KcBK I dan II serta KcBO I dan II terbaik (68,15, 76,97, 69,03, dan 78,21%, berurutan;  $P < 0,05$ ). Imbangan 20% jerami padi, 60% tepung gaplek, dan 20% daun ketela pohon menghasilkan KcPK I dan II terbaik (32,64 dan 61,16%, berurutan;  $P < 0,05$ ). Berdasarkan hasil penelitian dapat disimpulkan bahwa ransum J2G7K1 menghasilkan KcBK dan KcBO terbaik, serta ransum J2G6K2 menghasilkan KcPK terbaik.

**Kata kunci:** Jerami padi, Tepung gaplek, Daun ketela pohon, Urea, Kecernaan *in vitro*

## **IN VITRO DIGESTIBILITY OF RUMINANT'S RATION CONTAINING RICE STRAW, GROUND CASSAVA, AND CASSAVA LEAVES IN VARIOUS PROPORTIONS**

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### **ABSTRACT**

This study was aimed to determine the best proportion of rice straw, ground cassava, and cassava leaves on ruminant's ration based on the results of *in vitro* digestibility. The method used was a 2-stage *in vitro* digestibility analysis method with five treatment combinations: 20% rice straw + 80% cassava flour (J2G8K0), 20% rice straw + 70% ground cassava + 10% cassava leaves (J2G7K1), 20% rice straw + 60% ground cassava + 20% cassava leaves (J2G6K2), 20% rice straw + 50% ground cassava + 30% cassava leaves (J2G5K3), and 20% rice straw + 40% ground cassava + 40% cassava leaves (J2G4K4). Urea (1% of total ration) was added into each feed mixtures. Observed variables were: nutrient composition of feed ingredients, nutrient composition of treatment rations, dry matter digestibility (DMD), organic matter digestibility (OMD), and crude protein digestibility (CPD). The research design used was a one way completely randomized design. Nutrient composition data of feed ingredients and treatment rations were analyzed descriptively. *In vitro* digestibility data was analyzed by analysis of variance, and then continued with Duncan's multiple range test for any differences among means. The results showed that proportion of 20% rice straw, 70% ground cassava, and 10% cassava leaves resulted in the best DMD I and II, OMD I and II (68,15, 76,97, 69,03, and 78,21%, respectively;  $P < 0,05$ ). Proportion of 20% rice straw, 60% ground cassava, and 20% cassava leaves resulted in the best CPD I and II (32,64 and 61,16%, respectively;  $P < 0,05$ ). Based on the results, it can be concluded that J2G7K1 ration resulted in the best DMD and OMD, and J2G6K2 ration resulted in the best CPD.

**Keywords:** Rice straw, Ground cassava, Cassava leaves, Urea, *In vitro* digestibility