

PENGARUH PEMBERIAN BUFFER TERHADAP KECERNAAN *IN VIVO* PAKAN DENGAN KONSENTRAT FERMENTASI BERBASIS AMPAS TAHU PADA KAMBING BLIGON

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INTISARI

Penelitian bertujuan untuk mengetahui pengaruh pemberian buffer NaHCO_3 pada konsentrat fermentasi berbasis ampas tahu terhadap konsumsi, ekskresi, dan pencernaan nutrisi kambing Bligon betina. Penelitian dilaksanakan selama delapan minggu di kandang peternak milik Bapak Sapon, Jalan Godean KM.8, Dusun Jetak, Sidokarto, Godean, Sleman, Yogyakarta dan Laboratorium Biokimia Nutrisi, Fakultas Peternakan, Universitas Gadjah Mada. Penelitian ini menggunakan 12 ekor kambing Bligon betina umur 12 bulan, bobot badan 22 sampai 24 kg, yang dibagi pada tiga perlakuan dan empat kali ulangan. Ketiga perlakuan tersebut adalah penambahan buffer NaHCO_3 ke dalam konsentrat masing-masing : P0 (penambahan 0% buffer NaHCO_3), P1 (penambahan 1,5% buffer NaHCO_3); dan P2 (penambahan 3% buffer NaHCO_3). Masing-masing perlakuan mendapatkan pakan basal berupa rumput lapangan dan jerami kacang tanah dengan perbandingan hijauan : konsentrat adalah 70 : 30. Data yang diambil meliputi konsumsi, ekskresi, dan pencernaan bahan kering (BK), bahan organik (BO), serat kasar (SK), protein kasar (PK), lemak kasar (LK), bahan ekstrak tanpa nitrogen (BETN). Data dianalisis dengan analisis statistik dengan analisis variansi Rancangan Acak Lengkap pola searah dan dilanjutkan dengan uji *Duncan's Multiple Range Test*. Hasil penelitian menunjukkan bahwa konsumsi BK, BO, SK, PK, LK, dan BETN tidak dipengaruhi secara nyata ($P > 0,05$) oleh perlakuan pakan. Perlakuan pakan berpengaruh nyata ($P < 0,05$) terhadap ekskresi dan pencernaan BK, BO, SK, PK, LK, dan BETN. Dari penelitian dapat disimpulkan bahwa penambahan buffer NaHCO_3 dengan level 1,5% mampu meningkatkan pencernaan nutrisi.

Kata kunci: Buffer, Kecernaan *in vivo*, Pakan fermentasi, Ampas tahu, Kambing Bligon

EFFECT BUFFER ON *IN VIVO* DIGESTIBILITY OF FEED WITH FERMENTED CONCENTRATE BASED ON TOFU WASTE OF BLIGON GOAT

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ABSTRACT

The aim of the research was to identify the effect buffer NaHCO_3 on fermented concentrate based on tofu waste of nutrients consumption, excretion, and digestibility of female Bligon goats. The research was conducted for eight weeks in the housing of goats farmer Mr. Sapon at Godean Street KM. 8, Jetak, Sidokarto, Godean, Sleman, Yogyakarta and Laboratory of Biochemical Nutrition, Faculty of Animal Science, Gadjah Mada University. Twelve female of Bligon goats at twelve months old with initial body weight of 22 to 24 Kg, were randomly divided into three groups, each group was consisted of four female goats. The treatments with adding buffer NaHCO_3 to fermented concentrate were : 1) control (without adding 0% NaHCO_3), 2) with adding 1.5% NaHCO_3 , 3) with adding NaHCO_3 3%. Each treatment getting basal fodder native grass and peanut straw with a ratio of forages : concentrate as 70 : 30. The variables were consisted of consumption, excretion, and digestibility nutrients. Oneway analysis of variance was used to analyze the mean differences if significant will continued with Duncan's Multiple Range Test for significant differences. The result showed that the consumption of dry matter, organic matter, crude fiber, crude protein, crude fat were not significantly ($P>0.05$). By added NaHCO_3 3% was affected significantly ($P<0.05$) on excretion and digestibility of dry matter, organic matter, crude fiber, crude protein and crude fat than control. It could be concluded that adding level 1.5% of NaHCO_3 could increased nutrients digestibility.

Key words: Buffer, *In vivo* digestibility, Fermented feed, Tofu waste, Bligon goat.