KECERNAAN *IN VITRO* BAHAN KERING DAN BAHAN ORGANIK JERAMI PADI FERMENTASI YANG DISUPLEMENTASI 15% ONGGOK DAN BUNGKIL KELAPA SAWIT DENGAN LEVEL YANG BERBEDA

Abdul Ja'far Assidiq
13/352485/PT/06611

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh level suplementasi bungkil kelapa sawit pada jerami padi fermentasi dan onggok sebesar 15% berdasarkan nilai kecernaan bahan kering (KcBK), kecernaan bahan organik (KcBO), dan kecernaan serat kasar (KcSK) secara *in vitro*. Uji kecernaan pakan dilakukan dengan teknik *in vitro* Tilley dan Terry. Rancangan penelitian menggunakan rancangan acak lengkap pola searah dengan empat level suplementasi bungkil kelapa sawit (0, 10, 20, dan 30%) yang ditambahkan dalam pakan basal jerami padi fermentasi dan onggok (15% BK). Semua pakan perlakuan dianalisis proksimat dan diuji kecernaannya dengan diinkubasikan secara *in vitro* selama 48 jam. Data yang diperoleh dianalisis variansi (*anova*) pola searah dan untuk mengetahui perbedaan antara rata-rata dilakukan uji lanjut dengan *Duncan's multiple range test*. Kecernaan *in vitro* bahan kering jerami padi fermentasi dengan suplementasi onggok 15% dan bungkil kelapa sawit menunjukkan perbedaan ($P<0,05$) dengan perlakuan BS0, BS10, BS20, dan BS30 berturut-turut adalah 38,86, 42,23, 42,72, dan 42,59%. Kecernaan *in vitro* bahan organik jerami padi fermentasi dengan suplementasi onggok 15% dan bungkil kelapa sawit menunjukkan perbedaan ($P<0,05$) dengan perlakuan BS0, BS10, BS20, dan BS30 berturut-turut adalah 35,21, 37,91, 38,94, dan 39,16%. Kecernaan *in vitro* serat kasar jerami padi fermentasi dengan suplementasi onggok 15% dan bungkil kelapa sawit menunjukkan perbedaan ($P<0,05$) dengan perlakuan BS0, BS10, BS20, dan BS30 berturut-turut adalah 39,32, 35,30, 31,32, dan 26,07%. Hasil penelitian menunjukkan bahwa suplementasi 10% bungkil kelapa sawit dan 15% onggok pada jerami padi fermentasi adalah yang paling optimal dalam meningkatkan kecernaan secara *in vitro*.

Kata kunci: Bungkil kelapa sawit, Jerami padi fermentasi, Kecernaan *in vitro.*

IN VITRO DRY MATTER AND ORGANIC MATTER DIGESTIBILITY OF FERMENTED RICE STRAW SUPPLEMENTED WITH 15% CASSAVA BY-PRODUCT AND PALM KERNEL CAKE IN DIFFERENT LEVELS

Abdul Ja'far Assidiq
13/352485/PT/06611

ABSTRACT

This study was done to determine the influence of the level of palm kernel cake supplementation on fermented rice straw and 15% cassava by-product based on in vitro digestibility of dry matter (DMD), organic matter (OMD), and and crude fiber (CFD). Digestibility analyzis of feed was performed using in vitro technique of Tilley and Terry. The experimental design used was a one-way completely randomized design with four levels of palm kernel cake supplementation (0, 10, 20, and 30%) added in the fermented rice straw and cassava by-product (15% DM). All feed treatments were analyzed using proximate analysis and tested for their digestibility by incubating in vitro for 48 hours. The data obtained were analyzed by analysis of variance (*anova*) and to determine the differences among means, a Duncan's multiple range test was performed. In vitro digestibility of DMD fermented rice straw supplemented with 15% cassava by-product and palm kernel cake treated with BS0, BS10, BS20 and BS30 were 38.86, 42.23, 42.72, and 42.59%. In vitro digestibility of OMD fermented rice straw supplemented with 15% cassava by-product and palm kernel cake treated with BS0, BS10, BS20, and BS30 were 35.21, 37.91, 38.94, and 39.16%. In vitro digestibility of CFD fermented rice straw supplemented with 15% cassava by-product and palm kernel cake treated with BS0, BS10, BS20, and BS30 were 39.32, 35.30, 31.32, and 26.07%. The results showed that supplementation of 10% palm kernel cake and 15% cassava by-product on fermented rice straw resulted in the most optimal Value in vitro digestibility.

Kata kunci: *In vitro* digestibility, Palm kernel cake, Rice straw fermentatiton