

PENGARUH PENGGUNAAN BUNGKIL INTI SAWIT (*PALM KERNEL CAKE*) YANG DISUPLEMENTASI ENZIM TERHADAP EFISIENSI ENERGI DAN PROTEIN PADA PAKAN AYAM BROILER

Muhammad Abdurrahman
19/442997/PT/08129

INTISARI

Penelitian ini bertujuan untuk mengetahui penggunaan bungkil inti sawit (*Palm Kernel Cake*) yang disuplementasi enzim terhadap efisiensi energi dan protein pakan ayam broiler. Sebanyak 540 ekor Day Old Chick (DOC) ayam broiler strain *Indian River* dipelihara selama 28 hari. Perlakuan penelitian terdiri dari P0 berupa pakan basal, P1 berupa pakan basal + 10% bungkil inti sawit + enzim NSPase 200 g/ton, mananase 182 g/ton, protease 130 g/ton, dan P2 pakan basal + 20% bungkil inti sawit + enzim NSPase 200 g/ton, mananase 182 g/ton, protease 130 g/ton. Setiap kelompok perlakuan terdiri atas 6 replikasi, masing-masing replikasi terdiri 30 ekor ayam. Variabel yang diamati antara lain konsumsi pakan, pertambahan bobot badan, konsumsi energi, konsumsi protein, efisiensi energi, dan efisiensi protein. Data yang diperoleh selanjutnya akan dianalisis statistik dengan menggunakan Analysis of variance (ANOVA) dan dilanjutkan dengan uji Duncan's Multiple Range Test (DMRT). Hasil penelitian menunjukkan bahwa penggunaan PKC 10% dan 20% dan enzim tidak meningkatkan konsumsi energi, tetapi meningkatkan konsumsi protein. Penggunaan PKC 10 dan enzim dapat meningkatkan efisiensi energi dan protein ($P < 0,05$), sedangkan penggunaan PKC 20% dan enzim tidak dapat meningkatkan efisiensi energi dan protein. Penggunaan PKC 10% dengan penambahan kombinasi enzim NSPase, mananase, dan protease dapat meningkatkan konsumsi protein, efisiensi energi, dan efisiensi protein.

Kata kunci: Broiler, Enzim, Efisiensi energi, Efisiensi protein, Palm kernel cake

EFFECT OF ENZYME-SUPPLEMENTED PALM KERNEL CAKE ON ENERGY AND PROTEIN EFFICIENCY IN BROILER DIETS

Muhammad Abdurrahman
19/442997/PT/08129

ABSTRACT

This study aims to determine the use of Palm Kernel Cake supplemented with enzymes and amino acid correction on energy efficiency and protein of broiler feed. A total of 540 Day Old Chick (DOC) Indian River strain broiler chickens were reared for research for 28 days. The treatments given were: P0 was basal feed, P1 was basal feed + 10% palm kernel meal + enzyme NSPase 200 g/ton, mannanase 182 g/ton, protease 130 g/ton, and P2 was basal feed + 20% palm kernel cake + enzyme NSPase 200 g/ton, mannanase 182 g/ton, protease 130 g/ton. Each treatment group consisted of 6 replications which is for each replication consisted of 30 chickens. Variables observed included feed consumption, body weight gain, energy consumption, protein consumption, energy efficiency, and protein efficiency. The data obtained will then be analyzed statistically using Analysis of Variance (ANOVA) and if there is a difference between traetments followed by Duncan's Multiple Range Test (DMRT). The results showed that the use of 10% dan 20% PKC and enzyme did not increase energy consumption, but increased protein consumption. The use of PKC 10% and enzyme could increase energy and protein efficiency ($P < 0,05$), while the use of PKC 20% and enzyme could not increase energy and protein efficiency. The use of PKC 10% with the addition of combination of enzyme NSPase, mannanase, and protease chould increase protein consumption, energy efficiency, and protein efficiency.

Keywords: Broiler, Energy efficiency, Enzyme, Palm kernel cake, Protein efficiency