

Metabolizable Energy Value of The Diets Containing Palm Kernel Cake (PKC) and Enzyme on The Kampong Chicken at Nine Weeks Old

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Kampong chicken is a local chicken that domesticated in Indonesia. It was a domestication's result from jungle fowl that domesticated in Bangladesh, Pakistan, India, Srilangka and Semenanjung Melayu. Kampong chickens are potensial as poultry meat source in Indonesia. Feed cost is the highest component from operational cost in chicken's farm, so it must be tried to use local feed ingredients that available and have good quality. One of them is palm kernel cake (PKC). Palm kernel cake is a waste product of palm oil processing that can be obtained by chemical process (extraction) or physical process (expeller). To improve PKC digestibility in kampong chicken's feed, an enzyme product that contain of protease, amylase, lypase and phytase can be used. There is no research to report the usage PKC as well as enzyme product in the kampong chicken's diet. The experiment was conducted to study the effect of PKC and enzyme in the diet on the metabolizable energy value of nine weeks old kampong chicken.

Nine kampong chickens with the age of nine weeks which taken from ninety six chickens that reared during nine weeks were used in this experiment. The diets were: The diet without PKC (R1), R1 + 0.1% enzyme (R2), the diet contain of PKC (R3), R3 + 0.1% enzyme (R4). The parameter observed were energy consumption, energy excretion, apparent metabolizable energy (AME), nitrogen corrected apparent metabolizable energy (AMEn), true metabolizable energy (TME), nitrogen corrected true metabolizable energy (TME_n), nitrogen consumption, nitrogen excretion and nitrogen retention (NR). The experiment used Completely Randomize Design with four treatment and four replication and each replication contained one kampong chicken. The data was analized by Analyses of Variance (ANOVA) and significant differences among treatments were made by Duncan Range Test (SAS Institute, 1997).

The result showed that pkc as well as enzyme in the diet did not affect the NR, AME, AMEn, TME and TME_n. The conclusion from this experiment was the diet contained of 25% PKC without enzyme supplementation could be used as Kampong chickens diet.

Key words: kampong chickens, palm kernel cake (PKC), enzyme, metabolizable energy