

## **Effect of fermented rice bran, bio-converted byproduct on performance of broiler chickens.**

### **ABSTRACT**

About 3 weeks feeding trial using 96 days old, male broiler chicks (Cobb) was conducted to evaluate the potential of fermented rice bran, residue from phytase production on performance of broiler chicken in comparison with untreated rice bran. There were eight birds per pen and four replicate pens per treatment. Feed and water were available ad libitum throughout the 21 days experiment. The experimental diets formulated were corn-soya bean meal based diet (control), corn-soya bean meal-untreated rice bran based diet and corn-soya bean meal-fermented rice bran based diet. The value of crude protein content and crude fat was significantly ( $p < 0.05$ ) improved in the fermented rice bran and phytate P content was reduced as compared to untreated rice bran. No significantly different body weight gain, feed intake and FCR ( $p > 0.05$ ) was shown by addition of 10% untreated rice bran and fermented rice bran in corn soya bean meal diet in comparison with corn soya bean meal based diet. The growth performance of chicken fed 10% fermented rice bran was not significantly different ( $p > 0.05$ ) from those fed 10% untreated rice bran. The addition of fermented rice bran, bio-converted byproduct in the diet produced better phosphorus content in tibia ash and P retention ( $p < 0.05$ ) in comparison with untreated rice bran. Inclusion of 10% untreated rice bran and fermented rice bran in corn soya bean meal based diet did not give adverse effect on any performances of broiler chicken except for total P retention and can reduce feed cost with the same production cost. The fermented rice bran, byproduct of phytase production can be applicable as chicken feed without giving detrimental effects.

**Keyword:** Bone ash; Fermented rice bran; Malaysia; Performance; Phosphorus retention; Rice bran.