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Substitution of rice bran instead of corn in broilers diet

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This experiment was conducted to study the effects of rice bran substitution in broilers diet, in a completely randomized block design. The treatments included 0, 2.5, 5, 7.5 and 10 percent of rice bran as corn substitution with 4 replications of 15 chicks each. The first experiment last 49 days (from 7 days of age to 56) and the second 32 days (from 22 to 56 days of age). The diets were formulated to meet birds' requirements according to NRC (1994). Body weight and feed intake were measured weekly and feed conversion ratio was calculated. In the end of 8th week, two necroposes were conducted from each pen and carcass weight, abdominal fat pad and intestine weight were determined and analyzed. The results of the first experiment indicated significant differences in feed intake, body weight and FCR among treatments ($P<0.05$). The highest body weight, daily body weight gain and FCR were seen in the treatment with 2.5% of rice bran and highest feed intake (94.58 g/day) in the treatment with 10% of rice bran. There was no significant difference among the treatments considering the carcass weight to live body weight and abdominal fat pad ($P>0.05$), but the 5% treatment had the lowest abdominal fat pad. The results of the second experiment indicated no significant differences among treatments in terms of feed intake, body weight, daily body weight gain, feed conversion ratio, carcass weight percentage to live body weight and intestine weight percentage to body weight ($P> 0.05$). By increasing rice bran level, the price of diet per Kg decreased with the highest decrease in the 7.5 and 10% treatments. Finally it is concluded that rice bran as corn substitution in broilers diet can reduce the diet cost without any adverse effect on final body weight of broilers and it is also has the potential to decrease abdominal fat pad.

Keywords: Rice bran, Broiler, Performance

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