Judul: **Effect of Rice hull Inclusion with and without Enzymes on Growth Performance and Digestive Traits of Broilers**

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Abstract

In a twenty-one day feeding trial, the effects of rice hulls inclusion with and without enzymes supplementation were determined on growth performance, and digestive traits of broilers. Total of 200 one-day-old male broiler chicks (Lohmann) were divided into 40 groups of five (5) birds each and randomly assigned to the four treatment diets in a completely randomized designed (CRD). The treatment diets were: 1) corn-soybean based diet as a control diet (C), 2) inclusion of 4% rice hulls in the diets (RH), 3) RH diet + phytase1750FTU/kg (RHP), 4) RH diet + phytase 1750 FTU/kg + cellulase 500 unit/kg (RHPC). Inclusion of 4% rice hulls in the diets increased body weight gain (BWG) ($p<0.001$) and gave better feed conversion efficiency (FCE) ($p<0.05$) on broiler chickens at 21 d of age compared to those fed the control diets. Supplementation of phytase or phytase and cellulase did not enhance BWG or FCE. Feed intake was not affected by diets ($p>0.05$). In addition, inclusion of rice hulls in the diet increased jejunum weight ($p<0.05$), and supplementation of phytase decreased the weight of jejunum same as that in the control diet. The inclusion of 40 g/kg rice hulls in corn- soybean based diets induces a better growth performance of young broiler chickens. Addition of phytase or phytase and cellulase in a balanced diet did not improve growth performance but it affected jejunum weight. The mechanism in which the addition of enzymes reduced the jejunum weight was unknown.

Keywords : rice hulls, growth performance, jejunum weight, phytase, cellulase