

Effects of rumen filtrate fermented wheat bran on performance of finishing broiler chickens

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Abstract:

An experiment was carried out to investigate the effect of fermented wheat bran with rumen liquor at different inclusion rates on the performance of broilers at age from 21-35 days. Rumen liquor was collected and immediately mixed with wheat bran. The ingredient was incubated in sealed bags for 24 days at room temperature and then was sun dried for approximately 30 hrs. A total of 205 one-day-old male and female Cobb broiler chicks were fed commercial diets from 1-20 days of age. Four isonitrogenous and isocaloric experimental finisher diets were prepared as follows: control (C), diet 2 contained 5% rumen filtrate fermented wheat bran (FWB5%), diet 3 contained 10% rumen filtrate fermented wheat bran (FWB10%) and diet 4 contained 15% rumen filtrate fermented wheat bran (FWB15%). At 21 days of age chicks were divided randomly into four experimental groups. Every treatment group contained four replicates of 12 birds each using completely randomized design (CRD). The chicks were fed the experimental diets from 21-35 days of age. Body weight gain, feed consumption and feed conversion ratio were measured throughout the experiment. The measurements of carcass traits and economical parameters were determined at the end of the experiment. Feed consumption, weight gain, feed conversion ratio and carcass characteristics were not significantly affected across treatments. The results of this study indicated that fermented wheat bran with rumen filtrate up 15% inclusion rate can be used in the broiler finisher diet without any adverse effects on parameters during the finishing phase of broilers.

Key words: Broilers, rumen filtrate, wheat bran.