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Assessments of corn germ in broilers' diet on performance, carcass quality and immunity parameters

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Abstract:

To investigate the effect of different level of corn germ (high oil) on performance, immunity, digestibility, biochemical compound and morphology an experiment in completely randomized design with 5 treatment, 5 replication and 25 bird per each rep was conducted. For performed this experiment was used 0 (control), 5, 15 and 20 percent of corn germ (CG). Result of this experiment showed that 10 percent of corn germ had best Body weight gain (BWG) compared different levels of CG ($p < 0.05$). On the other hand, had no significant difference observed in Feed intake (FI) between different treatments ($p > 0.05$). Feed conservation ratio (FCR) in 5 percent CG was higher than other levels ($p < 0.05$). Economic Indicators showed 10 percent of CG had lowest cost in FI per each kilo gram of live weight ($p < 0.05$). Assessing of production index showed that, highest and lowest amount was related to 10 and 5 percent of CG respectively. The study of feed digestibility showed, dry matter (DM), crude protein (CP), crude fat (CF), Ca and P had significant difference between different treatment ($p < 0.05$). On the other, energy and digestible diet energy digestibility had no significant difference between treatments ($p > 0.05$). Immunity factors had no significant difference between treatments ($p > 0.05$). On the other hand, effect of different levels of CG on jejunum and ileum (length, width, depth and length to depth ratio) had no significant difference ($p > 0.05$). Biochemical compounds consist of glucose, Uric acid, alkaline phosphatase, phosphorus, total protein, albumin and

globulin had no difference ($p>0.05$). However, on cholesterol was observed (lowest cholesterol was observed in 15 percent CG) significant difference ($p<0.05$).

Keywords: corn germ, performance, humeral immunity, production index, digestibility and broiler chicks.