

SYNERGISTIC EFFECT OF BLACK CUMIN AND CINNAMON IN BROILER PRODUCTION

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Extended Summary

The experiment was conducted to investigate the synergistic effect of black cumin and cinnamon in broiler production. About 180 “Cobb-500” strain day old broiler chicks were collected and divided into treatment groups 1 to 6. The chicks of each treatment group were further randomly divided in the form of 3 replications each having 10 birds. The chicks of treatment group 1 to 4 were respectively treated with Black cumin 0.5% + Cinnamon 0.5% (T₁), Black cumin 0.5% + Cinnamon 1.0% (T₂), Black cumin 1.0% + Cinnamon 0.5% (T₃) and Black cumin 1.0% + Cinnamon 1.0% (T₄). The chicks of treatment groups 5 were given antibiotics (T₅) and group 6 were maintained an untreated control (T₀) i.e. no herbs or antibiotics were utilized in control diet. At the age of 28 days, all treated groups had significantly (P<0.05) higher body weight than the control. The feed conversion ratio of all treated groups were significantly (P<0.05) lower compared to control, however, comparatively better FCR was found in T₄. All treatment groups were found significantly (P<0.05) higher antibody SP ratio for Gumboro as compared to control. Consequently, T₄ was found higher antibody level than others. Considering all the results of the present experiments, it may be concluded that poultry farmers may use 1.0% black cumin + 1.0% cinnamon (T₄) as safe alternative of the traditional antibiotics. Finally, Government and NGOs should take attempt to disseminate the findings to the broiler farmers through extension organizations for betterment of the Nation.

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