

Effect of adding *Cinnamomum cassia* powder to the ration on some blood physiological parameters of broiler Ross 308

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Abstract

This study was conducted at Poultry Farm of Animal Resources Dept., College of Agriculture, University of AL-Qasim Green to investigate the effect of adding *Cinnamomum cassia* powder to the ration on some blood parameters physiological parameters of broiler Ross 308 . Ninety broiler chicks one day old Ross 308 were randomly distributed to three treatments (by 3 replicates per treatment and 10 chicks per replicate), The treatments were as follows : (first treatment) without adding *Cinnamomum zeylanicum* powder to the diet, add *Cinnamomum cassia* powder by 2.0 g / kg feed (second treatment) and add *Cinnamomum cassia* powder by 2.5 g / kg feed (Third treatment) . Blood traits included in this study were white blood cell counts, differential leucocyte count and concentrations of glucose, protein and cholesterol in blood plasma. The results indicated that the addition of *Cinnamomum cassia* powder at the level of 2.0 and 2.5 g / kg feed to broiler diet led to a significant improvement ($p < 0.05$) of white blood cell counts, but significant decrease ($p < 0.05$) in heterophil to lymphocyte ratio and concentrations of glucose . in blood, treatment with *Cinnamomum cassia* powder resulted in significant ($p < 0.05$) increase in the protein amount of level but significant decrease ($p < 0.05$) in plasma cholesterol as compared to control group.

Concluded from this experience, that the addition of *Cinnamomum cassia* powder to the diet can be lead to improve some blood characteristics of broiler chicks .