Effect of Different Levels of Dried Citrus Sinensis Peel on Blood Parameters of Broilers

Authors: Abbas Ebrahimi, Zohreh Pourhossein, Nariman Miraalami

Abstract : The experiment was conducted to evaluate the effects of different levels of dried citrus sinensis peel (DCSP) on the blood parameters of broilers. Four hundred Ross 308 strain day old broiler in a completely randomized design with five treatments (four replicates per treatment and each replicate had 20 chicks) were categorized. Each treatment used either regulatory diet including 1.5% and 3% DCSP in the base diet and in two periods of 1st to 21st day and 1st to 42nd day and base diet without any additive for six weeks. Data analysis was performed using SAS software and mean comparison was conducted by Duncan method. The results determined that using different level of DCSP has significant effects on blood plasma parameters (P<0.05). Cholesterol, glucose, triglyceride, low density lipoprotein (LDL) at the rearing period was significantly influenced by experimental treatments (P<0.05). However, uric acid, alkaline phosphatase and high density lipoprotein (HDL) was not affected by experimental treatments (P>0.05). The lowest rate of blood cholesterol was concerned to the treatment which was used 3% DCSP 1st to 42nd day and the highest mean of blood cholesterol were concerned to the control treatment. The lowest rate of blood alkaline phosphatase was concerned to the treatment which was used 3% DCSP 1st to 42nd day and the highest mean of blood alkaline phosphatase was concerned to the treatment which was used 3% DCSP 1st to 21st day.

Keywords: blood parameters, broilers, dried citrus sinensis peel, regulatory diet

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