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THE EFFECT OF PLANT EXTRACTS AS A COMPLEMENTARY ADDITIVE IN THE DIETS OF BROILER CHICKENS ON GROWTH PERFORMANCE AND SOME BLOOD PARAMETERS

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ABSTRACT

Plant extracts and their phytobiotic effects can be included in poultry diets to increase their productivity, physiology and even poultry welfare. Plants active substances are chemical compounds present in the entire plant or in specific parts of the plant that give them therapeutic activity or beneficial effects. Although there is an extraordinary interest in the use of herbal supplements, it is still necessary to carry out additional research on the influence of phytogenic components from different plant families. Therefore, this study aims to evaluate the effects of plant extracts of S. scardica and M. piperita in the growth performance and certain blood parameters of Ross 308 broiler chickens. The experiments included 200 one-day-old broiler chickens of the Ross 308 type. The birds were grouped into 4 experimental groups: G1 (supplemented with S.scardica extract 0.2%), G2 (supplemented with extract of M. piperita 0.2%), G3 (supplemented with combined extract of S.scardica and M. piperita 0.2%) and G4 (control, base diet without extract). Supplementation with plant extracts has resulted in positive effects influencing the samples of all groups to have an increase in their average weight on the 42nd day of their life. Significant changes in Chol-total, Triglycerides and LDL-cholesterol were observed in the first and second experimental groups compared to the control group where the value of $p<0.05$ in broilers treated with mint extract and mountain tea. In the third group, although lower blood lipid values were encountered, the changes were not significant. The concentration of HDL-cholesterol was found to have higher average values in the third group, but without a significant difference compared to the control group.

KEYWORDS: *Plant Extract, Broiler, S.Scardica, M. Piperita*