EFFECT OF GREEN PROPOLIS ON SERUM BIOCHEMICAL PROFILE OF GROWING RABBITS

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Propolis is rich in flavonoids and may affect the serum biochemical profile in animals. This study was carried out to evaluate the serum biochemical profiles of growing rabbits supplemented with green propolis extract (GPE). One hundred rabbits, 50 males and 50 females, were used in a completely randomized design with five treatments and five replicates of four animals each. Treatments consisted of GPE supplied at 0, 50, 100, 150, and 200 mg/kg body weight, blended in the pelleted commercial ration. The rabbits were weighed weekly to determine the appropriate quantity of GPE to be added to the rations. At 85th day of age, blood samples were collected, and the obtained serum was used to determine the levels of creatinine, urea, glucose, total protein, triglycerides, and the activities of ALT and AST. The data were analyzed using analysis of variance in SISVAR® software. Supplementation with GPE did not affect (P > 0.05) the variation in serum biochemical profile (creatinine 0.47 to 0.67 mg/dL; urea 33 to 45.25 mg/dL; ALT 18.5 to 39 U/L; AST 15.5 to 23 U/L; triglycerides 68.5 to 75.75 mg/dL; glucose 83.75 to 88.75 mg/dL; and total protein – 4.31 to 5.85 g/dL) of the rabbits. GPE may affect liver and kidneys with a reduction in the serum activity of ALT and AST and/or in the urea levels, in addition to its hypoglycemic and anti-hyperlipidemic effects, however this effect was not seen in this study. Supplementation of the pelleted commercial ration for rabbits with green propolis extract showed no positive effect on serum biochemical profiles of the rabbits.

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