

Selected Blood Biochemical and Haematological Parameters in Turkeys after an Experimental Probiotic *Enterococcus faecium* M-74 Strain Administration

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Abstract :

In this study selected biochemical (cholesterol, total lipids, triglycerides, calcium, inorganic phosphorus) and haematological parameters (erythrocytes and leucocytes count, haematocrit) in blood of turkeys, BIG 6 breed, after probiotic strain *Enterococcus faecium* M-74 administration added to the feed mixture and drinking water during 12 weeks of feeding were analyzed. Animals were divided into three groups: control and two experimental groups P1 and P2. Preparation with *Enterococcus faecium* M-74 5.109 CFU (colonies forming units) in amount of 300g/1000kg (0.03%) to the feed mixture of P1 group was supplemented. Animals in group P2 received probiotic preparation from the drinking water (structured doses from 2.108 to 30.108 daily for animal according to age and live weight). The lowest concentration of total lipids in control group 4.79±0.30mmol/L was found as compared with values 4.91±0.34mmol/L in P1 group and 5.34±0.48mmol/L in the P2 group. The highest average concentration of triglycerides in the control group 3.38±0.09mmol/L was observed. In the experimental groups the concentration of this parameter was significantly lower (2.74±0.10mmol/L in P1 group and 2.75±0.21mmol/L in P2 group). The lowest average concentration of cholesterol 3.73±0.11mmol/L was detected in control group, followed by 3.77±0.19mmol/L in P1 and 3.78±0.29mmol/L in P2 group. The highest values of calcium and inorganic phosphorus were found in control group (2.44±0.03mmol/L and 1.81±0.09mmol/L). Slightly higher values without significant differences in both experimental groups were found. In the case of haematological parameters any significant differences were found in erythrocytes and leucocytes count and haematocrit.

Key Word :

Enterococcus faecium, blood biochemistry, haematology, turkeys

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