

HEMATOLOGICAL RESPONSE OF SAUDI ARABIAN FOWL TO PROTEIN REARING REGIMENS

A.A. Alsobayel¹, F.M. Attia,
M.S. Bayoumi and I.Y. Haroun

Animal Production Department, College of Agriculture,
King Saud University, Riyadh 11451, Saudi Arabia

Summary

The purpose of this investigation was to study the hematological response of Saudi Arabian Baladi fowl to protein rearing regimens. Males and females were subjected to the following 4 protein rearing regimens: conventional, C; reverse protein, RP; 2 single-stage low protein, SS₁ and SS₂ using 15% and 12% CP diets, respectively. Regimen effect was highly significant ($p \leq .01$) on BW, PCV, TP and U-Ac and significant ($p \leq .05$) on TL. Serum chol levels were not affected by regimen. In general SS₂ birds showed the lowest values for all parameters studied, except for PCV. However, the differences were not significant in each case. Age and sex effects were highly significant ($p \leq .01$) for all parameters, however, the regimen X sex interaction was not significant except for PCV. Regimen X age interaction, on the other hand, was highly significant ($p \leq .01$) only for BW, TP and U-Ac concentrations. The data may suggest that low levels of protein in the rearing regimen is an important factor influencing levels of the blood parameters studied. The data also indicate a lack of clear relationship between hen-day egg production and the blood parameters studied.

(Key Words: Saudi Arabian Fowl, Protein Regimen, Blood Parameters, Egg Production).