Effect of Chromium Yeast on Hematological Parameters in Camel Calves (Camelus dromedaries) Reared under Hot Summer Conditions

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Abstract : The intention of this study was to evaluate the effect of dietary Cr supplementation on haematological parameters in camel calves reared under hot summer conditions. Fifteen male camel calves (5 - 6 months old) were randomly allotted to three dietary treatments (n = 5) for a period of 84 days. Camel calves were fed ad libitum on basal diet without Cr supplementation (control), basal diet supplemented with 0.5 mg Cr/kg DM (Cr 0.5) or basal diet supplemented with 1.0 mg Cr/kg DM (Cr 1.0). During this, blood samples were collected every four weeks for hematological examination. The obtained results revealed that dietary Cr supplementation to camel calves reared under hot summer did not show significant effects (P> 0.05) on hematological variables. However, the neutrophil to lymphocytes ratio (N: L ratio) was significantly (P < 0.05) reduced in camel calves fed on diets supplemented with chromium. In conclusion, Chromium supplementation to the diet of camel calves did not show any significant effects on hematological variables. Whereas, the neutrophil to lymphocytes ratio (N: L ratio) was reduced in camel calves fed diets supplemented with chromium.

Keywords: camel calves, chromium, haematological, immune response

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