

# ABSTRACT

The nutritional evaluation of chrome shavings have been studied in quails *Coturnix coturnix japonica* on the body composition, dressing percentage, haematology, biochemical analysis of serum enzymes and the estimation of chromium in carcass and histopathological studies of liver, kidney, heart and gizzard.

Two different levels of chrome shavings were prepared i.e. 2.5 % and 5 %. After the oral supplementation of chrome shavings body weight, body composition (moisture, mineral, protein and fat), dressing percentage and selective absorption of chromium through atomic absorption was recorded. The studies of moisture, mineral, protein content, dressing percentage and chromium analysis were found to significantly increased as compared to control groups. The study of the fat content was found to be significantly decreased.

The haematological studies, total erythrocyte count, total leukocyte count, haemoglobin and packed cell volume were investigated. From these studies total erythrocyte count, haemoglobin and packed cell volume were found to be significantly decreased and total leukocyte count was found to be significantly increased as compared to control. The serological studies included liver function tests and renal function tests were also studied. These serological studies were found to be significantly increased as compared to control.

Different histopathological changes in liver, kidney, heart and gizzard were also observed. These studies showed varying degree of changes such as necrosis, pyknosis, karyolysis, karyorehexis, hemorrhages, blood vessel dilations and leukocytic infiltration in tissues of treated quails as compared to control.