

ABSTRACT

The study was carried out to investigate the effect of hydrolysed chrome shaving on body weights, dressing %, haematology, Serology, body composition, analysis of heavy metal and histopathology in quail (*Coturnix Coturnix japonica*).

Five hundred quail chicks were divided into groups (A, B and C). Group A were kept as a control. Where as "B" and "C" contains 7.5% and 10% hydrolysed chrome shaving. Groups of hydrolysed chrome shaving were exposed and this treatment is continued upto 9th week. The animals were scarified at the end of 2nd week.

The effect of hydrolysed chrome shaving at the end of each week on body weight and dressing % were noted. Chicks were dissected. Blood samples were taken. Haematological studies was observed Heart, liver, gizzard and kidney were removed and effect of hydrolysed chrome shaving on body composition, estimation of chromium in muscle carcass were studied. Histopathology of heart, liver, gizzard and kidney were made and their enzyme was studied.

It was concluded that 7.5% level of hydrolysed chrome shaving increase in weight gain and dressing percentage but 10% level of hydrolysed chrome shaving decrease in weight gain and dressing percentage. There was an increase in WBCs where as decrease in RBCs, Hb and PCV in haematological studies. In serological studies liver and kidney enzyme were increases. There was an increase in body composition contents except fat content. Heavy metal chromium in muscle carcass was also studied. Major histopathological changes in heart were degeneration, dislocation of nuclei.

In liver were congestion, fibrosis, necrosis, infiltration, degeneration and fatty change and in kidney were infiltration of cells, congestion, degeneration of tubules, necrosis and fibrosis was also recorded.