

# ABSTRACT

The objective of this project was to determine the immunotoxic effect of chromium on some immune responses in a farmed fish *Labeo rohita*. In this experiment the animal was exposed to sub lethal concentration of 12 mg/lit of chromium before primary and primary boosted antigen administrations. The human B erythrocytic <sup>cells</sup> antigens were used as antigen. Following chromium exposure there ~~is~~ was an increase in TLC, monocytes, neutrophils, basophils and eosinophils while a decrease in lymphocytes as compared to untreated groups. The humoral antibody production was greatly effected and decreased on the other hand the number of pyroninophilic cells and aggregates were also reduced. Bioaccumulation of chromium was studied on Atomic Absorption spectrophotometer in liver, kidney, gills and muscle which showed increased accumulation in kidney followed by gills, liver and muscle. Histopathological effects of chromium on kidney, liver and spleen showed severe damages including necrosis, cellular degeneration, cellular infiltrations and expansion in melanomacrophage centers.