

# ABSTRACT

The present study deals with the immunomodulation due to the effect of fluoride in *Labeo rohita*. The toxic effect of fluoride on the humoral antibody production was studied. In addition, histopathological damage induced by fluoride in liver, kidney and spleen was also noted. Study of the antibody production revealed that fluoride suppressed humoral immunity of the fish. On examining the internal structure of liver, kidney and spleen it was observed that fluoride caused severe damage, such as necrosis, vacuolization and degeneration, to the tissues. Pyroninophilic cells observed during Proliferative response showed that fluoride-treated fishes had a reduced Proliferative response as compared to the control group of fishes.