

ABSTRACT

The nutritional evaluation of chrome shavings have been studied in fish *Cirrhinus mrigala* on the body composition, hematology, biochemical analysis of serum enzymes and histopathological studies of liver and kidney.

Four different levels of chrome shavings were prepared i.e. 5%, 10%, 15% and 20%.

After oral supplementation of chrome shavings body weight, body composition (moisture, minerals, protein and fat) and selective absorption of chromium through atomic absorption was recorded. The study showed their significant increase as compared to control group. The study of fat contents was found to be significantly decreased, while mineral contents showed non significant change. In hematological studies total leukocyte count was found to be significantly increased, while total erythrocyte count was to be significantly decreased. The serological studies included GPT, GOT and AP activity showed significant increase as compared to the control group. The concentration of bilirubin and creatinine in serum was also studied that showed significant increase as compared to control group.

Various histological changes in liver and kidney were also observed. These studies showed various changes such as necrosis, pyknosis, blood vessel dilations leukocytic infiltration in tissues of treated fish as compared to control.