

**Toxic effect of hexavalent chromium and aluminium in fish *Ictalurus punctatus* grown in contaminated water and bioremediation by using dead fungal biomass.**

ThangaMalathi S, Manjula K\*.

Department of Biochemistry, Mohamed Sathak College of Arts and Science, Sholinganallur, Chennai – 600119, Tamil Nadu, India.

Corresponding author email: [6772chem@gmail.com](mailto:6772chem@gmail.com)

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Post Graduate & Research Departments of Biochemistry, Microbiology, Biotechnology and Bioinformatics, Mohamed Sathak College of Arts & Science, Sholinganallur, Chennai-600119, India.

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**ABSTRACT**

Fish serum may reflect status of many biochemical processes in the metabolism. Heavy metals may alter serum biochemical parameters in fishes. The present study investigated the toxic effect of Cr (VI) and Al (III) in fresh water fish *Ictalurus Punctatus* and neutralizes these heavy metals by using dead fungal biomass. Activities of serum ALT, AST, ALP, LDH, CPK,  $\alpha$ -Amylase and Glucose concentration increased in Al and Cr exposed fish. Urea concentration increased in Al-exposed fish, although it decreased in Cr-exposed fish. The above study suggests that serum biochemical parameters could be used as important and sensitive biomarkers in eco toxicological studies concerning the effects of metal contamination and fish health. To remove these heavy metals from environment by using dead fungal biomass, this study was carried out by the adsorption range of metal ions Cr (VI) AND Al (III) in optimum pH 5.2 & 5.5, various concentrations of metal ions are completely adsorbed with in 8hours contact time.