



Mycoremediation of Chromium from Tannery Effluent Collected from Outskirts of Dindigul

Jayanthi Abraham*

Microbial Biotechnology Laboratory, School of Biosciences and Technology,
VIT University, Vellore-632014, Tamil Nadu, India

Abstract : In the present investigation fungal strains were employed in degrading chromium which is found to be a major contaminant in leather processing waste water. The organisms were isolated from tannery effluent situated in Sengulam in Dindigul. Isolation of fungus was carried out on SDA by serial dilution and spread plate method. Seven prominent fungal isolates were obtained and were designated as F1 to F4. The fungal isolates were further morphologically and identified as *Aspergillus fumigates*, *Aspergillus flavus*, *Aspergillus niger* and *Mucor* sp. The maximum Cr uptake by *Aspergillus flavus* (58%), *Aspergillus fumigatus* (37%), *Aspergillus niger* (40%), and *Mucor* sp. (31%) respectively in 72 hrs with initial Cr metal concentrations of 10ppm. *Aspergillus fumigatus* could accumulate and remove maximum Cr up to 50% from the initial conc. of 50ppm, 100ppm, 250ppm and 500ppm respectively with increase in the incubation period.

Keywords : Heavy metals, Chromium, Biosorption, *Aspergillus*.

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