REMOVAL OF COPPER FROM AQUEOUS SOLUTION USING *CALOCYBE INDICA*

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ABSTRACT

The study simulates a cost-effective approach for the removal of copper from aqueous solution using edible Milky White Mushroom, *Calocybe indica*. Wastewater samples of varying strength was synthesized and removal efficiency was analyzed for variation with respect to p^H, contact time, mushroom size, strength of copper solution and mushroom dosage, for both steady-state and stirring conditions in batch reactors. The analysis of residual copper concentration was carried out by colorimetric procedure. Under laboratory control conditions, the maximum removal efficiency was observed to be 48.50% for a p^H of 3.5 at an initial copper concentration of 5.09mg/ml. The efficiency when compared to chemical techniques may be slightly lower, but the process is economical and has no toxic by-products, as it is completely exhaustive in nature.

KEYWORDS: *Calocybe indica*, copper, colorimetric, mushroom, wastewater.