



Phytoremediation of Brass and Electroplating Industry Effluent through *Eichornia crassipes*

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Abstract

An experiment was conducted to evaluate the phytoremediation potential of *Eichornia crassipes* exposed to different dilutions (i.e., 25%, 50% and 75%) of brass and electroplating industry effluent. A supporting experiment was also conducted in parallel with synthetic binary and single metal solutions of Cd and Cr to assess their impact on growth of plants. The maximum removal of heavy metals was observed under 50% dilution effluent (i.e., 89% for Cd and 87% for Cr) followed by 75% (i.e. 81% for Cd and 77% for Cr) and 25% (i.e. 51% for Cd and 50% for Cr) dilutions. Richard's model fitted to shoot growth data showed highest growth and rate in 50% diluted effluent ($k=0.372$; $Kc=0.49$ for Cd and 0.45 for Cr). The study suggested that *E. crassipes* can be a good plant species for remediation of water bodies moderately contaminated with brass and electroplating industry effluent.