

Effect of Edta in the Phytoextraction of Copper by Terminalia catappa (Talisay) Linnaeus

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Abstract : Phytoextraction capability of *T. catappa* in contaminated soils was done in the improvised greenhouse. The plant samples were planted to the soil which contained different concentrations of copper. Chelating agent EDTA was added to observe the uptake and translocation of copper in the plant samples. Results showed a significant increase of copper accumulation with the addition of EDTA at 250 and 1250 mg·kg⁻¹ concentration of copper in the contaminated soils ($p < 0.05$). While translocation of copper was observed in all treatments, translocation of copper is not significantly enhanced by the addition of EDTA ($p > 0.05$). Uptake and translocation were not directly affected the presence of EDTA. Furthermore, this study suggests that the *T. catappa* is not a hyperaccumulator of copper, and there is no relationship observed between the length of the plant and the copper uptake in all treatments.

Keywords : chelating agent EDTA, hyperaccumulator, phytoextraction, phytoremediation, terminalia catappa

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