



UPTAKE AND DISTRIBUTION OF LEAD IN *Jatropha curcas* L.

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ANGEL GO

CLAUDINE ORCINE

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ABSTRACT

The phytoremediation ability of *Jatropha curcas* was tested by artificially contaminating jatropha in sandy loam soil. Four treatments were prepared: control (without contaminants), low, medium and, high contamination level lead. The *Jatropha curcas* were contaminated after two months of cultivation. After contamination, the *Jatropha curcas* were harvested and dried, digested and were subjected to atomic absorption analysis.

Based on results, *Jatropha curcas* showed that most of the leads settled on the root system, although the shoot and leaves were also able to take up lead the amount of accumulation in leaves are relatively low. In terms of height, *Jatropha curcas* that were subjected to high levels of lead contamination showed signs of stunted growth the height can be considered lower as compared to the acquired height of the *Jatropha curcas* under control treatment. The Bioconcentration factor of *Jatropha curcas* contaminated with lead showed tolerance and may therefore be considered phytoremediator.



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