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An Evaluation of Edible Plants for Remediation of Contaminated Soil- Can Edible Plants Be Used to Remove Heavy Metals on Soil?

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Abstract : In Mozambique rapid industrialization (mining, aluminium and cement activities) and urbanization processes has led to the incorporation of heavy metals on soil, thus degrading not only the quality of the environment, but also affecting plants, animals and human healthy. Several methods have been used to remediate contaminated soils, but most of them are costly and difficult to get optimum results. Currently, phytoremediation is an effective and affordable technological solution used to extract or remove inactive metals from contaminated soil. Phytoremediation is the use of plants to clean up a contamination from soils, sediments, and water. This technology is environmental friendly and potentially cost effective. The present investigation summarised the potential of edible vegetable to grow under the high level of heavy metals such as lead and zinc. The plants used in these studies include Tomatoes, lettuce and Soya beans. The studies have shown that edible plants can be grown under the high level of heavy metals on the soil. Further investigations are identifying mechanisms used by plants to ensure a safe and sustainable use for remediation of contaminated soils by heavy metals.

Keywords : contaminated soil, edible plants, heavy metals, phytoremediation
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