



Assessment of Accumulation of Mercury by Different Spontaneous Plant Species Grown in Soils of the Industrial PVC-Factory Located in Vlora (Albania)

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Abstract: The aim of this study is to assess the environmental impact of mercury disposal to surface soils and local vegetation in the area of the former factory of Soda-PVC in Vlora (south Albania). Phytoremediation techniques could be proposed to remediate and/or mitigate the pollution impact. Soil samples collected in the contaminated area and at different distances from the factory in the northeast main wind direction were analyzed for Hg content and availability to plant uptake by a sequential extraction procedure in two steps. Obtained results showed that the highest Hg concentration was in the samples closest to the factory. Different plant species, collected in the restricted contaminated area, showed different ability to tolerate and accumulate Hg from soils. The spontaneous plant species *Tamarix dalmatica* Baum and *Echium italicum* L. showed respectively the highest and lowest Hg content in their aerial part.

Keywords: *mercury pollution, chlor - alkali plant, Hg availability, phytoremediation.*

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