

Application of Acer velutinum for Absorbing Heavy Metal, Mercury, from the Environment

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Abstract : One-year seedlings of Acer velutinum were provided from plantations and the solution of Mercuric chloride was developed in 20,40 and 60 mg/l concentrations, then this solution was added to the soil and the Acer velutinum were placed in a vase. Six months after seedlings' growth, the leaf, stem and roots were separated. The results were investigated by variance analysis and Duncan test. The highest level of mercury accumulation in the organs of leaf, stem and root was 45.67, 40 and 55 mg/kg, respectively. According to the obtained results from this research, the velutinum species was appropriate for refining the soils contaminated by mercury.

Keywords : heavy metals, acer velutinum, mercury, phytoremediation

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