

Phytoextraction of Heavy Metal Polluted Soils



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AIT Bioresources
AIT Environmental Resources & Technologies

Heavy Metal Contaminated Soils

Metal contaminants are undegradable
Bioavailable fraction is only a small part of the total concentration



Heavy Metal Accumulator Plants

Plants for phytoextraction

Tolerance of otherwise toxic levels of particular heavy metals, dependent on plant species
Heavy metal concentration in plant higher than in soil



Research on Improvement of Phytoextraction Efficiency

Mobilisation of heavy metals in soil
Suitable plant species:
Metal concentration in aboveground plant tissues
High biomass formation
Microbial inoculations



Contribution of Plant-Associated Microorganisms

Bacteria, Mycorrhiza

Influence on rhizosphere processes and uptake
Improvement of plant health under stress conditions

