

Project Title: Bioavailability of Arsenic in Contaminated Soils: Effect of Phosphate Application

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In this project, we have investigated the effect of phosphate (an analogue of arsenate) on the mobility and bioavailability of arsenic in two types of arsenic contaminated soils by growing the *Brassica napus* and *B. jucea* plant species. The results showed that phosphate application can increase more biomass in *B. napus* than the *B. juncea* and also more arsenic was removed from soil by *B. napus* than the *B. juncea*. We concluded that how phosphate fertilizer application could increase the bioavailability of arsenic in soils for plant uptake and hence can be used to remediate As-contaminated soils using phosphate assisted phytoextraction strategy.