

Trace Metal Analysis in Root Crops and its fields of Islamabad (Pakistan)

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Two root crops: *Daucus carota* (Carrot) and *Allium fistulosum* (Spring onion) and its soil samples have been characterized for the physiochemical parameters (pH, electrical conductivity and moisture content) and available concentration of trace metals and their speciation through sequential extraction. Elemental toxicity was evaluated by measuring their content in leaf, stem, root and flower of these plants by using atomic absorption spectrophotometer. The results showed that elements are mostly concentrated in soil than crop parts following the sequence Cr > Zn > Ni > Pb > Cu > Cd. However, speciation depicted the concentration of Zn and Pb as Fe-Mn oxide, Cr and Cd as exchangeable, Ni as organic and Cu as carbonate bound form. The total contents measured for trace metal are found in the usual range found in these types of soils except Cd and Zn. Due to higher accumulation potential of spring onion as compared to carrot, it can be used in phytoremediation of elements in soil.