

The contamination of soils due to the presence of toxic metals can result in serious negative consequences, such as damage of ecosystems and of agricultural productivity, deterioration of food chain and serious human and animal health problems. The impact of soil pollution (due to urban and mining areas) on the food chain presents a challenge for many investigations. Availability of essential and potentially toxic metals in polluted soil and their possible transfer in various plant foods were examined. Several plant food species were examined from polluted and referent (unpolluted) areas: sorrel (*Rumex acetosa*), spinach (*Spinacia oleracea*) and common nettle (*Urtica dioica*) were used as self-growing plant food; garlic (*Allium sativum*), onion (*Allium cepa*) and parsley (*Petroselinum crispum*) were used as cultivated plant food (vegetable species). Atomic emission spectroscopy with inductively coupled plasma was used for determination of the 21 elements content.

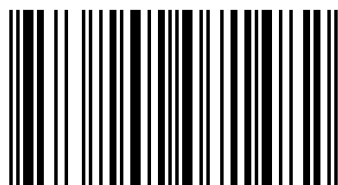


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Bio-accumulation of essential and heavy metals in plant food

Multi-elements characterization of plant food

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