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Occurrence of trace elements in some vegetables of the *Magnoliopsida* Class

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Abstract. Toxic metals cause an inhibitory effect on the growth of plants. Metals such as copper, iron, manganese, nickel and zinc are essential nutrients for living organisms but become toxic at higher concentrations. The objective of the current work was to investigate levels of contamination of *Solanum tuberosum* (potato) and *Apium graveolens dulce* (celery) with Cd, Cu, Fe, Mn and Zn. Analyses were performed using the flame atomic absorption spectrometry (Shimadzu AA 6200).
Iron was found in higher quantities than cadmium, manganese, zinc and copper in the both studied plants. For the studied sample only Fe, Mn and Zn concentrations are under the maximum limits, Cd concentrations are higher that maximum limits in all samples and Cu concentrations are higher only in potato's flower. The accumulation of investigated metals is different, depending on the organ of the plant.

Keywords: Cd, Cu, Fe, Mn, Zn, FAAS, potato, celery

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