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Investigation of some microelements from edible mushrooms using atomic absorption spectroscopy

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Abstract. Concentrations of eight trace elements (Fe, Zn, Mn, Cu, Cd, Pb, Ni, Cr) and two macroelements (Ca, Mg) were determined in two edible species of mushrooms (*Boletus edulis* and *Hymenochaete rubiginosa*) collected from adjacent zones of two neighbouring cities: Pitesti and Campulung. The elements were detected and quantified using flame atomic absorption spectrometry. In the zones with high degree of soil contamination the mushrooms samples have presented the highest contamination with heavy metals. The highest concentrations of Cr (6.5 mg/Kg), Pb (1.51 mg/Kg) and Cd (5.11 mg/Kg) were detected in *Hymenochaete rubiginosa*, in change, in *Boletus edulis* was detected the highest amounts of Ni (0.71 mg/Kg) and Zn (2.61 mg/Kg).

Keywords: microelements, atomic absorption spectrometry, *Boletus edulis, Hymenochaete rubiginosa*

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