

EVALUATION OF *ARMILLARIA MELEA* SPECIES FEATURES CONCERNING SOME HEAVY METALS UP TAKE IN NATURAL CONDITIONS OF DIFFERENT FORESTRY ECOSYSTEMS

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Abstract

It was necessary to identify the metals (heavy, noble and rare metals) bioabsorption characteristics to the edible mushroom species *Armillaria melea*, in the view to relieve its quality as indicator. The samples were collected from some forestry ecosystems: Adanca, Gorgota, Manesti, Bucegi-Paduchiosu and Dambovita River vally from Dambovita County. All over the world today are developing large studies concerning biochemical and physiological features of mushrooms in the view to promote them as biological tools in different types of environmental biotechnologies grace of their bioabsorption capacity for heavy, rare or noble metals. This paper is about the elemental content of *Armillaria melea* in cap and stipe, bioabsorption factor, correlated to the mineral content of substrate and its natural pH value. The elemental content of biological and environmental samples was determined by spectrometry of fluorescence (EDXRF) using ELVA_X apparatus. Biological samples and their substrate samples have been dried at 600C some hours first. After drying the solid samples have been grinded until to fine powder and weighed.

For the evaluation of EDXRF results was used a certified reference sample NIST SRM 1571- Orchard leaves. So, it was determinate the presence of some heavy metals as copper, manganese, lead.

Key words: *Armillaria melea*, bioabsorption factor, translocation factor, pH.

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