



Evaluation of bioaccumulation factor for some heavy metals at *Lactarius piperatus* species in the view of utilize it in environmental biotechnologies

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The aim of this work is the evaluation of bioaccumulation factor for some heavy metals at *Lactarius piperatus* species. Biological samples consisted in *Lactarius piperatus* harvested from forestry ecosystems of Dambovită county. Were determined the iron, manganese and nickel content of biological samples and of soil under them. Also were determined the pH of soil samples. The chemical content was analyzed by EDXRF method with fluorescence spectrometer ELVAX. For the validation of results obtained by EDXRF were used the NIST SRM 1571-Orchard leaves standards of references. Was calculated the value of bioaccumulation factor for each metal species and for cap and stipe separated. The value of bioaccumulation factor for iron in case of *Lactarius piperatus* samples harvested from Bolboca forest was approximately 3510% in cap and 1532% in stipe of mushroom. At the samples prelevated from Mogoi forest, the value of bioaccumulation factor for iron was 686% in cap and 555% in stipe. It must be mentioned that the pH of soil samples was in all cases 6,7. In case of *Lactarius piperatus* samples harvested from Bolboca, the value of bioaccumulation factor for manganese was 130500% in cap. A part of samples prelevated from Mogoi had a value of bioaccumulation factor for manganese 36183% in cap. The results obtained for bioaccumulation factor of nickel indicated values between 0,5 și 0,7% as well in stipe as in cap at all samples, no matter the site of prelevation.