



ATMOSPHERIC HEAVY METAL SURVEY BY MEANS OF MOSSES: A REGIONAL STUDY (IASI, ROMANIA)

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Abstract

A survey of heavy metal deposition in one of the most populated areas (Iasi) of the Eastern Romania was carried out in 2000 and 2001. Moss samples (*Hypnum cupressiforme* and *Brachytecium salebrosum*) were collected from 10 sampling sites (about 2 sites/1000 km²) and analyzed by atomic absorption spectrometry (AAS and GFAAS) and inductive coupled plasma - mass spectrometry (ICP-MS). A distribution map was drawn up for four elements: Cd, Cu, Pb and Zn. The linearity of the interspecies relation between the elemental contents in *Hypnum cupressiforme* and *Brachytecium salebrosum* was examined. Significant correlation was found for Cd, Cu and Pb, while for Zn the results show saturation effects in *Brachytecium salebrosum*. No significant differences were obtained for the element concentrations in 2000 and 2001 samples.

Keywords: biomonitoring, mosses, Cd, Cu, Pb, Zn

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