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Mosses as bioindicators of radionuclide and metal pollution in northern Kosovo and Metohija mountain region

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Abstract

The study investigates mosses (*Hypnum cupressiforme* Hedw.) as bioindicators of pollution in three non-urban mountain areas of northern Kosovo and Metohija regions. Concentrations of radionuclides and metals were measured in moss and soil samples. ^{137}Cs specific activities in soil were strongly correlated with organic matter content. ^{137}Cs in mosses was significantly higher in coniferous than in deciduous forests. ^{7}Be measured in moss samples was increasing with altitude. Concentrations of Ni, Cr, Cu and Zn exceeded regulatory limits in many soil samples from two mountains (Kopaonik and Rogozna). However, concentrations of elements in mosses were weakly correlated with those in soil.

Keywords Moss · Soil · Radioactivity · Metal · Enrichment factor · Contamination factor

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