

THE ACUMULATION OF RADIONUCLIDES AND HEAVY METALS BY MUSHROOM'S COMPLEX IN FORESTRY ECOSYSTEMS

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Comprehensive studies of the mycobiota contribution to the biogeochemical migration of heavy metals (HM), radionuclides and their stable isotopic and non-isotopic carriers under native conditions have been carried out in contaminated forests of Russia and Ukraine (1988-2000). It was shown that species is a prime factor of ^{137}Cs accumulation by the fungi. The so-called "concentrator" group is now clearly represented by *Xerocomus badius*, *Suillus luteus* and *Tylopilus felleus*. ^{137}Cs content in the fungus mycelium is close to that in the fruit bodies. No significant difference in ^{137}Cs concentration was revealed depending on the fruit body part or age. Spatial variability of ^{137}Cs content in the fungi was considerably higher compared to other radionuclides and HM. The contribution of fungus complex to the biogeochemical migration of the various contaminants depends on both the chemical nature of the contaminant and soil-ecological conditions. The contribution is most manifested for ^{137}Cs , especially in hydromorphic landscapes (up to 50% of total accumulation in the biota).