STUDY OF CONCENTRATION OF HEAVY METALS IN FISH

B.Staniskiene. R. Palavinskas, C.Boes

Summary. Heavy metals are extremely dangerous for live organisms because they can cause cancer and mutations. The aim of this work was to determine the amount of heavy metals (Fe, Zn, Mn, Cu, Cr, Cd, Pb, Ct, V, Ba, U) in 15 fish. Fifteen samples from different water sources of Lithuania were analysed by means using ICP-MS spectometer. The highest concentrations of Fe and Zn were found in the fish. Metal concentrations in fish can be a direct result of water contamination with heavy metals. The lowest concentration of metals was found in fish from Labanoras lakes, where the level of urbanisation is relatively low. Metal concentration were found to be influenced by fish type. Even though the amount of metal concentration in samples of fish was not above the allowable standard, regular monitoring is absolutely necessary.

Keywords: fish, lake, heavy metals, mass-spectrometry, contamination, concentration, monitoring.