FOOD CHAIN BIOMAGNIFICATION OF HEAVY METALS IN SAMPLES FROM THE LOWER PRUT FLOODPLAIN NATURAL PARK

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Abstract

Pollutants transfer via the food chain was investigated in a wetland ecosystem from the Lower Prut Floodplain Natural Park in Romania. Trace elements (Cd, Cu, Pb and Zn) were determined by Inductively Coupled Plasma – Optical Emission Spectrometry (ICP-OES) from samples belonging to primary producers and primary and secondary consumers, and also from water and sediments samples. Non-essential trace elements as Cd and Pb exhibited low concentrations in molluscs and fish, but zinc had shown concentration up to 745.28 µg/g in Cyprinus carpio.

Key words: bioaccumulation, food chains, heavy metals, Prut River

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