



The Concentration of Heavy Metals in Fish Gills, Livers, and Muscle Tissues in The Black Drin River

M.Dz. Musa¹, I.A. Murtezan², S.S. Mile^{2,*}

¹*Dr. Ibrahim Temo High school, Struga, 6330, Macedonia;* ²*SEEU, Institute for Environment and Health, Tetovo, 1200, Macedonia*

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Abstract: Along the shoreline of Lake Ohrid, three major towns – Ohrid, Pogradec, and Struga – and numerous villages are located. They share a population of around 400.000 people. This number almost doubles during the summer holiday season, increasing the pollution levels. The Black Drin river flows out of Lake Ohrid in the town of Struga. It flows through many populated areas and has numerous tributaries as well as pollution sources, covering a distance of 285 km before emptying into the Adriatic Sea in Albania. In this study, are analyzed fish in a 26 km section of the river, starting from the outflow from Lake Ohrid in Struga until the “Globocica” hydroelectric power plant. One of the biggest polluters of the river is the municipal wastewater cleaning facility located at Lozan, near Struga. The quantity of untreated wastewater released into the river stream is 580 liters per second. In addition, the amount of untreated water entering the stream increases significantly when we take into account the drainage and surface runoff waters. Specifically, are examined the concentration of Zn, Cu, Cd, and Pb (in µg), in fish gills, livers, and muscles. Three types of fish living in Lake Ohrid and the Black Drin river have been included in the study: Fam: Salmonidae, *Salmo trutta fluviatilis* - Lumi, Fam. Cyprinide, *Cyprinus carpio* L. and *Barbus meridionalis petenyi* Heck.

Key words: *heavy metals, fish, gills, liver, muscle, Black Drin River.*

*Corresponding: E-mail: m.srbnovski@seeu.edu.mk; Tel.: +389 44 356 114 Fax: +389 44 356 001