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PHYSICO-CHEMICAL CHARACTERISTICS OF THE KARST LAKE IGHIU (ROMANIA)

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Abstract

The main purpose of this paper is to present basic chemical and physical characteristics of Ighiu lake water, which is controlled by rock weathering, inputs from the catchment, but it can be further affected by atmospheric deposition processes and biological activity in the water column. The survey was carried out in 2010. Water samples were collected from two different sites covering the middle of the lake and were analyzed for a pre-defined set of physical and chemical indicators to allow the build up of a meaningful database that can be used for comparative assessment and trend delineation. The results have shown a generally good water quality but have also shown the presence of minor traces of pesticides and heavy metals. The obtained data was classified according to Order 161/2006 into five quality classes, and the classification of the lake was established by using the percentile system V (90%).

Key words: Ighiu Lake, karst lake, physico-chemical characteristics, water quality

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