QUALITY ANALYSIS OF OCNA SIBIULUI’S LAKES
I. PHYSICAL-CHEMICAL AND BACTERIOLOGICAL DESCRIPTION OF WATERS

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Abstract: This paper presents the results obtained at the physical-chemical and microbiological analysis of thirteen hypersaline lakes in the Ocna Sibiului region in Romania. Three of these lakes (Cloșca Lake, Crișan Lake and Horia Lake) have a low mineralization degree, low concentration of chlorides and calcium and a reduced amount of organic matter, whereas the Black Lake is characterized by a high mineralization degree, maximum amount of chlorides and organic matter, a reduced concentration of dissolved oxygen, minimum pH. Brâncoveanu Lake is characterized by high mineralization of water, high concentration of chlorides and calcium, high hardness and dissolved oxygen. Ocnița Lake, Bottomless Lake, The Mine’s Mouth Lake, Swallow Lake, The Lake with insland, The Mud Lake present moderate degree of mineralisation, moderate concentration of chlorides and calcium. Cloșca Lake, Linnen Lake and Cats Lake present maximum values of faecal indicators. Most of the other lakes show a lower number of colonies and faecal coliform organisms. The low value of bacteriological parameters reflects that the faecal contamination was reduced in those periods when the bathing season was closed.

Keywords: water, microbiological analysis, chemical analysis, hypersaline lake, Ocna Sibiului

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