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INFLUENCE OF HYDROLOGIC REGIME ON ZOOPLANKTONIC DIVERSITY OF HARREZA DAM (Haut-Cheliff) AIN DEFLA ALGERIA

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ABSTRACT

Dam of Harreza is located in meadow of high Cheliff (Algeria) with semi-arid climate. It is characterized by a weak hydraulic activity and irregularity of waters distributions. During two years' study, average monthly volume passed from 3.68±1.02 Hm^3 in 2009 to 11.65±4.58 Hm^3 in 2010. Measuring of temperature, dissolved oxygen and zooplanktonic samplings had been conducted in 5 stations spread between shores and pelagic zone. Variation of hydrologic regime recorded during both years had not affected the spatiotemporal evolution of the temperature. Growth of contents in dissolved oxygen had been recorded during the second year (2010) in keeping with water level growth.

Structural study of zooplanktonic populations allowed noting that specific richness had declined passing from 26 in 2009 to 24 in 2010. That is translated by disappearance of 3 species (*Chydorus sp.*, *Polyarthradolichoptera*Idelson, 1925 and *Neolovenulaalluaudi*Guerne& Richard, 1890)and appearance of specie non inventoried in 2009 (*Epiphanessenta* O.F. Müller, 1773). In terms of time, relative abundance did not show any significant difference, when from spatial level, differences are noted between stations. Hydrologic regime of Harreza Dam keeps abundance of zooplanktonic population when diversity of the last ones is influenced.

KEYSWORDS: Hydrology, Dam, Temperature, Dissolved Oxygen, Zooplankton, Abundance