

State and evolution of the microbiological pollution of the lake of reghaïa

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ARTICLE INFO

Article History:

Received : 04/05/2017

Accepted : 04/02/2018

Key Words:

micro-organisms;
coliforms fecal;
streptococcus fecal;
MPN.

ABSTRACT/RESUME

Abstract: The lake of reghaïa is a fresh water tank, which represents a very vulnerable link for maintenance of the balance in the ecosystem, but currently it receives a very important volume of liquid-effluents generated by the industrial activities which disturbs the balance of the aquatic life opposite fauna and the flora, the micro-organisms represent a biological form of pollution conveyed by the industrial effluents (sewage), the objective of our study is the identification, the quantitative estimate and the follow-up of the seasonal dynamics of the various communities of the micro-organisms which develop in this tank, for this purpose 3 series of taking away were carried out between the month of December 2015 and July 2016, in order to follow the development and the proliferation of certain micro-organisms of the coliforms type fecal and streptococcus fecal which are, *Escherichia coli* (colon bacillus) (enterobacter) and the streptococcus ones of group D (enterococcus), where the enumeration was carried out by the method NP and the presence of the salmonella and vibrio-choleric. The results gave very high concentrations which exceeds $15 \cdot 10^4$ for the coli bacilli and between 0-6 for the enterococcus ones, with absence of salmonella and choleric vibrio, which allows us to classify our water category 4 (water of bad quality), and the dynamics of the bacteria follows a seasonal cycle which varies according to the flow and the nature of the effluents rejected towards the lake (physico-chemical characteristics) of water.