ASSESSMENT OF DRINKING WATER QUALITY IN FIER DISTRICT, THROUGH THE MICROBIOLOGICAL AND CHEMICAL PARAMETERS

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ABSTRACT

Water is life and water quality is an essential measure of quality of life or, to be clearer, the existence of life. Improving access to safe drinking-water can result in tangible benefits to health. Efforts must be made to achieve a drinking-water quality as safe as possible. Water supply in relation with the standards and rules settled for the bacterial levels, offers the possibility for a hygienic environment which of course serves as an antidote to many infective diseases which originate from water. This study will create the conditions for the full evaluation of water standards in Fier, the third biggest region in the country. The monitoring process of the standards will be made by microbiological and physical-chemical indicators. Samples are gathered every month during June 2014-June 2015 period, in 29 different locations scattered in different communes, water deposits and rural water supply centers. Most Probable Number index is used for evaluation of *Escherichia coli*, while the number of heterotrophic bacteria is determined by counting colonies on plates with PCA. Chemical testing includes parameters like pH, ammonia, chloride, nitrite and dissolved oxygen that are estimated using standard methods. According to preliminary results, water standards in the city are satisfactory having no positive causes, meanwhile in some communes there are different cases found positive on microbiological indicators like *E. coli, S. faecalis*.

Keywords: Physicochemical analysis, Most Probable Number index, faecal indicators, water quality.