



Physico-Chemical and Bacteriological Analysis in the river at the village of Radesh in Municipality of Dragash (Kosova)

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Abstract: Increase of population in our planet causes water pollution and that's why there is a need to treat water. The use of polluted water may lead to various diseases like: cholera, bladder and colorectal cancer. The aim of this research is to analyze: physical, chemical and biological parameters of water in the river of Village Radesh, Municipality of Dragash, Kosova and to reach a conclusion regarding the quality of this water. To monitor the indicated parameters analytical methods like: photometric methods, conductivity methods, pH meters and volumetric methods are used. Process of treatment of water including: collection, precipitation, coagulation, filtration and disinfection is described. Coagulant used is $\text{Al}_2(\text{SO}_4)_3 \times 18\text{H}_2\text{O}$. Chlorine is used for disinfection. Merc's standards are used to determine presence of: nitrates, nitrites, ammonia, chlorides, iron, manganese and aluminium. DPD1 tablets are used to determine value of chlorine present in the water. Feeders: Tergitol agar base, Slanetz agar base and Yeast extract agar are used for bacteriological analysis. Samples are taken at three different sites: at river, water factory in Municipality of Dragash and consumers that use water in this municipality. Results are for the months March to December of year 2014 (excluding July). Physical, Chemical and Bacteriological parameters are according to the directives of EU and WHO. Finally water is classified according to the EU standard 294 of 1984 for the quality of surface water used for drinking, additional standards (Standard no:258) for the quality of water and German industry standard (DIN 38408). According to these standards water is classified in category A1.

Key words: *River Radesh, polluted water, treatment, diseases, Kosovo.*

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