

WATER QUALITY ANALYSIS OF GROUND WATER FROM LOCATIONS IN NORTH BANGALORE

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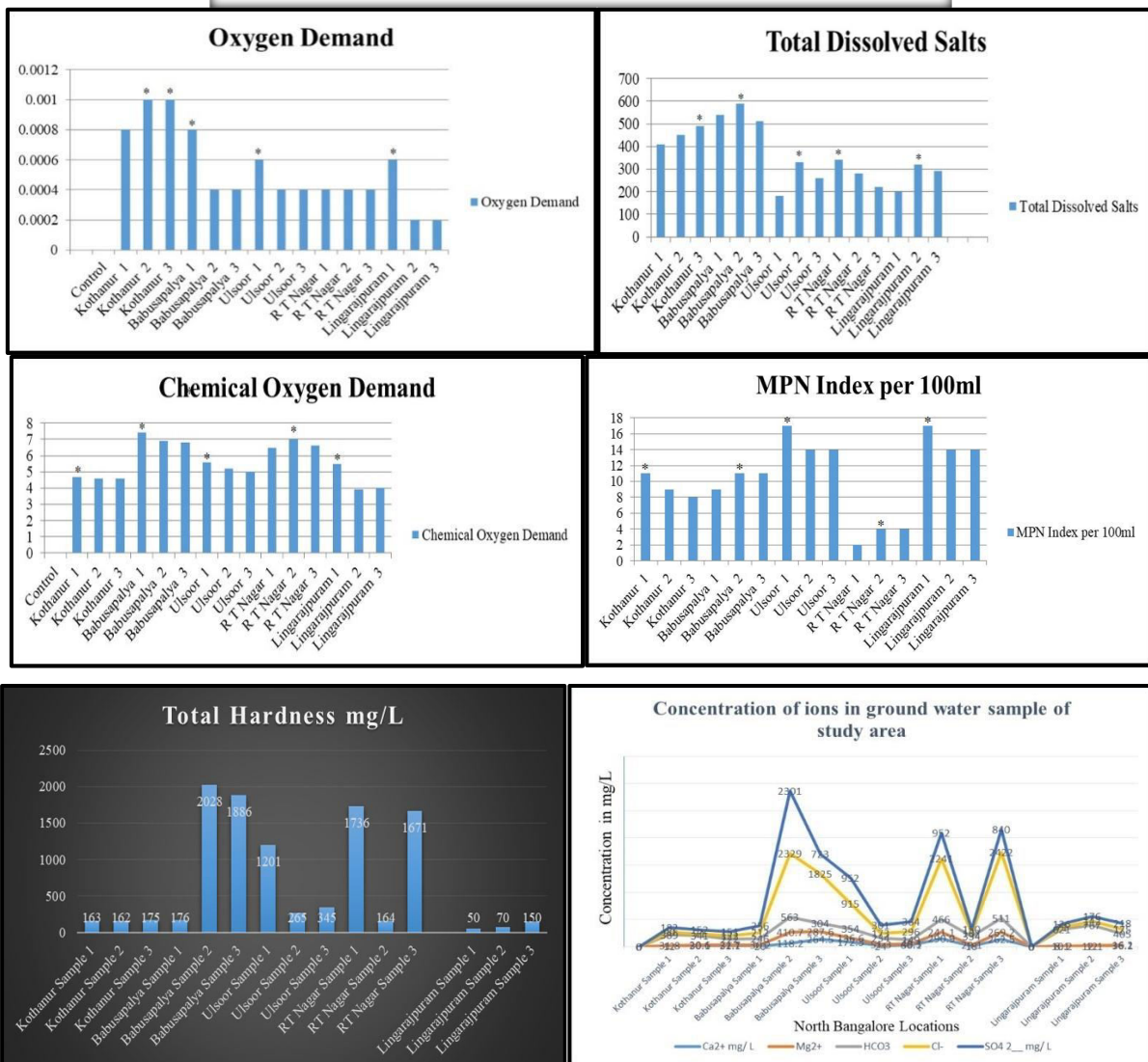
ABSTRACT:

Water quality can be defined as the chemical, physical and biological characteristics of water, usually in respect to its suitability for designated use. Water has many uses, such as for recreation, drinking, fisheries, agriculture and industry and the quality of the water for each of the above- mentioned uses have different defined chemical, physical and biological standards necessary to support that use. We expect higher standards for water we drink and swim in comparison to that used in agriculture and industry. Water quality standards are put in place to ensure that the water is safe to use and also supports efficient utilisation of water for that specific purpose. Water quality analysis is to measure the required parameters of water, following standard methods, to check whether they are following the standard and provides us an opportunity to monitor the water quality regularly. Groundwater is generally an excellent source of water for drinking, cleaning, bathing, irrigation and industrial purposes. The quality of water invariably is contaminated in many ways by natural, agricultural and anthropogenic activities with the release large number of pollutants into the water bodies. The objective of this study is to perform a qualitative analysis of some physicochemical parameters of groundwater in the study area. This may be considered as a reference for society to get cautious about the impending deterioration of their environment and health. The groundwater samples were collected from five different locations in North Bangalore. The samples were subjected to physicochemical analysis where the results showed that most of the parameters like TDS, BOD, COD and MPN are well below the permissible limit prescribed by WHO. Further, the groundwater quality has been evaluated for the allowed concentrations of various chemical compounds and further categorized as suitable and unsuitable for drinking purposes. It is advisable that the ground water sample which falls under the suitable category must be boiled or purified before using for drinking purposes, while they can be used for other domestic purposes as well. These experiments were done to provide people awareness on the water quality of groundwater in their area. Also, to give an insight on the importance of sanitation and economical water treatment methods like filtration and boiling which would prove beneficial for improving the quality of

water being used and to avoid waterborne disease. The remedial measure must be taken to safeguard and conserve the precious water resources from pollution for the future generation.

RESULTS

S.No.	Sampling Location	Sample No	Source	
			Tube well	Open well
1.	Kothanur	3	2	1
2.	Babusapalya	3	1	2
3.	Ulsoor	3	1	2
4.	R.T. Nagar	3	2	1
5.	Lingarajapuram	3	3	-



PUBLICATION:

The results of this research have been submitted for publication in a scopus indexed journal- **Current Trends in Biotechnology and Pharma Research.**