



Study of Some Physico-Chemical Parameters of Bhosga Water Body, Tq. Lohara, Osmanabad Dist (M.S.) India.

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Abstract:

The present communication deals with the study of some Physico-Chemical parameters in Bhosga Water Body, Osmanabad (M. S.) India. The work was carried-out during the year 2019 (January to December). The Bhosga Water Body is mainly constructed for irrigation, drinking water and fishery purposes.

The physico-chemical parameters were studied during the study period. The aspects like water temp. pH free CO_2 , Alkalinity D.O., were studied.

Key words - Bhosga Water Body- water temp., pH, CO_2 , Alkalinity D.O. - India.

Introduction:

Water is the one of most important compound to the ecosystem. Good quality of water described by It's physical, Chemical and microbial characteristics. But some correlation was possible among these parameters and significant one would be useful to indicate quality of water. The water body is source of drinking and irrigation water for nearly about six villages under the canal irrigation. This water body was polluted due to domestic and agricultural waste leading to notable changes in the water quality and present investigation was carried out from Jan 2019-Dec 2019.

Water is life. Today's world facing a problem of pure water, water pollution means excess concentration of foreign materials water is one of the most important elements of the biosphere and it is necessary for sustain all plants and animals water pollution give birth to many water borne diseases.



Materials and Methods:

Monthly samples were collected from the tank for a period of one year in morning hours.

Samples were collected in pre-cleared plastic bottles of one liter and brought to the laboratory and analyzed some parameters were checked on the spot. The methods used for the analysis of physico-chemical Biological parameters areas given in APHA (1980), Trivedy and Goel (1984) and Kokarkaretal (1998).

Results and Discussion:

- Temp.**
 - Air** - The air temperatures ranged between 21 °c to 40°c the lowest recorded in January and highest recorded in may.
 - Water**-It varies from 20°c to 37°c the minimum was recorded in January And maximum in may.
- pH** - The pH of water ranged between 7.2 to 8.6 Bhosga Water Body. The minimum was 7.2 in the month of June and highest 8.6°c in the month of December.
- Free CO₂**- The values of free CO₂ was varies from 8 mg/lit to 27 mg/lit. The free CO₂ was recorded lowest in the summer and highest in rainy season.
- Alkalinity** - The water of Bhosga Water Body was moderately alkaline throughout the period of investigation Total alkalinity was ranged between 80 mg/lit to 140 mg/lit.
- Dissolved oxygen** - The values of D.O. ranging between 7 mg/lit to 12 mg/lit. The value of D.O.

Table. No. I - Profile of physico-chemical parameters of Bhosga Water Body, Osmanabad (2019).

Sr. No.	Parameters	Range
1	Temp. a. Air	21 ⁰ to40 ⁰ c
	b. Water	20 ⁰ to40 ⁰ c
2	pH	7.2 ⁰ to37 ⁰ c
3,	FreeCO ₂	8 mg/lit to 27 mg/lit
4	Alkalinity	80mg/lit to 140 mg/lit
5	D.O.	7 mg/lit to 12 mg/lit



was maximum during rainy season and minimum in summer.

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