

عنوان مقاله:

Determination of Physico-Chemical Parameters of River Majowopa, Sagamu, Ogun State, Nigeria

محل انتشار:

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خلاصه مقاله:

In this study, the physicochemical parameters of the river Majowopa were determined. The parameters assessed are temperature, pH, turbidity, conductivity, total dissolved solids (TDS), total suspended solids (TSS), total solids (TS), total acidity, total alkalinity, chloride, nitrate, phosphate, sulphate, dissolved oxygen (DO), chemical oxygen demand (COD) and biochemical oxygen demand (BOD). The obtained result revealed that the average value of the parameters analysed are; temperature (27.99 ± 0.51 °C), pH (6.76 ± 0.08), turbidity (7.69 ± 2.51 NTU), conductivity (124.90 ± 18.42 uS/cm), TSS (18.29 ± 2.27 mg/L), TDS (68.17 ± 13.63 mg/L), TS (86.46 ± 13.95 mg/L), total acidity (17.57 ± 2.37 mg/L), total alkalinity (25.23 ± 6.23 mg/L), chloride (27.91 ± 1.92 mg/L), nitrate (10.14 ± 2.28 mg/L), phosphate (7.62 ± 1.85 mg/L), sulphate (32.72 ± 0.87 mg/L), DO (1.60 ± 0.55 mg/L), COD (23.79 ± 5.45 mg/L), BOD (8.31 ± 3.65 mg/L) and that these values are within the WHO allowed limits except for turbidity (7.69 ± 2.51 NTU), nitrate (10.14 ± 2.28 mg/L), phosphate (7.62 ± 1.85 mg/L) and DO (1.60 ± 0.55 mg/L). One-way analysis of variance (ANOVA) carried and the 95% confidence level revealed that the value of each parameter was significantly different ($p < 0.05$) from one site to another. The variation of each parameter observed along the river was as a result of pollution from activities that take place along the river bank and the vicinity of the river.

کلمات کلیدی:

Physico-chemical, parameter, Pollution, concentration, Permissible limit

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