

Physicochemical characteristics and water quality assessment from Kuramo lagoon, Lagos

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A study was carried out on the assessment of the physico-chemical characteristics of Kuramo Lagoon in Lagos state. During the study period however, Weekly changes in physical and chemical water parameters from Kuramo Lagoon were investigated between two hydrological cycles for a period of 6months from February to July and analyzed. Variations in Water Temperature, Transparency, Turbidity, Dissolved oxygen, pH, Depth, Conductivity, Turbidity and Salinity were observed. The relationship between conductivity and salinity, transparency and turbidity, dissolved oxygen and Depth were also observed. Conductivity increases with increase in salinity. In most practical water quality application, the change of conductivity is dominated by temperature. The increase in conductivity in each sampling station is proportionate to increase in salinity. Kuramo Lagoon derives total dissolved solid from influx from Lagos Lagoon and river tributaries. The higher the turbidity the lower the transparency and vice versa, but around sampling station 4, the turbidity in this region is higher than other, this is because the sampling station has a shallow depth than other sampling station and there are lots of dead organic matter and inorganic materials that are lurked around the region. The oxygen concentrations are inversely proportional to depth. In shallow water, the bulk of the loss is attributable to oxidation generally occurs at the sediment/water interface where bacterial activity and organic matter are concentrated. All parameters were above permissible limits. The results shows that the Kuramo lagoon is polluted and is not fit for Domestic use and pisciculture, however, some species of fish were found in the Lagoon, this is an indication of long time adaptation to the polluted aquatic environment, and such aquatic animal could be used as bio-indicator/bio-monitor for further study on aquatic pollution.

Biography

Babalola Olusola Adeniyi is young and dynamic individual. He completed his first degree in Aquaculture and Fisheries Management from Federal University of Agriculture Abeokuta, Nigeria in 1999 and proceeded to Lagos State University in 2003 in Pursuance of Master's Degree in Fisheries Science, option in Aquatic Pollution. Presently, he has registered for his Ph.D. programme in Hydrobiology and Fisheries in Ekiti State University, Ekiti Nigeria. He has attended both international conferences and training in Israel and South Korea respectively. Presently he is a lecturer in the department of Fisheries Technology, Lagos State Polytechnic and also coordinator of departmental unit in charge of Student's academic project. To his credit however, he has written up to 10 scientific papers some yet to be published.

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