

CHEMICAL CONSTITUENTS OF FRESHWATER PRAWN HABITAT IN THE NIGER DELTA, NIGERIA

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ABSTRACT

Electrical conductivity, pH, dissolved oxygen, calcium, phosphate, nitrate and salinity were studied at Ovia River for a period of two years. Water samples were taken at monthly intervals from four stations along the stretch of the River. The ranges of the chemical characteristics throughout the study period are as follows: pH (5.22-7.40); electrical conductivity (26.50-92.83 μScm^{-1}); dissolved oxygen (3.63-7.99 mg/l); calcium (1.13-6.26 mg/l); phosphate (0.00-0.47 mg/l); nitrate (0.01-1.52 mg/l); salinity (0.01-0.08 ‰). Electrical conductivity, calcium, phosphate and salinity showed significant difference ($P < 0.05$) between the station in the first year (2005). In the second year (2006), pH, dissolved oxygen and calcium was significantly different ($P < 0.05$) between the stations. Seasonal variation showed significant difference ($P < 0.05$) in the pH, electrical conductivity, calcium and salinity in 2005 while electrical conductivity, phosphate, nitrate and salinity All the parameters studied were within the Federal Environmental Protection Agency standard for water bodies.

KEYWORDS: Chemical Constituents of Freshwater Prawn Habitat