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Seasonal Variation in the Physicochemical Parameters in the Estuarine Waters of Gautami Godavari, East Coast of India

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ABSTRACT

Monitoring of river waters are an important in now a days because of increasing industrialization, urbanization and anthropogenic actives from river banks. The industrial effluents, domestic sewage, agricultural wastes and aqua cultural wastes are being discharged into the river waters and finally reaching into coastal waters that causing degradation of coastal water quality. The present study was carried out to determine the water quality in terms of seasonal variability and behaviour of physicochemical parameters for a period of one year during 2015 in the estuarine waters of Gautami Godavari along its longitudinal stretch at seven stations from the head of the estuary to mouth of the estuary. The temperature values in the estuarine waters, varied from 25.60 to 31.80 $^{\circ}$ C, pH values in the in the range of 7.20 to 8.3, salinity ranged from 0.23 to 31.83 psu, dissolved oxygen values ranged from 2.36 to 6.82 mg L⁻¹. Hydrographical parameters (temperature, pH, salinity, dissolved oxygen) indicated distinct spatial and seasonal variations.

Keywords: Godavari estuary, physicochemical parameters, behavior, seasonal variations.