

Seasonal Measurement of Nutrient Concentrations and Total Alkalinity in the Mond Estuary Ecosystem

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Abstract

The aim of this study was to evaluate and compare nutrient concentrations and total alkalinity in summer and winter and along the marine, estuarine and riverine portions of the mond estuary ecosystem in the Persian Gulf. Sampling was conducted in warm and cold seasons. The concentrations of nutrients were measured by MOOPAM standard method and total alkalinity was measured by potentiometric titration method. The results showed that there was not significant difference in measured alkalinity along the marine, estuarine and riverine stations between summer and winter. The results showed that the average concentration of nitrate and nitrite in estuarine stations were more than marine and riverine stations. Also, seasonal variations and increased rainfall caused higher average concentration of nitrate and nitrite in winter and lower average concentration of phosphate and silicate.

Keywords: *Nutrients, Total alkalinity, Mond estuary, Persian Gulf.*
