



Evaluation of organic pollution in Shatt al-Basrah Canal, Southern Iraq

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Given the environmental importance of the Shatt al-Basra Canal, the current study aimed to examine organic pollution levels in the canal waters using the Organic Pollution Index (OPI) and the Nutritional Status Index (TSI) to identify the variables influencing organic pollution during the period from January 2023 to December 2023. Water samples were collected monthly from two stations. The measured environmental factors were water temperature 16-35°, salinity 47-20.2 ppt, DO 9-5 mg/L, BOD 0.65-0.10 mg/L, light transmittance 71-18 cm, nitrate 12.24-1.19 mg/L, phosphate 0.63-0.13 mg/L, and ammonium 10.48-3.1 mg/L, and chlorophyll-a 61.18-10.4 mg/L. TSI values ??in the two study stations were 55.96-48.76, and the water quality assessment was within the well-nourished classification in all stations except for the second station, which was within the average nutrition classification. The results showed clear changes in OPI values ??(95.56-22.35). The water quality of the Shatt al-Basra Canal was classified as sixth (poor) at the first station (60.13), and decreased to fourth (weak) at the second station (41.10).

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