

## **MARINE NEMATODES AT PORT BIN QASIM OF ARABIAN SEA AND THEIR ROLE IN THE ECOSYSTEM**

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### **Abstract**

Free- living marine nematodes are the most abundant and diverse metazoan in sea and play important roles in the ecosystem. Nematodes exhibit many very different roles in aquatic ecosystem as consumers of bacteria, as grazers of primary producers, as predators and parasites. Their role in stimulating bacterial metabolism is well documented and they must have an important and direct influence on the productivity of shallow water by enhancing nutrient regeneration in the sediment. During the last decade much attention has been given to free-living marine nematodes and in particular, to the species of the Arabian sea of Pakistan. The coast line of Karachi is increasingly highly polluted with a variety of hazardous substances of industrial, municipal and agriculture origin, yet there does not exist any proper monitoring or treatment facilities to mitigate their harmful effects. The levels of pollutants have already crossed the safety limits. In this regard a survey of Bin Qasim Port was conducted to determine the heavy metal and other pollutant and analysis of water and sediment samples were undertaken. The concentration of all these pollutants in Bin Qasim Port was quite alarming compared with National Environmental Quality Standard. Further more large number of nematode genera and species were found during this study.