Use of benthic polychaetes to assess anthropogenic impacts in the southern Saudi Arabian red sea coast

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This paper studied the polychaete community structures and their response to anthropogenic impacts in the southern Saudi Arabian red sea coast. Samples were collected from four stations, i.e. Jazan Port, Fisherman's Port, Corniche North Park and Al Qunfudah, along the southern Saudi Arabian Red Sea Coast for benthic polychaetes and environmental variables during July 2012. A total of 75 polychaete taxa were identified from the study area. Spatial trends showed Jazan Port and Fisherman's Port to have low species abundance, richness and diversity compared to the reference site (Al Qunfudah). Species richness, abundance and diversity were intermediate at Corniche North Park. The reference station had the highest species richness, species diversity and evenness with the following dominant polychaete species: Owenia fusiformis, Pista macrolobata, Euclymene africana, Maldane sarsi and Syllis gracilis. Capitella capitata, Cirratulus cirratus and Heteromastides bifi dus were most abundant at Fisherman's Port and Jazan Port. The study revealed that polychaetes of the southern Saudi Arabian Red Sea Coast are sensitive to various types of pollution. The data obtained serve as a baseline against which data obtained on subsequent monitoring can be compared. It is recommended that relevant authorities should carry out a continual assessment on the levels of pollutants in the studied area.

Biography

Saleh Abdulaziz Alfarraj has completed his Ph.D. at the age of 37 years from King Saud University (KSU), Saudi Arabia, Riyadh and got trained in several labs around the world. Presently he has been working as Associate Professor in Department of Zoology and also he is a Training and Community Service Center Manager, King Saud University, Riyadh. He has 16 years experience in both teaching and research activities. He has participated in several International, National conference, symposiums, workshops. He has published more than 41 papers in reputed national, international and ISI journals and serving as an editorial board member of reputed journal and also has lifetime membership of Protozoa associations in worldwide.