Benthic Foraminiferal Responses to Coastal Pollution for Some Selected Sites along Red Sea, Egypt

Authors : Ramadan M. El-Kahawy, M. A. El-Shafeiy, Mohamed Abd El-Wahab, S. A. Helal, Nabil Aboul-Ela

Abstract : Due to the economic importance of Safaga Bay, Quseir harbor and Ras Gharib harbor , a multidisciplinary approach was adopted to invistigate 27 surfecial sediment samples from the three sites and 9 samples for each in order to use the benthic foraminifera as bio-indicators for characterization of the environmental variations. Grain size analyses indicate that the bottom facies in the inner part of quseir is muddy while the inner part of Ras Gharib and Safaga is silty sand and those close to the entrance of Safaga bay and Ras Gharib is sandy facies while quseir still also muddy facies. geochemical data show high concentration of heavy-metals mainly in Ras Gharib due to oil leakage from the hydrocarbon oil field and Safaga bay due to the phosphate mining while quseir is medium concentration due to anthropocentric effect.micropaelontological analyses indicate the boundaries of the highest concentration of heavy metals and those of low concentration as well.the dominant benthic foraminifera in these three sites are Ammonia beccarii, Amphistigina and sorites. the study highlights the worsening of environmental conditions and also show that the areas in need of a priority recovery.

Keywords : benthic foraminifera, Ras Gharib, Safaga, Quseir, Red Sea, Egypt
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