

Using Sea Cucumber for Mitigation of Marine Pollution

Authors : A. Al-Yaqout, A. Al-Alawi, T. Al-Said, E. Al-Enezi, M. Al-Roumi

Abstract : Kuwait's marine environment suffers from increased organic pollution. Sea cucumbers play an important role in the marine environment. They create a healthier environment for many types of benthic micro-organisms through their slow movement and feeding mechanism on micro-organisms and organic material. A preliminary study has been conducted in Kuwait Institute for Scientific Research to assess the possibility of using sea cucumbers for mitigation of the coastal pollution. Sediments were collected from locations identified to be heavily loaded with organic pollutants. Ten aquaria glass tanks, 65x 40x 30cm will be supplied with 10 cm height (14 kg) of the sediments added in each tank and filled with 70 L of filtered seawater. Two species were used in this study, *Stichopus hermanni*, and *Holothuria atra*. Water and sediment samples were analyzed weekly. The results showed promising possibility for using sea cucumber to lower the organic load in sediments.

Keywords : organic pollution, sea cucumbers, mitigation, *Stichopus hermanni*, *Holothuria atra*

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