J Earth Sci Clim Change 2018, Volume:9
DOI: 10.4172/2157-7617-C5-052

6th Global summit on Climate Change

November 19-20, 2018 Paris, France

Evaluation of seasonal pollution impact on the morphological tests of Ammonia tepida (Cushman) at the Manzala lagoon, Egypt

O H Orabi[1], **A M Badr-ElDin**[2] and **A A El-Badry**[3]
[1]Menoufia University, Egypt
[2]Alexandria University, Egypt
[3]National Institute of Oceanography and Fisheries, Egypt

The present investigation clarifies that the modes of test deformation of Ammonia tepida rely primarily on the degrees of pollution particularly concentration of trace metals (Cu and Zn) in the Manzala lagoon sediments. The degrees of deformation in Ammonia tepida range from mild (Group A) during both spring and autumn seasons, moderate (Group B) during winter to the extreme (Group C) during summer, where the copper and zinc contents in these three groups are low, moderate and high respectively during seasonal variations of 2017. Zinc pollutant in the sediments affects the cytoskeleton, which defines the shape of the foraminiferal test during growth and forms the template for each additional chamber that is formed. The presence of Cu and S in X-ray spectra analysis in deformed tests of A. tepida suggests exposure to Cu and S may inhibit calcite formation resulting in deformed tests and not changes in environmental parameters.

Notes: