

P66. SUB-SECTION : DOCUMENTATION, UTILIZATION AND CONSERVATION OF BIODIVERSITY FOR INCLUSIVE DEVELOPMENT

A study on microfouling organisms in the plastic debris collected from Ayiramthengu region, Kerala, India

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Microfouling studies in the plastic debris collected from Ayiranthengu region were carried out during the period 2013-2014. Seasonwise analysis showed that the microfoulers attached to the plastic debris varies with hydrographical parameters. Thirteen categories of microfoulers belonging to five phyla were observed. Microfoulers being higher throughout monsoon, *Nitzschia* sps. were dominant. During premonsoon settlements were very poor and *Navicula* sps. were absent. Maximum richness and abundance observed during monsoon. This study investigates the seasonal distribution of microfoulers present in the plastic debris.

KEYWORDS: Microfoulers, Ayiramthengue, Plastic debris.

P67. SUB-SECTION : ASSESSMENT AND MITIGATION OF ENVIRONMENTAL POLLUTION FOR BETTER LIVELIHOOD

Groundwater quality assessment in and around M/S. Larsen & Toubro Ltd. Cement plant mining area in Tummalapenta Village, Kurnool District, Andhra Pradesh, India

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M/s Larsen & Toubro Ltd, is situated about 15 Km from Tadipathri town and 50 km away from Anantapur head quarter on Tadipathri-Nandyal Road, located at 15°00' 15" N Latitude and 78°01'05" East Longitude. The extensive agricultural industrial activities and urbanization resulted in the contamination of the aquifer. Groundwater samples were collected from bore wells dug wells and springs located in and around the L & T cement plant/mining area and were chemically analysis. Most of the locations are contaminated by higher concentration of pH, TDS, K and CaCO₃. The results indicate that the quality of water in general is fit for drinking as well as industrial use in plant and mining area. Based on the United States salinity diagram, most of the samples fall in the field of C₃SI, indicating high salinity and low sodium water, which can be used for almost all types of soil with little danger of exchangeable sodium. Majority of the samples are not suitable for domestic purposes and drinking water standards. However, PI values indicate that groundwater is suitable for irrigation.