

## **SURVEY STUDY OF ARTEMIA IN SOUTHERN SALTPANS OF TAMIL NADU AND ITS ECOLOGICAL RELATIONSHIP WITH PHYTOPLANKTON WITH SPECIAL REFERENCE TO SEASONAL VARIATION**

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### **ABSTRACT**

The present study was conducted to observe the *Artemia* population at five different saltpans of three Southern districts of Tamilnadu namely Kanyakumari, Rameshwaram and Thoothukudi from January 2012 to December 2012 covering three seasons Pre-Monsoon, Monsoon and Post Monsoon. The present work was carried out at Kovalam, Swamythoppu, Puthalam, Tuticorin and Rameshwaram saltpans. An extended effort was made to assess the physico-chemical and biological parameters of these saltpans and also to analyze the ecological relationship among *Artemia* and Phytoplankton with special reference to seasonal variation. Salt pan water samples were collected from five different stations and the physico-chemical parameters were recorded. The samples were concentrated by centrifugation and the cells were counted using Haemocytometer. The phytoplankton cells were observed under microscope and the photos were captured with digital camera. In addition to this, the phytoplankton recorded from these samples were also identified taxonomically. From the results obtained it is clear that Monsoon plays a positive role in the ecological relationship between the phytoplankton and *Artemia* population and at the same time the seasonal variation also plays a major role on the changes of both phytoplankton and *Artemia* population. Hence the further study on this area could demystify more details on the ecological enigmas of saltpans and the ecological relationship between Phytoplankton and *Artemia* in these saltpans.

**KEYWORDS:** *Artemia*, Ecological Enigma, Monsoon, Saltpans, Seasonal Variation and Phytoplankton