



ZOOPLANKTON BIODIVERSITY AND POLLUTION INDICATOR SPECIES IN NASPUR LAKE, ADILABAD DISTRICT, TELANGANA STATE. INDIA

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ABSTRACT:

The present examination time frame manages the decent variety of zooplankton of Naspur lake. It's arranged eastern piece of the area. The example were gathered amid morning hours at month to month shrewd. Amid the investigation was shaped 16 zooplankton species they are four gatherings like .Rotifer, cladocera, copepoda and Ostracoda. The zooplankton network was greatest in summer season and least in the storm season. The sythesis of zooplankton(Rotifer's)was prevailing (46.98%) trailed by cladocera(26.19%)copepod(16.01%)and ostracod(5.63%).The overwhelming pattern of zooplankton in the present examination Rotifer> >Cladocera >Copepod >Ostracod. Town sewage water, coalmine pollutants water counsel to the lake physico-synthetic parameters of this lake was close to the contamination .Because of that lake insurance reason a few precautionary measures to be taken for further age.



KEY WORDS: Naspur lake, physico concoction parameters, Zooplankton assorted variety.

INTRODUCTION

The amphibian biological community biodiversity depends to a great extent on the nature of the water. In turns is needy upon the degree of mining and modern activity, horticultural practices and the way of the executives of waste item in the region. The abundance of zooplankton in a waterbody is viewed as a pointer of efficiency nature firmly identified with nourishment esteem temperature of water body. Dutta and Verma(2010) have announced limnological character tics of any waterbody adjust the zooplankton diversity. Deivanai et.al.,(2004) zooplanktons are a noteworthy connection in the exchange of vitality from autotrops to heterotrophs. Zooplankton give the principle sustenance things of and can be utilized as indical of the trophic status of waterbody present day coal mining is a formative movement in this locale ,which will undoubtedly harm the normal biological community by all exercises. The present paper manages zooplankton decent variety of Naspur lake Adilabad area amid the period from September 2012-August – 2013

MATERIAL AND METHODS:

Naspur lake is arranged around 5 km far from Manchiryal town, it's a synthetic lake. The lake gets water through surface keep running off amid storm from encompassing upland coalmine additional result were counsel to the waterbody. The zooplankton test was gathered from time of sep 2012 to Oct 2013. Sample were gathered early morning hours amid 7-00am to 9-00am only. Sample were gathered utilizing tiny fish net made by darting nylon cloth (mesh measure 50µm). Zooplankton examples were saved in 4% formaldehyde arrangement and test were watched and recognized present day examine binocular microscopes by utilizing standered key and literature (Tonapi 1980, Kodarkar et.al., 1998). For zooplankton checking the Sedgewick beam cell was utilized which is 50mm long 20mm width and 1mm profound aggregate number of zooplankton in the S-R Cell was gotten from the accompanying recipe.

$$\text{No. M}^{-1} = \frac{CX100X\text{mm}^2}{LXD\text{X}WXS}$$

Where:

- C= Number of living being checked
- L= length of each strip
- D= Depth of strip
- S= Number of strips tallied
- W= Width of S-R cell

RESULTS & DISCUSSION:

The present examination report the zooplankton assorted variety network of Naspur lake. In the examination time frame sixteen zooplankton were distinguished in this types of which eight types of rotifer three types of copepod three cladocera and two types of Ostracod species were recognized. During the present examination class Rotifer was overwhelmed among all the zooplankton gather in all the exploration appeared. Anyway the assorted variety of zooplankton shifted from season to season and the most extreme decent variety was seen in winter season and least was seen in rainstorm season. Ostozic (2000) announced eutrophication influence structure and creation of zooplankton network zooplankton reacts rapidly to condition pressure, while they broadly considered as bio pointer of contamination. The examples of most commanded types of zooplankton were distinctive table Rotifer species demonstrated their tops in ostracod, while least thickness was found in examination period.

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