



## DIVERSITY OF ZOOPLANKTONS OF SARNI-SANGVI RESERVOIR TAL-KAIJ, DIST-BEED, (M.S.) INDIA

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### ABSTRACT

The present work reports the zooplankton community in the Sarni-Sangvi reservoir has been studied for a period of one year from Sept.2006 to Aug.2007. The total number of zooplanktons and monthly average of zooplanktons per liter were recorded. It was noted that the total number of zooplanktons varied from 29 to 45 per lit. at station ' A ' and 28 to 47 per Lit. at station ' B ' .

**Key words:** Zooplanktons, Sarni-Sangvi reservoir.

### INTRODUCTION

Sarni-Sangvi reservoir is situated near Sarni and Sangvi villages beside Latur-Aurangabad Highway. Water of this dam is used for agricultural purposes, drinking, washing and some other activities. Sarni-Sangvi Brahat large irrigation project is an ideal place for the growth of certain aquatic macro invertebrates other aquatic animals and fish fauna due to productivity and development of planktonic organisms and shows positive relationship with the phytoplankton and zooplankton as well as dissolved oxygen. Zooplanktons are important for their role in energy transfer in aquatic ecosystem. Zooplankton diversity refers to variety with in their community. Planktonic organisms play a key role in the turnover of organic matter and energy through the ecosystem. Zooplanktons provide food for fishes in fresh water ponds, lakes and reservoirs. A notable contribution of planktonic forms of fresh water ecosystem is available [1]. The zooplanktons occupy a central position between the autotrophs and other heterotrophs and form an important link in food web of a fresh water ecosystem. In general

zooplanktons belong to four main taxonomic groups such as rotifer, cladocera, ostacoda and copepoda.

### MATERIALS AND METHODS

Water samples from two different stations were collected monthly in between 7 to 8 am at regular intervals and filtered by using 644 plankton net. The samples were preserved in 4% formalin. The samples were observed for their identification using APHA [2].

### RESULTS AND DISCUSSION

Zooplanktons recorded from two different stations of Sarni-Sangvi reservoir belongs to four major groups Rotifera, Cladocera, Ostracoda and Copepoda. Zooplanktons population rises steadily with time to a peak level coinciding with the maximum release of nutrients with least DO And Highest BOD at safe level. [3]. It was noted that the total number of zooplanktons varied from 28 to 45 number per lit. at station ' A ' and 28 to 47 per lit. in station ' B ' [4]. Diversity of Zooplankton in Nagartas dam (MS) India, Kumar et al recorded zooplanktons at Munger 17 to 137 per lit. in Ganga river in Bihar. Baburao et al found the domination of zooplankton over phytoplankton in Himayatnagar lake Hyderabad. Pawar and Madlapure [5] recorded 29 genera of zooplanktons from Sirur dam water in Mukhed in Naded District. Sirsat and Ambore studied the zooplankton community from a fresh water pond at Dharmapuri in Beed Maharashtra, Jaybhay and Madlapure were recorded zooplanktons number varied from 23 to 43 per lit. at station ' A ' 18 to 33 per lit. at station B and 19 to 41 per lit. at station C During the year Feb.2003 to Jan.2004 in Parola dam Hingoli.



**Table 1. Monthly variations of Zooplanktons in No/lit.of Sarni-Sangvi large minor irrigation project at station "A".**  
**Zooplanktons**

Sr.No.	Zooplanktons	Total	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
1	Copepoda	100	03	06	12	11	11	07	10	12	13	07	04	04
2	Rotifera	150	09	13	14	15	13	10	14	15	16	15	09	07
3	Cladocera	87	06	12	08	07	06	08	06	07	04	04	09	10
4	Ostracoda	98	11	10	11	12	07	08	07	07	04	04	07	10
	Total	435	29	41	45	45	39	33	37	41	37	38	39	31

**Table 2. Monthly variations of Zooplanktons in No/lit.of Sarni-Sangvi large minor irrigation project at station "B".**  
**Zooplanktons**

Sr.No.	Zooplanktons	Total	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June	July	Aug
1	Copepoda	105	04	06	13	12	11	08	10	12	13	07	04	05
2	Rotifera	151	08	13	14	14	13	11	15	15	16	15	09	08
3	Cladocera	90	06	11	09	07	07	08	06	07	03	05	10	10
4	Ostracoda	95	10	10	11	12	07	09	06	06	04	04	07	09
	Total	441	28	40	47	45	38	36	37	41	36	31	30	32

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