

## Ichthyofauna of Sanjay Sagar Reservoir of District Guna (MP)

Shiv Singh

Government Auto. P.G. College, Datia, (MP)

**ABSTRACT :** The main aim of the present study was to investigate the species composition of Sanjay Sagar reservoir of Guna district. A limno-ichthyological study was conducted for one year (March 2018 to February 2019) and various indigenous and commercial fishes of importance were found in this reservoir. The present paper deals with the variety and abundance of freshwater fishes of reservoir.

**Keywords :** Sanjay Sagar reservoir, ichthyofauna, fishes.

### INTRODUCTION

Fishes constitute economically very important group of animals. The nutritional and medicinal value of fishes has already been recognized (Hora and Pillay 1962, Mishra 1956, Jhingran 1982). A number of large artificially constructed fish water impoundments have come into existence in India, especially during last four decades, adding considerably to the already existing rich water potential for the development of the country's fishery resources fish fauna of various reservoirs has been reported by Sharma *et al* (2004) and Jhingran (1982). The Sanjay Sagar reservoir in Guna district, M.P. has been extensively used for irrigation, drinking, bathing and fish culture.

### MATERIAL AND METHODS

Sanjay Sagar reservoir is located in the Guna district, about 50 Km. from Guna Township. The average rain fall of Guna is 910 mm. Sanjay Sagar reservoir is a medium irrigation reservoir constructed in 1982 with the help of World Bank Funding with a catchment area of 6973 ha. It lies between latitude 24-22-30" and longitude 77-14-30" at an altitude of 480.05 meters above mean sea level. The dam is built across the reservoir is mainly used for irrigation, drinking water and fish culture purposes.

During the present study fishes were collected monthly from the Sanjay Sagar reservoir with the help of local fisherman fresh water fishes were brought to the laboratory and preserved in formalin solution. The identification of fish was done with the help of standard keys and books (Mishra 1956, Day 1978, Shrivastava 1992).

**Table: 1: The ichthyofauna collected from the Sanjay Sagar reservoir.**

Class-Pisces		
Sub-class-Teleostei		
Order-Cypriniformes		
Sub-order-Cyprinodei		
Family-1-Cyprinidae		
1.	<i>Catlacatla</i>	(Ham.) Major carp.
2.	<i>Cirrihinamrigala</i>	(Ham.) Major carp.
3.	<i>Cirrihinareba</i>	(Ham.) Major carp.
4.	<i>Cyprinus carpio</i>	(Lim.) Exotic species.
5.	<i>Labeobata</i>	(Ham.) Miscellaneous.
6.	<i>Labeocalbasu</i>	(Ham.) Major carp.
7.	<i>Labeofimbriatus</i>	(Bloch) Major carp.
8.	<i>Labeogonius</i>	(Ham.) Miscellaneous.
9.	<i>Labeorohita</i>	(Ham.) Major carp.
Order-II Siluriformes		
Family-IIBagridae		
10.	<i>Mystus aor</i>	(Ham.) Catfishes
11.	<i>Mystus seenghala</i>	(Sykes) Catfishes
Family-III Siluridae		
12.	<i>Wallago attu</i>	(Bl., Schn.) Catfishes
Family-IV Clariidae		
13.	<i>Clarias batrachus</i>	(Linn.) Livefishes
Order-III Mastacembelliformes		
Family-VMastacembelidae		
14.	Miscellaneous	(Lacepede)
Order-IV Ophiocephaliformes		
Family-VIOphiocephalidae		
15.	<i>Ophiocephalus marulius</i>	(Day) Live fishes
16.	<i>Ophiocephalus striatus</i>	(Day) Live fishes

### RESULTS AND DISCUSSION

In Sanjay Sagar reservoir sixteen species of fishes were found belonging to four different Order of Sub-class Teleostei of Class-Pisces Viz. Cypriniformes, Siluriformes, Mastacembelliformes and Ophiocephaliformes of order fishes.

The economic importance of the species collected is also given Table 1. Fishes of Order Cypriniformes dominated the fish fauna of the reservoir with Total - Nine species followed by Siluriformes by Four species, Ophiocephaliformes by Two species, Mastacembelliformes represented by single species.

**Table 1: Economic importance of fishes recoded from Sanjay Sagar reservoir.**

S. No.	Species	Commercial	Fine food	Coarse food	Feeding Habit
1.	<i>Catla catla</i>	☞	☞		Plankton feeder
2.	<i>Cirrhina mrigala</i>	☞	☞		Omnivorous
3.	<i>Cirrhina reba</i>	☞	☞		Predatory fish
4.	<i>Cyprinus carpio</i>	☞			Omnivorous
5.	<i>Labeo bata</i>	☞			Herbivorous
6.	<i>Labeo calbasu</i>	☞			Omnivorous
7.	<i>Labeo fimbriatus</i>	☞			Herbivorous
8.	<i>Labeo gonius</i>	☞			Herbivorous
9.	<i>Labeo rohita</i>	☞	☞		Herbivorous
10.	<i>Mystus aor</i>	☞	☞		Predatory fish
11.	<i>Mystus seenghala</i>	☞	☞		Predatory fish
12.	<i>Wallago attu</i>	☞			Predatory fish, LV
13.	<i>Clarias batrachus</i>	☞			LV, Carnivorous
14.	Miscellaneous	☞	☞		Predatory fish
15.	<i>Ophiocephalus marulius</i>	☞	☞		LV, Predatory fish
16.	<i>Ophiocephalus striatus</i>	☞			LV, Predatory fish

LV - Larvaevorous

### REFERENCES

- Ahirro, S.D. and Mane, A.S. (2000). The diversity of ichthyofauna, taxonomy and fisheries from some Freshwater of Parbhani district (M.S.) *J. Aqua. Bio.* **15**(122): 40-43.
- Datt, Munshi and Srivastav, P.M. (1988). Natural history of fishes and systematic of fresh water fishes of India, Narendra Publishing House, New Delhi.
- Day, F.S. (1978). The fishes of India. William & Sons Ltd. Dhakad., N.K. Shinde, Deepak and Choudhary, Preeti (2008). Fish Fauna of Mod Sagar reservoir of Jhabua District M.P., *Nature. Environ. & Poll. Tech.* **7**(1): 159-161.
- Hora, S.L. and Pillay, T.V.R. (1962). In Hand Book on Fish culture in India Pacific Region. *FAO Fish. Bio. Tech. Paper*, **14**: 204.
- Jhingran, V.G. (1982). Fish and Fisheries of India. Hindustan Pub. Corporation India.
- Lagler, K.F. (1952). Freshwater Fishery biology W.M.C. Brown and Cowles.
- Mishra, K.F. (1956). An Aid to the Identification of the Fishes of India, Burma and Ceylon.
- Munde, A.V. and Hiware, C.J. (2006). Diversity of Fish Fauna from Thodaga reservoir, Ahmedpur Taluka of Marathwada Region, Maharashtra state, *Flora & Fauna*. **12**(1): 54-56.
- Sharma Archana, Mudgal, L.K., Sharma Anajana, Sharma Shailendra (2004) Fish diversity of Yashwant Sagar reservoir, Indore (M.P.), *Him. J. Environ. Zool.*, **18**(2): 117-119.
- Shrivastava Gopalji (1992). Fishes of U.P. and Bihar. Vishwavidyalay Prakashan, Chowk, Varanasi (India).