

# Study of fresh water fish diversity of Sanjul Lake, Aurangabad. (M.S). India

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## ABSTRACT

Sanjul Lake water resource for human consumption and also helpful for the agriculture and fisheries in Taluka Phulambri, District Aurangabad. Investigation was carried out during the study period from Jun 2018 to May 2019. The present paper deals with the variety and abundance of fresh water fishes in Sanjul Lake, Taluka Phulambri, District Aurangabad (M.S) India. The results of present investigation reveal the occurrence of 15 fish species belonging to 3 orders, 4 families and 12 genera.

**Keywords:** Fish diversity, Sanjul Lake, fresh water fish.

## INTRODUCTION

Fish constitutes half of the total number of vertebrates in the world. They live in almost all conceivable aquatic habitats. 21,723 living species of fish have been recorded of and Commercial fishes of importance were found in vertebrates out of these 8,411 are freshwater species and 11,650 are marine. India is one of the mega biodiversity countries in the world and occupies the ninth position in terms of freshwater mega biodiversity (Burton *et al* 19926) In India there are 2,500 species of fishes of which 930 live in freshwater and 1,570 are marine (Kar *et al* 2003).

The species diversity of an ecosystem is often related to the amount of living, nonliving and organic matter present. In the field of ichthyology there is valuable work given an incision in their abdomen and preserved. As per economic importance and scope of fish and fisheries especially in Maharashtra, but it is natural to study the distribution and availability of fish from fresh water. Present investigation was undertaken to study the fish diversity from Sanjul Lake is the first effort in this direction. Various indigenous and commercial fishes of importance were found in this area. Cyprinid fishes are one of the most important groups of vertebrates for man and influencing his life in various ways. The nutritive and medicinal value of fish has been recognized from ancient time to recent era.

## MATERIALS AND METHODS

Fishes were collected from Sanjul Lake, Taluka Phulambri, Aurangabad (M.S). India with the help of local fishermen using different type of nets namely gill nets, cast nets, dragnets. Immediately photographs were taken with help of digital camera. Fishes brought to laboratory were preserved in 10% formalin solution in separate specimen jar according to the size of species. Small fishes were directly placed in the 10% formalin solution. While large fishes were given an incision in their abdomen and preserved. The Meristic and morphometric characters measured and fishes were identified up to the species level, with the help of standard keys and books (Shinde *et al* 2009 and Ubarhande *et al* 2011).

## RESULTS AND DISCUSSION

In the present fish diversity study, species of 14 different genera belonging to 04 families and 03 orders recorded from the Sanjula Lake Taluka Phulambri,

Aurangabad and number of catches carried out during June 2018 to May 2019. The members of Order Cypriniformes were dominated by 10 species followed by Siluriformes with 01 species, Perciformes 03 species. Cypriniformes with 10 species was dominant group in the assemblage composition in which *Catla-catla*, *Lebeo rohita*, *Cyprinus carpio* and *Cirrhinus mrigala* were found most abundant. Fishing practices are carried out throughout the year. The average catch is more in winter and summer as compared to rainy season (Ubarhande *et al* 2011). Fishing operations were carried out for nine months with low in monsoon compared to high in post monsoon (Rankhamb SV 2011). Scientific fishing standard and fishing quotas are to be worked out; this will play an important role in protection of the reservoir biodiversity. Thus it is duty of every individual to play an important role to conserve biodiversity at this place and handover the resources in healthy conditions to the future generations (Shinde *et al* 2009). The work will provide future strategies for development and fish fauna conservation at Sanjula Lake Taluka Phulambri, Aurangabad (M.S).



*Catla catla*



*Labio rohita*



*Cirrhinus mrigala*



*Cyprinus carpio*



*Oreochromis mossambica*



*Claris batrachus*



*Channa punctatus*

**Conflicts of interest:** The authors stated that no conflicts of interest.

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