

# Diversity of Fishes Found in the Kajali River, of Lanja Tehsil Ratnagiri District (MS) India

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**Abstract:** *Freshwater fish fauna of Kajali River, Ratnagiri district was studied from 2022 to 2023. A total of 12 species belonging to 07 orders, 08 families, and 09 genera were recorded, of which, 02 species are endemic to the Western Ghats and 01 species endemic to the Kajali River system. Labeokontius, an endemic barb of the Kajali River System was recorded for the first time from the Kajali River, Maharashtra. As per the IUCN Red List of Threatened Species, 02 species are assessed as 'Least Concern', 02 species as 'Near Threatened', 03 species as 'Vulnerable', 01 as 'Endangered', and two as 'Data Deficient'. The conservation status of two species has not yet been assessed. Fish fauna of the Kajali River within the study area is threatened as a result of alien species, and several anthropogenic stressors such as pollution from industrial as well as agricultural sources, human settlements, and overfishing. Since, this small study area harbors 02 endemic and one threatened species, their conservation should be given high priority.*

**Keywords:** Freshwater fish

## I. INTRODUCTION

Fish are the gill-bearing aquatic craniates that lack limbs with digits. They form a sister group to the tunicates, together forming the olfactores. Included in this definition are the living hagfish, lampreys, and cartilaginous and bony fish as well as various extinct related groups. Tetrapods emerged within lobe-finned fishes, so cladistically they are fish as well. However, traditionally fish are rendered paraphyletic by excluding the tetrapods (i.e., the amphibians, reptiles, birds and mammals which all descended from within the same ancestry). Most fish are ectothermic ("cold-blooded"), allowing their body temperatures to vary as ambient temperatures change, though some of the large active swimmers like white shark and tuna can hold a higher core temperature.

Fish are abundant in most bodies of water. They can be found in nearly all aquatic environments, from high mountain streams (e.g., char and gudgeon) to the abyssal and even hadal depths of the deepest oceans

Earth is a Habitat of Millions and Millions of species diversity consisting of nearly 70 % Water and 30% Land. India is blessed with a rich diversity of freshwater fishes both in the Western Ghats and North Eastern Hills. Sea food is secondary largest means to fulfill the basic needs of mankind in which we are having Fishes, Molluscs and Crustaceans. The Western Ghats of India is one of the 34 - biodiversity 'hotspot' areas of the world. The rate of endemism is well reflected in the case of lower vertebrates especially with regard to fishes. The current study deals with fish diversity undertaken during period of July 2019 to December 2019 to demographic and marketable in essential fishes in Kajali River of Lanja tehsil in Ratnagiri District. Of the 300 species of freshwater fishes in the Western Ghats, 155 are considered ornamental fishes, of which 117 are endemic to the Western Ghats (Gopalakrishnan&Ponniah, 2000).

## II. MATERIAL AND METHOD

Fishes were collected from Kajali river area at Ratnagiri Dist. (M.S) India with the help of local fishermen using different type of nets namely gill nets, cast nets, dragnets and Bhorjal.

Immediately photographs were taken with help of Mobile 1+ 10 T Camera. Fishes were brought to laboratory and preserved in 10% formalin solution in separate specimen jars 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. (Shinde, S.E., 2009). fish biodiversity of kajali river Dist. Ratnagiri, (M.S) India. Morphometric measurement of fishes was taken by Scale to the nearest tenth of a mm and measuring tape with nearest tenth of mm. For proper identification, taxonomic key to species, were followed according to **Heemstra & Randall**.

The detail measurements of all these 12 species are given in Table 1.

Sr. No	Species Name	Family	Order	Length in Cm
1	<i>Labeorohita</i> ,	Cyprinidae	(Cypriniformes)	1-12 cm
2	<i>Labeobata</i> ,	Cyprinidae	(Cypriniformes)	1-10 cm
3	<i>Osteochilusvittatus</i>	Cyprinidae	(Cypriniformes)	1-8 cm
4	<i>Rasboracaverii</i>	Cyprinidae	(Cypriniformes)	1-4 cm
5	<i>Etroplussuratensis</i>	Cichlidae	( Cichliformes)	1-5 cm
6	<i>Tilapia mosambika</i>	Cichlidae	( Cichliformes)	1-11 cm
7	<i>Mastacembelusarmatus</i>	Mastacembelidae	(Synbranchiformes)	1-13 cm
8	<i>Wallagoattu</i>	Siluridae	(Siluriformes)	1-14 cm
9	<i>Dayellamalabarica</i>	Clupeidae	(Clupeiformes)	1-4 cm
10	<i>Anguilla bengalensis</i>	Anguillidae	(Anguilliformes)	1-12 cm
11	<i>Nemacheilusanguilla</i>	Nemacheilidae	(Cypriniformes)	1-7 cm
12	<i>M. rosenbergii</i>	Palaemonidae	(Decapoda)	1-4.5 cm



*Osteochilusvittatus* (Cyprinidae)



*Mastacembelusarmatus*  
(Mastacembelidae)



**Tilapia Mosambica  
(Cichlidae)**

### **III. RESULTS**

The present paper deals with the variety and abundance of fresh water fishes in Kajali River of Lanja tehsil in Ratnagiri District. The outcome of present Study shows that there are 12 fish species belonging to 5 orders, 8 families. The eight Families are Cyprinidae, Cichlidae, Mastacembelidae, Siluridae, Clupeidae, Anguillidae, Nemacheilidae and Palaemonidae. The five Orders are Cypriniformes, Cichliformes, Synbranchiformes, Siluriformes, and Decapoda. The dominant fishes I found there are include *Labeorohita*, *Labeobata*, *Osteochilus vittatus*, moderate level *Mastacembelus armatus* and *Etroplus suratensis* least are from Family Clupeidae, Anguillidae. Some fishes are Unidentified and yet further work is needed for studies.

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