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Chambai dam fish fauna of district Karak, Khyber Pakhtunkhwa, Pakistan

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Abstract
The Objective of the current study was to find out the diversity of fishes of Chambai dam located in District Karak K.P.K, Pakistan. Fish of the Chambai dam were collected from the different region of Chambai Dam with the help of dam contractor using various types of nets like hand nets, cast nets and hooks from August 2016 to September 2016. In the present study three species were identified *Labeo rohita*, *Hypophthalmichthys molitrix*, *Catla catla* belonging to order Cyprinforms and family Cyprinidae. From the present research it can be concluded that Chambai dam will be best for the fish Cyprinidae family. So, our research will give useful information about the diversity of fishes in Chambai dam that will be later important in taxonomic, fisheries management and conservation.

Keywords: Fishes, Diversity, Chambai dam, Cyprinidae, Karak

1. Introduction
Chambai Dam is situated about 3 km from the south of the Karak development Authority (KDA) of District Karak. The dam is completely surrounded by mountain from the south, East and western sides. Biodiversity is a valuable area of biological science, it explores the importance, excess and important role of living things in the ecosystem [1]. Water living organism like, ichthyo-diversity is the most important phenomenon because it gives us instruction about the life in the water. Fishes live in almost every type of aquatic environment, ranging from Antarctic water to the hot spring. Fishes can also tolerate a wide range of salinity as well [2]. The biodiversity shows variation in the structure, habitat and their mode of life. Despite the other well organized vertebrates, Fish is having a great diversity [3].Fishes can be only found in survive in water reservoir [4]. Forever Decline and distribution of some fish species might be correlated with variation in the environment and harvesting. The decline of fish species as expected due to mixing of correlated and increase diversity of new introducing species [5, 6, 7]. Ichthyo-diversity affects the capacity of biotic to respond to changes in the environment, under pains ecosystem functions and provides the ecosystem goods and services that's support human beings, as well as having intrinsic value biodiversity has an esthetic value many of us have admired the beautiful colors and different shapes on coral reefs and coastal habitats [8]. The aim of the research work was to find out the Chambai dam fish diversity District Karak, KPK, Pakistan.

2. Materials and Methods
2.1 Fish Collection
Fishes were collected from the various region of Chambai Dam with the help of a local dam contractor using various types of catch-up instrument like hand nets, cast nets and hooks from August 2016 to September 2016. After collection proper photographs were taken from different angles for proper identification and then preservation with 10% formalin, since formalin decolorizes the fish color on long preservation.

2.2 Fish Preservation and Identification
Collected fishes were preserved and after the preservation these fishes were brought to the Research laboratory for proper identification. Fishes were properly identified in the laboratory by using keys of fish's identification Jayaram [8], Mirza and Sadhu [9] and Mirza [10].

All the fishes were preserved for longer time off period in a kettle jar by using 10% of formalin solution.

3. Results

The selected three species were belonged to one class, one order, one family, three genera and three species as shown in detail in table 1. In these three species *Labeo rohita, Hypophthalmichthys molitrix, Catla catla* were belongs to with class Actinopterygii order Cypriniformes and with family Cyprinidae.

Table 1: Taxonomic representation of fishes of Chambai Dam Tehsil and District Karak

S\N	Local Name	Class	Order	Family	Genus	Species
1.	Rohu	Actinopterygii	Cypriniformes	Cyprinidae	Labeo	*L. rohita*
2.	Silver carp	Actinopterygii	Cypriniformes	Cyprinidae	Hypophthalmichthys	*H. molitrix*
3.	China fish	Actinopterygii	Cypriniformes	Cyprinidae	Catla	*C. Catla*

4. Discussion

During the current study in Chambai dam Tehsil and District Karakthree fish species were found up to the species level in the current study, three species were found and there proper systematic classification is given in the table 1, respectively. The selected three species were belonged to one class, one order, one family, three genera and three species as shown in detail in table 1. In these three species *Labeo rohita, Hypophthalmichthys molitrix, Catla catla* were belongs to with class Actinopterygii order Cypriniformes and with family. Hameed *et al* in 2015 conducted research work on biodiversity of fish fauna of Sarki Lawaghar dam, Takhte-Nasrati district, karak kpk, Pakistan. During the study about four species *Labeo rohita, Hypophthalmichthys molitrix, Cirrhinus mrigala, Tor khudree* class Actinopterygii, order Cypriniformes and Cyprinidae species were identified. From the obtained results it may be concluded that Sarki Lawaghar dam have rich fauna of cyprinidae species [11]. Some of these species were also studied by Zubia *et al*, in 2015 at Zebi dam during their survey they found total of six species, and all of the six species which were found in the Zebi dam were beloging to the same family Cyprinidae, Same order Cypriniformes and that of Same class Actinopterygii and these species were *Cirrhinus mrigala, Hypophthalmichthys molitrix, Labeo rohita, Carassius auratus, Catla catla, Ctenopharyngodon idella* and their Genus are *Cirrhinus, Hypophthalmichthys, Labeo, carassius, Catla, Ctenopharyngodon* respectively[12].Another attempt was done by Tahir *et al*, in 2016 when they conducted a survey of Ghol dam and they found 6 species there, 5 of these 6 species belonging to family Cyprinidae and order Cypriniformes. And these species were *Labeo rohita, Hypophthalmichthys molitrix, Catla catla, Cirrhinus mrigala, Tor tor* and their Genus were Labea, Hypophthalmichthys, Catla, Cirrhinus and Tor respectively. And only a single specie *Oreochromis niloticus* Genus *Oreochromis* family Cichlidae and order Perciformes do not belong to family Cyprinidae [13]. Hence the current study revealed that all the three species *Labeo rohita, Hypophthalmichthys molitrix,* and *Catla catla* of fish diversity belong from Cyprinidae family and that of the same order Cypriniformes. Hence, the fishes of the family cyprinidae were dominant in the Chambai dam of district Karak. Such wide distributions may be created to provide a favorable environmental condition for Cyprinidae family.

5. Conclusion

From the current result at might be revealed that Chambai dam having abundant fauna of Cyprinidae family and the Chambai dam environmental condition may be more favorable for Cyprinidae family. According to the local fisherman the two species *Labeo rohita, Hypophthalmichthys molitrix* is having a mortality rate during the summer from May to August, while the species *Catla Catla* survival ratio were much better. We are trying to explore the reasons in the upcoming physiochemical study of soil and water.

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