

**A STUDY ON ICHTHYO-DIVERSITY OF MUNTJIBPUR POND OF ALLAHABAD (U.P.) INDIA****ASHOK KUMAR VERMA**

Department of Zoology,  
Government Post Graduate College,  
SAIDABAD- ALLAHABAD-221508 (U. P.)  
Corresponding Author:  
akv.apexz@gmail.com

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**ABSTRACT**

An attempt was made to find the ichthyo-diversity of Muntjibpur pond of Allahabad. Systematic surveys were conducted during a period of one year. A total of 13 species of fishes belonging to 12 genera, 8 families and 5 orders were identified. Siluriformes order is represented by 5 genera and 5 species while Cypriniformes order by 4 genera and 5 species. Each of the orders Clupeiformes, Osteoglossiformes and Ophiocephaliformes is represented by single genus and single species.

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**KEY WORDS** : Conservation, Family, Genus, Ichthyo-diversity, Muntjibpur pond, Order, Species.**Introduction**

India is a developing and agriculture dominating nation. Its most of population depend upon agriculture including pisciculture. In India, a number of ponds, lakes and reservoirs are naturally found but they are not being utilized properly due to lack of insufficient study of their hydrobiology. The study of different water parameters is very important. One of the most important features of ponds is the presence of standing water, which provides habitat for wetland plants and animals.

The fishes are not only used as good source of food for mankind, having economic importance from medicinal point of view but also play a crucial role in the second tropic level of the aquatic ecosystem. Fish diversity is a good index of healthy, growing, dynamic and economically efficient water body.

Workers<sup>6-9,11-16</sup> conducted the limnological studies as well as fish biodiversity in a fresh water body. The present study is undertaken to find out the complete ichthyo-diversity of Muntjibpur pond of Allahabad. This study and systematic survey were conducted during Jul 2014 to Jun 2015.

**STUDY AREA**

Muntjibpur pond is a natural pond, located on north side of village Muntjibpur (Fig. 1). This pond is surrounded by agricultural fields and covers more than 5000 square meters. It is located in Pratappur block of Phoolpur tahsil of Allahabad district of Uttar Pradesh and is more than 25 km away from Allahabad headquarter. This village is surrounded by Miraipur in east, Fatuhan in west, Saidpur in north and Fulahan in south. It is situated at latitude 25°25'55.16"N and longitude 82°03'13.16"E.

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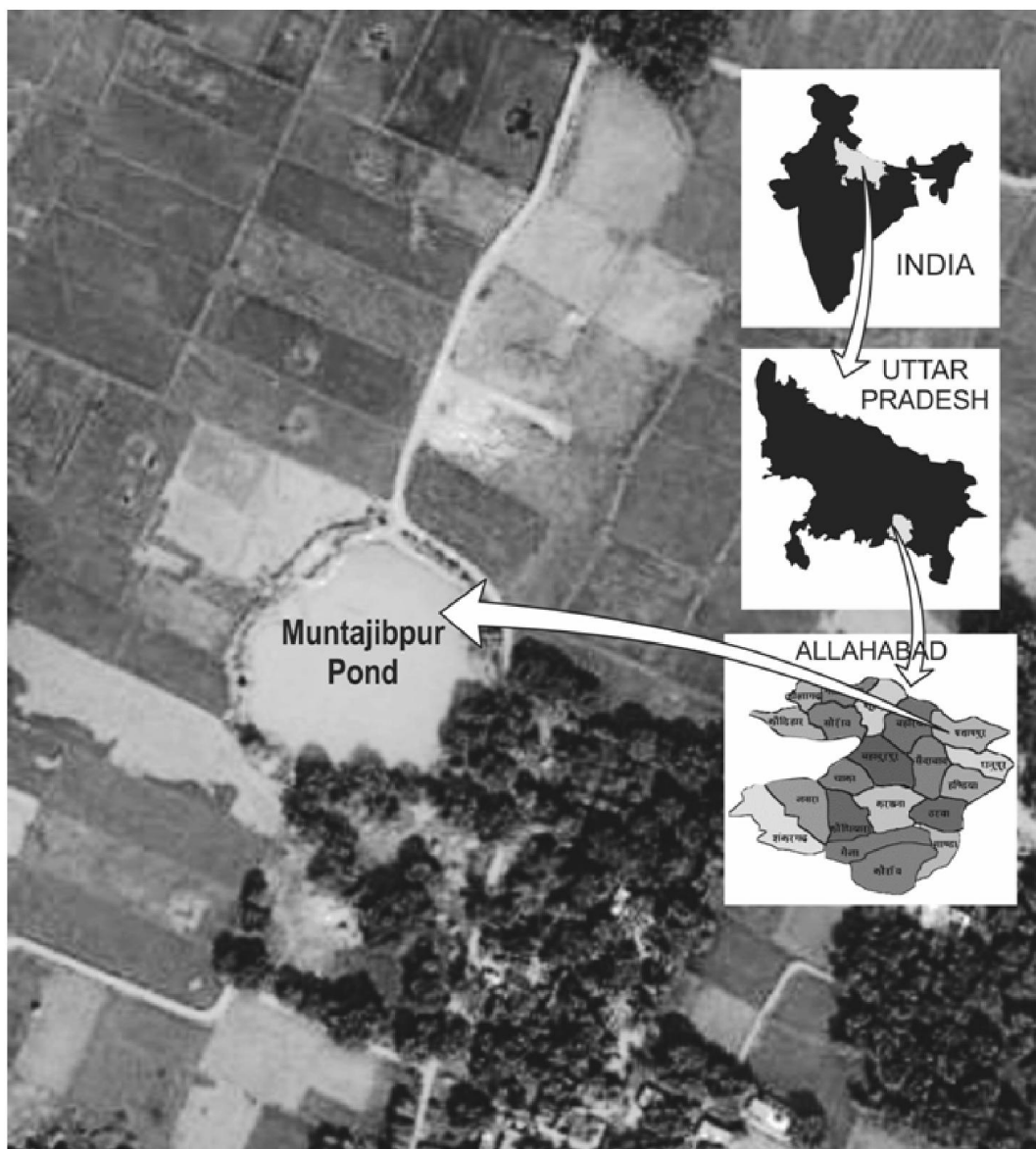


Fig. 1 : Location of study area

### Material and Methods

Muntjibpur pond was surveyed and studied in detail for fishes once in a month for the period of one year from July 2014 to Jun 2015. The fishes were caught and collected for present survey from Muntjibpur pond by hand-nets, gill nets, cast nets,

hooks, drag nets with the help of local people and fisherman.

Fishes were identified using the standard keys<sup>1,3,4,5,10</sup>. People of local communities of adjoining areas also assisted the author in various ways for data collection and identification.

TABLE - 1 : Showing fishes reported from Muntjibpur pond in the year 2014-15.

S.No.	Zoological name	Family	Order
1.	<i>Catla catla</i>	Cyprinidae	Cypriniformes
2.	<i>Labeo rohita</i>	Cyprinidae	Cypriniformes
3.	<i>Labeo calbasu</i>	Cyprinidae	Cypriniformes
4.	<i>Cyprinus carpio</i>	Cyprinidae	Cypriniformes
5.	<i>Puntius ticto</i>	Cyprinidae	Cypriniformes
6.	<i>Mystus seenghala</i>	Bagridae	Siluriformes
7.	<i>Rita rita</i>	Bagridae	Siluriformes
8.	<i>Wallago attu</i>	Siluridae	Siluriformes
9.	<i>Clarias batrachus</i>	Clariidae	Siluriformes
10.	<i>Heteropneustes fossilis</i>	Saccobanchidae	Siluriformes
11.	<i>Channa punctatus</i>	Ophiocephalidae	Ophiocephaliformes
12.	<i>Gudusia chapra</i>	Clupeidae	Clupeiformes
13.	<i>Notopterus notopterus</i>	Notopteridae	Osteoglossiformes

### Result and Discussion

One of the most important features of pond is the presence of water, which naturally provides habitat for wetland plants and animals. A large number of invertebrates feed on the decaying plants and these invertebrates in turn provide food for wetland species including fishes. The summer, monsoon and winter season show different seasonal fluctuation in various hydrobiological parameters in this pond. The water present in the said pond is useful for irrigation as well as fish culture. The water quality of this pond is although having some pollution but is suitable for agricultural purposes also, as it is rich in organic humus, planktons and nutrients.

During the entire study period, a total of 13 species of fishes of 12 genera belonging to 8 families and 5 orders were recorded from the Muntjibpur pond. The collected and identified fish

species including their zoological names, family and order are shown in the given Table.

### Conclusion

Ichthyo-diversity of the pond studied belongs to 5 orders *namely* Siluriformes, Cypriniformes, Ophiocephaliformes, Osteoglossiformes and Clupeiformes. In present investigation, a total of 13 species of fishes belonging to 12 genera, 8 families and 5 orders were identified. Siluriformes order is represented by 5 genera and 5 species while Cypriniformes order by 4 genera and 5 species. Each of the orders Clupeiformes, Osteoglossiformes and Ophiocephaliformes is represented by single genus and single species. In this way, author collected, recorded and identified 13 different species, some of them need conservation.



**Fig. 2: A view of study area of Muntjibpur pond**

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