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Study of Ichthyofaunal Diversity of Banghara Pokher Ghataho, Samastipur, Bihar

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Abstract: ***The present study deals with ichtyofauna of Banghara Pokher, Ghataho, Dist. Samastipur, Bihar. In order to estimate its potency for fish culture during the period of January 2017 to December 2017. 25 species of fishes were observed in which 17 species have high food value, 8 species have low food value used by common people..***
Keywords: Banghara Phokhar, Ichthyofauna, Fish Diversity.

I. INTRODUCTION

India has rich resource of inland fresh water fish fauna with about 940 species which constitute about 40% Indian ichthyofauna and are of considerable economic and scientific value. Biodiversity is an important ecological factor for the homeostasis of an ecosystem. The fishes which constitute 25% of all vertebrates are not only cheap but also are the chief sources of proteins and minerals. The fresh water fishes are an important of global biodiversity (Reid et al. 2013). India is one of the leading mega biodiversity countries in the world and occupies in the ninth position in terms of fresh water mega biodiversity (Mittermeier et al. 1997). The state of Bihar is one of the important aquatic biodiversity richness especially for fish fauna in both lotic and lentic water. The present investigation was designed to study ichthyofauna of Banghara Holi Pokher of village Ghataho, Dist. Samastipur, Bihar, because, no such work was done previously in this water body. Holi Pokher is large, deep, perennial rain cum river fed, roughly rectangular in shape. During rainy season, the river water, along with fishes, comes in Banghara Pokher. This Pokher is rain fed. Therefore, sufficient water remains present throughout the year. Fishes of the Ientic water bodies have been studied since last century. Survey of fish fauna as observed by Berg (1947); Jay Ram (1981); Jhingran (1982); Qureshi (1983); Dutta Munsi (1988); Thakur et. al. (2003); A.V. Munde (2006); Singh et. al. (2009); it is apparent that much emphasis has been paid to study the survey of fishes at different places in India. A thorough knowledge of fishery resources, their availability and distribution in a particular water body is essential for proper exploitation.

II. MATERIAL AND METHODS

The Banghara Pokher is situated in village Ghataho of Samastipur District. The water of this Pokher is used for bathing and drinking for cattle. The fishes were collected with the help of cast net, gill net, line and bait methods season wise. These fishes were preserved in 8% formaline. Colour and general pigmentation of fishes were also noted. The local name were recorded with the help of local fishermen. The identification of fish species was done with the help of Standard keys and books. The scheme of classification adopted here, was according to Leo S. Berg (1947).

III. RESULTS AND DISCUSSION

The results of our study confirmed the occurrence of 25 species belonging to 6 orders and 13 families. Out of six orders Cypriniformes was dominant with 12 species, order Ophiocephaliformes with 5, Clupeformes with 3 species, Order Mastacembeliformes and Perciniformes with 2 each, Symbrachiformes with 1 species. Also out of thirteen families Cyprinidae was dominant with 7 species, Ophiocephalidae with 4 species, Bagnidae, Mastacembelidae and Notopteridae with 2 species each, Amphipnoidae, Anabantidae, Belonidae, Centrapomidae, Clariidae, Clupeidae, Saccobranchidae and Siluridae with 1 each. Due to more fecundity of major carps and suitable environmental conditions, there existed relatively higher number of Cypriniformes to provide food. Such type of observations were also made by Srivastava, G.J. (1980); Singh, et. al. (1989); Thakur, C.M. et. al. (2003); S.V. Pandit, et. al. (2009); A.V. Munde et. al. (2006); K. Singh, et. al. (2009) for Indian fishes.

Table-1 : Showing fish species diversity of Banghara Pokhar, Ghataho, Dist-Samastipur, Bihar

Sl. No.	Scientific Name of Fish	Order	Family	Local Name	Common Population
1.	Gudisha Chapra (Ham)	Clupeformes	Clupeidae	Suhia	F
2.	Notopterus (Pallas)	Clupeformes	Notopteridae	Bhuna	F
3.	Notopterus Chatala (Ham)	Clupeformes	Notopteridae	Moya	F
4.	Catla catla (Ham)	Cypriniformes	Cyprinidae	Katla, Bhakur	C
5.	Cirrhinus mrigala	Cypriniformes	Cyprinidae	Naini	C
6.	Cirrhinus reba	Cypriniformes	Cyprinidae	Reba	C
7.	Lebeo calbasu (Ham)	Cypriniformes	Cyprinidae	Basari	F
8.	Labeo rohita (Ham)	Cypriniformes	Cyprinidae	Rohu	C
9.	Punitus sarana (Ham)	Cypriniformes	Cyprinidae	Darhi	F
10.	Punitus sophore (Ham)	Cypriniformes	Cyprinidae	Pothia	P
11.	Mistus vittatus (Bloch)	Cypriniformes	Bagnidae	Kanti tengra	C
12.	Mistus Synghala (Ham)	Cypriniformes	Bagnidae	Dhari tengra	P
13.	Wallago attu (Bloch)	Cypriniformes	Siluridae	Boari	C
14.	Hetropneustus fossils (Bloch)	Cypriniformes	Saccobranchidae	Singi	F
15.	Clarias batrachus (Linn)	Cypriniformes	Clariidae	Magur	F
16.	Xenetodon cancila (Bloch)	Opheocephaliformes	Belonidae	Kauwa	R
17.	Channa gachua (Ham)	Opheocephaliformes	Ophiocephalidae	Chenga	P
18.	Channa punctatus (Ham)	Opheocephaliformes	Ophiocephalidae	Garai	C
19.	Channa straitus (Ham)	Opheocephaliformes	Ophiocephalidae	Sauri	F
20.	Channa marulius (Ham)	Opheocephaliformes	Ophiocephalidae	Chittidar sauri	F
21.	Amphipnous cuchia (Ham)	Symbranchiformes	Amphipnoidae	Bami	R
22.	Chanda nama (Ham)	Perciformes	Centrapomidae	Chanri	P
23.	Anabas testudines	Perciformes	Anabantidae	Kawai	F
24.	Mastacembelus aculeatus (Bloch)	Mastacembaliformes	Mastacembelidae	Ganchi	P
25.	Mastacembelus armatus (Lacepede)	Mastacembaliformes	Mastacembelidae	Bam	F
Abbreviation :- C-Common, R-Rare, P-Plenty, F-Few					

Table-2 : Order wise Percentage distribution of fish fauna of Banghara Pokhar, Ghataho, Dist-Samastipur, Bihar

Sl. No.	Order	No. of Species	Percentage (%)
1	Clupeformes	3	12
2	Cypriniformes	12	48
3	Opheocephaliformes	5	20
4	Symbranchiformes	1	4
5	Perciformes	2	8
6	Mastacembaliformes	2	8
	Total	25	

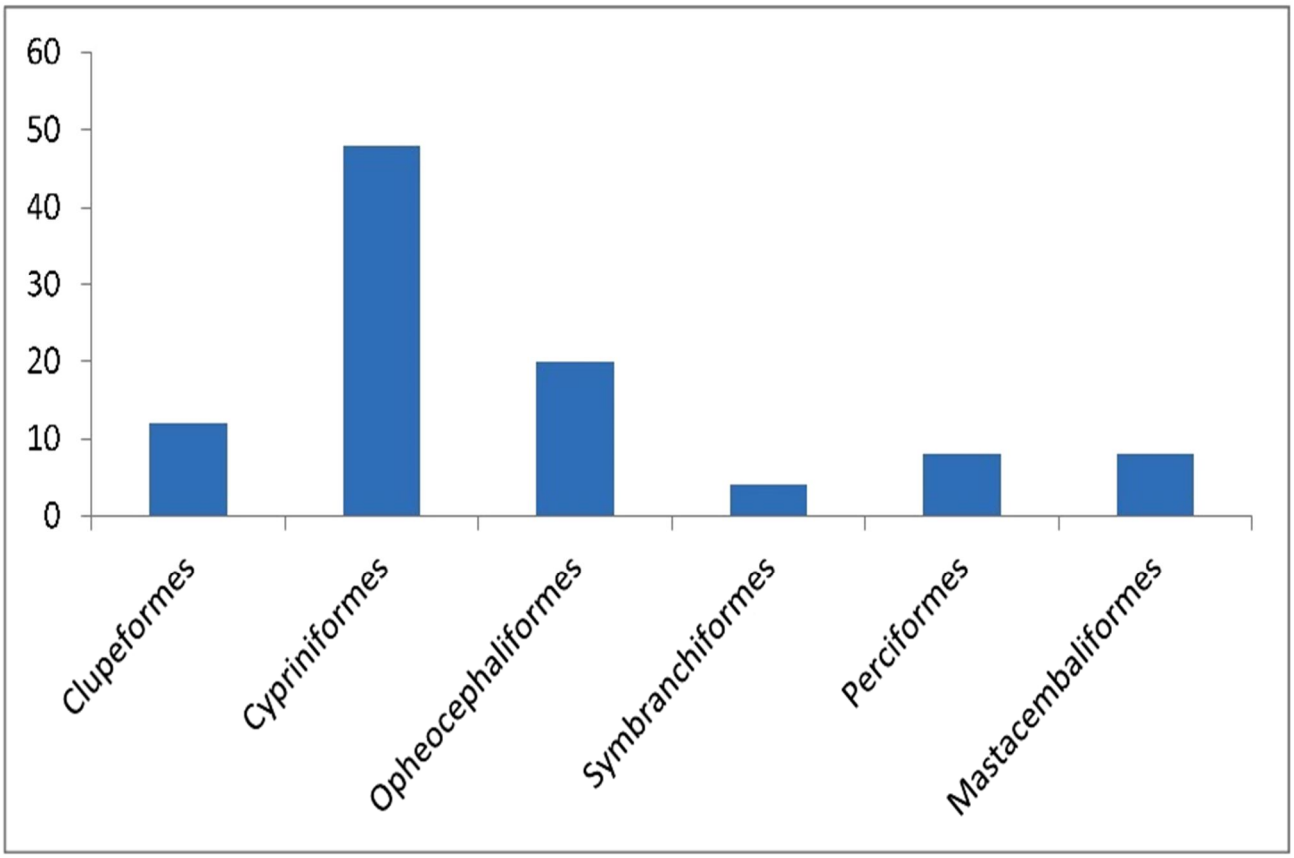

Figure 1-Order wise Percentage distribution of fish fauna of Banghara Pokhar, Ghataho, Dist-Samastipur, Bihar

Table-3 : Family wise Percentage distribution of fish fauna of Banghara Pokhar, Ghataho, Dist-Samastipur, Bihar

Sl. No.	Family	No. of Species	Percentage (%)
1	Amphipnoidae	1	4
2	Anabantidae	1	4
3	Bagnidae	2	8
4	Belonidae	1	4
5	Centrapomidae	1	4
6	Clariidae	1	4
7	Clupeidae	1	4
8	Cyprinidae	7	28
9	Mastacembelidae	2	8
10	Notopteridae	2	8
11	Ophiocephalidae	4	16
12	Saccobranchidae	1	4
13	Siluridae	1	4
	Total	25	

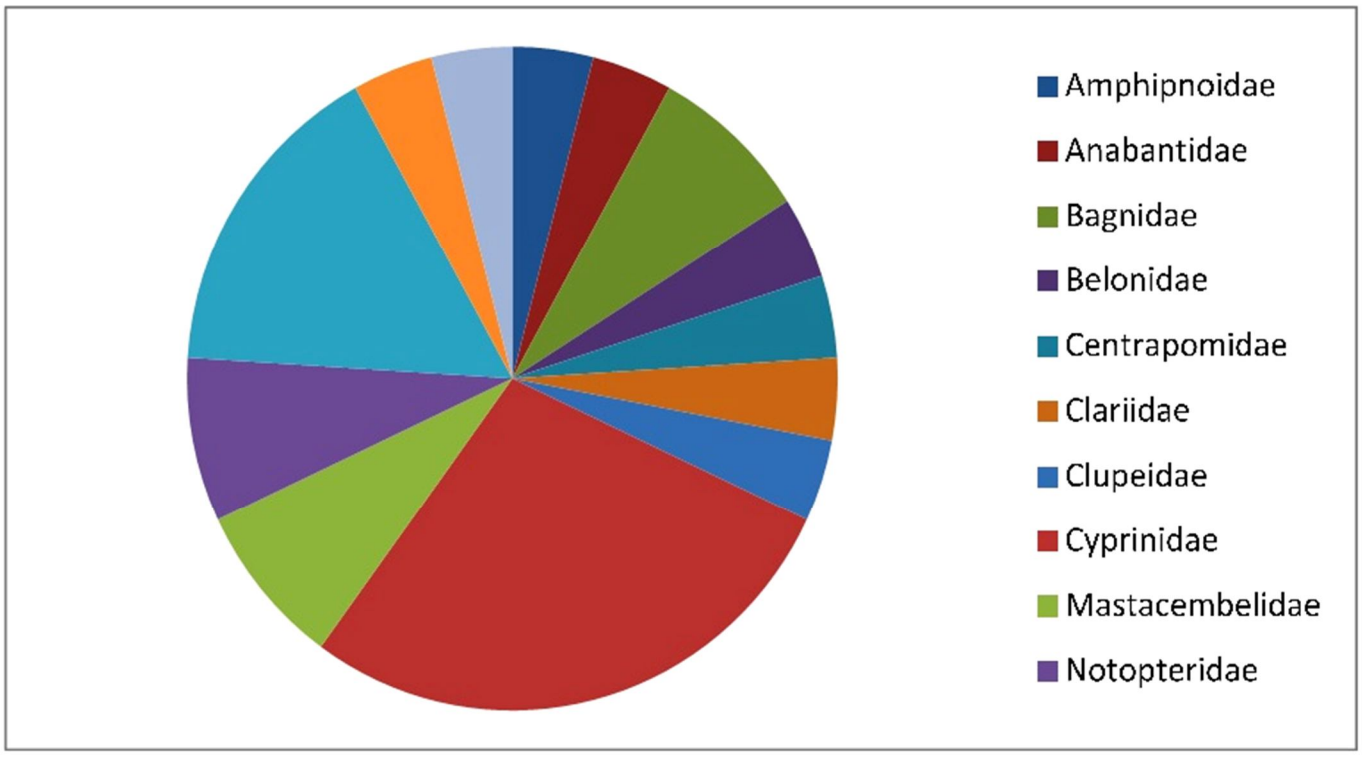

Figure 2 - Family wise Percentage distribution of fish fauna of Banghara Pokhar, Ghataho, Dist-Samastipur, Bihar

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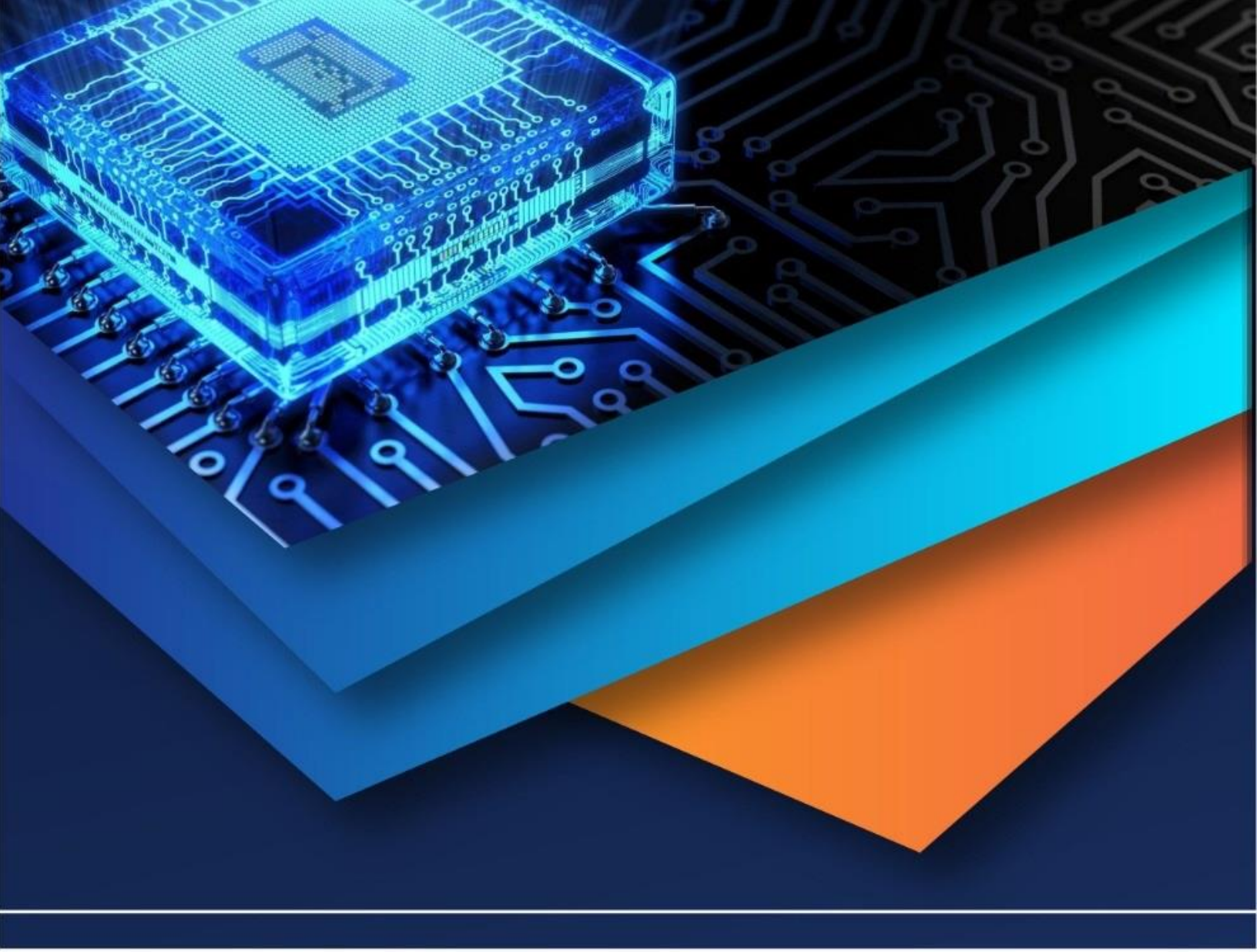

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