

## Studies on Fish Diversity of Pimpalwandi Reservoir Taluka Patoda Dist. Beed (M.S.) India

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**Abstract:** The present investigation was carried to study the aquatic vertebrate animal specially reference to fishes. The present study of bio-diversity of Ichthyofauna Pimpalwandi reservoir during Dec 2017 to Nov 2018, Pimpalwandi reservoir is mainly used for irrigation drinking water and fish production. In this study 15 different species of fishes were observed under 12 genus belongs to 09 families with 06 orders

**Key Words:** Biodiversity, Ichthyofauna, Pimpalwandi reservoir.

### Introduction:

Fresh water ecosystem such as rivers play important roles in the water cycle, maintaining the delicate balance of aquatic food chain, purification of water, control of infectious organisms, fresh water biodiversity is very important with tremendous economic, social and environmental impacts, they provide human species with nutrients rich food, water other resources. The world bank reports on the fresh water biodiversity in Asia identified the streams and rivers originating from the Balaghat mountain as one of the biodiversity hot spot in the Maharashtra (Kottelat and Whitten 1996). The local decline in fish diversity has been attributed to habitat transformation and loss, Aquatic habitats are frequently transformed by changing the direction of the flow by construction of dams, the water sand mining continuous erosion of the banks by the destruction of the surrounding vegetation and by damping soil water, while these can be can be natural transformations of aquatic habitats due to general changes in climate and vegetation these are comparatively slower, giving the fish communities more time the adept to these changes (R.J. Ranjit Daniesls 2002). The fresh water resources in inland fishery, number of studies had been conducted involving various aspects of the dam and reservoir, fisheries such as on Chilka lake (Ray and Parida 1966), Stanley reservoir (Sreeneivasan 1966), Sardar Sagar (Sreeneivasan 1979), and Kandhar tank (Kanwate and Kulkarni 2006) in West Bengal studies on the fresh water fish was carried on workers viz. (Barman, 2007).

The present investigation was undertaken to study the status of diversity fish fauna from Pimpalwandi reservoir, Pimpalwandi Dist. Beed. The main purpose of reservoir of irrigation, drinking water and aquaculture potential, water is also used for various purposes such as washing of cloths, cattle's, etc. It is one of the sources number of aquatic animals which are economically important for nature of the mankind.

### Material and Methods:

Pimpalwandi reservoir is located near Pimpalwandi Tal. Patoda Dist. Beed. This dam away from Beed about 55 Km. The main purpose of reservoir was irrigation drinking and aquaculture potential. The fishes were collected early morning on a fixed day and time with help of local fisherman in Pimpalwandi reservoir. This investigation during Dec. 2017 to Nov. 2018 for the study of fish fauna Dist. Beed. Fishes were identified with the help of proper books and photographs, the systematic position, identification and economic importance was done with the help of books. (Shrivastav et al. 1994 and S.S. Khanna 1992) (Jayaram V. 1981, 1994 Day, 1878, Talwar and Jhingran 1981).

### Result and Discussion:

The biodiversity of fish associates with Pimpalwandi reservoir assessed during Dec. 2017 to Nov. 2018. The distribution of fish species is quite variable because Geographical and Geological condition. The result of present work confirms the occurrence of 15 different species were found these fish species were grouped in 06 order 09 families and 13 genera the detailed classification of fish is given. This work is supported by number of authors Das and Nath (1966), were first describe 23 species belonging to 7 families and 14 generation inhabit in river Tawi and tributaries further Das and Nath (1971) revised fish fauna of Jammu and enlisted the presence of 16 fish species belonging to 9 families and 5 generation in river Tawi and its tributaries. Tilak (1971) survey river Tawi and its



tributaries and reported the presence 35 fish species inhabiting river Tawi and its Gandigarh tributary Malhotra et.al. (1975) prepared and identification key of 45 fish species including 37 fish species inhabiting river Tawi and its tributaries Gandigarh.

**Table. 1 Order wise appearance of fishes in Pimpalwandi Reservoir.**

Sr. No	Order	Family	Genus	Species
01	Clupiformii	Notopteridae	<i>Notopterus</i>	<i>chitala</i>
02	Cypriniformes	Cyprinidae	<i>Lebeo</i>	<i>rohita</i>
			<i>Catla</i>	<i>catla-catla</i>
			<i>Cyprinus</i>	<i>carpio</i>
			<i>Puntius</i>	<i>ticto</i>
			<i>Rasbora</i>	<i>danricus</i>
		Cobitidae	<i>Nemachellus</i>	<i>botia</i>
03	Mugiliforme	Gobiidae	<i>Mugil</i>	<i>cephalus</i>
04	Siluriformes	Bagridae	<i>Mystus</i>	<i>seenghala</i>
		Siluridae	<i>Wallago</i>	<i>attu</i>
05	Gobiidae	Perciformes	<i>Glossogobius</i>	<i>giuris</i>
		Centropomidae	<i>Ambasis</i>	<i>nema</i>
06	Channiformes	Channidae	<i>Channa</i>	<i>marulius</i>
				<i>gachua</i>
				<i>punctatus</i>

**Table.2 Dominance of fishes in Pimpalwandi Reservoir**

Sr. No	Genus	Species
01	<i>Notopterus</i>	<i>chitala</i>
02	<i>Lebeo</i>	<i>rohita</i>
03	<i>Catla</i>	<i>catla-catla</i>
04	<i>Cyprinus</i>	<i>carpio</i>
05	<i>Puntius</i>	<i>ticto</i>
06	<i>Rasbora</i>	<i>danricus</i>
07	<i>Nemachellus</i>	<i>botia</i>
08	<i>Mugil</i>	<i>cephalus</i>
09	<i>Mystus</i>	<i>seenghala</i>
10	<i>Wallago</i>	<i>attu</i>
11	<i>Glossogobius</i>	<i>giuris</i>
12	<i>Ambasis</i>	<i>nema</i>
13	<i>Channa</i>	<i>marulius</i>
14	<i>Channa</i>	<i>gachua</i>
15	<i>Channa</i>	<i>punctatus</i>

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