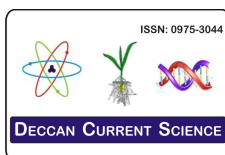


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Diversity of Ichthyofauna from Yelgaon Dam at District Buldhana

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Abstract:

The present work deals with the study of Ichthyofaunal diversity from Yelgaon dam, Ta & District- Buldhana during May 2010- April 2011. Yelgaon Dam is perennial medium irrigation dam construct for the irrigation, drinking water and fisheries for nearby villages from Buldhana district. During the study period 15 species were reported under 11 family and 05 order where Cyprinidae family was dominant with 09 species. Yelgaon dam was full of ichthyofaunal diversity as well as support and conserve the biodiversity of this region.

Key words: - Ichthyofaunal Diversity, Yelgaon Dam, Cyprinidae, Biodiversity, irrigation.

Introduction:

India is one of the mega-biodiversity countries in the world and occupies the 9th position in term of freshwater mega-biodiversity (Mittermeier and Mittermeier, 2000). Two biodiversity "hotspots" namely The Eastern Himalayas and Western Ghats have been recognized by the World Conservation Monitoring Center (WCMC, 1998).

Around the world approximately 22,000 species of fishes have been recorded out of which 11 % are found in India i.e. 2,420, where the Osteichthyes include 34.55 % and Chondrichthyes include 65.45 %. In India, there are 2500 species of fishes of which, 930 live in freshwater and 1,570 are marine (Kar, 2003). There are about 450 families of

freshwater fishes globally, about 40 represent in India (warm freshwater fishes) about 25 of these families are commercially important. Day (1878) and Hamilton (1822) were the first modern writers of Indian fishes.

Greater diversity of environment contributes to greater biological productivity a database on fish diversity is essential, and a decision making tool for conservation and management of fish diversity.

Painganga River is one of the important river in Buldhana District of Viderba Region. It is tributaries of Godavari river Basin. It originate from Satpuda Hilly ranges of Girda village District Buldhana . Yelgaon Dam is medium irrigation project constructed at Yelgaon village it is located 05 Km away from Buldhana district

and 150 Km away from Fishery research laboratory, Department of Zoology, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, latitude 20°29' 09.07" N and longitude 76°11' 42.32" E (Google Earth, 2013). The present investigation was carried out to study the ichthyofaunal diversity of Yelgaon dam situated on Painganga River which is a tributary of Godavari river Basin District Buldhana (M.S) India. The objective of study is to make a database of ichthyofauna of this area for a researcher, financial agencies and fishermen.

Material and Methods:

To study the ichthyofauna of Yelgaon dam from May 2010 to April 2011, fish samples were collected which represent the ichthyofaunal composition of Buldhana district.

Fish samples were collected every week during the study period from the fish landing centers with the help of skilled local fishermen by various fishing crafts, gears with variable mesh size. Sampling points were distributed throughout the site to cover its whole area and location was changed for the collection of fish fauna according to the season.

Identification of fishes was done up to species level at fish landing center to get its natural colour, pattern of scales, fins, mouth pattern, identification marks like black spot, bloach on operculum, paired and unpaired fins and body parts with the help of standard literature by Datta Munshi and Srivastava, (1988); Hamilton (1822); Talwar and Jhingran, (1991); Francis Day vol I & II, (1986); Jayaram (1981); Jayaram, (1991); Jayaram, (1999); Menon (1987); Yazdani, (1985); Jyoti and Arti Sharma (2006) and etc.

Fish species which were not identified on the field (landing center) were preserved in 10 % formalin or 5cc of formalin was injected in the belly of fish with disposable syringe and packed in polythene bags. These fish samples were brought to Fishery research laboratory, Department of Zoology, Dr. Babasaheb

Ambedkar Marathwada University, Aurangabad for further identification.

Specimen with doubtful identifying characters was sent to Zoological Survey of India (ZSI) Pune, regional branch (ZSI) Kolkata for identification.

Result and Discussion:

During the study period 15 species were reported under 11 family and 05 order where Cyprinidae family was dominant with 09 species. Chandanshive *et al.*, (2007) reported 29 species under 14 genera under the family Cyprinidae from Pavana river Pune district Maharashtra, respectively. Jadhav and Yadhav (2009) reported 25 species under 11 genera under the family Cyprinidae from Solapur district Maharashtra. Muchlism and Siti Azizah, (2009) reported 26 species under 12 genera from fresh water of Northern – Sumatra, Indonesia. Sharma Chitra, (2008) reported 87 species under 36 genera under the Cyprinidae family from freshwater of Nepal.

Shinde *et al.*, (2009) observed 11 species under 10 genera under the Cyprinidae family from Harsul Savangi dam dist Aurangabad (M.S), Acharjee and Barat (2013) reported 65 species from 39 genera from Teesta river Darjeeling Himalaya of west Bengal where cyprinidae family was dominant with 21 species, Jain *et al.*, (2013) observed 21 species under 16 genera under the Cyprinidae family was dominant with 11 species from Bilwali tank Indore, Sarwade and Khillare (2010) reported 60 species under 36 genera under the Cyprinidae family was dominant with 36 species from Ujani wetland, Jaiswal and Ahirrao (2012) reported 28 species under 25 genera where cyprinidae family was dominant with 09 species from Rangavali dam Navapur district Nandurbar, Jaybhaye and Lahane (2013) reported 21 species under 13 genera where cyprinidae family was dominant with 11 species from Pimpaldari tank district Hingoli, Ubarhande and Sonawane (2012) observed 21 species under 19

genera under the Cyprinidae family was dominant with 10 species from Paintakli dam Buldhana district.

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Table 1: Systematic Position of Fish Species from Yelgaon Dam at Buldhana District (M.S)**India**

Sr. No	Order	Family	Genus	Species
01	Cypriniformes	Cyprinidae	<i>Labeo</i>	
				<i>Rohita</i>
			<i>Puntius</i>	<i>Chola</i>
				<i>Stigma</i>
				<i>Ticto</i>
			<i>Rasbora</i>	<i>Daniconius</i>
			<i>Catla</i>	
				<i>Catla</i>
			<i>Cyprinus</i>	<i>carpio specularis</i>
				<i>carpio communis</i>
			<i>Cirrhinus</i>	
				<i>Mrigala</i>
			Genus :- 06	Species:-09
	Result	Family :- 01	Genus :- 06	Species :- 09
02	Synbranchiformes	Mastacembelidae		
			<i>Mastacembelus</i>	
				<i>Armatus</i>
			Genus :- 01	Species:- 01
	Result	Family :- 01	Genus :- 01	Species :- 01
03	Siluriformes			
		Clariidae		
			<i>Clarias</i>	
				<i>Batrachus</i>
			Genus :- 01	Species:- 01
	Result	Family :- 01	Genus :- 01	Species :- 01
04	Perciformes			
		Channidae		
			<i>Channa</i>	<i>punctatus</i>
				<i>Orientalis</i>
			Genus :- 01	Species:- 02
		Cichlidae		
			<i>Oreochromis</i>	
				<i>Mossambica</i>
			Genus :- 01	Species:- 01
	Result	Family :- 02	Genus :- 02	Species :- 02
05	Cyprinodontiformes			
		Poeciliidae	<i>Poecilia</i>	
				<i>Reticulate</i>
			Genus :-01	Species:-01
	Result	Family :- 01	Genus :- 01	Species :- 01
	Order :- 05	Family :-06	Genus:- 11	Species :- 15