



Short Communication

Current status of indigenous ornamental fish species diversity of Egra-I block in Purba Medinipur district, West Bengal, India

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Abstract

Ornamental fishes have attractive colour in nature. This study was conducted on indigenous ornamental fish species diversity of Egra-I block in Purba Medinipur District, West Bengal, India from March 2021 to December 2022. Total 25 native ornamental fishes under 15 genera, 13 families and 7 orders were found during the investigation period. The maximum number of species belonging to order Siluriformes followed by Anabantiformes and Cypriniformes. This survey observed that many of the available ornamental fish species are endemic to some places. Of the fish species available, many are of tremendous economic importance. In the present research, all the water bodies of Egra-I block of Purba Medinipur district were thoroughly surveyed for natural ornamental fishes.

Keywords: Ornamental fish, indigenous, fish diversity, Purba Medinipur.

Introduction

Aquarium fishes are usually small, colorful and mostly weird looking¹. Ornamental fishes may be described as attractive colorful fishes of peaceful nature which can be saved as pets in limited spaces of an aquarium or a lawn pool with the cause of enjoying their splendor for a laugh and fancy. Aquarium fish is also called ornamental fish because they are usually kept in glass aquariums. Aquarium fishes are the most popular pets in the world². The popularity of home aquariums in many parts of the world has made ornamental fish an important part of international trade and a global industry³. In India, most of the ornamental fish species are marketed from the North Eastern states, with the rest from the Southern states, which are hotspots for fish diversity in India. Out of the 800 aquarium fish species from diverse aquatic environment visible in the worldwide, its predicted that more than 100 types of indigenous ornamental fishes are available in our freshwater atmosphere similarly to a same wide variety of unique species that are breed in captivity. Kolkata and its surrounding area in West Bengal is one of the most important ornamental fish producers in India. The growing demand for aquarium fish has resulted in a continuous increase in the sale of aquarium fish worldwide.

Materials and methods

The specimens were collected from March 2021 to December 2022 from various canals, ponds, bills and markets across the Egra-I block using cast net, gill net and drag net. Fish collection was done early in the morning and the samples were preserved in 4% formaldehyde solution. Fish samples were identified using the keys of Jayaram, Talwar and Jhingran.

Results and discussion

In total 25 indigenous ornamental fishes under 15 genera, 12 families and 7 orders from the Egra-I block were recorded during this research period.

Out of the total 25 fishes, 23 fishes were Least Concern, 1 fish was Near Threatened and 1 fish was Vulnerable.

The highest number of species belongs to the order Siluriformes 32% followed by Anabantiformes 28%, Cypriniformes 24%, Synbranchiformes, Cyprinodontiformes, Osteoglossiformes and Perciformes each with 4% of the total species. Order Siluriformes contributed 4 families to the total families, followed by Anabantiformes 3, Cypriniformes, Synbranchiformes, Cyprinodontiformes, Osteoglossiformes and Perciformes each with 1 family. Cyprinidae is the most dominant family contribute 24% species followed by Channidae 16%, Bagridae 16%, Siluridae 8%, Osphronemidae 8% and Anabantidae, Notopteridae, Claridae, Heteropneustidae, Aplocheilidae, Mastacembelidae and Ambassidae each with 4% among total species.

Among these fish species, *Amblypharyngodon mola*, *Esomus danricus*, *Mystus vittatus*, *Notopterus notopterus*, *Ompok pabba* and *Wallago attu* are in high market demand.

Paul and Chanda recorded 48 indigenous aquarium fish from the district of Paschim Medinipur. Basu et al. enlisted 70 indigenous ornamental fish species from West Bengal. Due to over and indiscriminate fishing over the years, fish diversity has decreased in Egra-I block.

Table-1: Indigenous ornamental fish diversity of Egra-I block.

Order	Family	Species name	Local name	Conservation status
Cypriniformes	Cyprinidae	<i>Amblypharyngodon mola</i>	Mourola	Least Concern
		<i>Esomus danricus</i>	Daria	Least Concern
		<i>Puntius ticto</i>	Puti	Least Concern
		<i>Puntius sarana</i>	Sar puti	Least Concern
		<i>Puntius sophore</i>	Puti	Least Concern
		<i>Puntius chola</i>	Puti	Least Concern
Perciformes	Ambassidae	<i>Chanda nama</i>	Chanda	Least Concern
Siluriformes	Siluridae	<i>Ompok pabda</i>	Pabda	Near Threatened
		<i>Wallago attu</i>	Boal	Vulnerable
	Bagridae	<i>Mystus cavasius</i>	Tengra	Least Concern
		<i>Mysus tengara</i>	Tengra	Least Concern
		<i>Mystus vittatus</i>	Tengra	Least Concern
		<i>Mystus gulio</i>	Tengra	Least Concern
	Heteropneustidae	<i>Heteropneustes fossilis</i>	Singi	Least Concern
	Clariidae	<i>Clarias batrachus</i>	Magur	Least Concern
Osteoglossiformes	Notopteridae	<i>Notopterus notopterus</i>	Pholui	Least Concern
Synbranchiformes	Mastacembelidae	<i>Macrognathus pancalus</i>	Pankal	Least Concern
Cyprinodontiformes	Aplocheilidae	<i>Aplocheilus panchax</i>	Techoukka	Least Concern
Anabantiformes	Channidae	<i>Channa punctata</i>	Lata	Least Concern
		<i>Channa marulius</i>	Sal	Least Concern
		<i>Channa gachua</i>	Chang	Least Concern
		<i>Channa striatus</i>	Shol	Least Concern
	Osphronemidae	<i>Trichogaster fasciata</i>	Kholisa	Least Concern
		<i>Trichogaster lalius</i>	Kholisa	Least Concern
	Anabantidae	<i>Anabas testudineus</i>	Koi	Least Concern

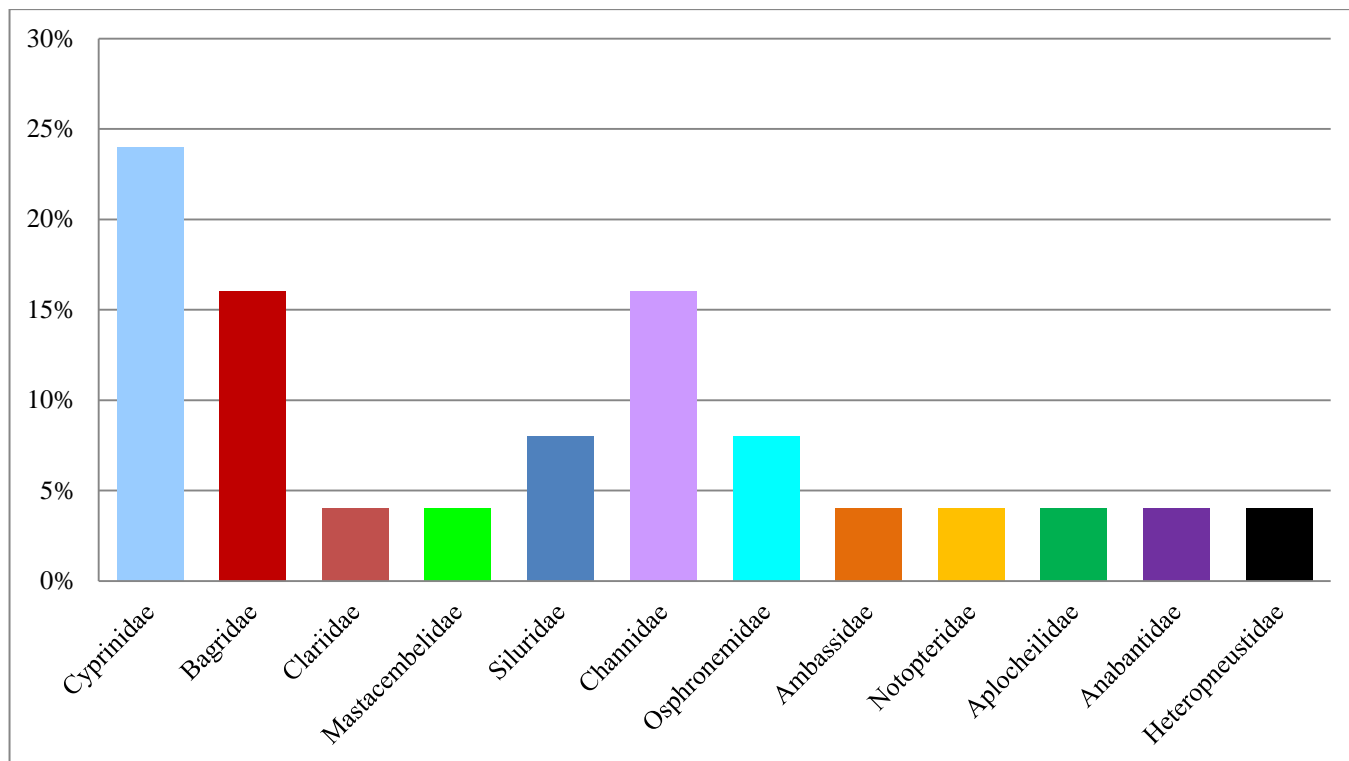


Figure-1: Family-wise representation of indigenous ornamental fishes in Egra-I block.

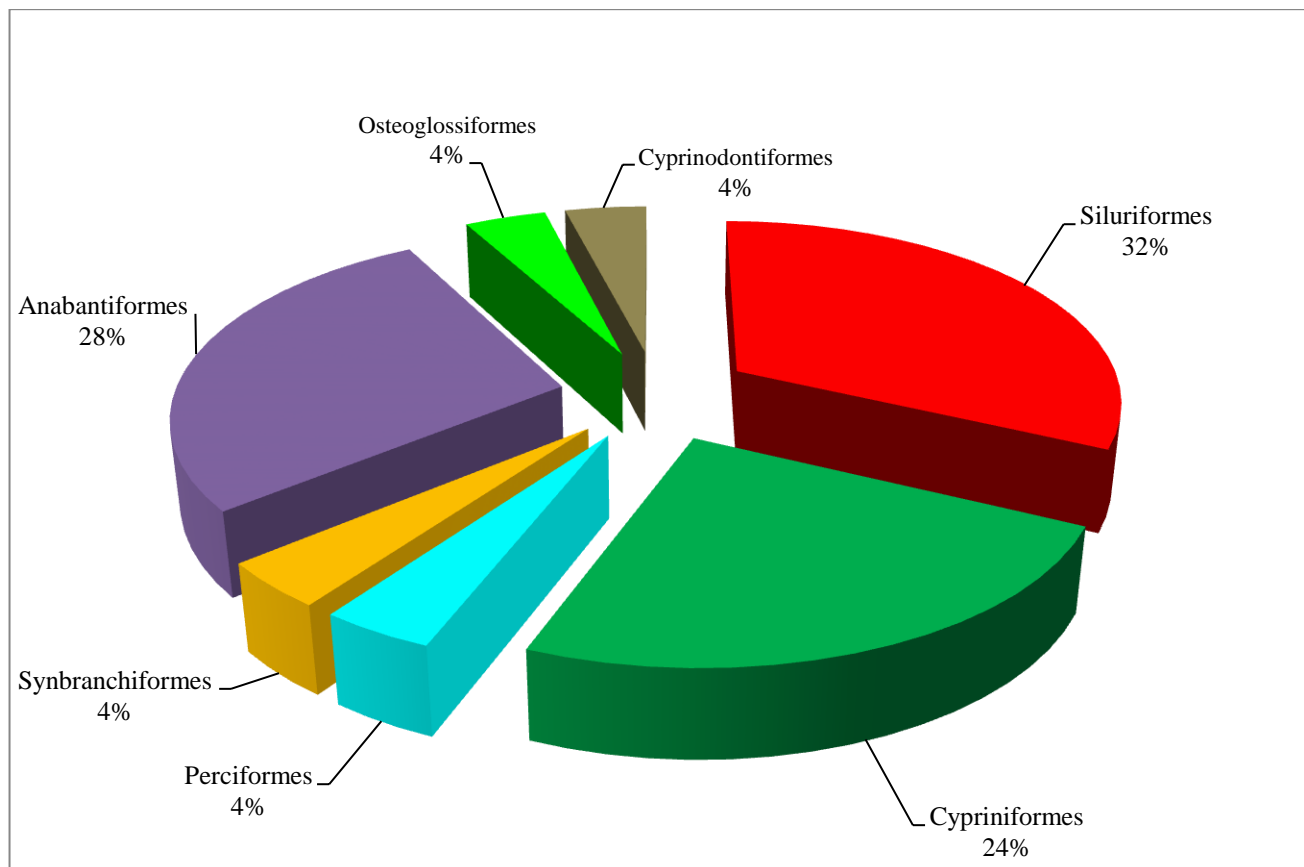


Figure-2: Order-wise representation of indigenous ornamental fishes in Egra-I block.

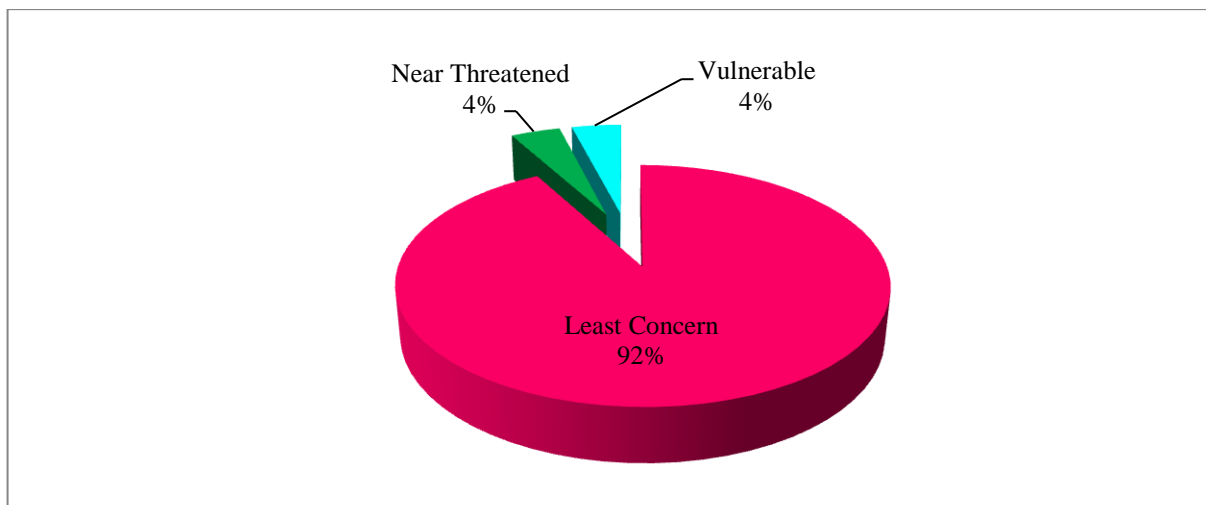


Figure-3: Conservation status of indigenous ornamental fishes in Egra-I block.

Conclusion

The aim of present investigation was to explore the present indigenous fish diversity of Egra-I block in Purba Medinipur district. A total of 25 native ornamental fish species have been found in Egra-I block. Overfishing should be avoided and efforts should be taken to increase public awareness to save the fish diversity of Egra-I block.

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