Recent Research in Science and Technology 2011, 3(12): 11-13
ISSN: 2076-5061
www.scholarjournals.org

www.recent-science.com

RRST-Environmental Science

Ichthyofaunal Diversity of Godavari River at Mudgal Tq. Pathri, Dist. Parbhani

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Article Info

Article History

Received : 09-02-2011
Revised : 18-05-2011
Accepted : 18-05-2011

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Abstract

Ichthyofaunal studies were undertaken during July 2009- March 2010. Present paper deals with the variety of fresh water fishes in Godavari River at Mudgal Tq. Pathri, Dist. Parbhani. The results of present investigation reveal the occurrence of 26 fish species belonging to 05 orders, 07 families and 15 genera. The members of Order Cypriniformes were dominated by 15 species followed by Siluriformes with 05 species, Channiformes 04 Species, and Mastacembaliformes 01, Perciformes 1 species.

Key Words: Ichthyofauna, Fish diversity, Godavari River

Introduction

Fish constitutes half of the total number of vertebrates in the world. They live in almost all conceivable aquatic habitats. 21,723 living species of fish have been recorded of and commercial fishes of importance were found in vertebrates out of these 8,411 are freshwater species and 11,650 are marine. India is one of the mega biodiversity countries in the world and occupies the ninth position in terms of freshwater mega biodiversity [6] In India there are 2,500 species of fishes of which 930 live in freshwater d 1,570 are marine [5]. Ichthyodiversity refers to variety of fish species; depending on context and scale, it could refer to alleles or genotypes within of life forms within a fish community and to species or life forms across aqua regimes [1]. Biodiversity is essential for stabilization of ecosystem protection overall environmental quality for understanding intrinsic worth of all species on the earth [3] Positive correlations between biomass production and species abundance have been recorded by various earlier workers [7]. The species diversity of an ecosystem is often related to the amount of living, non living and organic matter present. In the field of ichthyology there is valuable were given an incision in their abdomen and preserved.

As per economic importance and scope of fish and fisheries especially in Maharashtra, but it is natural to study the distribution and availability of fish from fresh water. Present investigation was undertaken to study the fish diversity from Godavari River.

Godavari River is most important river as far as Maharashtra is concerned. It is rich in flora and fauna. Various aquatic animals present in Godavari River so many peoples livelihood depends on fishing. Mudgal is one of the holy places situated on the bank of the Godavari River in Parbhani district. Ongoing construction of dam attracted us to select this site for study. After completion of dam this site will be one of the diversity rich spot in Godavari River.

Materials and Methods

Fishes were collected from Godavari river Mudgal using different types of net namely gill nets , cast net, drag net, bhar-jal and immediately photographs were taken using camera.

Fishes brought to laboratory were preserved in 10% formalin solution in separate specimen jar according to the size of species. Small fishes were directly placed in the 10% formalin solution, while large fishes were given an incision in their abdomen and preserved. The Meristic and morphometric characters were measured and fishes were identified up to the species with the help of standard keys and books. [2, 4, & 8]

Results and Discussion

In the present Ichthyofaunal study, 26 species of 15 different genera belonging to 07 families and 05 orders recorded from the Godavari river at Mudgal and number of catches carried out during July 2009- March 2010. The members of Order Cypriniformes were dominated by 15 species followed by Siluriformes with 05 species, Channiformes 04 Species, and Mastacembaliformes 01, Perciformes 1 species. Cypriniformes with 15 species was domionant group in the assemblage composition in which *Catla-caltla, Lebeo rohita, Cyprinus carpio* and *Rasbora daniconius* were found most abundant.

Fishing operations were carried out for nine months with low in monsoon compared to high in post monsoon. It is suggested that the fishery authorities should investigate and practice the proper exploitation and management of this spot fishery resources according to ecological principles. They should recommend and determine the stocking standards and

reasonable introduction according to potential of fish productivity and character of this water body. Scientific fishing standard and fishing quotas are to be worked out; this will play an important role in protection of the reservoir biodiversity. Thus it is duty of every individual to play an important role to conserve biodiversity at this place and handover the resources in healthy conditions to the future generations. The work will provide future strategies for development and fish fauna conservation at Godavari river at Mudgal.

It was concluded that further studies may be done to develop techniques for fish culturing. The use of illegal methods to catch fish should be banned in this area to prevent further depletion of freshwater fish resources. The fisherman's should make aware about fishing, scientific training and facilities should be made available to the fish farmers fishing of the spawn, larval fish and immature should be avoided and subsidies loan facility may provided on large scales which may help in high yield of fish production in the Godavari river at Mudgal.

Table- Ichthyofaunal Diversity of Godavari River at Mudgal during July-2009 to March 2010

Class : Pisces
Sub-class - Teleosti
Order I - Cypriniformes
Sub-order - Cyprinoidei
Family I - Cyprinidae
1) *Chela phulo* (Ham.)
2) *Chela sladoni* (Day.)
3) *Cyprinus corpio.* (Linn.)
4) *Catla catla* (Ham.)
5) *Cirrhinus mrigala* (Ham.)
6) *Labeo rohita* (Ham.)
7) *Puntius amphibias* (Valeneiennes)
8) Puntius chola (Ham.)
9) *Puntius sarana- sarana* (Ham.)
10) *Puntius ticto- ticto* (Ham.)
11) *Puntius sophere.* (Ham.)
12) *Thynnichthys sandkhol* (Skyes)
13) *Rasbora daniconius* (Ham.)
Family II- Cobitidae
14) *Nemacheilus botia* (Ham.)
15) Nemacheilus beavani (Ham.)
Order II - Siluriformes
Family III - Bagridae
16) *Mystus cavasius* (Ham.)
17) *Mystus seenghala* (Sykes)
18) *Mystus vittatus* (Bloch.)
Family IV - Siluridae
19) *Wallago attu* (Bloch and Schneider)
20) *Ompak bimaculatus* (Bloch)
Order III - Channiformes
FamilyV - Channidae
21) *Channa gaucha* (Ham.)
22) *Channa marulius* (Ham.)
23) *Channa striatus* (Bloch)
24) *Channa punctatus* (Bloch)
OrderVI - Mastacembaliformes
FamilyVI - Mastacembelidae
25) *Mastacembelus armatus* (Lacepede)
Order V - Preciformes
Family VII - Gobiidae
26) *Glassogobius giuris* (Ham.)

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