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Studies on Ichthyofaunal diversity of Pranhita River, Sironcha, Dist: Gadchiroli, Maharashtra, India

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ABSTRACT

Ichthyofaunal studies were undertaken June 2011 to July 2013 Present paper deals with the variety of freshwater fishes in Pranhita River at Sironcha Dist, Gadchiroli. The result of the present investigation reveal that occurrence of 37 species belonging to 21 different genera, in 11 families 08 order were recorded. The members of order cypriniformes were dominated by 18 species followed by siluriformes with 08 species, perciformes 03, mastacembeliformes 03, channiformes 02, Atheriniformes 01, Anguilliformes 01.

Keywords: Ichthyofaunal, Fish Diversity, Pranhita River, Sironcha.

1. Introduction

Fish constitutes half of the total number of vertebrates in the world. About 21,730 species of fishes have been recorded in the world of which about 11.7% are found in Indian water (murugan, A.S.2012). In India out of 2500 species of fishes, 930 live in freshwater. Fresh water fish are used as bio indicators for the assessment of water quality, river network connectivity or flow regime (Chovane et.al 2003) fish being rich source of proteins and have high nutritive and economic value.

Many workers are studied Taxonomy, biodiversity and distribution of fishes found in fresh water freshwater bodies of various part of India. David (1963) recorded fish fauna of Godavari and Krishna river, Yadav (2004 & 2006) reported 33 Species from Pench National Park, Dist. Nagpur and 84 species from Tadoba National Park Dist, Chandrapur S.V. Rankhamb (2009 & 2010) reported 26 species from Godavari river at Mudgal Dist, Parbhani, S.G. Gedekar and R.V. Tijare (2010 & 2012) 49 species from Wainganga river, Markandadeo region Dist Gadchiroli (MS)

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 Pranhita River Sironcha.

Pranhita is the river which flows on the border of Gadchiroli district in Maharashtra and Adilabad district in Andhra Pradesh. Pranhita is name given to the combined flow of the rivers wardha and wainganga.

The Wardha River joins wainganga near kouthala and forms the Pranhita. The river then flows up to Sironcha before it empties into the Godavari River near Sironcha in Maharashtra. Taken along with the basins of wardha and Penganga, the river drains an area of 109, 078 km², emptying into the Godavari and providing almost 40% of Godavari total flow. The river course is mainly through the dense forest which are rich in teak. (timber), and medicinal plants.

The river is used for water transport between Sironcha (MS) and Kaleshwaram (AP).

| | | | | |
|------------|---|--------------------------|---|-----------|
| Tributains | - | left | - | Waingangā |
| | | Right | - | wardha |
| Source | - | elevation | - | 146 m |
| Length | - | 113 km | | |
| Basin | - | 109, 078 km ² | | |

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Fishes were collected from Pranhita River, Sironcha using different types of net namely gill nets, cast net, drag net, bhor jal. Gill netting was installed over night and cast netting during day time (Fish collection methods of Arun, 1998, Mheen, 1995, Arunachalam, 2000). After sampling the photographs of fishes were taken and fishes brought to laboratory were preserved 10% formalin solution in separate specimen jar according to size of the species. Small fishes were directly placed in the 10% formalin solution while large fishes were given an incision in their abdomen and preserved.

Species identification and confirmation were carry out with the help of standard keys and books. (Larger, 1956, sterba 1967, Talwar & jhingran 1991, Jayaram K.C.1991, Gupta, 2006).

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2. Result and Discussion

During the study of 37 species of primary freshwater fishes belonging to 08 orders 11 families and 21 genera recorded from the pranhita river at sironcha and number of catches carried out during June 2011 to July – 2013. The member of order cypriniformes were dominated by 18 species followed by siluriformes with 08 species, perciformes 03, mastacembaliformes 03, channiformes 02 species, Atheriniformes 01 species, Anguilliformes 01 species.

Cypriniformes with 18 species was dominant group in the assemblage composition in which, Labeo rohita, catla-catla, Rasbora daniconius, cirrhinus mrigal, puntius sophore, P. Chola, were found most abundant.

Fishing operation were carried out for 25 months. 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. 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 plays and handover the resources in the healthy condition to the future generation. The work will be provide future strategies for development and fish fauna conservation at Pranhita River at sironcha.

It was concluded that further studies may be done to develop technique for fish culturing. The use of illegal method to catch fish should be banned in this area to prevent for the depletion of fresh water fish recourses. The fisherman's should make aware about fishing, scientific training and facilities should be made available to the fish formers fishing of the spawn, larval fish and immature should be avoided an subsidies loan facility may provide on large scale which may help in high yield of fish production in the Pranhita river at sironcha (Tribal, Adivasi, Hilly area, Dense forest).

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| Sr. No | Order | Family | Scientific Name |
|--------|---------------|------------|---------------------------------------|
| 1) | Cypriniformes | Cyprinidae | 1) Labeo rohita (Hamilton-Buch) |
| | | | 2) Catla catla (Hamilton-Buch) |
| | | | 3) Cirrhinus mrigala (Hamilton-Buch) |
| | | | 4) Puntius sophore (Hamilton-Buch) |
| | | | 5) Puntius ticto (Hamilton-Buch) |
| | | | 6) Puntius chola (Hamilton) |
| | | | 7) Puntius amphibious (Valenciennes) |
| | | | 8) Puntius sarana sarana |
| | | | 9) Chela phulo (Hamilton) |
| | | | 10) Rasbora daniconius (Bleekar) |
| | | | 11) Labeo boggut (sykes) |
| | | | 12) Danio devario (Hamilton) |
| | | | 13) Osteobrama catio catio (Hamilton) |
| | | | 14) Pseudo oxygaster sp. |

| | | | |
|----|-------------------|-----------------|---|
| | | | 15) <i>Lepidocephalus guntea</i> (Hamilton) |
| | | | 16) <i>Chela sladoni</i> (Day.) |
| | | | 17) <i>Noemochelius botia</i> (Hamilton) |
| | | | 18) <i>Thynnichthys sandkhol</i> (Skyes) |
| 2) | Siluriformes | Bagridae | 19) <i>Mystus cavasius</i> (Ham) |
| | | | 20) <i>Mystus Seenghala</i> (Skyes) |
| | | | 21) <i>Mystus vittatus</i> (Bloch) |
| | | | 22) <i>Rita chrysa</i> (Day) |
| | | | 23) <i>Rita Rita</i> (Ham.) |
| | | Siluridae | 24) <i>Wallago attu</i> (blecker) |
| | | | 25) <i>Ompak Bimaclatuss</i> (bloch) |
| | | | 26) <i>Ompok pabda</i> (Ham) |
| 3) | Perciformes | Gobiidae | 27) <i>Glossogobius giuris</i> (Ham-Buch) |
| | | Channidae | 28) <i>Channa orientalis</i> |
| | | Ambassidae | 29) <i>Ambassis ranga</i> (Ham) |
| 4) | | Mastacembelidae | 30) <i>Mastacembelus armatus</i> |
| | | | 31) <i>Macrornathus puncalus</i> (Ham.) |
| | | | 32) <i>Macrorognathus aculeatus</i> |
| 5) | | Channidae | 33) <i>Channa gaucha</i> (Ham.) |
| | | | 34) <i>Channa marulius</i> (Ham.) |
| 6) | Antheriniiformes | Belonidae | 35) <i>Xenentodon cacila</i> (Ham.-Buch) |
| 7) | Anguilliformes | Anguillidae | 36) <i>Anguilia bengalensis bengalensis</i> |
| 8) | Osteoglossiformes | Notopteridae | 37) <i>Notopterus notopterus</i> (pallas) |

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