K.R.R. GOVT. ARTS & SCIENCE COLLEGE, KODAD, SURYAPET DT.

# STUDENT STUDY PROJECT

# IDENTIFICATION OF LOCAL FISH FAUNA

(MORPHOMETRIC ANALYSIS)

DEPARTMENT OF ZOOLOGY

## **DECLARATION**

We declare that the Student Project Work entitled "IDENTIFICATION OF LOCAL FISH FAUNA-KODAD" is done by us under the guidance of Sri M. SRINIVAS SARIN, Asst. Prof. of Zoology, K.R.R Govt Arts Science College, Kodad, Suryapet district.

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### CERTIFICATE

This is to certify that the students project work entitled "IDENTIFICATION OF LOCAL FISH FAUNA OF KODAD" is done by the group of students of B.Sc II year (BZC), K.R.R. Govt Arts & Science College, Kodad is a bonafied record and is submitted to the Department of Zoology, K.R.R. Govt Arts & Science College, Kodad under the guidance and supervision of Sri M. SRINIVAS SARIN, Asst. Prof. Of Zoology, K.R.R. Govt Arts & Science college, Kodad.

DEPARTMENT OF ZOOLOGY

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# IDENTIFICATION OF LOCAL FISH FAUNA - KODAD

#### **Introduction:**

Fishes are cold blooded vertebrates that can breathe by means of gills and live in water. They comprise about 30,000 to 40,000 species differing widely from each other in shape, size, habits & habitats. Some of them are very small not more than an inch a length. While a few attain a length upto 18.5 m. They live in all the seas, Rivers, Lakes, Canals, Dams and in almost every place where there is water. Fishes usually have a stream lined body but some are elongated snake like & few are dorso-ventrally compressed.

They have paired, Un-paired fins supported by spiny fin rays. Dorsal, caudal, Anal fins are unpaired while the Pectoral, Pelvic are Ventral are paired. Number of species possesses barbels which are excellent organs of touch. Fishes are economically very important group of animals besides being used as food/ fish liver is an important source of oil containing Vit. A & D. Fish oil is extensively used in soap industry & Tanning. Fishes also yield Fish meal, Fish Manure, Isinglass as products of Commerce.

# **Importance of Fishes:**

Fish flesh is mainly composed of proteins, fats, Minerals & Vitamins with high percentage of water. Fish is a very valuable source of protein which is easily digestible due to low percentage of connective tissue. All the essential amino acids are present in fish flesh in sufficient quantities. It is also a rich source of I, P & vitamins B, A & D.

Fish therefore is a very valuable food. When alive in water, fish carries large number of bacteria on its body, gills & in the gut. Soon after the death of the fish these bacteria start reproducing or attack various organs so that the preservations of the fish have to be done without loss of time.

# **SUMMARY**

The Kodad is a centre for fisherman for marketing and exporting the fishes. It is near to Krishna River (25 kms) & is surrounded by number of tanks & streams. The main fish producing resources are 1. The Krishna River, 2. Paleru Reservoir, 3. Paleru Vagu, 4. Bethavolu Reservoir, 5. Kodad tank etc. Apart from the above there are number of small tanks also present which, are good resources to crop the fishes. (Monoculture)

In the fish market we observed that the Carp fishes are 60%, Murrels are 30%, Cat fishes are 5% and others fishes (Eels & Perch) 5%.

From the nutritive values of the fishes collected we observed that,

The Ophiocephalus (Murrels) fishes as high protein value i.e 19.5 grams / 100 gms of flesh with 0.5 grams of fats & other minerals & it is followed by the Carp fishes which has 16.6 gms of Proteins & 1.4 gms of Fats. The proteins are highly available in all the fishes ranging from 15.2 gms to 19.5 gms / 100gms of flesh.

The cholesterol content is very less i.e,. 0.4 gms to 1.4 gms / 100 gms of flesh. The highest Calcium possessing fishes are Major Carps & Murrels i.e 610 mg to 650mg / 100 gms of flesh. The Phosphorus content is also high in Ophiocephalus i.e 530 mg. 'Fe' can also be present in all the fishes from 19mg to 130mg. The Fish flesh has high caloric value 97 K.Cal. to 200 K.Cal.

On the basis of the characters exhibited by the fishes (Morphometric analysis data & Taxonomic data), we can conclude that the major carp fishes (Labeo) are inhabitants of tanks & reservoirs. They are culturable fishes. The Genera of Ophiocephalus & Mystus are usually occurred in the mud waters, rice fields, ditches etc. The perch fishes are small in size and not culturable. The shape of the body of the Murrels & Carps is spindle shaped, so that they can attain large size.

In this small project work, we have the chance to interact with the local fish marketers & fisher man. We have examined the fishes, identified and classified them basing on the morphometric analysis, data & the literature available in the library.