

Zootherapeutic uses of hill stream fishes : An important element of the traditional knowledge of the tribals in Aravalli region of South Rajasthan, India

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ABSTRACT

During present study, zootherapeutic uses of hill stream fishes by tribal inhabitants were discovered in Aravalli region of South Rajasthan. This study was based on field surveys carried out in villages and the information about medicinal uses of the fishes were collected on the basis of interview with tribal healers and experienced old persons belonging to different tribal communities. Tribals use various parts of hill stream fishes to cure many ailments, viz., Tuberculosis, joint pains, respiratory disorders, pneumonia, asthma, sexual impotency, paralysis, skin diseases, psoriasis, high B. P. and kidney ailments, etc.

Figure : 01

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Table : 01

KEY WORDS : Aravalli region, Ethnozoology, Hill stream fishes

Introduction

Ethnozoology deals with the study of interrelationship between primitive human societies and the animal resources around them. As far as fishes are concerned, many species have been proved to be vital source of tribal medicine.

Although ethnozoological studies related to fishes are scanty. Yet some zootherapeutic practices among fishing communities were reported in Brazil¹. Important work on folk management were done in the world's fisheries^{8,11}. Notable work on ethnozoological practices among tribal inhabitants was done in Khowai district of Tripura, North –East India². Ethnomedicinal Plants were studied in the Halam Tribe of North Tripura, Northeast India³.

Indigenous ethnomedicines and victuals were observed in Malayans, an indigenous population of Peechi-Vazhani Wildlife Sanctuary, Western Ghats, India⁷. Ethno-botanical importance of Parashi (*Cleistanthus collinus*) was studied in South West Bengal of India⁹. The ethnozoology of fishes of Rajasthan were studied by few workers^{4-6,10}.

Materials and Methods

The ethnozoological field survey was conducted in tribal localities of Jhadol and Phalasia villages of Udaipur district, Rajasthan. For collecting information

regarding fishes used for medicinal purpose by tribals, a number of field trips were made during 2018-19. The information about medicinal uses of the fishes were collected on the basis of interview with tribal healers and experienced old persons belonging to different tribal communities.

Results and Discussion

During present study, therapeutic importance of hill stream fishes was discovered (Table-1). Tribals use various parts of hill stream fishes to cure many ailments, viz., Tuberculosis, joint pains, respiratory disorders, pneumonia, asthma, sexual impotency, paralysis, skin diseases, psoriasis, high B. P. and kidney ailments, etc.

During conversation with tribals, it was concluded that consumption of certain hill stream fishes like *Noemacheilus botia*, *Noemacheilus denisonii*, *Garra gotyla* etc. helps them to tolerate hard winters without wearing warm cloths.

Channa punctatus is especially used in curing respiratory diseases, whereas, oil of *Noemacheilus botia* locally called “telan” is used in paralysis and skin diseases especially eczema. *Channa marulius* (Sanwal) otolith is used for curing kidney ailments. The pancreas of *Noemacheilus botia* and *Garra gotyla* are used to cure asthma and other respiratory ailments by the local inhabitants.

TABLE-1 : Therapeutic uses of hill stream fishes by Tribals

S.N.	Fish species	Local name	Family	Therapeutic uses
1.	<i>Garra gotyla</i>	Patthar chata	Cyprinidae	Asthma & other Respiratory diseases
2.	<i>Danio rerio</i>	Danio	Cyprinidae	Respiratory & Skin diseases
3.	<i>Noemacheilus botia</i>	Bamna	Balitoridae	Paralysis, Respiratory disorders & Skin diseases especially Eczema
4.	<i>Noemacheilus denisonii</i>	Bamna	Balitoridae	Paralysis, Respiratory disorders & Skin diseases
5.	<i>Channa punctatus</i>	Girhi	Channidae	Respiratory disorders
6.	<i>Channa marulius</i>	Sanwal	Channidae	Kidney ailments (Otoliths)



Fig. 1 : Fishing by Tribals

Conclusion

These tribals know ethno-pharmaceutical attributes of many fishes. Such fishes should be subjected to pharmacological studies. Biochemical screening of all the hill stream fishes should be done so

that compounds with promising biological activities could be discovered and scientifically validated drugs could be produced. This knowledge of tribals must be covered under intellectual property rights.

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