

Ethnozoological Practices on Frogs of Bodo Tribe from Kokrajhar District, Assam, India

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ABSTRACT

North east India is having rich diversity of traditional communities. Such a rich diversity of traditional community and biological resources in the region has endowed with advantage for evolving innumerable ethnozoological knowledge. Bodo tribe is one of the oldest and major tribe of Kokrajhar district, Assam, India and they use three species of frogs as delicious food and one species as medicine for skin diseases. *Hoplobatrachus tigerinus*, *Euphlyctis cyanophlyctis* and *Euphlyctis hexadactylus* are used by local people as delicious food. Skin of *Duttaphrynus melanostictus* is used as medicine in skin diseases.

Keywords- Kokrajhar district, Bodo tribe, Frog ethnomedicine.

INTRODUCTION

North east India is not only biodiversity hot spots but is having rich diversity of traditional communities. Such a rich diversity of traditional community and biological resources in the region has endowed with advantage for evolving innumerable ethno-zoological knowledge. The ethno-zoological knowledge of the communities ranges from edible, medicine and therapeutic use. In north east India ethno-zoological knowledge and practises by using animal and their products were studied by earlier workers. The traditional Ethno- method of curing diseases using animals and animal products among the Chakesang tribe was reported from Nagaland¹. Indigenous knowledge of zootherapeutic use of vertebrate origin by

the Ao tribe was also reported from Nagaland². In Assam, the traditional knowledge related to the use of flora and fauna as indicator in predicting annual seasons among Karbi tribe³. The ethno-zoological findings of Amphibian fauna was recorded from Arunachal Pradesh of North East India⁴. Ethnozoological practices by using amphibians and their body parts are still poorly known to the world.

Bodo tribe is one of the major and oldest tribe of Assam, India. They have been using certain animals and their product as their diet and as medicine. Bodo people consume certain species of insects which constitute a significance component of diet among them⁵. Use of certain frogs as diet is a traditional practise among the Bodos. In this study an attempt has been made to

provide ethno- zoological information related to frogs of the Bobo tribe.

METHODOLOGY

Kokrajhar district (89° 46'E to 90°38' E and 29°19'N to 26°54'N) is located in the western part of Assam, North East India in the Northern bank of Brahmaputra river and has an area of 3,169.22 square km. The district has the major population of Bodo tribe. Ethno zoological information related to amphibian was collected by interviewing local people and by distributing questionnaires to certain villagers of the Kokrajhar district. Name of villages surveyed were Khapurgaon, Ramfalbil, Khalaigaon, Aflagaon, Batabari, Dotma, Sumliguri, Bongsigaon, Mailipara, Titaguri, Samgami, Bonorgaon, Taktara, Khazigaon and Parbatjora. The total number of questionnaires distributed was hundred.

Sample of questionnaire

Name: Ananda Narzary,

Age: 62 years

Address: Village: Khapurgaon, P.O.: Ramfalbil, PIN: 783346, District: Kokrajhar
Local name of species/frogs used: Ambu bongla.

Parts of the body used: Flesh of thigh

Mode of preparation: Fried in mustard oil.

Mode of use

Traditional food. Medicine for stomach trouble and high blood pressure.

Species recorded in local name were later identified and scientific names follow the website⁶.

RESULT AND DISCUSSION

Analysis of questionnaires revealed that certain species of frogs were being used as delicious food and as medicine for skin disease (Table.1). *Hoplobatrachus tigerinus*, *Euphlyctis cyanophlyctis* and *Euphlyctis hexadactylus* are used by local people as

delicious food. Skin of *Duttaphrynus melanostictus* is used as medicine in certain skin diseases.

Duttaphrynus melanostictus is a ubiquitous species of India. As we recorded, the skin of this frog is used in treatment of skin diseases. Skin of live frog is cut and then it is washed in water. This piece of skin is placed in infected area of finger (in paronychia) or any part of organs (in case of ringworm) and wrapped tightly for 2-3 days and is reported to be fully cured.

Flesh of *Hoplobatrachus tigerinus* is very popular as delicious food among Bodo tribes and some people believe that it contains some alkaline substances which is good for their health (stomach trouble and high blood pressure etc.). The other two- *Euphlyctis cyanophlyctis* and *Euphlyctis hexadactylus* are also popular in the locality as delicious food. We found that flesh of *H. tigerinus* fetches very high price in local market (Rs. 200 per kg).

The skin of *Duttaphrynus melanostictus* contains antimicrobial and anticancer peptides⁷. From such molecular study of previous workers and our record on the ethnozoological practises of Bodo tribe by using skin of *D. melanostictus* for treatment of human skin diseases, give us clear picture that frogs' skin is a source of medicine for various diseases. The flesh of *H. tigerinus* was also believed by Bodo people as alkaline medicine for stomach trouble and high blood pressure. Further survey with larger groups may yield more valuable information related to use of amphibian in ethnomedicine.

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Table 1. Frogs used as medicine and food by bodo tribe of kokrajhar district, Assam (LC- least concern)

Local name of the species used for ethnozoological practices	Scientific Name of species (www.amphibia.org, 2014)	IUCN Status, 2014	Parts of body used	Mode of preparation	Mode of used/ Name of disease
Ambu sitro	<i>Duttaphrynus melanostictus</i>	LC	Skin	Skin of live animal is cut and washed in water. Then it is placed in infected area and wrapped tightly for 2-3 days.	Used as medicine for 1. Ringworm, a kind of skin disease. 2. Paronychia, a kind of finger infection.
Ambu tered	<i>Euphlyctis cyanophlyctis</i>	LC	Flesh of thigh	Fried in mustard oil.	Used as delicious food.
Ambu tered	<i>Euphlyctis hexadactylus</i>	LC	Flesh of thigh	Fried in mustard oil.	Used as delicious food.
Ambu bongla	<i>Hoplobatrachus tigerinus</i>	LC	Flesh of thigh	Fried in mustard oil or cooked with some locally available vegetables.	Used as 1. Delicious food. 2. People belief medicine for stomach trouble and high blood pressure