

Phyto-remedies of jaundice, A traditional approach on Majuli, Special reference to Satra culture people, Assam

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ABSTRACT

An ethno botanical survey was conducted from April 2010 to April 2012 in the Greatest river island Majuli. The survey aimed at identifying the plants used in the treatment of Jaundice in the Satra culture people that related to their livelihood as well as socio-economic and spiritual aspect. A total of 17 medicinal plants were recorded from 27 households comprising 17 genera and 14 families..

Key Words: Phyto-remedy, Jaundice, Satra culture people, Majuli, Assam

INTRODUCTION

Man has been using plants in various ways since the beginning of human life as his food, shelter and cloth. In search of food and the ways to cope up successfully with human suffering, primitive man began to distinguish those plants suitable for nutritional purpose from others with definitive pharmacological action. This relationship between plants and man has kept on growing, and many plants have now come to be used as drugs. Herbal medicine is currently experiencing a revival in the world, along with other complementary therapies such as traditional Chinese Medicines, Osteopathy and Homeopathy (Shinwari and Gilani, 2003).

People on all continents have used hundreds to thousands of indigenous plants for treatment of ailments since prehistoric times. Indigenous healers often claim to have learned by observing that sick animals change their food preferences to nibble at bitter herbs they would normally reject (Huffman, 2003).

Although different workers as Jain (1963, 1964, 1967), Borthakur (1976a, 1976b, 1981a, 1981b, 1994); Boissya & Mojumdar (1980) etc. have documented medicinal plants from various regions, no systematic investigation of medicinal plants against jaundice in Majuli based on satra culture has been made till date to the best of our knowledge. In that sense, the present study on antiviral application of medicinal plants for jaundice is one of its first kinds.

MATERIALS AND METHODS

a. The study area

Majuli is a large river island in the Brahmaputra River in the Indian state of Assam. Majuli is the largest river island in the world. It is in the Jorhat district covering an area in between 26° 40' N - 27° 10' N Latitude and 93° 37' E -

94°50'E Longitude. Majuli had a total area of 1,250 square kilometres (483 sq mi), but having lost significantly to erosion it has an area of only 421.65 square kilometres (163 sq mi) in 2001(Figure 1).

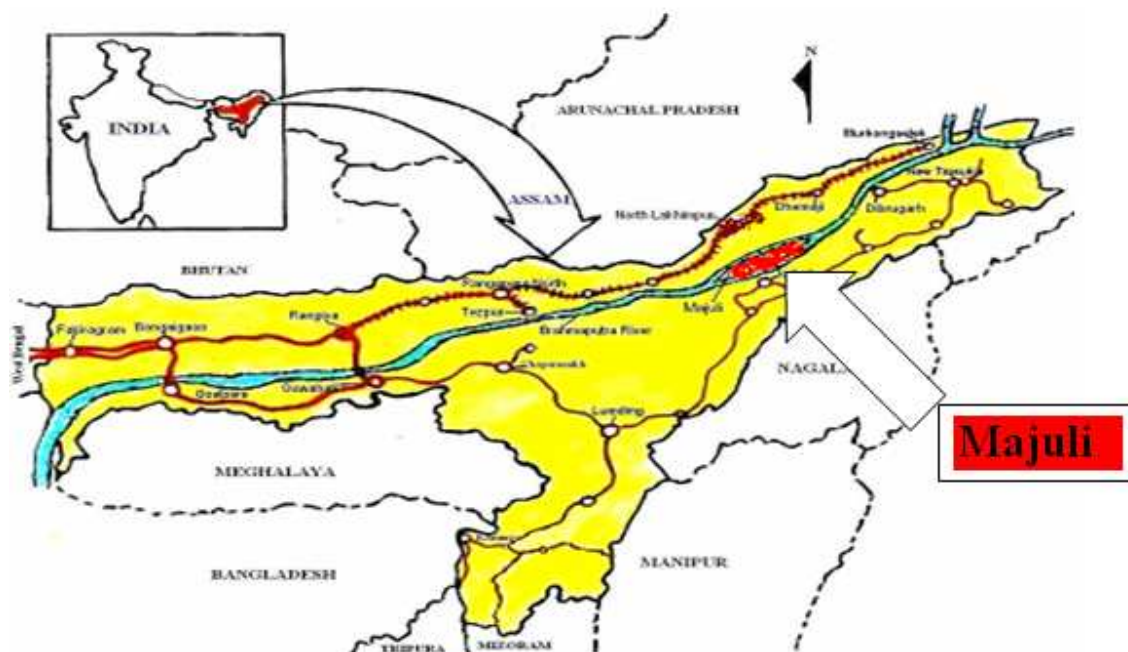


Figure 1, The Majuli island

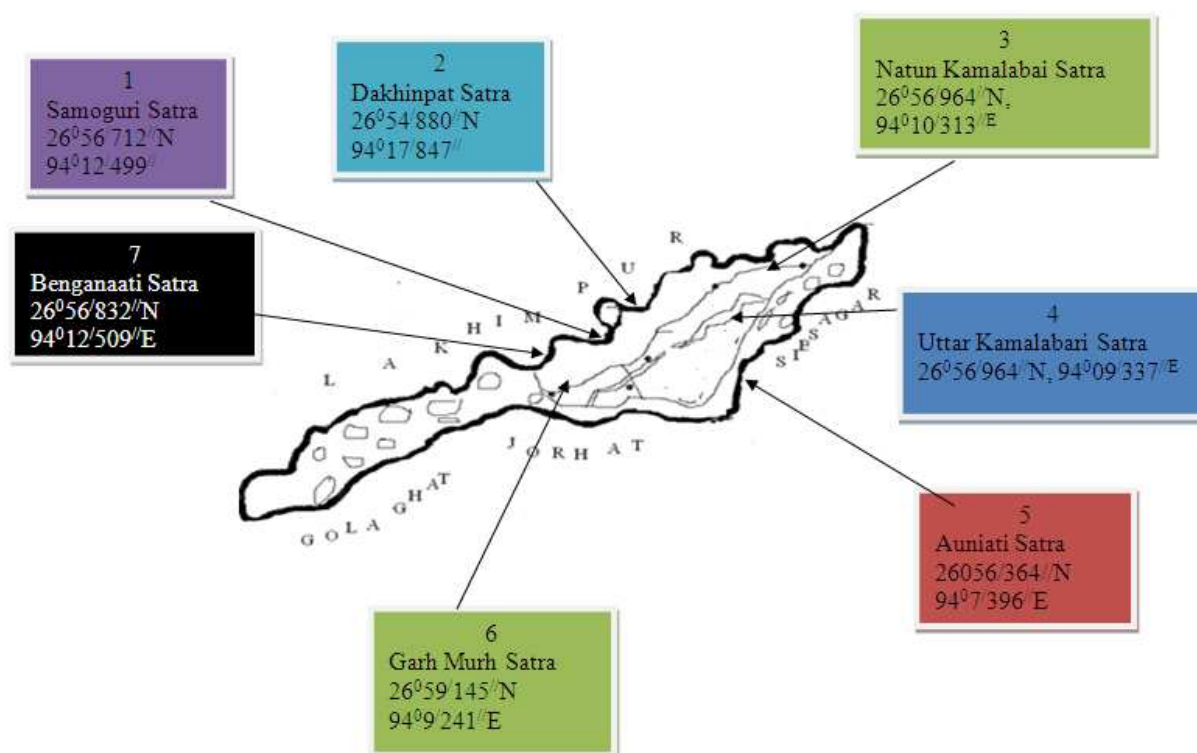


Figure 2. The numerical 1, 2, 3, 4, 5, 6, 7 are the areas of field work in Majuli.

The island is formed by the Brahmaputra river in the south and the Kherkutia Xuti, an anabranch of the Brahmaputra, joined by the Subansiri River in the north. Majuli island is accessible by ferries from the City of Jorhat. Majoli is also the abode of the Assamese neo-Vaisnavite culture.

It is absolutely isolated from the rest of the world and is one of the country's bio-diversity and cultural hot spots. It is perhaps the largest populated river island, with a population of 2.15 lakhs.

b. Methodology: The ethnobotanical survey were carried out since 2010 following standard method. Local informers were used to locate and collect information regarding the medicinal used on Jaundice along with its preparation. Personal cross interviews with head of the Satras also done during the survey. Collected plants were identified with the help of flora and available references and herbariums are deposited at Department of Botany, North Lakhimpur College for future references.

RESULTS AND DISCUSSION

Phytoremedies used by the Satra Culture people of Majuli:

As inhabitants of an isolated world, the people in Majuli are still dependant on herbal medicine for the treatment of diseases like jaundice, fever etc. In the present investigation, 17 medicinal plant species, belonging to 14 Families of plants, used to treat jaundice were attested.

The data obtained from the present investigation have been compiled and provisionally classified into seven categories-leaves, tender shoot, stem, the whole plant, a mix of bark, root and fruit, a mix of bark, root and cloves, and a mix of fruit and seeds- depending on the parts of the plants used. The different parts of the plants used to prepare the medicines for the treatment of jaundice were leaves, stems, fruit, bark, root, shoots and all the parts together. Out of these, the most frequently and commonly used part is the leaf which is followed by tender shoots, stem, the whole plant, a mix of bark, root and fruit, a mix of bark, root, and cloves, and a mix of fruit and seeds. For each of the categories of Phyto-medicine, detailed accounts of the botanical names of the plant species, family, local name, parts used, preparation and application are provided.

It is noteworthy that all the important ingredients of these medicines are easily found in the villages where this investigation was made with a little bit of variation in the level of availability as in the case of 'tubuki lota' and 'jom lakhuti' where it is low in Majuli, thanks to the large scale erosion, and as in the case 'athia kol' where it is high being highly suited to environment of Majuli. It is attested that the most dominant family of plant used in the preparation these medicines is Fabaceae with three species used in different extraction.

Table I Medicine prepared from Leaves

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Abutilon indicum</i> (L)Sw	"Jopa"	Malvaceae	leaves	The leaves are dried, powdered and boiled in water. The filtrate is used for jaundice	Approximately 50 ml /day until cured
2	<i>Cajanus cajan</i> Linn	"Rahar Dali"	Fabaceae	leaves	Leaf juice	20 ml daily until cured
3	<i>Bryophyllum calycinum</i> Salisb	"Dupor tenga"	Crassulaceae	leaves	Leaf juice	100 ml daily two times until cured
4	<i>Drymeria cordata</i> Willd	"lajabori"	Caryophyllaceae	leaves	Leaf juice mixed with sugar	50 ml daily one time until cured

Table-II Medicine prepared from tender shoots

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Mirabilis jalapa</i> Linn	"godhuli gopal"	Nyctaginaceae	Tender shoot	Shoot extraction mixed with a little amount of cow milk	250 ml daily at empty stomach until cured

Table-III Medicine prepared from stem

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Stephania elegans</i> , H.K	Tubuki lota	Menispermaceae	Stem	Grind and make a pest, mixed with water and sugar	200 ml daily until cure.

Table-IV Medicine made from the whole plant

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Phyllanthus neuri</i> Linn	Bon amlakhi	Euphorbiaceae	Whole Plant	Extraction of the plants mixed with 100ml of cow milk	100 ml daily 2 times at early morning and evening at empty stomach. alternately three days

Table-V Medicine prepared from a mix of root, bark and fruit.

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Bombax ceiba</i> Linn	“simolu”	Bombacaceae	Root	Grind all the items and mixed it, then mixed a little amount of mishiri, added few water and drink it	Approx. 500 ml/ day at empty stomach until cure
2	<i>Eugenia jambulena</i> Lam.	Bar jamu,	Myrtaceae	Bark		
3	<i>Dracaena angustifolia</i> . Roxb	Jam-lakhuti	Liliaceae	Root		
4	<i>Anonas comosus</i> (L) Merr.	Anarash	Bromaliaceae	Fruit		

Table-VI Medicine prepared with a mix of bark, root, and cloves

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Morus indica</i> Linn	Nuni	Moraceae	Bark 20 gm	Grind and Extraction of all mixer mixed with 250ml cow milk	Daily in early morning at empty stomach for 3 days
2	<i>Mucon bracteata</i>	Mekurimah	Fabaceae	Root 5 gms.		
3	<i>Piper nigrum</i>	Jaluk	Piperaceae	Cloves ½ Nos		

Table-VII Medicine prepared with a mix of fruit and seed

Sl. No	Scientific name of the plant	Local name	Family	Parts used	Process of use	Amount of the drug to be taken
1	<i>Musa paradisiaca</i> .	Athia kal	Musaceae	Fruit 1No.s	Cut the ripening fruit of athia kal and dropped in 500ml water with seeds of dhan and bootmah for overnight	Juice mixed with sugar and filtrate, daily at empty Stomach until cure
2	<i>Oryza sativa</i>	Dhan	Poaceae	Seed few No.s		
3	<i>Cicer arietinum</i> . Linn	Bootmah	Fabaceae	Seed few No.s		

Table 8: Statistical analysis of the different plant parts used with relation to the other parts for extraction

Plant parts	No.s Of Species	No.s of Family	Family Related to other plant Parts
Leaves	4	4	1
Tender shoot	1	1	
Stem	1	1	
Whole Plant	1	1	
Mix Bark, Root and Fruit	4	4	
Mix Bark root and Cloves	3	3	1
Fruit and Seed	3	3	1

Figure-I

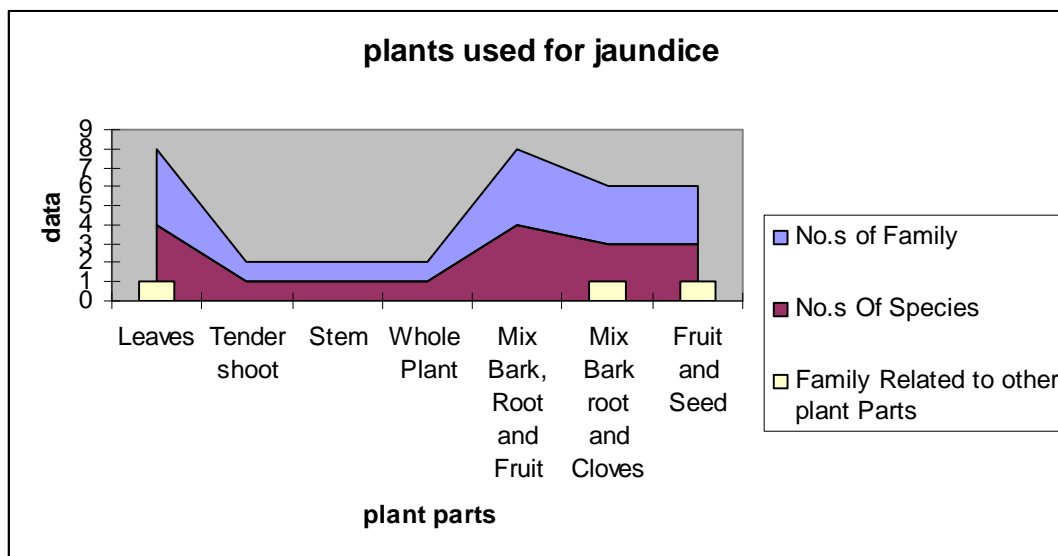


Figure shows the graphical representation of data

CONCLUSION

The use of these medicines to treat various illnesses is very common among the Satra people in Majuli for various reasons like their poor economic conditions, the high cost of and difficulty in accessing the allopathic medicines. The majority of the attested species used for the preparation of these medicines are wild. That is the most telling reason why these medicines ask for an urgent need to be conserved so that such vital resources are used in the primary health care system before they are lost forever. At the moment, conservation of this traditional knowledge is being handicapped both by factors related to modernization leading to deforestation in the region and lack of interest in traditional healers. But the loss of traditional knowledge within cultures undergoing rapid change is just as irreversible as the loss of species (Joshi and Joshi, 2005). Hence, efforts should be made to document the various uses of plants before some of these plants are completely extinct from the area, or before the knowledge is lost and the inhabitants shift over to modern remedies. It is high time that we have proceeded to save the cultural heritage of the natives in Majuli by confirming the therapeutic value of the plants by scientific means. To conclude, screening for the active substances to test their activities against jaundice and the conditions that cause the organisms to form could be the first step towards preservation.

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