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Traditional use of plants by the *Ahoms* in human health management in upper Assam, India

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Abstract

The present survey was carried out to document the ethno medicinal practices prevalent among the *Ahom* community of upper Assam, India. Survey was conducted in fifteen villages of three districts and data collected through observation and personal interaction. A total of 68 plant species were recorded. The recorded species were found to be commonly available and used for the treatment of various problems like cough, fever, headache, body pain, animal bite, heart problem, etc. Different parts of the plants like seed, leaf, bark, root, etc were found to be used in the form of medicine. Most of the medicines were prepared in mixture with other plants or non-plant products. The present investigation revealed the rich ethno medicinal knowledge of the *Ahom* community of upper Assam. The study focusses on the ethnomedicinal practices of the people, potential of ethnomedicinal research and the need for conservation and documentation of the traditional knowledge for the benefit of mankind.

Keywords: *Ahom*, upper Assam, plant, ethno medicine, diseases

Introduction

The state of Assam located in the north-eastern part of India at 24°8' N - 28°2' N latitudes and 89°42' E - 96° E longitudes lies at the southern region of the eastern Himalayas. Assam is well known for its rich medicinal plant diversity. Different communities of the state are known to use various identified and unidentified plant species for the treatment of a number of diseases. The ethnic groups of Assam living in remote forest areas still depend upon indigenous knowledge system of medicine (Dutta and Dutta, 2005) [1]. Many wild plants are also known to be consumed as food and also used as medicine from time immemorial (Basumatary *et al.*, 2014) [2]. The knowledge of medicinal value of plants has come orally through generations. Hughes (1968) [3] refers ethno medicine as “those beliefs and practices relating to disease which are the products of indigenous cultural development and are not explicitly derived from the conceptual framework of modern medicine”. A number of ethnomedicinal studies among different ethnic groups have been studied by different workers from different parts of northeast India such as Sharma Thakur (1999) [4], Das and Tag (2006) [5], Sajem and Gosai (2006) [6], Buragohain and Konwar (2007) [7], Das *et al.* (2008) [8], Kalita and Bora (2008) [9], Sikdar and Dutta (2008) [10], Saikia *et al.* (2010) [11], Sarma and Sarma (2010) [12], Barukial (2011) [13], Buragohain (2011) [14], Sonowal and Baruah (2011) [15], Abujam and Shah (2012) [16], Baruah *et al.* (2012) [17], Deka *et al.* (2012) [18], Gam (2013) [19], Sarma *et al.* (2013) [20], Nath (2014) [21], Talukdar (2014) [22], etc. But the ethnomedicinal practices of the *Ahom* community of the state are poorly known. Therefore, the present study was done to report the ethno medicinal practices prevalent among the indigenous *Ahom* community of upper Assam. The *Ahoms* are members of the Tai group known to migrate from China and establish their capital in Sivasagar. Today the *Ahoms* are a distinct ethnic group of Assam having their own traditions and indigenous knowledge.

Materials and Methods

Study area: The present study was conducted during 2014-2015 in fifteen randomly selected villages in Sivasagar, Dibrugarh and Tinsukia districts of upper Assam such as Betbari, Gorgaon, Mahmora, Sonari, Tengapukhuri, Rajgarh, Tengakhat, Naharkatia, Bogibil, Moran, Berekuri, Baghjan, Hapjan, Bordubi and Guijan.

Collection of data: Data was collected through observation and personal interaction with *kobiraj*, herbal practitioner, gaonburha (village head) and elderly men and women of the *Ahom* community.

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Identification of Recorded plants: The plants were identified with the help of literature and by following earlier works of Vidyarthi (1989) [23], Dutta (1998) [24] and Pandey (1993) [25].

Results

Presentation of collected data are summarized below

Table 1: Traditional herbal therapies of the *Ahom* community

Serial No.	Diseases	Plants scientific & vernacular name	Parts used & treatment process
1	Diabetes	(i) <i>Momordica charantia</i> (Titakerela)	Fruits are externally rubbed below the foot; fruit juice is also preferable except for gastric patients
		(ii) <i>Syzygium cumini</i> (Jamuk)	Powder of bark and seeds by mixing with milk
		(iii) <i>Coccinia grandis</i> (Kunduli)	Fruit is taken as vegetable or eaten raw
2	High pressure	(i) <i>Clerodendrum colebrookianum</i> (Nephaphu)	Leaf twigs are eaten raw or in steamed condition
		(ii) <i>Rauwolfia serpentina</i> (Sarpagandha)	Both leaves and root juice is taken
		(iii) <i>Tamarindus indica</i> (Teteli)	Fruit eaten raw or as chatni
3	Heart problem	(i) <i>Terminalia arjuna</i> (Arjun goch)	Patients are advised to take bark powder mixed with milk
4	Jaundice	(i) <i>Saccharum officinarum</i> (Kuhiyar)	Stem juice is taken
		(ii) <i>Averrhoa carambola</i> (Kordoi)	Fruit juice
5	Pox & measles	(i) <i>Azadiracta indica</i> (Neem)	Leaf paste applied over affected portion or directly used to relief itching
		(ii) <i>Spondius pinnata</i> (Amora)	Tender leaves boiled and the water is applied or leaf paste is used.
6	Cough	(i) <i>Ocimum sanctum</i> (Kola tulokhi)	Leaf paste with <i>Zingiber officinale</i> and honey is taken one teaspoon trice daily after food.
		(ii) <i>Piper longum</i> (Pipoli)	Seeds mixed with hot milk
		(iii) <i>Zingiber officinale</i> (Zinger)	Rhizome as raw or in paste form with honey.
		(iv) <i>Cinnamomum verum</i> (Dalcheni)	As raw or half teaspoon powder mixed with honey taken before sleep.
		(v) <i>Piper nigrum</i> (Jaluk)	Seeds prepared with tea or paste prepared with ginger and honey
7	Fever	(i) <i>Saccharum officinarum</i> (Kuhiyar)	Dense juice
		(ii) <i>Allium sativum</i> (Naharu)	Fruit taken in raw form
8	Sinusitis	(i) <i>Leucas aspera</i> (Durun bon)	Leaf and flower juice applied into nose
9	Tonsillitis	(i) <i>Sapindus mukrossi</i> (Monisal)	Seed used with hot water to gargle
10	Stomach problem	(i) <i>Hydrocotyl javanica</i> (Haru manimuni)	Leaf paste with water taken as juice or as vegetable
		(ii) <i>Eryngium foetidum</i> (Mandhanian)	Leaf as raw
		(iii) <i>Citrus aurantifolia</i> (Gulnemu)	As pickle or one slice as raw
11	Burns	(i) <i>Mangifera indica</i> (Mango)	Leaf dried and ash prepared, applied on affected area
		(ii) <i>Aloe vera</i> (Salkuwori)	Leaf gel applied over the burn area
12	Allergy	(i) <i>Azadiracta indica</i> (Neem)	Leaf as paste applied on affected area
		(ii) <i>Curcuma longa</i> (Haladhi)	Rhizome used as paste, applied on affected area
13	Cut injury	(i) <i>Tagetes erecta</i> (Narji phul)	Leaf smashed and applied to cut portion
		(ii) <i>Ageratum conyzoides</i> (Gondhua bon)	Leaf and flower smashed and applied to cut portion
14	Dysentery	(i) <i>Alternanthera sessilis</i> (Matikanduri)	Whole plant taken as raw or as vegetable
		(ii) <i>Psidium guajava</i> (Modhuri)	Leaf twig as paste
		(iii) <i>Spondius pinnata</i> (Amora)	Leaf paste and fruit eaten as raw
		(iv) <i>Citrus aurantifolia</i> (Gulnemu)	As pickle or raw
		(v) <i>Houttuynia cordata</i> (Masunduri)	Leaf smashed or as salad
		(vi) <i>Murraya koenigii</i> (Narahingha)	Fried leaf or soup
		(vii) <i>Duchesnea indica</i> (Goru khis)	Fruit and leaves
15	Pain reliever after child birth	(i) <i>Celtis tetrandra</i> (Sukuta)	Dried leaf paste cooked with water
		(ii) <i>Paederia foetida</i> (Bhadailota)	Whole plant as chatni
16	Blood purifier	(i) <i>Bacopa monnieri</i> (Brahmi)	Leaf and stem juice with milk
		(ii) <i>Solanum indicum</i> (Titabhekuri)	Boiled fruits preferable except for gastric patients
17	Gall bladder stone	(i) <i>Bryophyllum pinnatum</i> (Dupor tenga)	Leaf in empty stomach
18	Toothache	(i) <i>Nicotiana tobaccum</i> (Dhapat)	Leaf directly used at affected area.
		(ii) <i>Mimosa pudica</i> (Nilaji bon)	Root mixed with milk or directly in pain area
19	Hair fall & dandruff	(i) <i>Hibiscus rosa-sinensis</i> (Joba phul)	Paste of leaf and flower
		(ii) <i>Dillenia indica</i> (Ou tenga)	Seed
20	Reproductive problems	(i) <i>Cucurbita maxima</i> (Rongalau)	Fried seed increase the reproductive capacity
		(ii) <i>Catharanthus roseus</i> (Nayan tora)	Boiled root extract is prescribed
21	Diarrhoea	(i) <i>Houttuynia cordata</i> (Masunduri)	Leaf paste or tender leaves steamed and taken as food
		(ii) <i>Garcinia sp.</i> (Thekera)	Fruit taken in raw form or as juice
22	Irregular menstruation	(i) <i>Hibiscus rosa-sinensis</i> (Joba phul)	Dried root powder is mixed with water and taken orally; flower paste is also used
		(ii) <i>Saraca indica</i> (Ashok phul)	Dried bark powder is mixed with milk
		(iii) <i>Flemingia strobilifera</i> (Makhioti)	Juice of root is taken
		(iv) <i>Lasia spinosa</i> (Chengamora)	Rhizome is boiled and taken
23	Anaemia	(i) <i>Phyllanthus emblica</i> (Aamlakhi)	Fruit as raw, as juice, in dried form

24	Fungal infection	(i) <i>Lawsonia inermis</i> (Jetuka)	Leaf paste applied over infected area
25	Piles (Kasumuria)	(i) <i>Aegle marmelos</i> (Bel)	Fruit mixed with milk
26	Malaria fever	(i) <i>Cinchona officinalis</i> (Cinchona)	Stem bark is boiled and the water is taken
		(ii) <i>Alstonia scholaris</i> (Chatiana)	Stem bark is boiled and the water is taken
27	Dental care	(i) <i>Moringa oleifera</i> (Sajina)	Leaves, root, bark and stem is used
		(ii) <i>Jatropha sp</i> (Bhot era)	Root decoction used to rinse oral cavity
28	Asthma	(i) <i>Phylogacanthus thyriformis</i> (Titaphul)	Dried or boiled tender leaves and flower is recommended
29	Rheumatic arthritis	(i) <i>Vitex negundo</i> (Posotia)	Leaves used as vegetable
30	Itching	(i) <i>Vitex negundo</i> (Posotia)	Leaf kept under mattress of bed or leaf paste applied over infected area
31	Increase lactation	(i) <i>Alternanthera sessilis</i> (Matikanduri)	Leaf and stem used as food
		(ii) <i>Ricinus communis</i> (Era)	Juice of leaves and root taken orally
32	Snake bite	(i) <i>Carica papaya</i> (Amita)	Milky juice is recommended
33	Wasp bite	(i) <i>Allium sepa</i> (Onion)	Peeled fruit or its juice is applied
34	Liver trouble	(i) <i>Hedyotis corymbosa</i> (Bon jaluk)	Seed and leaves are used as remedy
35	Pneumonia	(i) <i>Solanum indicum</i> (Titabhokuri)	Boiled fruit taken as food or salad
36	Intestinal Worm	(i) <i>Citrus grandis</i> (Robab tenga)	Fruit is taken
37	Mumps (Pithakhua)	(i) <i>Ricinus communis</i> (Era)	Leaves applied over problematic area
38	Ring worm	(i) <i>Ocimum sanctum</i> (Tulokhi)	Leaf with lime mixture applied over infected portion
39	Vomiting	(i) <i>Mentha viridis</i> (Podina)	Leaves mix with honey and boiled mango.
40	Dog bite	(i) <i>Saccharum</i> (Kuhiyar)	Stem juice is recommended
41	Headache	(i) <i>Osmium sanctum</i> (Tulokhi)	Massage with paste or juice of leaves
42	Nerve problem	(i) <i>Allium sativum</i> (Naharu)	Raw fruit is recommended
43	Bone fracture	(i) <i>Cucurbita longa</i> (Halodhi)	Rhizome paste is used as bandage over the area
44	Leprosy	(i) <i>Moringa oleifera</i> (Sajina)	Bark juice is used
45	Kidney stone	(i) <i>Raphanus sativus</i> (Mula)	Used in raw form or as vegetable
46	Cold and flu	(i) <i>Allium sativum</i> (Nohoru)	Seeds smashed, heated in mustard oil and applied over chest, underarms, nose and back.
47	Eye problem	(i) <i>Punica granatum</i> (Dalim)	Juice applied as eyedrops
48	Bronchial Asthma (Hapani)	(i) <i>Ocimum gratissimum</i> (Ramtulokhi)	Leaf juice is used
49	Eyesight improvement	(i) <i>Amaranthus viridis</i> (Khutura)	Used as vegetable
		(ii) <i>Spinacia oleracea</i> (Paleng)	Used as salad or vegetable
50	Epistaxis (Aewa bhoga)	(i) <i>Leucas aspera</i> (Durun)	Juice of whole plant is used
		(ii) <i>Tagetes erecta</i> (Narji phul)	Tender leaves smashed and placed in the nostrils

Discussion

A total of 68 plant species used for the treatment of 50 ailments were recorded. These species are commonly available and used for the treatment of various problems like cough, fever, headache, body pain, burns, animal bite, cut injury, diabetes, high blood pressure, tuberculosis, heart problem, stomach problem, worm, pox, jaundice, sinusitis, reproductive problem, allergy, pimple, *sum pora*, hair fall, sunburn, etc. Different parts of plant like seed, leaf, bark, root, etc are used for treatment of different ailments. It was found that in case of problems related to skin, medicines were used in the form of paste and directly applied to the affected area and in some cases also used as food. The ailments are listed along with the name of the plant used as medicine; it's local and scientific name and part used in treatment (Table1). Most of medicines were found to be prepared as mixtures with other plants or non-plant products. During the survey most of the people were found to be reluctant to share their knowledge because of their conservative beliefs. They believed that as a result of sharing of their indigenous knowledge, their medicine would not work out further. So there are chances that the indigenous knowledge systems might be lost with the sudden death of such storehouse person. This stresses the importance and urgent need of proper exploration and documentation of the ethnic herbal treatments.

Conclusion

The present investigation revealed the rich ethno medicinal knowledge of the *Ahom* community of upper Assam. It has

also been found that most of the indigenous people still depend on these herbal remedies for their day to day health care.

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Reference

1. Dutta BK, Dutta PK. Potential of Ethno botanical studies in North East India: An overview. *Indian Journal of Traditional Knowledge*. 2005; 4(7):1-5.
2. Basumatary N, Teron R, Saikia M. Ethnomedicinal practices of the bodo-kachari tribe of Karbi Anglong district of Assam. *International Journal of Life Sciences Biotechnology & Pharma Research*. 2014; 3:161-167.
3. Hughes CC. Ethnomedicine. In: *International Encyclopedia of the Social Sciences*. Crowell Collier and Macmillan, Inc., London, 1968, 10.
4. Sharma Thakur GC. Indigenous health practices and system of cure among the tribes of Assam plains. In: S Sengupta: *Health, Healers and Healing: Studies in Medical Anthropology*. N. L. Publications, Dibrugarh, 1999, 239-249.
5. Das AK, Tag H. Ethnomedicinal studies of the Khanti tribe of Arunachal Pradesh. *Indian Journal of Traditional Knowledge* 2006; 5:317-322.
6. Sajem AL, Gosai K. Traditional use of medicinal plants by the Jaintia tribes in North Cachar Hills district of

- Assam, northeast India. *Journal of Ethnobiology and Ethnomedicine*. 2006; 2:33.
7. Buragohain J, Konwar BK. Ethnomedicinal plants used in skin diseases by some Indo-Mongoloid communities of Assam. *Asian Journal of Experimental Science*. 2007; 21:281-288.
 8. Das FA, Barua I, Das DD. Ethnomedicinal practices: A case study among the Sonowal Kacharis of Dibrugarh, Assam. *Ethno-Medicine* 2008; 2:33-37.
 9. Kalita D, Bora R. Some folk medicines from Lakhimpur district, Assam. *Indian Journal of Traditional Knowledge*. 2008; 7:414-416.
 10. Sikdar M, Dutta U. Traditional Phytotherapy among the Nath People of Assam. *Ethno- Medicine* 2008; 2: 39-45.
 11. Saikia B, Borthakur SK, Saikia N. Medico-ethnobotany of Bodo tribals in Gohpur of Sonitpur district, Assam. *Indian Journal of Traditional Knowledge*. 2010; 9:52-54.
 12. Sarma R, Sarma HK. Ethnomedicines of Sonapur, Kamrup district, Assam. *Indian Journal of Traditional Knowledge*. 2010; 9:163-165.
 13. Barukial J, Sarma JN. Ethnomedicinal plants used by the people of Golaghat district, Assam. *Indian Journal of Medicinal Aromatic Plants*. 2011; 1:203-211.
 14. Buragohain J. Ethnomedicinal Plants Used by the ethnic Communities of Tinsukia District of Assam, India. *Recent Research in Science and Technology* 2011; 3:31-42.
 15. Sonowal R, Barua I. Ethnomedicinal Practice among Tai-Khamyangs of Assam, India. *Ethno- Medicine* 2011; 5:41-50.
 16. Abujam SS, Shah RK. Study on the ethnomedicinal system of local people of Dibrugarh, Assam. *International Journal of Pharmaceutical Invention*. 2012; 2:17-28.
 17. Baruah SM, Baruah LB, Nath SC. Ethnomedicinal plants from Disoi valley reserve forest of Jorhat district, Assam. *Plant Sciences Feed* 2012; 2:59-63.
 18. Deka R, Baruah BK, Saikia K, Ahmed R, Basumatary D, Kalita J. Study of medicinal plants in a flood plain wetland in Barpeta district, Assam, India. *The Clarion* 2012; 1:87-93.
 19. Gam NK. Ethno Medicinal claims Existing among Mising Tribes of Assam. *International Journal of Science Inventions Today*. 2013; 2:284-291.
 20. Sarma BP, Baruah D, Bakalial B. Wetland medicinal plants in floodplains of Subansiri and Ranga river of Lakhimpur district, Assam, India. *Asian Journal of Plant Science and Research*. 2013; 3:54-60.
 21. Nath D. Ethno-medicinal Significance of Few Naturally Grown Plants Practices for Hepatitis in Sivasagar District of Assam, India. *European Academic Research* 2014; 2:5372- 5385.
 22. Talukdar M. Ethnomedicinal Plants used by the Sonowal Kacharis of Bhekulajan Village in Dibrugarh District, Assam, NE India. *International Research Journal of Environment Sciences*. 2014; 3:54-57.
 23. Vidyarthi RD. *Text Book of Botany*. S. Chand & Company LTD, New Delhi, 1989, 752.
 24. Dutta AC. *Botany for degree students*. Oxford University press, India, 1998, 724.
 25. Pandey BP. *Taxonomy of angiosperms*. S. Chand & Company LTD, New Delhi, 1993, 642.