



## Impact of Traditional Herbal Medicine on the Socio-cultural Life of the Assamese Community, Lakhimpur District, Assam

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Nat. Env. Poll. Tech.  
ISSN: 0972-6268  
www.neptjournal.com

### Key Words:

Herbal medicine  
Medicinal plants  
Assamese community

### ABSTRACT

The district of Lakhimpur, Assam, situated at the far east corner of north-east India is a region of rich biodiversity. Because of its location at the foothills of Arunachal Pradesh, an environment with heavy rainfall and high humidity, conducive for a significant floristic diversity prevails in this region. The native people of this region, the greater Assamese community, therefore depends to a large extent on the varied plant species for food and medicine besides other uses. A survey on the usage of traditional herbal medicine by the native inhabitants of this region, revealed that a total of 59.14 percent of different sections of the community preferred use of traditional medicine during common ailments. This paper deals with the importance of cultivation and preservation of locally available medicinal plants and encourage all sections of the society to preserve the important medicinal plants.

### INTRODUCTION

The dependence of man on plants has been in continuation since the very early days of civilization. In fact, plants, animals and so the human beings have intimate biological relationship and have evolved along parallel lines for their existence. This inevitably led to the exploration of various plant species for use as food, shelter and medicine of animals and human ailments. Once having realized the potentiality of the plants on life of human beings, measures were gradually developed for their cultivation and preservation.

The medicinal importance of the native plants of a locality has great significance in human civilization. There are numerous reports on a number of herbs that have a variety of medicinal effects. *Tinospora cordifolia* has been reported to stimulate indigenous 'insulin' secretion of pancreas (Gupta 1967). Gehlot & Bohra (2002) found extracts of various plant parts of *Aerva persica* to have antimicrobial activity against human pathogenic bacterial strains of *Staphylococcus aureus* and *Salmonella typhi*. Hansraj (1996) has shown medicinal value of *Adiantum*, a locally available fern plant. Parihar & Bohra (2002) have reported that few fern plants like *Adiantum lunatum*, *Equisetum ramosissimum* and *Marsilea minuta* inhibited growth of *Candida albicans*, a human fungal pathogen. Phukan (2008) worked on certain weeds of low land rice fields of Lakhimpur District, Assam and found considerable medicinal importance of such plants. Not only the medicinal plants are used to cure human diseases, but some of the common plants are also reported to cure some plant diseases also (Bhatt et al. 2001, Thippeswamy et al. 2003).

The present investigation was carried out in different villages of Lakhimpur district, which is situated at the foot hills of Arunachal Pradesh having a unique climatic pattern, incomparable to any part of India. A comparatively heavier annual rainfall with high humidity prevails almost throughout the year in the district. This typical climate results in rich evergreen vegetation with dense forest

areas suitable for growth of a number of rare plant species which are utilized for medicine for treatment of various ailments, besides food and shelter. Sarmah & Boissya (2000) during their investigation on ethnomedicine of Nepalese residing in Dhemaji district, Assam, found a number of rare plant species in every day use as medicine by the community. Similar studies were made by other workers in different parts of Assam (Borthakur 1976, Bora & Boissya 2002). In the present study an effort has been made to gather information of plant species traditionally used for treatment of certain common diseases by greater Assamese community of the district of Lakhimpur.

## MATERIALS AND METHODS

A survey was made among the common people of six sections of Assamese community of the District Lakhimpur during 2008-09 regarding usage of herbal medicine during the treatment of certain commonly occurring diseases such as cold, cough, fever, dysentery, worm, irritation, cut injury, etc. (Table 1). The survey was on the basis of structured questionnaire to different sections of the community, both male and female individually and in groups and aimed at to what extent the common people opt for local plants as traditional medicine that are in use from old days.

The second part of the survey was to enumerate the plant species that are of similar use by all the surveyed sections of the community, during the treatment of some common ailments. Information were collected as suggested by Schultes (1963) and Jain (1989) on the basis of spot interview with the growers, the head of the village referred to as 'Gaonbura', other senior persons of the locality having wide knowledge of the plant species and their traditional usage, and village medicine men commonly known as 'Bez'. The works of Kanjilal et al. (1934-40), Dutta (2005) and Sarma 2002) were referred for taxonomic identification and medicinal importance of the plant species (Table 2).

## RESULTS AND DISCUSSION

The survey revealed that a total of 59.14 percent people of Assamese community prefer to go for traditional, i.e., herbal medicine collected and prepared from locally available plants for the treatment of certain diseases. The female section prefer herbal treatment to a higher extent (59.28%) than the male. Preference is almost equal in case of urban section and rural section (56.37 and 54.24 % respectively). The maximum usage of traditional medicine (63.50) belong to the 'Ahom' section and the lowest to survey No. 6, belonging to 'Konch' section.

The survey revealed that majority of the Assamese community still believe on the use of traditional medicine prepared from commonly available plant species. Modern researches on herbal medicine have brought to light some significant information that makes big promise to the cure of certain deadly diseases (Thippeswamy et al. 2003). Today, people stand at the cross road of herbal medicine and modern medicine prepared chemically. Herbal drug, in its completely balanced state is biologically more compatible to the human body constitution. Another very significant property of herbal drug is that it can be useful to several ailments in different combinations (Oudhia 2007).

The biological activity and efficacy of the medicinal herbs is dependent on the time and stage of its collection. There occurs number of changes in the metabolic activities as well as biochemical contents in the senescent phase of plants. So the traditional healers lay much emphasis on the stage (age) of collection of plants for such uses (Sinha & Sinha 2005).

Herbal medicine today owes its existence much to the skill of the ancient traditional folk healers only. Unfortunately, these very valuable medicinal plants remain largely neglected in the remote areas of the district of Lakhimpur, Assam. It is time for all of us that we should lay much emphasis on

Table 1: Percentage usage of herbal and synthetic medicine by people of different castes of Assamese community in Lakhimpur district, Assam.

Section	Male		Female		Urban		Rural		Total	
	T	S	T	S	T	S	T	S	T	S
Brahmin	48.4	51.6	57.5	42.5	52.5	47.5	63.0	33.0	55.35	44.65
Ahom	69.3	30.7	62.3	37.7	52.8	47.2	69.4	30.6	63.50	36.50
Chutia	61.2	38.8	63.6	36.4	59.8	40.2	61.4	38.6	61.50	38.50
Kalita	54.8	45.2	59.6	40.4	62.1	37.9	64.0	36.0	60.12	39.88
Koibarta	44.5	55.5	68.4	31.6	62.6	37.4	70.3	29.7	61.45	38.55
Konch	51.6	48.4	44.3	55.7	48.4	51.6	67.6	32.4	52.97	47.03
Total(%)=	54.97	45.03	59.28	40.72	56.37	43.63	54.24	45.76	59.14	40.86

C.D. at 5%= 0.83; Figures are average of 5 replicates; T= Traditional herbal medicine, S= Synthetic medicine

Table 2: Some local plants most commonly used as medicine in different ailments by Assamese community, Lakhimpur, Assam.

Name of ailment	Botanical name	Family	English name	Assamese name	Parts used
Jaundice	<i>Averrhoa carambola</i> Linn	Oxalidaceae	Karambola	Kordoi	Fruit juice
	<i>Saccharum officinarum</i> Linn.	Poaceae	Sugarcane	Kuhiar	Stem juice
Cough & Cold	<i>Ocimum sanctum</i> Linn.	Lamiaceae	Sacred basil	Tuloshi,	Flower & Leaf
	<i>Zinziber officinalis</i> Rosc	Zingiberaceae	Ginger	Ada	Rhizome juice
	<i>Piper longum</i> Linn.	Piperaceae	Black pepper	Jaluk	Fruit
Dysentery, Diarrhoea	<i>Houttuynia cordata</i> Thumb	Piperaceae	Chamaleon plant	Musandari	Whole plant
	<i>Centella asiatica</i> Linn	Apiaceae	Indian pennywort	Manimuni	Whole plant
	<i>Psidium gujava</i> Linn	Myrtaceae	Guava	Madhuri	Fruit & tender leaf juice
Constipacy Pain	<i>Carica papaya</i> Linn	Caricaceae	Papaya	Amita	Ripe Fruit
	<i>Curcuma longa</i> Linn	Zinziberaceae	Turmeric	Halodhi	Rhizome paste
	<i>Calotropis gigantean</i> (L) Br	Asclepiadaceae	Madar	Akon	Leaf
Fracture Cut injury	<i>Cissus quadrangularis</i> Linn	Euphorbiaceae	Medica gum	Harjora	Stem
	<i>Tagetes petula</i> Linn	Asteraceae	Marigold	Narji	Leaf juice
	<i>Clitoria ternatia</i> Linn.	Fabaceae	Butterfly creeper	Aparajita	Leaf juice
Memory weakness	<i>Bacopa monnieri</i> Pennel	Scrophulariaceae	Brahmi	Brahmi	Whole plant
	<i>Azadiracta indica</i> A.Juss.	Meliaceae	Margosa	Mohaneem	Leaf
Worms	<i>Phlocanthus thyrsofloras</i> (Roxb)	Acanthaceae	Red basak	Titaphul	Inflorescence
	<i>Cassia alata</i> Linn	Caesalpiniaceae	Senna	Khorpat	Leaf & Flower
Fever	<i>Gynocardia odorata</i> R.Br.	Flacourtiaceae	Chalmogra	Lentem	Leaf extract
	<i>Cissumpelos parera</i> Linn	Menispermaceae	Velvet leaf plant	Tubuki Lota	Leaf paste
	<i>Aloe vera</i> Tourn ex.Linn	Liliaceae	Aloe	Salkonwori	Leaf paste

the systematic exploration of medicinal plants which had a glorious history in India since the vedic periods. With proper exploration, scientific preservation and utilization in a planned manner, it is hoped that herbal medicine will find its place and recognition in the society in due course.

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