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## A STUDY ON THE TRADITIONAL PRACTICES OF SOME HERBAL MEDICINE IN THE RURAL HEALTH CARE SYSTEM OF ASSAM

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### ABSTRACT:

*The North Eastern India of the country is very rich in medicinal plants resources. The natural environment favours to grow ample species of valuable plants. On the other hand folk practices of this region are also highly countable and the flora of this area is among the richest of the country. Majority of valuable medicinal plants are gradually facing danger for its survival and many of which have already been destroyed even without having the scientific uses. World Health Organization estimates that 80% of the people in developing countries of the world rely on traditional medicine for their primary health care needs. About 3.5 to 4 billion people in the world rely on plants as sources of drugs. In countries like India medicinal plants has specific role in the rural health care. The common diseases are often treated by effective herbal remedies. The authors have collected the knowledge of such uncommon folk practises from different parts of Assam and the work is being continued further by Authors. This article mainly highlighted such 32 Folk Practices of some herbal Medicines used in rural health care system for the common diseases particularly by the rural peoples of Assam along with their local name, botanical name, disease conditions, part used and method of use. These medicinal use of the herbs when compared with Ayurvedic text it is seen that some herbs are described for similar use or properties and on the other hand some herbs are found to use in traditional medicine in other parts of India and abroad. It is also seen that some herbs are used as preventive measure for diseases and taken as food substances by these rural peoples.*

**KEY WORDS:** Assam, Common diseases, Folk practice, Medicinal plants, Traditional medicine.

## INTRODUCTION

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Since the time immemorial medicinal plants have been used by mankind for treatment of their day to day sufferings. It has a specific role in the rural health care system. Especially the poor section of people depends on some medicinal plants available at their door step which are quite effective. Medicinal plants being natural, non-narcotic, having no side effect, a range of safe, cost effective, preventive and curative therapies which could be useful in achieving the goal of Health for all in a cost effective manner. Demand for medicinal plants is increasing in both developing and developed countries<sup>1</sup>. Traditional Medicines derived from medicinal plants are used by about 60% of the world's population<sup>2</sup>. World Health Organization estimated that 80% of people worldwide rely on herbal medicines for some part of their primary health care<sup>3</sup>. Diseases like diarrhoea (Atisar), malaria (Visamjwar), cough cold (Kasa

*Pratisyaya*), neuromuscular disease (*Vatavyadhi*), abdominal disease (*Udararoga*), skin disease (*Twakroga*), worm infection (*Krimiroga*) etc. were having very good effective herbal remedies and they are in practice in the remote and rural areas.

North East India has the richest reservoir of plant diversity in India and is one of the biodiversity hotspots of the world supporting about 50% of India's biodiversity. This region is a good reservoir of medicinal plants and traditional health practices<sup>4</sup>. The food habits of the people also include various medicinal plants and plant products, on the base of traditional knowledge.

The valuable medicinal plants of this area used by the villagers in the form of medicines as well as food habits in day to day are Haldhi (Haridra; *Curcuma longa* Roxb.), Masandari (*Houttuynia cordata*), Bhebeilota (Prasarani; *Paederia foetida* Linn), Manimuni (Mandukparni; *Centella asiatica* L. Urban), Nim (Nimba; *Azadirachta indica*), Sewali (Paarijaata; *Nyctanthes arbour-tristis* Linn.), Titaphul (*Phlogacanthus tubiflorus*) Bakphul (*Agatis grandiflora*), Amora (Aamraataka; *Spondias pinnata*), Bel (Bilva; *Agle marmelos* Linn), Khutura (Tanduliya;

*Amaranthus viridis*), Thekera (Amlavetasa; *Garcinia pedunculata* Roxb.), Jamu (Jambu; *Eugenia jambolina* Lam.), Amlaki (Aaamalaki; *Phyllanthus emblica* Linn), Silikha (Haritaki; *Terminalia chebula* Retz.), Arjun (Arjuna; *Terminalia arjuna* Roxb.), Kalakachu (Pindaaluka; *Colocasia esculenta*), Sarpagandha (Sarpagandha; *Rauwolfia serpentina* Benth. Ex. Kurz.), Titbhakuri (Brihati; *Solanum indicum*), Kalpatita (Kaalmegha; *Andrographis paniculata* Nees.), Jaba (Japaa; *Hibiscus rosa-sinensis*), Dron gach (Drunapushpi; *Leucas cephalotes* Roth. Spr.), Palasa (Paalasha; *Butea monosperma* Lam. Taub.), Amita (Erand-karkati; *Carica papaya* Linn.), Sajina (Shigru; *Moringa oleifera* Lam) etc<sup>5,6,7,8,9,10,11,12</sup>. These were the few examples with maximum uses.

The interest of the global community in medicinal plants is growing day by day because of its minimum side effects and low cost. World Health Organization estimates that 80% of the people in developing countries of the world rely on traditional medicine for their primary health care needs, and about 85% of traditional medicine involves the use of plant extracts. This means that about 3.5 to 4 billion people in the world rely on plants as sources

of drugs<sup>13</sup> (Farnsworth et al., 1985). The value of herbal medicine in worldwide has been estimated more

than 60 billion dollar per year and it is on a rapid increase<sup>14</sup>. It is estimated that about 90% of the medicinal plants are harvested from wild sources<sup>11</sup>. Though north eastern states are heavily forested and considered as a hub of medicinal plants but due to shrinkage of forest areas in some of the states, many of these valuable plants are threatened with extinction. Even the traditional practices by rural peoples are also gradually decreasing due to urbanization. Therefore, it became highly essential to take different steps for collection of traditional knowledge of practices for betterment of human being.

This paper highlights some herbal medicines used by rural people of Assam in their localities. This data is collected by visiting few rural areas of Assam where peoples are highly dependent on folk practices of medicine. These folk medicinal claims are enumerated below mentioning the Local names, Botanical names, Medicinal uses, Part used and Method of use.

Local name	Botanical Name	Disease condition	Part used	Method of use
1. Kalakasu	<i>Colocasia esculenta</i> L. Schott.	For cut injury	Stem	Stem juice applied locally in the affected part to stop bleeding immediately.
2. a. Sarpagandha  b. Silikha	a. <i>Rauwolfia serpentina</i> Benth. Ex, Kurz.  b. <i>Terminalia chebula</i>	For abdominal pain	a. Root  b. Seed	The mixed form of the both plants taken orally with water for abdominal pain.
3. Anaras	<i>Ananas comosus</i> Linn Merr	For worm problems	Soft & White portion of leaves	Leaf juice of plant taken orally at morning in empty stomach
4. Kalpatita	<i>Andrographis paniculata</i> Nees.	For liver disease (Jaundice)	Whole Plant	The decoction of the plant is used for liver diseases specially in jaundice.
5. Madar	<i>Erythraea indica</i> .	Jaundice	Bark	The decoction of bark (15-20 ml) taken orally with honey for 7 days.
6. Thekera	<i>Garcinia pedunculata</i> Roxb.	For Diarrhoea & Dysentery	Fruits	The old and dry fruits are soaked in water and taken orally.  Taken as vegetable also.
7. Amita	<i>Carica papaya</i> Linn.	Liver diseases (fatty liver, enlarged liver)	Newly appeared small fruits	The fruits are boiled with water and taken orally.  Taken as vegetable also.
8. Bhotera	<i>Jatropha curcas</i> Kinn.	Diarrhoea and vomiting	Bark	The paste of bark (approx 3 gms) taken orally in every four hours interval.
9. Jaibangla	<i>Mikania scandens</i> Willd	External bleedings	Leaves	The paste of leaves applied locally to the wound.

**Table 1: List of medicinal plants with their used disease condition**

10. Sewali	<i>Nyctanthes arbour-tristis</i> Linn.	Malaria, worm infestation	Flowers	Fresh or dried flowers are taken in different preparations like Vati (tablets), curry etc.  Taken as vegetable also.
11. Bakul	<i>Mimusops elengi</i> Linn.	Disease of oral cavity (Piarrhoea , Bleeding gums, etc.)	Bark	Decoction of bark locally applied in teeth for different diseases of oral cavity and it is also commonly used for cleaning of mouth cavity.
13. Jabakutari	<i>Abutilon indicum</i> L.	Diarrhoea and vomiting	Root	The root paste of the plant (about 3 gms) taken orally with water twice a day for 2-3 days.
14. Kapalphuta	<i>Cardiospermum halicacabum</i> L.	Vomiting	Root	Juice of fresh root (Approx 5 gms) taken orally with half cup water thrice daily.
15. Era gach	<i>Ricinus communis</i> Linn.	Pain & swelling	leaves	The leaves are crushed and applied locally for healing pain & swelling.
16. Katakhutura	<i>Amaranthus spinosus</i> Linn.	Anaemia, night blindness	Whole plant	Decoction of the whole plants used for deficiency disorders like anaemia, night blindness etc.  Taken as vegetable also.
17. Tengesi tenga	<i>Oxalis corniculata</i> Linn.	Flatulence , Dysentery , loss of memory	Whole plant	Decoction or curry is prepared for use in dysentery, flatulence and loss of memory.  Taken as vegetable also.
18. Nilajiban	<i>Mimosa pudica</i> Linn.	Itching, Bleeding problems	Whole plant	The fresh juice is taken orally to stop bleeding in case of menstrual disorder and applied locally in skin diseases.
19. Masandari	<i>Houttuynia cordata</i>	Diarrhoea, Dysentery	Whole plant	The decoction form of the whole plant is used orally for Diarrhoea & dysentery.
20. Sajana	<i>Moringa oleifera</i> Lam	Night blindness,  Pain & swelling	Fruits, bark	The fruits are usually taken as curry for prevention of night blindness. The bark paste used locally for pain & swelling.  Taken as vegetable also.
21. Satmul	<i>Asparagus racemosus</i> Wild	Weakness & lethargy	Rhizome	The rhizomes of the plant is boiled with milk and taken orally. It is used as a tonic.  Taken as vegetable also.

22. a. Letaguti  b. Haladhi	a. <i>Caesalpinia bonducella</i> (L) Fleming.  b. <i>Curcuma longa</i> Roxb.	Malaria	Root  Rhizome	The fresh juices of both the plants taken orally with honey for 7 days.
23. Bhatghila	<i>Oroxylum indicum</i> (Linn) Benth ex Kurz	Jaundice	Stem, Bark	The fresh juice of the bark mixed with sugar and taken orally with water.
24. Madhuriam	<i>Psidium guajava</i> Linn.	Mouth ulcers	Soft leaves	The paste form of leaves applied locally
25. Dhekia	<i>Diplazium esculentum</i>	Hair growth of new born	Young leaves	The young leaves of the plant taken orally in the form of curry in 4/5 times monthly from 4 <sup>th</sup> month onwards.  Taken as vegetable also.
26. Owtenga	<i>Dillenia indica</i> Linn.	Prevention of Chicken Pox.	Fruit	The fruits of this plant are kept under the bed for prevention of chicken pox.  Taken as vegetable also.
27. a. Boch  b. Rahun	a. <i>Acorus calamus</i> Linn.  b. <i>Allium sativum</i> Linn.	Common cold sneezing	a. Leaves  b. Bulb	The equal numbers of indicated part of plants garlanding around neck cure the disease especially in children.
28.a.Yamlakhuti  b. Chatiana	<i>Costus speciosa</i> Koen Sm.  <i>Alostonia scholaris</i> R.Br.	Difficulty in speaking (stammering)	a. Stem  b. Bark	Fresh juice of both plants is taken orally with honey.
29. Hatibhekuri	<i>Solanum torvum</i> swarts	Ulceration in mouth	fruits	The fruit paste of the plant applied locally in affected part of the mouth.
30. Dron gach	<i>Leucas cephalotes</i> Roth. Spr.	Indigestion, loss of appetite.	leaves	The soft leaves are taken as curry in indigestion, flatulence, loss of appetite etc.  Taken as vegetable also.
31. Palasa	<i>Butea monosperma</i> Kuntze	Leucorrhoea, Dysmenorrhoea	Bark	The bark of the plant boiled in water and sugar is added, after filtering the boiled water is taken orally (20-40 ml) for few days.

32. Sarpagandha	<i>Rauvlfia serpentina</i> Benth ex. Kurz.	Diabetes Mellitus	Leaves	The fresh juice of leaves taken orally in empty stomach.
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## DISCUSSION

The enlisted herbs and their use in various diseases, shows that the rural people of Assam have a good knowledge of medicinal use of different herbs. They use the herbs for prevention as well as treatment of disease. The *Amaranthus spinosus* in anaemia and night blindness is not only used for treatment purpose but also as a preventive measure. Simultaneously fruit of *Dillenia indica* is used for prevention of Chicken Pox which can easily spread to the other members of the family. These medicinal use of the herbs when compared with Ayurvedic text<sup>12</sup> it is seen that herbs like *Ananas comosus*, *Andrographis paniculata*, *Carica papaya*, *Nyctanthes arbour-tristis*, *Mimusops elengi*, *Ricinus communis*, *Mimosa pudica*, *Moringa oleifera*, *Acorus calamus*, *Allium sativum*, *Leucas cephalotes*, *Butea monosperma* are described for similar use or properties. On the other hand some herbs are found to use in traditional medicine in other

parts of India and abroad like- *Colacasia esculata* petiole juice is also used by the Sonowal Kachari tribe of Dibrugarh district of Assam<sup>15</sup>, *Rauvlfia serpentina* root is also used by the Khamptis of Arunachal Pradesh in abdominal pain<sup>16</sup>, *Miakanian scandens* fresh leaves are used to stop bleeding from cut injuries by Lodhas and Oraons of southern districts of West Bengal<sup>17</sup> also, where as Mohit MS cited the use of *Abutilon indicum* in diarrhoea<sup>18</sup>, the hematonc use of *Amaranthus spinosus* is also cited by Ashok Kumar CK<sup>19</sup>. *Oxalis corniculata* whole plant is traditionally used in dyspepsia, dysentery, diarrhoea by the peoples and healers of Hoshangabad district of Madhya Pradesh<sup>20</sup>. *Houttuynia cordata* root is used in diarrhoea by the tribes of Kameng district of Arunachal Pradesh<sup>21</sup>. *Caesalpinia bonducella* seed extract is used in malaria, root is used in fever<sup>22</sup>. *Oroxylum indicum* bark juice is used in jaundice by the people of Bangladesh<sup>23</sup>.



Among the herbs few like *Garcinia pedunculata*, *Carica papaya*, *Amaranthus spinosus*, *Oxalis corniculata*, *Nyctanthes arbour tristis*, *Moringa oleifera*, *Asparagus racemosus*, *Diplazium esculentum*, *Dillenia indica*, *Leucas cephalotes* are used as vegetables

also in day to day food habit. As per claims of the local people these herbs are quite effective to treat these ailments and they are on regular use of these. All the plants are very easily available in the locality so easy access is possible whenever the diseases occur.

### CONCLUSION

Authors have observed that the rural areas of Assam have a high dependency on the traditional health practices. The peoples are on regular use of the folk practices of herbal medicines for the treatment of the common ailments. The reasons may be either due to easy availability or requirement of very less effort to prepare and have good efficacy. The rural people use some of these herbal medicines regularly as diet also and they increase the

frequency if the disease conditions occur. Authors while concluding the paper, intend to indicate that these claims of folklore medicine from Assam have lots of possibilities of discovering new treatments and medicine which may become useful to mankind. A systematic investigation followed by Pharmacological and clinical trials may discover a new horizon in the globe in the field of herbal medicine.

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