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## RESEARCH ARTICLE

### WILD EDIBLE PLANTS AND THEIR UTILIZATION BY HALAM TRIBE OF SOUTHERN ASSAM, INDIA

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#### ABSTRACT

This article deals with the status of wild edible plants and their traditional utilization by Halam tribe of Southern Assam, India inhabitant villages of Halam population. A total of 35 nos. of plant species were recorded. Finally the investigated plant species have been enumerated according to the formulation prescribed by the medicine men, along with botanical names, families, local or tribal names, parts used.

#### Key words:

Wild edible plants, Survey, Halam, Southern Assam.

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## INTRODUCTION

Wild edible plants are the ultimate gift of our nature and most of the ethnic communities are depends on it maintain and their daily life (Reyes-Garcina *et al.*, 2005 and Pfoze *et al.*, 2012). The rich ethnic communities of Northeast India have immense traditional knowledge on the utilization of forest and plant parts especially as food products in multi varied ways of application (Sundryal *et al.*, 1998). Moreover, one cannot avoid the medicinal importance of the edible parts of wild plants used by Halam tribal people. Therefore, a urgent needs for observing their therapeutic level. Regarding Ethnobotany of wild edible parts of Southern Assam there is no available published work but there are some of the important works consulted are Anonymous (1999), Laskar, Kowser *et al.* (2014), Shakun Mishar (2012), Das (1997), De *et al.* (2013), Das (2006), Das *et al.* (2004).

## MATERIALS AND METHODS

### Study Area

The Southern Assam (Barak Valley) is the southern most three districts viz. Cachar, Hailakandi and Karimganj of Assam, India. It lays between Longitude 90 15 and 93° 15' E and Latitude 24° 8' and 25 ° 8' N and cover an area of 6922 sq.

kms. The valley is surrounded to the north by Dima Hasao (North Cachar Hills) district of Assam, to the south by Mizoram to the east by Manipur and to the west by Sylhet district of Bangladesh and Tripura. The valley is inhabited by about 80% Bengali community, speaking mainly Sylheti Bengali- a distinct Bengali dialect and the rest are the Tea garden Tribe/ workers, Methai Manipuri, Assamese, plain tribes like Barhman/Kachari, Rajbonghsi and Khasia, Lusai/Mizo, H'mar, Halam, Riang etc. The southern Assam lies in one of the remotest corner of the country with undulating hills and maeshes with luxuriant vegetation. Halam people are living in the forests, hill sides are being consuming numerous leafy vegetables.

### Ethnobotanical data collection and analysis

Regular visit and survey were conducted in different inhabitant areas of Halam people and interactions with 76 informants mainly local educated people, medicine men or Kaabiraj, old women, house wife. The information mainly related to wild edible plants obtained through household surveys, semi-structured interviews and informal discussions with the experienced and elderly Halam people. Interviewers were asked to know about the plant's vernacular name(s) of the plant, part (s) use, kind of traditional recipes preparation. The preferences of choice was identify for a particular plant to understand the application of plants as vegetables in an around the Halam populated areas.

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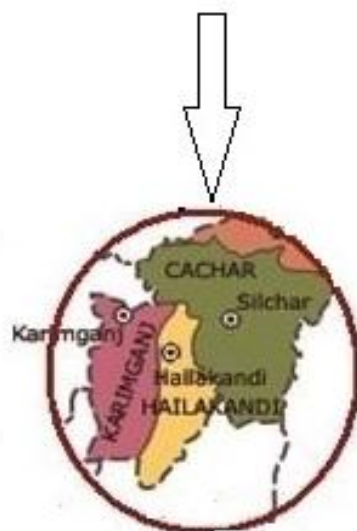
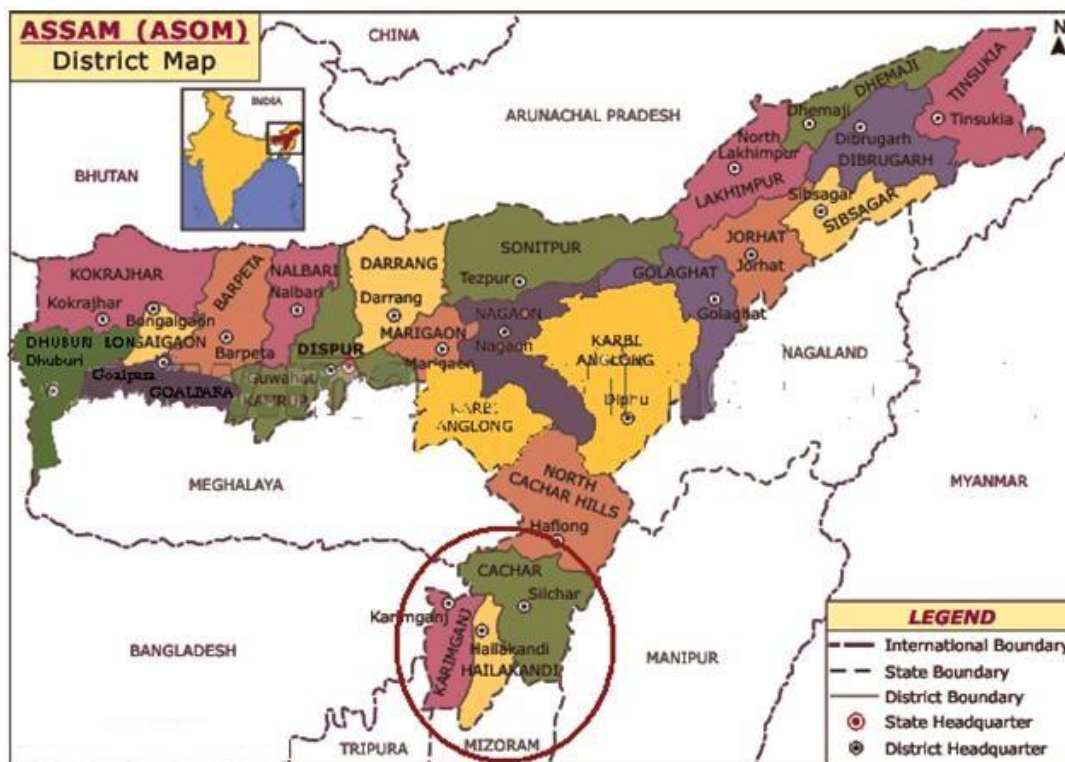


Fig: Showing the Study site (Southern Assam)

### Plant Collection

Plants specimens identified during the field visits were crosschecked against different informants to validate the information. The plant species were identification was confirmed by Flora of Tripura (Deb, 1981, 1983). All the specimens were preserved following the standard herbarium methods by (Jain, 1987, 1989). Identified voucher specimens were deposited in the Department of Ecology and Environmental Science, Assam University, Silchar.

### RESULTS AND DISCUSSIONS

Many wild plant species are used by Halam tribe as vegetables, first hand information gathered on wild vegetable plants of Southern Assam during the present investigation is given table I. During the field survey 35 species of wild plants were documented that belonging to 28 families. The

**Table 1. Showing the wild vegetable plants of Halam tribe**

Sl. No.	Botanical name	Family	Tribal name	Mode of utilization
1	Allium tuberosum Roxb.	Liliaceae	Purense	Leaves are fried then taken with rice.
2	Murraya korengii (L.) Spreng.	Rutaceae	karihattu	Young leaves are applied on curries as natural flavoring agent in food.
3	Ipomoea aquatic Forsk.	Convolvulaceae	kalmi-sak	Young leaves are fried then taken with rice.
4	Moringa oleifera Lam.	Moringaceae	Sajana	Unripe fruit are fried
5	Apomoea batata (L.) Lam.	Convolvulaceae	Romai	Young leaves are fried then taken with rice.
6	Curcuma angustifolia Roxb.	Zingiberaceae	Koova	Flowers are eaten as vegetables after cooked.
7	Centella asiatica L. Uran	Apiaceae	Perup	Young leaves are fried then taken with rice in early morning.
8	Carica papaya Linn.	Caricaceae	Koipol	Unripe fruit are used in curries.
9	Musa paradisiacal Var.	Musaceae	Motkung	Pseudo stem are used in curries.
10	Cajanas cajan (L.) Huth.	Fabaceae	Khoklaing	Ripe seeds are used as a favorite dish for vegetarian.
11	Corcharous capsularis L.	(Tiliaceae	Nalia	Tender leaves are fried then taken with rice.

**Table 2. Showing the wild vegetable plants of Halam tribe**

12	Calamus tenuis Roxb.	Arecaceae	Jalibath	Pseudo stem are fried then taken with rice.
13	Lablab purpurea (L.) Sweet.	Papilionaceae	Seam	Unripe fruit are cooked then eaten.
14	Enhydra fluctuans Lour.	Asteraceae	Helancha	Young leaves are fried then eaten.
15	Brassica compestris L.	Brassicaceae	Hoiru	Tender leaves are cooked then taken with rice
16	Momordica charantia L.	Cucurbitaceae	Chengu	Unripe fruit are fried then eaten with rice.
17	Eryngium foetidum L.	Umbelliferae	Bilatidonia	Young leaves are added in preparations like, salad and curry.
18	Areca catechu L.	Arecaceae	Supary	Pseudo stem are made curry is an indigenous food dish.
19	Amaranthus viridis L.	Amaranthaceae	Phuika	Young leaf and stem are fried then taken with rice.
20	Averrhoa carambola L.	Averrhoaceae	Kamranga	Unripe fruit are made curry is an indigenous food dish.
21	Alocasia marcorrhiza (L.) G.Don	Areceae	Bani	Petioles are cooked and eaten with rice.
22	Alternanthera sessilis (L.) R.Br.ex.DC.	Amaranthaceae	Kudar	Young leafy twigs are cooked and eaten with rice.
23	Azadirachta indica A. Juss	Meliaceae	Neem	Young leaves are fried then taken with rice.

**Table 3. Showing the wild vegetable plants of Halam tribe**

24	Colocasia esculenta (L.) Schott	Araceae	Bal	Young leaves and petioles are cooked then taken with rice.
25	Diplazium esculentum (Retz.) SW.	Athyriaceae	Paloi	Young fronds are fried and eaten with rice.
26	Justicia adhatoda L.	Acanthaceae	vasok	Young leafy twigs are cooked and eaten with rice.
27	Spondia pinnata (L.f) kurz	Anacardiaceae	Amra	Young leafy twigs are cooked along with small fishes then taken with rice
28	Ziziphus maruritiana Lam.	Rhamnaceae	Barhwai	Young leafy twigs eaten as raw or after cooking.
29	Bambusa tulda Roxb.	Poaceae	Bash	Shoot are cooked then taken with rice.
30	Homalomena aromatic Schott.	Araceae	Kamanthri	Stem are cooked then taken with rice.
31	Nelumbo nucifera Gaertn.	Nymphaeaceae	Poddo	Young leaves are cooked and taken with rice.
32	Ocimum americanum L.	Lamiaceae	Tulosi	Young leaves are applied on salad.
33	Smilax lanceaefolia Roxb.	Smilacaceae		Flowers are used as vegetables.
34	Curcubita maxima Duch.	Cucurbitaceae	Romai	Young shoots are cooked then taken with rice.
35	Benincasa hispida (Thunb.) Cogn.	Cucurbitaceae	Chulkumra	Fruits are used a vegetables as curry.

Cucurbitaceae, Areceae family is found to be most often used as vegetables. The process of inclusion of tribe in the mainstream societies is leading younger generation away from traditional knowledge, who are ignoring their rich heritage. Halam tribe use a good number of plants as vegetables and for sustaining their livelihood. It is desirable to undertake a detailed study of nutritional values of the plants they consume as vegetable.

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#### REFERENCES

- Anonymous, 1999. The land and the people, in freedom at 50-challenges to meet, (ICAT, Government of Tripura).
- Deb, 1981 and 1983. *Flora of Tripura State*, Vol- 1 and 2, Today and Tomorrow's printers and publisher, New Delhi.
- Jain, S.K, 1987. *A manual of Ethobotany*. Scientific publisher. Jodhpur.
- Das, P, 1997. *Wild edible plants of Tripura tribes*, (Tripura Tribal Research Institute & Museum, Agartala).
- Das, A.K. 2006. Study of Medicinal plants used by different communities of Cachar District, Assam, India (Ph. D Thesis, Assam University, Silchar).
- Das, A.K., Sharma, G.D. and Dutta, B.K. 2004. Study of plant Biodiversity and its Conservation in Hailakandi District, Assam, India, Part-I Flora. *Journ. Econ. Taxon. Bot.* 28(10): 213-328.

- De P, Dutta S., Pal S., Bhattacharjee P & De B, 2013. Food value of the vegetables marketed by tribal farmers and importance of long term preservation of seasonal (winter) vegetables by tribal farmers for enhancing economic status: A discussion based on an observation in Agartala. TUI (*A journal of tribal life and culture, Tribal Research Institute, Govt. of Tripura, Agartala, Tripura, India*). XI (2):62.
- Jain, S.K, 1989. *Methods and Approaches in Ethnobotany*, Society Ethnobotanists, Lucknow.
- Pfoze, N.L., Y. Kumar, N. Sheikh and B. Myrbo, 2012. Assessment of local dependency on selected wild edible plants and fruits from Senapati dist., Manipur, Northeast India. *Ethnobot. Res. Appl.* 10:357-367.
- Shakun Mishra, 2012. Plants used as vegetables by korku, Gond and Nihal tribes in East Nimar region of Madhya Pradesh. *Ethnobotany*. 24:96-100.
- Reyes-Garcia, V., V. Vadez, T. Huanca, W. Leconard and D. wilkie, 2005. Knowledge and consumption of wild plants: A comparative study study in two Tsinmane villages in the bolivian amazan. *Ethnobot. Res. Appl.* 3:201- 207.
- Sundryal, M., R.C. Sundryal, E. Sharma and A.N. Porohit, 1998. Wild edible and other useful plants from the Sikkim Himalaya, India. *Oecol. Mont.* 7:43-54.
- Laskar, Kowser Alam, Das, Ajit kumar and Dutta Biman Kumar, 2014. Indigenous medicine used for treatment of Hepato-protective and other related problems by the Halam tribe of Krimganj district, Assam. *International. Jowl. Of Current Research*. Vol.6, (4) 6088-6091.

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