



Ethnomedicinal Uses of wild vegetables used by Tai-Shyam People of Sivasagar District, Assam, India

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Abstract

Assam is enriched with luxuriant vegetation, having five national parks and no.s of reserve forests. Eleven percent of the Sivasagar district is covered with forest areas. More than 450 plants used in folk and traditional medicines are harvested from the forest of Sivasagar District. Ethnic people of the district Tai-Ahom, Tai-Shyam, Tai-Phake, Mising, Kachari, Sonowal and various Tea-tribes are still using the medicinal herbs for their own method of treatments and also supply them to the herb traders. wild vegetables used by them also have some medicinal value viz. *Centella asiatica*, *Justicia adhatoda*, *Alpinia galanga*. Their food habits make them very healthy.

Keyword: Wild vegetables, tai-shyam, ethnomedicine, traditional knowledge.

Introduction

Sivasagar district of Assam is an historical place, situated in the transition region in between Assam, Nagaland and Assam, Arunachal Pradesh. It lies between 94°8'-94°4' east longitude and 26°7'-27°2' north latitude and an altitude of 110M, and is situated in the foot hills of Naga Hills. The district comprises seven reserve forest areas viz Sola, Abhaypur, Sapekati, Rangoli, Gelekey, Dilli and Panidihing Bird sanctuary, with luxuriant vegetation.

The Tai-Shyams peoples are a section of the great Tai-stock. The Tai groups in India who migrated to Assam from south-west China and north Myanmar in the historical past. The different Tai groups are the Khamyangs (Shyam), the Khamtis, the Phakes, the Turungs, the Aitons and the Ahoms. They belong to the Siamese-Chinese linguistic family. Today, the Tai - Shyam, one such immigrant tribe are a distinct ethnic group of Assam having their own culture and tradition. The tribal people of India mostly live in naturally isolated regions like hills and forests, and they depend on forests for their day today life such as food, fodder, medicines, wild vegetables, fibres and domestic purposes.

The people of rural areas still dependent on traditional medicines for health care and treatment of diseases, it has no side effect and curing capacity is also high. Traditional medicines have developed through experience of many generations and have been primarily dependent upon locally available plants.

Natural products are important sources for biologically active drugs¹. Most of the wild vegetables are coming under ethnomedicinal plants.

Material and Methods

Two very old Khamyang villages namely, Disangpani Shyam village and Solapathar Shyam village under Sivasagar district of Assam, were selected to carry out the study. Interacting and interviewing people of this area to get knowledge about their food habits and find out the wild vegetables used by them and their ethno medicinal value.

Result and Discussion

In the present studies recorded 25 species 22 genera and 17 families. Out of these 3 are Pteridophytes and 22 from Angiosperms in 17 dicotyledones and 5 monocotyledons. From the list *Alpinia galanga* willd, *Clerodendrum colebrookianum*, *Alternanthera sessilis* DC, *Dioscorea alata* L. are coming under IUCN Red list. All these vegetable listed below are coming under non conventional food plant, frequently used for the curing of various ailments by traditional practitioners for most of common diseases as cough, cold, diarrhea, dysentery and fever. Available information indicates that all these are nutritionally and medicinally important with conventional crops²⁻⁴.

List of plants used as vegetables as well as medicine

Scientific name: *Alpinia galanga* willd, Family: Zingiberaceae, Local name: Tora Baghini, Part used as vegetable: Juvenile culms, Medicinal use: Rhizome along with leaf of commiphora mukul is a cure upon inflammation of rheumatism, rheumatoids, arthritis and pain is vertebral column, rhizome decoction with 10 ml of Ricinus oil apply on backache⁵. Habit and habitat: Aquatic herb. Flowering and fruiting period: June –November. Scientific name: *Alternanthera sessilis* DC. Family:

Amaranthaceae, Local name: Mati kandiri, Part used as vegetable: Young shoot, Medicinal use: Juice used for growth of hair and stomach trouble. Given to mother to increase the flow of milk after child birth., Habit and habitat: Semi aquatic annual herb, Flowering and fruiting period: Rainy Season.

Scientific name: *Amaranthus spinosus* L., Family: Amaranthaceae, Local name: Kata khutora, Parts used as vegetable: Young shoot, Medicinal use: Young tender shoot are used as green vegetables, as medicine to remove kidney stones, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: April- October.

Scientific name: *A. viridis* L, Family: Amaranthaceae, Local name: Jati khutora, Parts used as vegetable: Young shoot, Medicinal use: Young tender shoots are used as green vegetables and as medicine in eye problem, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: April-September.

Scientific name: *Bamboosa balcooa* Roxb, Family: Poaceae, Local name: Voluka bah, Part used as vegetable: Young Culm, Medicinal use: used against insect bite, Habit and habitat: Semi aquatic tree, Flowering and fruiting period: Once in life.

Scientific name: *Calamus tenuis* Roxb, Family: Arecaceae, Local name: Jati bet., Part used as vegetable: Young Culm, Medicinal use: Young stem used as medicine for stomach trouble, Habit and habitat: Semi aquatic woody herb, Flowering and fruiting period: September –May.

Scientific name : *Centella asiatica* (L) urban, Family: Apiaceae, Local name: Bor-manimuni, Part used as vegetable: Whole plant, Medicinal use: Leaf paste is applied on abscess and carbuncles for quick healing.,Habit and habitat: Semi aquatic herb, Flowering and fruiting period: April- September.

Scientific name: *Chenopodium album* L., Family: Chenopodiaceae, Local name: Jilmil hak., Part used as vegetable: Young tender shoots, Medicinal use: Young tender shoots are used to recover from dizziness, Habit and habitat: Annual herb, Flowering and fruiting period: October – March.

Scientific name : *Clerodendrum colebrookianum*, Family: Verbaceae, Local name: Nephafu, Part used as vegetable: Leaves, Medicinal use: The leaves are eaten as vegetable to normal blood pressure, Habit and habitat:Terrestrial shrub, Flowering and fruiting period: April, June.

Scientific name : *Colocasia esculenta* (L) Schot, Family: Araceae, Local name: Kala Kachu, Part used as vegetable: Bulb, Medicinal use: Folk claim Roasted petiole is applied in the form of plaster for a week in joint pains. About 200 ml, infusion of petiole mixed with 250ml. cow milk are prescribed once a day for three days to woman after child birth to promote secretion of breast milk, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: April-June.

Scientific name: *Curcuma angustifolia* Roxb, Family: Zingiberaceae, Local name: Ketkuri halodi, Part used as vegetable: Rhizome, Medicinal use: Rhizome juice is rubbed on swellings of the body and paste is used in healing fractured bone, Habit and habitat: Herb, met in wet areas, Flowering and fruiting period: During rainy season.

Scientific name: *Dioscorea alata* L, Family: Dioscoreaceae, Local name: Kathalu, Part used as vegetable: Tubers, Medicinal use: it is used as medicine to cure leprosy, diabetes, and piles, Habit and habitat: Climber Flowering and fruiting period: April, August.

Scientific name: *Drymaria cordata* Willd, Family: Caryophyllaceae, Local name: Lai jabori, Part used as vegetable: Young stem, Medicinal use: Plant is used as sinusitis, asthma, cough and cold, fever, head ache and pneumonia and also for burn, ring worm and skin diseases⁵. Plant extract is prescribed in diarrhea and dysentery, Habit and habitat: Herbaceous plant found in moist area, Flowering and fruiting period: October-February.

Scientific name : *Hedyotis scandens* Roxb, Family: Rubiaceae, Local name: Bhadali lata, Part used as vegetable: leaves, Medicinal use: The stem gives remedy for gastric ulcer, heartburn, and the fresh leaves acts as promoting tissue regeneration in wounds, Habit and habitat: Climber, Flowering and fruiting period: December, July.

Scientific name: *Hydrocotyl javanica* thumb, Family: Apiaceae, Local name: Haru mani muni, Part used as vegetable: Whole plant, Medicinal use: Leaves are tonic and blood purifier, used for nervousness, indigestion and dysentery, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: July – December.

Scientific name: *Ipomea aquatica* Forsk, Family: Convolvulaceae, Local name: Pani kolmou, Part used as vegetable: Young shoot, Medicinal use: Leaves juice is used in jaundice, also used in urinary trouble and nervous hindrance, Habit and habitat: Aquatic Herb, Flowering and fruiting period: Rainy Season.

Botanical name: *Justicia adhatoda* Medik, Family: Acanthaceae, Local name: Titaphool, Part used as vegetable: Flower, Medicinal use: The leaf extract has been used for treatment of bronchitis and asthma large doses of fresh juice of leaves have been used in tuberculosis. It is used to stop bleeding gum, Habit and habitat: Terrestrial shrub, Flowering and fruiting period: December – May.

Scientific name: *Lasia spinosa* (L) Thw, Family: Araceae, Local name: Changmora, Part used as vegetable: Young leaves, Medicinal use: Root and leaves are used as good remedy for sore throat and piles. Leaf paste is used on cut and an injury as haemostatic .The plant juice is used for colic rheumatism, Habit and habitat: Herbaceous plant found in marshy areas, Flowering

and fruiting period : September –December.

Scientific name: *Leucas aspera* Spreng, Family: Lamiaceae, Local name : Doron bon, Part used as vegetable: Young shoot, Medicinal use: leaf juice is used in sinusitis, stomach complaints, in headache and intermittent fever. The plant is used in cold, cough, jaundice, Habit and habitat: Terrestrial herbaceous plant, Flowering and fruiting period: Most part of the year.

Scientific name: *Marsilea minuta* L, Family : Marsileaceae, Local name: Part used as vegetable: Tender shoot and leaves, Medicinal use: Leaves are used for urinary troubles. Crushed plant with salt is applied to abdomen to cure hemorrhage, Habit and habitat: Semi aquatic pteridophytic herb, Flowering and fruiting period: November-January.

Scientific name : *Oxalis corymbosa* L, Family: Oxalidaceae, Local name: Bor tengesi, Part used as vegetable: Whole plant, Medicinal use: Used against scurvy and also used in stomach complaints, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: January-May

Scientific name : *Oxalis corniculata* L, Family: Oxalidaceae, Local name: Tengesi, Part used as vegetable: Whole plant, Medicinal use: The whole plant is stomachic, cooling and good remedy for dysentery, appetizing and an antidote for intoxicating effect⁵. Leaf is also used for headache, Habit and habitat: Semi aquatic herb, Flowering and fruiting period: In most part of the year.

Scientific name: *Pogostemon plectranthoides* Desf, Family: Lamiaceae, Local name: Hukloti, Part used as vegetable: Young shoot, Medicinal use: Decoction is given orally in swelling due to insect bite. Decoction (100 ml) is given orally after child birth for construction of uterus⁵, Habit and habitat: Terrestrial herb, Flowering and fruiting period: February, July and August.

Scientific name: *Pteridium aquilinum* L, Family: Polypodiaceae, Local name: Dhekia, Parts used as vegetable: Young shoot, Medicinal use: Rhizome and fronds are antihelminthic, and the decoction is given in chronic disorders of viscera and spleen due to obstruction, Habit and habitat: Fern met in both plain and hills, Flowering and fruiting period: September-November,

Scientific name : *P. enformis* L, Family: Poly podiaceae, Local name: Dhekia, Part used as vegetable: Young shoot, Medicinal use: The rhizome extract is applied to glandular swelling of neck. Fresh decoction of fronds is given in dysentery, Habit and habitat: Fern met in both plain and hills, Flowering and fruiting period: September-December
Tai-shyam people are healthy due to their food habit; they took boiled food without spicy and fried. Introducing these plants as food resource is important to get a healthy generation.

Wild medicinal vegetables are decreasing very fast due to industrial and anthropogenic activities. The frequently available plants are now rare in the district due to extensive indiscriminate collection either for medicine or for food. So, involvement of citizens at grassroots level is important in management of these wild plants.

Conclusion

The study revealed that all the collected plants are used as wild vegetable and all have ethno medicinal value. Inclusion of these vegetable as food helps to develop healthy and disease free generation. So, we should domesticate these plants for healthy future generation.

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