

Ethnobotanical resources and traditional skills prevalent among the Tagin community of Arunachal Pradesh, India

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Abstract

Ethnobotanical field survey was conducted in 10 villages of the Tagin community of Upper Subansiri District of Arunachal Pradesh during the month of May – June 2018 using semi-structured questionnaire and focused group discussion methods. The investigation reveals 70 species belonging to 62 genera and 44 plant families along with some unique sets of traditional knowledge and skills associated with diverse use of ethnobotanical resources available in their ethnoecological landscape.

Key words: Tagin tribe, Ethnobotany, Traditional Skill, Arunachal Pradesh

INTRODUCTION

The state of Arunachal Pradesh comprises of 25 districts with a total geographical area of 83,743 sq km rich in biocultural diversity and traditional knowledge system (Tag & Das 2007). The Upper Subansiri district is one of the oldest district of Arunachal Pradesh which was created in 1980 with Daporijo as its district headquarters (Figure 1). The district derived its name from the river Subansiri which navigates the whole length of the district and is one of the major tributary of River Brahmaputra in Assam. The district is bounded by Kamle District in South West, West Siang District in the East, Tibet in the North and Kurung Kumey district on the North West (Anonymous 2011). The elevation of the district ranging from 600 m to 3800 m from the mean sea level and located between geographical coordinate of 28.5° and 28.25° North Latitudes and 93.15° and 94.20° East Longitudes. The region is blessed with thick and dense forest comprises of moist alpine, temperate and subtropical forest, and tropical wet evergreen forest in the whole district rich in floral and faunal elements. The district is inhabited by 3 major tribes namely, the *Tagin*, *Nyishi* and the *Galo*, out of which *Tagin* community has the highest population (Murtem & Chaudhry 2016). The Tagin community of Upper Subansiri District of Arunachal Pradesh have been using the plants as food, medicinal and cultural materials since time immemorial. Literature studies have revealed that there is lack of published ethnobotanical information available to date on Tagin community. Although the region is rich in plant diversity and traditional knowledge, but there is a lack of published ethnobotanical information on the target community. Therefore, present paper describes ethnobotanical resources and traditional skills prevalent among the Tagin community of Arunachal Pradesh which aims to document the ethnobotanical diversity and associated traditional knowledge system for future sustainable conservation and management practices.

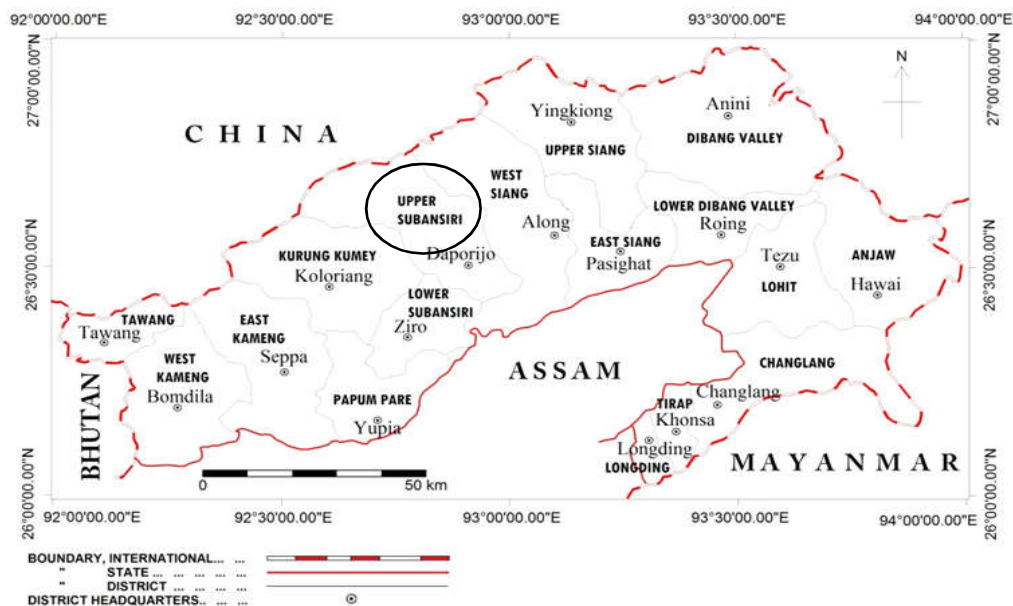


Figure 1. Map showing the location of study area (not to scale)

MATERIALS AND METHODS

The ethnobotanical survey was carried out in the 10 selected villages of Upper Subansiri District of Arunachal Pradesh, namely, *Sippi*, *Menga*, *Radding*, *Chotaropuk*, *Ronya*, *Baririjo*, *Riddi*, *Pakarijo*, *Liruk*, and *Dumporijo* during the month of May to June 2018 following the field method suggested by Martin (2008). The traditional knowledge and skills associated with ethnobotanical resources utilization were documented using semi-structured questionnaire and a focused group discussion session conducted in 10 selected villages of rural and semi-urban ethnoecological landscape. In all, 14 informants of age between 25 – 70 were selected for the interview of which 6 were female and 8 males. In addition, Prior Informed Consent (PIC) were obtained from the traditional knowledge holders prior to extensive field study as suggested by Lokho and Narasimhan (2013). During the field visit, translation of local nomenclature of plants and documentation of plant based traditional knowledge were assisted by local knowledge holders of Tagin community who were expertise in their local dialect, indigenous cultural system and local ethnoecological landscape. The ethnobotanical species with local names, parts used, mode of use, habits, and habitats of each plants were recorded in field notebook. The voucher specimens were collected and prepared in the form of herbarium by following Jain & Rao (1977) method which were deposited in the Herbarium of Arunachal University (HAU), Department of Botany, Rajiv Gandhi University, Rono Hills, Doimukh, Arunachal Pradesh for future reference. Each of the ethnobotanical species were identified through consultation of Standard Floristic Literatures such as *Flora of Assam* (Kanjilal *et al.* 1934 – 1940), *The Flora of British India* (Hooker, 1875 – 1897), *e-Flora of China*, and e-Herbarium of Kew. The currently accepted names were verified in the website www.theplantlist.org hosted by RBG Kew and Missouri Botanical Garden, St. Louis, USA.

RESULT AND DISCUSSION

The current data on ethnobotanical investigation reveals 70 plant species belonging 62 genera and 44 families (Table 1; Plate - I) which is used by the Tagin community of Upper Subansiri

District of Arunachal Pradesh. The most dominant plant family recorded is the Asteraceae (7) followed by Arecaceae (6) Solanaceae (4), Lauraceae (3), Polygonaceae (3) and Moraceae (3) (Figure 2). Out of total 70 species of ethnobotanically useful plants recorded, 23 are the herb species, 22 are the shrubs, 19 of trees and 6 are of climbers (Figure 3). The plants with various ethnobotanical uses has been recorded from the local residents which includes edible, medicinal, construction, ritual, livestock medication and poisoning agents.

Table 1. Checklist of ethnobotanical significant plants used by the Tagin community of Upper Subansiri District of Arunachal Pradesh.

Botanical Name [Family]; Voucher specimen	Local Name	Habit	Part Used	Purpose of Use	Ethnic Uses
<i>Acmella oleracea</i> (L.) R.K. Jansen [Asteraceae]; Coll. No. HAU/RR-MT820/ 5.06.2018/ Sippi	Maarsha	Herb	Flower and leaves	Edible	Flower and leaves consumed as homegrown vegetable.
<i>Acmella paniculata</i> (Wall. ex DC.) R.K. Jansen [Asteraceae]; Coll. No. HAU/RR-MT821/ 5.06.2018/Sippi	Byadik	Herb	Entire plant	Edible	Entire plant is consumed as vegetable.
<i>Ageratum conyzoides</i> (L.) L. [Asteraceae]; Coll. No. HAU/RR-MT823/5.06.2018/Sippi	Myora	Herb	Leaves	Medicinal	Leaves are crushed and the paste is applied on wound for blood clotting and wound healing
<i>Allium chinense</i> G. Don [Amaryllidaceae]; Cosll. No. HAU/RR-MT825/5.06.2018/ Menga	Talap	Herb	Leaves and bulb	Edible	Leaves and bulb are edible; It can be eaten raw as well as cooked
<i>Altingia excelsa</i> Noronha [Altingeaceae]; Coll. No. HAU/RR-MT824/8.06.2018/ Chotaropuk	Siingri	Tree	Trunk	Bio utensil, furniture; construction	Trunk is used for making house pillar, local furniture and traditional utensils (mortar)
<i>Anomum pterocarpum</i> Thwaites [Zingiberaceae]; Coll. No. HAU/RR-T826/8.06.2018/ Chotaropuk	Taleng	Shrub	Leaves	Stuffing	Leaves are used as packing material such as for packing rice and vegetables.
<i>Angiopteris evecta</i> (G. Forst.) Hoffm. [Marattiaceae]; Coll. No. HAU/RR-MT829/ 10.07.2018/ Baririjo	Tabii	Shrub	Roots	Famine food	Roots are crushed and paste made after crushing the roots are shed dried for 3-4 days. After that, the paste are packed on leaves and cooked. The cooked pastes are then consumed
<i>Asystasiella neesiana</i> (Wall.) Lindau. [Acanthaceae]; Coll. No. HAU/RR-MT828/ 5.06.2018/Menga	Barse	Herb	leaves	Edible	Leaves are edible and eaten as a comestible food
<i>Begonia aborensis</i> Dunn [Begoniaceae]; Coll. No. HAU/RR-MT827/8.06.2018/ Chotaropuk	Rebe	Herb	stem	Medicinal; edible	Stem is eaten as raw and believed to cure stomach pain
<i>Calamus erectus</i> Roxb. [Arecaceae]; Coll. No. HAU/RR-MT834/7.06.2018/ Don	Tare	Tree	Stem	Binding	Stem are locally used as rope for binding purpose such as for making boundary, poultry houses, house construction etc.
<i>Calamus flagellum</i> Griff. ex Mart. [Arecaceae]; Coll. No. HAU/RR-MT833/7.06.2018/ Don	Iiso	Climber	Stem	Binding	Stem is used for making local rope for binding purpose
<i>Canarium strictum</i> Roxb. [Burseraceae]; Coll. No. HAU/RR-MT831/5.06.2018/ Menga	Silum	Tree	Fruit	Edible	The fruit is edible

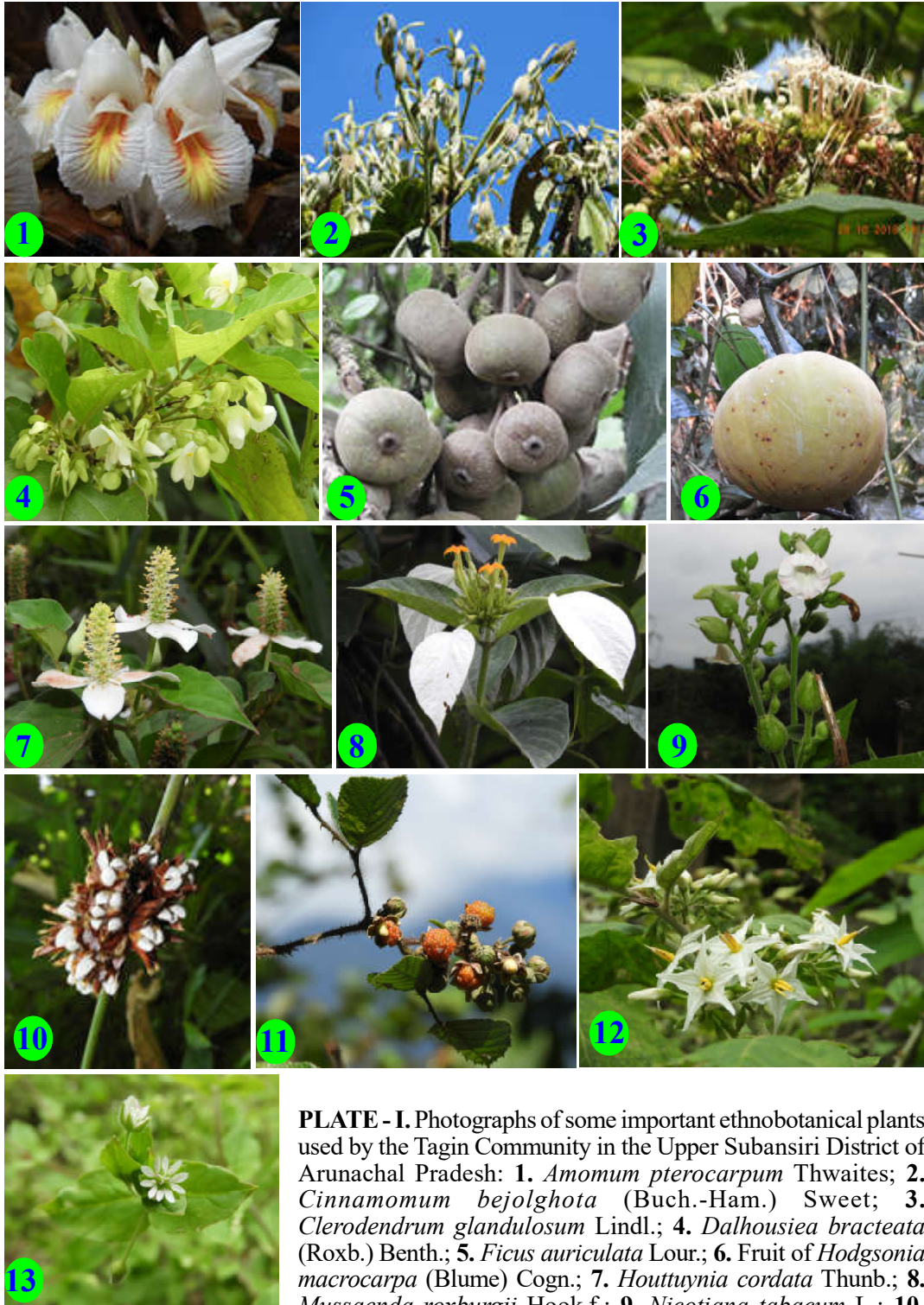


PLATE - I. Photographs of some important ethnobotanical plants used by the Tagin Community in the Upper Subansiri District of Arunachal Pradesh: **1.** *Amomum pterocarpum* Thwaites; **2.** *Cinnamomum bejolghota* (Buch.-Ham.) Sweet; **3.** *Clerodendrum glandulosum* Lindl.; **4.** *Dalhousiea bracteata* (Roxb.) Benth.; **5.** *Ficus auriculata* Lour.; **6.** Fruit of *Hodgsonia macrocarpa* (Blume) Cogn.; **7.** *Houttuynia cordata* Thunb.; **8.** *Mussaenda roxburgii* Hook.f.; **9.** *Nicotiana tabacum* L.; **10.** *Phrynium pubinerve* Blume; **11.** *Rubus ellipticus* Sm.; **12.** *Solanum torvum* Sw.; **13.** *Stellaria media* (L.) Vill.

Botanical Name [Family]; Voucher specimen	Local Name	Habit	Part Used	Purpose of Use	Ethnic Uses
<i>Caryota urens</i> L. [Arecaceae]; Coll. No. HAU/RR-MT832/ 05.06.2018/Sippi	Tamak	Tree	Trunk	Construction	Trunk is locally used for making floor of local houses in the tagin areas; It is also used for making pathway of local hanging bridges
<i>Choerospondias axillaris</i> (Roxb.) B.L.Burt & A.W.Hill [Anacardiaceae]; Coll. No. HAU/RR-MT830/5.06.2018/Menga	Beelam	Tree	Fruit	Edible	Fruits are eaten as raw. It is sour in taste
<i>Chromolaena odorata</i> (L.) R.M.King & H.Rob. [Asteraceae]; Coll.No. HAU/RR-MT881/8.06.2018/Chotaropuk	Maling-Jampak	Shrub	Leaves	Medicinal	Paste of leaves when applied to cuts and wound, heals and stop bleeding rapidly; leaves act as a blood clotting
<i>Cinnamomum bejolghota</i> (Buch.-Ham.) Sweet [Lauraceae]; Coll. No. HAU/RR-MT882/12.06.2018/Riddi	Magob	Tree	Leaves	Local beverage	Leaves are used for preparation of special kind of local beverage which serves as a local tea among tagin tribe
<i>Clerodendrum glandulosum</i> Lindl. [Lamiaceae] Coll. No. HAU/RR-MT883/12.06.2018/Riddi	Taapetaa la / Taapin	Shrub	Entire plant	Medicinal	Entire plant is edible and the leaf is used during lactation period for curing breast pain and back pain after heating the leaf on fire; leaves when consumed are believed to maintain the blood pressure also
<i>Crassocephalum crepidioides</i> (Benth.) S.Moore [Asteraceae]; Coll. No. HAU/RR-MT884/12.06.2018/Riddi	Iing-Kayeng	Shrub	Leaves	Edible	Leaves are consumed as local vegetable
<i>Cyclosorus extensus</i> (Blume) H. Itô [Thelypteridaceae]; Coll. No. HAU/RR-MT886/12.06.2018/Riddi	Rukdik	Shrub	Leaves	Livestock medication	It is believed that placing the leaves on local poultry houses are believed to cure viral and bacterial diseases within
<i>Dalhousiea bracteata</i> (Roxb.) Benth. [Leguminosae]; Coll. No. HAU/RR-MT885/06.06.2018/Radding	Tanyom	Shrub	leaves	Ritual	The tagin people use the leaves of this plant for ritualistic purpose.
<i>Dicranopteris linearis</i> (Burm. f.) Underw. [Gleicheniaceae]; Coll. No. HAU/RR-MT888/06.06.2018/Radding	Taho	Shrub	Stem	Binding	Stem is used as a local belt; The outer part of stem is pulled off and the inner part of the stem, which is quite tough, is locally used as a belt during early days.
<i>Dioscorea pentaphylla</i> L. [Dioscoriaceae]; Coll. No. HAU/RR-MT865/11.06.2018/Dumporijo	Hiili	Climber	tuber	Edible	Hanging tuber is edible; The tuber is consumed after boiling
<i>Diplazium esculentum</i> (Retz.) Sw. [Athyriaceae]; Coll. No. HAU/RR-MT866/12.06.2018/Riddi	Pakya-Raya	Shrub	Fronde	Medicinal	Crushed and paste made after boiling the frond are used for curing digestive problems
<i>Drymaria cordata</i> (L.) Willd. ex Schult. [Caryophyllaceae]; Coll. No. HAU/RR-MT880/12.06.2018/Riddi	Bodo-Bolo	Herb	leaves	Livestock medication	Crushed /paste of leaves are applied on the bone of domestic animals (dog and hen) to heal the broken bone
<i>Duabanga grandiflora</i> (DC.) Walp. [Lythraceae]; Coll. No. HAU/RR-MT867/10.06.2018/Baririjo	Kolak	Tree	Trunk	Construction	Trunk is particularly used for building the local houses; Stand or pillars are usually made
<i>Erigeron canadensis</i> L. [Asteraceae]; Coll. No. HAU/RR-MT868/8.06.2018/Chotaropuk	Bidiing-Kotar	Herb	Young shoot	Edible	Young shoot are consumed as a vegetables

Botanical Name [Family]; Voucher specimen	Local Name	Habit	Part Used	Purpose of Use	Ethnic Uses
<i>Fagopyrum esculentum</i> Moech [Polygoniaceae]; Coll. No. HAU/RR-MT877/8.06.2018/ Chotaropuk	Hoku-Paya	Herb	leaves	Edible	Leaves are edible and consumed as vegetable
<i>Ficus auriculata</i> Lour. [Moraceae]; Coll. No. AU/RR-MT879/10.06.2018/Baririjo	Tau	Tree	Fruits	Edible	Fruits are edible
<i>Ficus hirta</i> Vahl [Moraceae] Coll. No. HAU/RR-MT878/10.06.2018/Baririjo	Kokshi-Kyarik	Shrub	Fruits	Edible	Fruits are edible
<i>Ficus semicordata</i> Buch.-Ham. ex Sm. [Moraceae]; Coll. No. HAU/RR-MT862/10.06.2018/Baririjo	Takop	Tree	Fruits	Edible	Fruits are edible
<i>Gnetum montanum</i> Markgr. [Gnetaceae]; Coll. No. HAU/RR-MT863/7.06.2018/Don	Tagiing	Climber / Liana	Bark	Binding	Fibre of bark is used as ropes for tying up the local arrow after fire dried
<i>Gynocardia odorata</i> R.Br. [Achariaceae]; Coll. No. HAU/RR-MT864/6.06.2018/Radding	Siingrit	Tree	Fruit	Fish poisoning	Dried fruit are grinded into powder and used as poisoning material during fish hunting
<i>Gynura cusimbua</i> (D.Don) S.Moore [Asteraceae]; Coll. No. HAU/RR-MT861/09.06.2018/Pakarijo	Yogin	Herb	Leaves and tender shoot	Edible	Leaves and tender shoot are edible and consumed as a vegetable
<i>Hodgsonia macrocarpa</i> (Blume) Cogn. [Cucurbitaceae] Coll. No. HAU/RR-MT869/7.06.2018/Don	Tatar	Climber	Seed	Edible	Cotyledons are eaten after roasted which is rich in oil.
<i>Houttuynia cordata</i> Thunb. [Saururaceae]; Coll. No. HAU/RR-MT870/10.06.2018/Ronya	Hiingya	Herb	Entire plant	Edible	Entire plant is edible and consumed as chutney or salad
<i>Hydrocotyle javanica</i> Thunb. [Araliaceae]; Coll. No. HAU/RR-MT858/7.06.2018/Don	Kojak-Rotak	Herb	Leaves	Edible	Leaves are boiled and served as vegetable.
<i>Ipomoea batatas</i> (L.) Lam. [Convolvulaceae]; Coll. No. HAU/RR-MT859/10.06.2018/Ronya	Karya-Riyamiya	Herbaceous vine	Tuber	Edible	Tuber is sweet in taste and consumed as food after boiling the tuber
<i>Lagenaria siceraria</i> (Molina) Standl. [Cucurbitaceae]; Coll. No. HAU/RR-MT860/05.06.2018/Sippi	Opum	Climber	Fruit	Bio-utensil	Dried and hollowed fruit are used as local jug or container since time immemorial; It is used as bowls to drink local wine and also to carry water
<i>Litsea cubeba</i> (Lour.) Pers. [Lauraceae]; Coll. No. HAU/RR-MT871/10.06.2018/Ronya	Tayir	Tree	Leaves and fruit	Edible	Leaves have good aroma and it is consumed raw and also as a salad
<i>Livistona jenkinsiana</i> Griff. [Arecaceae]; Coll. No. HAU/RR-MT872/10.06.2018/Ronya	Taak	Tree	Leaves	Construction	In tagin locality, the leaves are very frequently used for making thatch of local houses for human and also for domestic animals like pig and hen.
<i>Lycopodiella cernua</i> (L.) Pic. Serm. [Lycopodiaceae]; Coll. No. HAU/RR-MT873/07.06.2018/Don	Dogu-Miir	Creeping Herb	Entire plant	Ritual	Plant is used for ritualistic purpose when a person is sick to cure different types of diseases.
<i>Manihot esculenta</i> Crantz [Euphorbiaceae]; Coll. No.	Engin-Sida	Woody shrub	Tuber	Edible	It is edible and consumed after cooking as a food.

Botanical Name [Family]; Voucher specimen	Local Name	Habit	Part Used	Purpose of Use	Ethnic Uses
<i>Melastoma malabathricum</i> L. [Melastomataceae]; Coll. No. HAU/RR-MT875/7.06.2018/ Liruk	Dai-Dasa	Shrub	Fruits	Edible	Fruit is sweet in taste.
<i>Musa balbisiana</i> Colla [Musaceae]; Coll. No. HAU/RR-MT856/6.06.2018/ Radding	kolong	Herb	Leaves	Stuffing	Green leaves are used as packing material while making local beverages; leaves are packed around all over for effective result
<i>Mussaenda roxburgii</i> Hook.f. [Rubiaceae]; Coll. No. HAU/RR-MT857/7.06.2018/ Don	Hak-Paum	Shrub	Leaves and tender shoot	Edible	Leaves and tender shoot are edible and consumed as good vegetable among the villagers.
<i>Nicotiana tabacum</i> L. [Solanaceae]; Coll. No. HAU/RR-MT889/9.06.2018/ Pakarijo	Dehii	Herb	Leaves	Smoking	Dried and grinded leaves are used as local tobacco for smoking and chewing.
<i>Perilla frutescens</i> (L.) Britton [Lamiaceae]; Coll. No. HAU/RR-MT876/8.06.2018/ Chotaropuk	Tanam-Namji	Herb	Seed	Edible	Seeds are edible and rich in oil content; crushed seed are cooked with vegetable to enrich the taste of the vegetable.
<i>Persicaria capitata</i> (Buch.-Ham. ex D.Don) H.Gross [Polygoniaceae]; Coll. No. HAU/RR-MT849/8.06.2018/ Chotaropuk	Beku-Yalu	Herb	Whole plant	Fodder	Entire plant of is given as a fodder for pig.
<i>Persicaria hydropiper</i> (L.) Delarbre [Polygoniaceae]; Coll. No. HAU/RR-MT890/09.06.2018/Pakarijo	Hosum	Herb	Whole plant	Fish poisoning	It is used for fish poisoning.
<i>Phoebe cooperiana</i> U.N Kanjilal ex A.Das [Lauraceae]; Coll. No. HAU/RR-MT850/06.06.2018/Radding	Sechar	Tree	Fruit	Edible	Fruits are edible
<i>Phrynium pubinerve</i> Blume [Marantaceae]; Coll. No. HAU/RR-MT851/7.06.2018/ Don	Kokam	Herb	Leaves	Stuffing	Leaves are widely used for packing purposes.
<i>Pinanga gracilis</i> Blume [Arecaceae]; Coll. No. HAU/RR-MT854/7.06.2018/ Don	Tachar	Tree	Whole plant	Ritual	Entire plant is used during ritualistic purpose.
<i>Piper pedicellatum</i> C. DC. [Piperaceae]; Coll. No. HAU/RR-MT852/05.06.2018/ Sippi	Yarii	Shrub	Leaves	Edible	Boiled leaves are served as vegetable.
<i>Portulaca oleracea</i> L. [Portulacaceae]; Coll. No. HAU/RR-MT853/9.06.2018/ Pakarijo	Tadar-oo	Herb	Whole plant	Edible	Plant is sour in taste and the entire plant is consumed as vegetable.
<i>Pouzolzia hirta</i> Blume ex Hassk. [Urticaceae]; Coll. No. HAU/RR-MT855/9.06.2018/ Pakarijo	Oik	Herb	Leaves	Edible; medicinal	Leaves are consumed as a good vegetable; It is believed to be rich in vitamin and increases the hemoglobin level.
<i>Pteris tripartita</i> Sw. [Pteridaceae]; Coll. No. HAU/RR-MT843/10.06.2018/ Baririjo	Tao-Kapung	Shrub	Tender leaves	Edible	Tender shoots are consumed as vegetable.
<i>Ricinus communis</i> L. [Euphorbiaceae]; Coll. No. HAU/RR-MT888/6.06.2018/ Radding	Parok-Iikana	Shrub	Leaves	Fodder; livestock medication	Leaves are used as fodder for caterpillar; caterpillar is fed on this plant for generating silk; the bark of long petiole is used as a bandage to cure the fracture bond of chicken.

Botanical Name [Family]; Voucher specimen	Local Name	Habit	Part Used	Purpose of Use	Ethnic Uses
<i>Rubus ellipticus</i> Sm. [Rosaceae]; Coll. No. HAU/RR-MT844/06.06.2018/ Radding	Tae	Shrub	Fruit	Edible	Fruit is sweet in taste and consumed raw.
<i>Rubus niveus</i> Thunb. [Rosaceae]; Coll. No. HAU/RR-MT845/06.06.2018/ Radding	Tae	Shrub	Fruit	Edible	Fruit is sweet in taste.
<i>Saurauia punduana</i> Wall. [Actinidaceae]; Coll. No. HAU/RR-MT846/9.06.2018/ Pakarijo	Hinchii	Tree	Entire plant	Ritual	Fruits are edible and the entire plant is used for ritualistic purpose; The plant is believed to be sacred for using in different ritualistic resolution
<i>Sauropus androgynus</i> (L.) Merr. [Phyllanthaceae]; Coll. No. HAU/RR-MT847/ 05.06.2018/Sippi	Oo-Toko	shrub	Leaves	Edible	Leaves are taken as vegetable.
<i>Solanum torvum</i> Sw. [Solanaceae]; Coll. No. HAU/RR-MT848/05.06.2018/ Sippi	Samatae/ Byake	Shrub	Fruit	Edible; medicinal	Crushed fruits are applied on the teeth for curing tooth ache; Fruit are also consumed as chutney.
<i>Solanum americanum</i> Mill. [Solanaceae]; Coll. No. HAU/RR-MT841/9.06.2018/ Pakarijo	Horee	Shrub	Leaves	Edible	Leaves are boiled and consumed as a good vegetable
<i>Solanum spirale</i> Roxb. [Solanaceae]; Coll. No. HAU/ RR-MT842/11.06.18/ Dumporijo	Sucha- Kaya	Shrub	Fruit	Medicinal	Among the tagin tribe, the fruit is believed to cure diarrhea and high blood pressure when consumed after boiled
<i>Spondias pinnata</i> (L. f.) Kurz [Anacardiaceae]; Coll. No. HAU/RR-MT840/10.06.2018/ Ronya	Kodum	Tree	Stem	Construction	Stem is used for the construction of pillar of local houses in the tagin regions
<i>Stellaria media</i> (L.) Vill. [Caryophyllaceae]; Coll. No. HAU/RR-MT837/10.06.2018/ Ronya	Meedam	Herb	Whole plant	Edible	whole plant is consumed as vegetable
<i>Sterculia hamiltonii</i> (Kuntze) Adelb. [Malvaceae]; Coll. No. HAU/RR-MT839/11.06.2018/ Dumporijo	Siinglam	Tree	Seed	Edible	Seeds are edible
<i>Thysanolaena latifolia</i> (Roxb. ex Hornem.) Honda [Poaceae]; Coll. No. HAU/RR-MT838/ 11.06.2018/Dumporijo	Taji	Herb	Entire plant	Local Broom	Entire inflorescences is used as broom after matured
<i>Wallichia oblongifolia</i> Griff. [Arecaceae]; Coll. No. HAU/RR-MT836/11.06.2018/ Dumporijo	Tase	Shrub	Black fibres	Handicrafts	People of tagin tribe uses the black fibres for making local bags called 'Raaming'; They carry this bag during rainy days to protect themselves from rainfall.
<i>Zanthoxylum rhetsa</i> DC. [Rutaceae]; Coll. No. HAU/RR-MT835/06.06.2018/ Radding	Honyir	Tree	Leaves	Fish poisoning; edible	Leaves are crushed into powder and used for fish poisoning; The leaves are also consumed by the local people as a vegetable; Leaves have a strong aroma and believed to enhance the taste of food.

Wild edible plants: Of the total plant recorded, 37 plant species are typically used as wild edible food by the local residents. Some of the common and most frequently used edible plants are *Acmella paniculata*, *Crassocephalum crepidioides*, *Litsea cubeba*, *Mussaenda roxburgii*, *Phoebe cooperiana*, *Piper pedicellatum*, *Pouzolzia hirta*, *Solanum torvum*, etc.

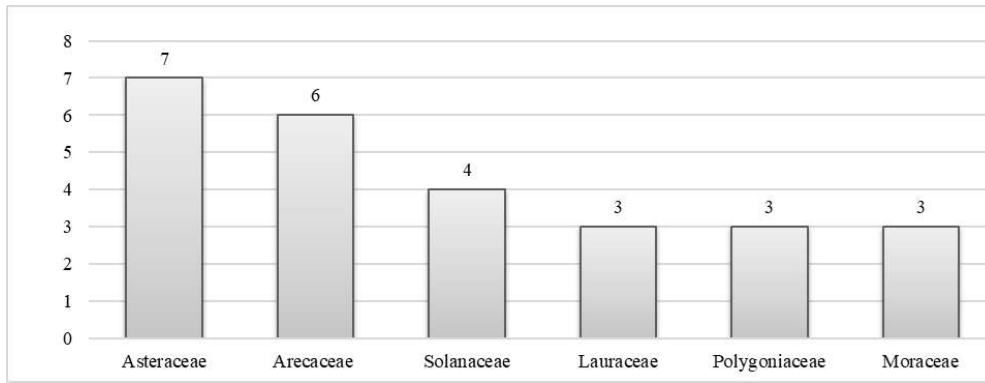


Figure 2. Major plant families of ethnobotanical significance used by the Tagin community of Upper Subansiri District of Arunachal Pradesh

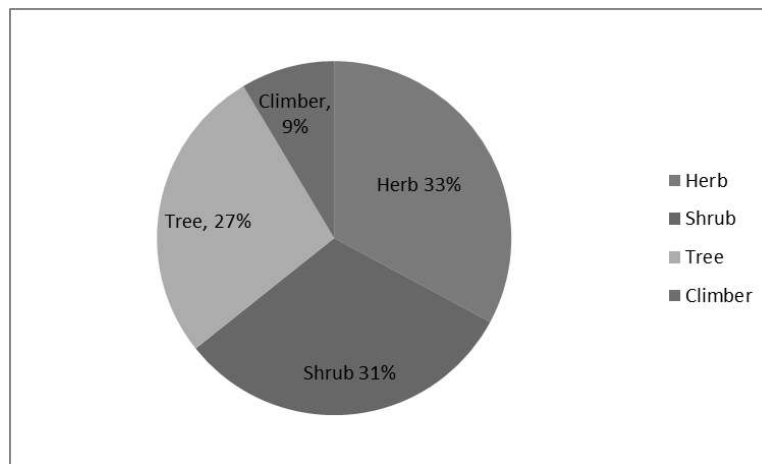


Figure 3. Habit groups of ethnobotanically useful plants used by the Tagin community

Medicinal plants: The study revealed 8 medicinally useful plants which were used by the local residents of rural localities for the treatment of various ailments such as diarrhea, toothache, stomach pain, blood pressure, blood clotting, breast and back pain during lactation period. Some of the significant plant species recorded includes *Begonia aborensis*, *Chromolaena odorata*, *Clerodendrum glandulosum*, *Solanum spirale*, etc.

Plants used for construction: Tree species like *Altingia excelsa*, *Caryota urens*, *Duabanga grandiflora*, *Livistona jenkinsiana* and *Spondias pinnata* were found to be used for the housing and godown construction purposes.

Plants used for local rituals: The Tagin community living in both rural and semi-urban localities use some plant species in traditional rites and rituals ceremony. The total of 4 plants species has been recorded which include *Dalhousiea bracteata*, *Pinanga gracilis*, *Bambusa stricta* and *Saurauia armata*.

Plants used for Livestock medication: The domestic livestock feds on the pastoral areas of Tagin community which are often infected by worms and other diseases. A total of 3 plants have been shown as livestock medication which include *Cyclosorus extensus*, *Drymaria cordata*, and *Ricinus communis*.

CONCLUSION

From present findings, it is concluded that the ethnobotanical resources and associated traditional knowledge and skills prevalent among the Tagin community of Upper Subansiri District is rich and diverse which they have acquired over the generations through oral traditional transmitted from their ancestors. The traditional knowledge and skills prevalent among the community is relevant to their ethnoecological and cultural landscape which help them sustaining their livelihood since millennia. The ethnobotanical resources reported are utility in nature and have economic, ecological and cultural significance. Further scientific studies on food and medicinal plants reported to be used by the target community would yield valuable information about bioactive compounds of economics and commercial significance.

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