

Studies on wild edible plants of ethnic people in east Sikkim

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East Sikkim has a hilly terrain, verdant landscape, rich plant diversity and Lepchas, Bhutias, Tibetans as ethnic inhabitants who are backward with a quest for easily available and cheap foodstuffs. Hence, the present communication reports on 222 angiospermic plants which are edible to man and his cattle.

Key words : Wild plant, Edible plant.

INTRODUCTION

DESPITE the fact that India is a megacentre of biodiversity, only sporadic and unrelated studies have been made on the ethnobotanical plants of East Sikkim (Janmeda, 2004). In an earlier paper Singh, Vats, Garg and Ranjana (2004) described "Medicinal, Incense and Edible Gymnosperms, Pteridophytes and Mushrooms of East Sikkim" and Janmeda, Singh and Vats (2006) reported on the "Folk claims on Monocotyledonous plants in East-Sikkim", necessitating communication on wild edible angiospermic plants of ethnic people of East Sikkim which is timely and appropriate.

MATERIALS AND METHODS

East Sikkim has a difficult hilly terrain having varied elevation ranging from 300 meters near Rangpo to more than 4,392 meter near Nathu-La region. The district has an area of 954 sq km and lies between 27°5' to 28°N latitude and 88°33' to 88°56' E longitude. The forest area of the district is 47,364 hectare and the climate is moist tropical, temperate and sub-alpine (Singh *et al.*, 2004). The study involved fieldwork and direct interviews as well as questionnaire. Data were obtained from villagers, ethnic Lepchas (L), Nepalese (N), Bhutias (Bh), Monks and Village Doctors apart from folk songs and tales.

RESULTS AND DISCUSSION

As a result of extensive, intensive and frequent field trips in the forest area occupied by ethnic people and inquiries from them, local herbal Doctor, folk tales and songs, following enumeration of edible angiosperms were made and their ethnobotanical uses have been reported (Table 1).

The plants reported in this study are an integral component of the ecosystem of East Sikkim. In all, 222 angiospermic plants edible to ethnic inhabitants of the area and to their cattle-Yak, Goats, Cows, Sheep, Horse, have been described. Of them, most are edible directly or as bread, pickles, chutneys, local beverages and condiments. Few, on the other hand are useful as source of edible oil, butter or resin (see Table). Still others are fodder plants, viz., *Albizia odoratissima*, *Alstonia scholaris*, *Amaranthus caudatus*, *Amplocissus barbata*, *Antiderma diandrum*, *Artocarpus lakoocha*, *Azanza lampas*, *Bauhinia vahlii* and *B. variegata*, *Beaumontia grandiflora*, *Boehmeria platyphylla*, *Bridelia retuse*, *Bryonopsis laciniosa*, *Butea parviflora*, *Caruga*

pinnata, *Cironniera reticulata*, *Cissus adnata*, *C. repanda*, *C. repens*, *Cyathula prostata*, *Diploknema butyracea*, *Drypetes lancifolia*, *Elaeagnus conferta*, *Elaeocarpus lanceaefolius*, *Elatostema platyphyllum*, *Entada scandens*, *Eupatorium cannabinum*, *Evodia spp.*, *Ficus oriculata*, *Ficus cunia*, *Ficus hitra*, *Ficus infectoria*, *Fraxinus floribunda*, *Garuga pinnata*, *Gmelina arborea*, *Hedyotis scandens*, *Holarrhena antidysenterica*, *Houttuynia cordata*, *Hymenodictyon excelsum*, *Jasminum dispersum*, *Leea robusta*, *Leucosceptum sanum*, *Litsea cubeba*, *Litsea glutinosa*, *lophophyllum bicrista*, *Mallotus philippensis*, *Morinda citrifolia*, *Mucuna monosperma*, *Murraenda frondosa*, *Naravellia zeylanica*, *Osbeckia arinita*, *Ostodes paniculata*, *Paederia foetida*, *Parthenocissus himalayana*, *Piper aurantiacum*, *Polygonum chinense*, *Polygonum hydropiper*, *Rubia cordifolia*, *Salix tetra*, *Saurauja napaulensis*, *Schima wallichii*, *Sechium edule*, *Selinum candollei*, *stephania glabra*, *stereospermum tetragonium*, *Tetrameles nudiflora*, *Trachelospermum lucidum*, *Trevesia palmata*, *Turpinia pomifera*, *Urtica dioica*, *Urtica parviflora*, *Vitex quinata* and *Wallichia densiflora*. Plants of Beverages category are *Alnus nepalensis*, *Amoose spectabilis*, *Angelica archangelica* (Tea), *Artemesia parviflora*, *Betula cylindrica stachys*, *Bidens pilosa*, *Camellia sinensis*, *Castanopsis hystrix*, *Cinnamomum tamala*, *Dioscorea deltoidea*, *Eurya raponica*, *Gycine max* - used for fermented Kinema, *Helixanthera ligustrina* - used as substitute of tea, *Hippophae salicifolia* - used as substitute for tea, *Litsea cubeba* - local beverages and wines, *Mahonia acanthifolia* - distilled to make alcohol, *Plumbago zeylanica* - roots are used for local drink, *Padophyllum hexandrum* (Chang), *Polygala arillata* - roots used in fermented beer, *Quercus lineata* - latex used as tea or coffee, *Rubus rosaefolius* (local beverages), *Saxifraga ligulata* (tea substitute) *Scoparia dulcis* (local drink as well as fodder). As to the Miscellaneous plants *Cinnamomum tamala*, *Piper longum*, *Heracleum tanatum* are Spice plants, *Manihot esculenta* is bread plant, *Perilla ocimoides* is oil plant and *Diploknema butyracea* is butter plant. The last plant Chiuri, is *Aesandra butyracea* Roxb. Baehni is synonym of *Diploknema butyracea* (Singh & Khan, 2004). Earlier it was called *Brassia sp.* This plant is used as ointment, bee forage, gur and fuel wood also. (Negi *et al.*, 1988). Our studies are supportive to the findings of Janmeda (2004) and shed new light to the edibles of East Sikkim.

S.No.	Plant species	Local name(s)	Used as
1.	<i>Abroma augusta</i> Linn. (Sterculiaceae)	Sanukapari (N), Sweet chui (L)	Seeds directly edible
2.	<i>Abutilon indicum</i> G. Don (Linn) (Malvaceae)	Kanghi (N)	Leaves are cooked, Flowers directly edible
3.	<i>Actinidia strigosa</i> H.K.F. & T. (Actinidiaceae)	Tekiphal Lahara (N), Tuksing-rik (L)	Fruits directly edible

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S.No.	Plant species	Local name(s)	Used as
4	<i>Agapetes saligna</i> (Hook F.) Hook F. (Ericaceae)	Ajeru (N), Phukup chyo (L)	Flowers directly edible
5	<i>Agapetes serens</i> (wt) Sleum (Ericaceae)	Ajene (N), Phukup chyo (L)	Chutney & Pickles are prepared from flowers
6	<i>Diploknema butyraceae</i> (Roxb.) Lam (Sapotaceae)	Chiuree (N), Yelpote, Yelkung (L)	Fruits used in pickles and jams, Leaves are good fodder
7	<i>Albizia odoratissima</i> (Mimosaceae)	Kalo-siris (N)	Leaves & twigs lopped for fodder
8	<i>Alnus nepalensis</i> D.Don. (Betulaceae)	Uti (N), Songru-Kung (L)	Crushed bark used as tea-leaves
9	<i>Alstonia scholaris</i> R.Br. (Apocyanaceae)	Saptparna (N), Purbuk-Kung (L)	Stem bark edible, leaves used as fodder
10	<i>Amaranthus caudatus</i> Linn. (Amaranthaceae)	Paleng sag (N)	Whole plant as a vegetable
11	<i>Amaranthus spinosus</i> Linn. (Amaranthaceae)	Lunde-Kaada (N), Phaknikbi (L)	Shoots are good fodder for pigs
12	<i>Amoora spectabilis</i> Miq. (Meliaceae)	Lali (N), Yatok (L)	Bark used as tea
13	<i>Ampelocissus barbata</i> (Watt) Planch (Vitidaceae)	Jarila Lahara (N), Mikrum-rik (L)	Fruits edible, Leaves are fodder for cattle
14	<i>Ananas comosus</i> (Linn.) Merrill (Bromeliaceae)	Anarus (N)	Fruits edible
15	<i>Angelica archangelica</i> Linn. (Apiaceae)	Budhi ankhati (N), Tuntok-neyeak (L)	Decoction of roots used as tea
16	<i>Anthocephalus indicus</i> Rich (Rubiaceae)	Kadam (N), Kapluck (L)	Seed oil edible
17	<i>Antidesma acuminatum</i> Wall (Euphorbiaceae)	Kalo Bilaune (N), Kunchur-Kung (L)	Fruits edible
18	<i>A. buniis</i> Spreng (Euphorbiaceae)	Himalchari (N), Kantjir (L)	Leaves and fruits edible
19	<i>Antidesma diandrum</i> Heyne ex. Roth (Euphorbiaceae)	Archal (N), Kunchur-Kung (L)	Shoots used in chutneys and vegetable, also as fodder for cows and goats
20	<i>Ardisia macrocarpa</i> Wall (Myrsinaceae)	Damai Phal (N), Dangpeyong-Kung (L)	Fruits edible
21	<i>Artemisia parviflora</i> Roxb. (Asteraceae)	Burnak (L)	Flower heads and leaves used in preparation of Marcha (a yeast for chang)
22	<i>Artemisia nilagirica</i> C.B. Clark (Asteraceae)	Titapat (N), Takneyel (L)	Shoots used as vegetable, Stem pith directly eaten
23	<i>Artocarpus lakoocha</i> (Roxb.) (Moraceae)	Borhar (N), Sangyen-Kung (L)	Fruits edible, leaves used as fodder
24	<i>Azanza lampas</i> (Cov) Alef (Malvaceae)	Sanokapase (N), Kaphalmuk (L)	Shoots are fodder for goats
25	<i>Baccaurea sapida</i> (Roxb.) (Euphorbiaceae)	Kusum (N)	Fruits are edible, rich in Vit.C
26	<i>Bauhinia malabarica</i> Roxb. (Caesalpiniaceae)	Amil Tanki (N)	Leaves and seeds edible
27	<i>B. purpurea</i> Linn. (Caesalpiniaceae)	Tanki (N), Chee-Kung (L)	Shoots eaten as vegetable
28	<i>B. vahlii</i> Wight & Ara (Caesalpiniaceae)	Bherla Lahara (N), Tiklopsyang-rik (L)	Seeds edible, Flowers as vegetables, shoots as fodder
29	<i>B. variegata</i> Linn. (Caesalpiniaceae)	Koiralo (N), Phar-kung (L)	Flowers edible
30	<i>Beaumontia grandiflora</i> Wall (Apocynaceae)	Gothale Lahara (N), Chom-rik (L)	Flowers edible, Leaves fodder for cattle
31	<i>Begonia sikkimensis</i> (Begoniaceae)	Magarkanji (N), Kundyong-pam (L)	Stalk used in chutney
32	<i>Betula cylindrostachys</i> Gamble (Betulaceae)	Saur (N), Sangli-kung (L)	Fruits edible, young shoots boiled in water as tea
33	<i>B. utilis</i> L. (Betulaceae)	Bhojpatra (N), Sanglikung (L)	Bark used as tea substitute

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34	<i>Bidens pilosa</i> Linn. (Asteraceae)	Kuro (N), Tukchong-muk (L)	Young leaves used as tea substitute
35	<i>Boehmeria platyphylla</i> D. Don (Urticaceae)	Kamle Jhar (N)	Twigs used as fodder
36	<i>Bridelia rotusa</i> Spreng (Euphorbiaceae)	Gayo (N)	Fruits edible
37	<i>Bryonopsis laciniosa</i> (Linn) Naud (Cucurbitaceae)	Sam Goal Kaksi lahara (N)	Whole plant as fodder for goats
38	<i>Buddleja asiatica</i> Lour (Buddlejaceae)	Bhimsen pate (N), Pondam-kung (L)	Tender leaves edible
39	<i>Butea parviflora</i> Roxb. (Fabaceae)		Leaves good fodder for cattle
40	<i>Calamus acanthospathus</i> Griff. (Aracaceae)	Gauri bel (N), Rhu (L)	Culms used as vegetable
41	<i>Calamus erectus</i> Roxb. (Aracaceae)	Betphal (N), Rhong (L)	Fruits edible, Culms used as vegetable & chutney
42	<i>Calamus latifolius</i> Roxb. (Aracaceae)	Rhekre Bet (N), Ruabu (L)	Fruits edible, Pith of stem edible
43	<i>Camellia drupifera</i> Lour (Theaceae)	Hinguwa (N), Chau-Kung (L)	Leaves used as substitute for tea
44	<i>Camellia sinensis</i> (Linn) O.Kuntze (Theaceae)	Chiya (N), Chau-Kung (L)	Tea brew is made and is called Sulja
45	<i>Carcinia stipulata</i> T & Tur. (Guttiferae)	Lampate (N), Sanakadan Kung (L)	Fruits eaten by Lepchas, plants yield yellow gum.
46	<i>Carcinia tinctoria</i> Dunn (Guttiferae)	Chunyel (N), Taksal Kung (L)	Fruits edible
47	<i>Carthamus tinctorius</i> Linn (Asteraceae)	Keshar (N), Khano-gira (Tib)	Roots and seeds are edible
48	<i>Caruga pinnata</i> Roxb (Burseraceae)	Aule Dabdaba (N)	Fruits edible. Leaves lopped for fodder
49	<i>Caryota urens</i> Linn (Arecaceae)	Rang Bhang (N), Somong Kung (L)	Leaves are edible. Pith of stem eaten by Lepchas, Seeds edible as betel-nut
50	<i>Castanopsis hystrix</i> A. Dc (Fagaceae)	Dalme Katus (N), Sherab Kung (L)	Dried shoots used as tea. Roasted nuts also used as tea.
51	<i>Centella asiatica</i> (Linn) urban (Apiaceae)	Goal-Pate (N), Siti muk (L)	Leaves edible and enhancer
52	<i>Chasalia curiflora</i> Thw. (Rubiaceae)		Leaves eaten by Lepchas
53	<i>Choerospondias exilaris</i> (Roxb.) Burt & Hill (Anacardiaceae)	Lapsi (N), Siolt-Kung (L)	Edible fruits used for chutney and pickles
54	<i>Cinnamomum tamala</i> Nees & Eberm (Lauraceae)	Tejpat (N), Dong-Sumsor (L)	Leaves used as spice, Root bark used in local drinks
55	<i>Cironniera reticulata</i> Thw. (Ulmaceae)	Sukar (N), Sheekung (L)	Shoots edible, Foliage used as fodder
56	<i>Cissus adnata</i> Roxb. (Vitaceae)	Sona Chara chare Lahara (N), Kung chen-rik (L)	Leaves used as fodder also eaten by Lepchas
57	<i>Cissus discolor</i> Blume (Vitaceae)	Sano purenia Lahara (N)	Leaves edible
58	<i>Cissus rependa</i> Vabl. (Vitaceae)	Pani Lahara (N), Vhyem-rik (L)	Tuber used as vegetable, Shoot as fodder for cattle
59	<i>Cissus repens</i> (Vitaceae)	Purnia Lahara (N), Kunchen-rik (L)	Stem edible, Fruits edible, Shoots are good fodder for cattle
60	<i>Clerodendron viscosum</i> Vent. (Verbenaceae)	Rato Asare, Bakakane (N), Kuombi (L)	Tender shoots and Inflorescence used as vegetable
61	<i>Coffea bengalensis</i> (Rubiaceae)	Coffee (N)	Roasted leaves used as coffee
62	<i>Cucumis sativus</i> Linn. (Cucurbitaceae)	Kankra (N)	Fruits edible
63	<i>Cyathula prostrata</i> Blume (Amaranthaceae)	Hili Jhar (N), Mungep (L)	Plants used as fodder
64	<i>Cyrtomandra betacea</i> Sendt (Solanaceae)	Rooka Rambada (N),	Fruits used in chutney, pickles and vegetable
65	<i>Debregeasia wallichiana</i> Wedd (Urticaceae)	Bahuni Lahara (N), Bap-Kung (L)	Fruits are edible

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66	<i>Deeringia celosiodes</i> Br. (Amaranthaceae)	Bakri Sag (N), Parongbee (L)	Tender shoots eaten
67	<i>Dillenia indica</i> Linn. (Dilleniaceae)	Phamsikol, (N), Thapru (L)	Fruits are edible as chutney
68	<i>Dillenia pentagyna</i> Roxb. (Dilleniaceae)	Tentri (N), Shukni-Kung (L)	Fruits and buds are edible
69	<i>Dioscorea bulbifera</i> Linn. (Dioscoreaceae)	Ghartarul or Geetha Tarul (N), Kuchung (L)	Tubers and Tender shoots used as vegetable, Bulbils are eaten by Lepchas
70	<i>Dioscorea deltoidea</i> Wallich ex griseb (Dioscoreaceae)	Kurkurtarul (N), Kencheong Sangrik (L)	Tubers used for preparing local beverages
71	<i>Dioscorea glabra</i> Roxb. (Dioscoreaceae)	Panglang Lahara (N), Panglang buk (L)	Tuberous roots edible after boiling or roasting, Tubers consumed as vegetable
72	<i>Dioscorea Kamoonsenses</i> Kunth Enum (Dioscoreaceae)		Tubers edible
73	<i>Dioscorea pentaphylla</i> Linn. (Dioscoreaceae)	Bhyangur Lahara (N), Koshauk-rik (L)	Tubers eaten after roasting
74	<i>Diplok-nema butyracea</i> (Roxb.) Lam. (Sapotaceae)	Chivree (N)	Seeds produce a butter, Leaves are good fodder, Jam also prepared
75	<i>Docynia indica</i> Wall Dence (Rosaceae)	Mehel (N), Li-Kung (L)	Fruits edible both as raw & cooked, Chutney, pickles & chook amilo prepared from fruits
76	<i>Drymaria diandra</i> Willd. (Caryophyllaceae)	Avijalo (N), Yok pindim muk (L)	Shoots of plant edible
77	<i>Drypetes lancifolia</i> Pax & Hoffm. (Euphorbiaceae)	Hare (N)	Shoots are fodder for goats
78	<i>Elaeagnus conferta</i> Roxb. (Elaeagnaceae)	Muslerhi, Malindo (N)	Ripe fruits edible & used for chutney & pickles, Leaves fodder for goat & cow
79	<i>Elaeocarpus lanceaefolius</i> Roxb. (Elaeocarpaceae)	Bhadrase (N), Shepykew (L)	Seeds edible, Shoots fodder for cattle
80	<i>Elatostema platyphyllum</i> Wedd (Urticaceae)	Gagleto (N), Kanshyelbi (L)	Tender shoots eaten as vegetable, Whole plant fodder for cattle
81	<i>Embelia gamblei</i> Kurz. (Myrsinaceae)	Amilpati, Patiamlo (N)	Leaves eaten by Bhutias
82	<i>Entada scandens</i> Benth (Mimosaceae)	Pangra (N), Kulhok-rik (L)	Leaves used as fodder for cattle
83	<i>Eugenia Kurzii</i> Duthie (Myrtaceae)	Jaman, Ambake (N), Songlong-Kung (I)	Fruits are edible
84	<i>Eugenia opeculata</i> Roxb.		Fruits edible
85	<i>Eugenia ramosissima</i> Wall (Myrtaceae)		Fruits edible
86	<i>Eugenia tetragona</i> Roxb. (Myrtaceae)		Fruits edible
87	<i>Eupatorium cannabinum</i> Linn. (Asteraceae)	Kalo-banmara (N), Muk- anock (L)	Plants used as fodder for sheep & goats
88	<i>Eurya japonica</i> Thunb (Theaceae)	Jhingni (N), Tuksol	Tender shoots used as a substitute of tea
89	<i>Evodia fraxinifolia</i> Hook f. (Rutaceae)	Khanakpa (N), Kalu Kung, Kanu (L)	Fruits used as chutney and pickles, Shoots used as fodder for goats
90	<i>Ficus auriculata</i> Lour (Moraceae)		Fruits & Tenders edible, Leaves lopped for fodder, Leafy buds used in chutney & pickles
91	<i>Ficus clavata</i> Wall (Moraceae)	Khanium (N), Seyetpe (L)	Fruits edible, Leaves are the substitute of tea
92	<i>Ficus cunia</i> Ham (Moraceae)	Khaniuna (N), Tungshee- kung (L)	Fruits edible, Leaves are lopped for fodder
93	<i>Ficus heterophylla</i> Linn. F. (Moraceae)	Dhusre (N)	Fruits edible, Young leaves used as fodder
94	<i>Ficus hitra</i> Vahl. (Moraceae)	Khasre Khanu (N), Sumsat pi (L)	Fruits & Tender shoots edible, Leaves used as fodder

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95	<i>Ficus infectoria</i> Roxb. (Moraceae)	Pakkar, Kabra (N), Kungji (L)	Shoots used as fodder,
96	<i>Firmiana pallens</i> K. Sch. (Sterculiaceae)	Labshi (N)	Tubers edible
97	<i>Fraxinus floribunda</i> Wall (Oleaceae)	Rukh Harchoor, Lakurni (N)	Tender shoots used as fodder
98	<i>Garuga pinnata</i> Roxb. (Burseraceae)	Aule dabdabe (N)	Tendral shoots used as fodder, Fruits edible & used for pickles
99	<i>Gaultheria fragrantissima</i> Wall (Ericaceae)	Machino (N), Kalomba (L)	Fruits edible
100	<i>Girardinia palmate</i> (Forsk) Gaud (Urticaceae)	Bhangre Shisnu (N), Kuzu Surong, Kazoobi (L)	Flowering twigs used as vegetable
101	<i>Glycine max</i> Merrill (Fabaceae)	Bhatmas (N)	Beans consumed as vegetable, 'Fermented Kinema' is made by beans
102	<i>Gmelina arborea</i> Roxb. (Verbenaceae)	Khamari (N), Numbong-Kung (L)	Shoots used as fodder for cattle
103	<i>Gouania tiliaefolia</i> Lam. (Rhamnaceae)	Batwasi (N), Tung-Cheongmonrik (L)	Tender shoots are edible
104	<i>Guizotia abyssinica</i> Cass (Asteraceae)	Philunge (N)	Seeds used for chutney and pickle
105	<i>Hedyotis scandens</i> Roxb. (Rubiaceae)	Kinchebrick (L), Bakhre Lahara (N)	Young twigs used as vegetable, Leaves used as fodder for goats
106	<i>Helicia ertica</i> Hook f. (Proteaceae)	Bandre (N), Zheyong-Kung (L)	Fruits edible
107	<i>Helixathera ligustrina</i> Wall (Loranthaceae)	Lisso (N), Chone	Leaves used as substitute of tea
108	<i>Heracleum lanatum</i> Mich. (Apiaceae)	Chimping (N), Chem-men (L)	Seeds used as spice & used for pickles & chutney
109	<i>Heracleum wallichii</i> DC. (Apiaceae)	Ganaro (N)	Seeds used for chutney
110	<i>Hemphragma heterophyllum</i> (Scrophulariaceae)	Vaidhye Lahara (N), Phirumuk	Fruits directly edible
111	<i>Hippophae salicifolia</i> D.Don. (Elaeagnaceae)	Tarbu (Bh)	Leaves are used as substitute of tea
112	<i>Hodgsonia heteroclita</i> Hook f. Thoms. (Cucurbitaceae)	Ghiu phal lahara (N), Kathior-pat (L)	Kernels eaten after roasting, Tender leaves used as vegetable
113	<i>Holarrhena antidysenterica</i> (Linn.) Wall (Apocynaceae)	Khirra (N), Fajee rip (L)	Shoots used as fodder
114	<i>Horsfieldia kingii</i> (Hook. F.) Warb. (Myristicaceae)	Ramguwa, Runehapot (N), Donglu-Kung, Kaoul-Kung (L)	Seeds chewed as Betel nut
115	<i>Houttuynia cordata</i> Thunb (Saururaceae)	Phapre jhor, Heeli jhar (N), Parushampabi (L)	Young shoots consumed as vegetable and also a good fodder for pigs, Rhizome eaten as vegetable, raw or cooked, Fruits edible
116	<i>Hymenodictyon excelsum</i> Wall. (Rubiaceae)	Latijhora (N)	Leaves used as fodder for cattle
117	<i>Jasminum dispernum</i> Wall (Oleaceae)	Hade lahara (N), Monthet Shyang-rik (L)	Shoots used for fodder
118	<i>Juglans regia</i> Linn. (Juglandaceae)	Okhar (N), Kul-Kung (L)	Leaves & root bark is used in the preparation of yeast 'Marcha', 'Kshurpi' is made by pulp of fruits
119	<i>Laportea terminalis</i> Wight (Urticaceae)	Patle-Shisnu (N), Kulhu-surong (L)	Young shoots are direct edible, Flowering twigs used as vegetable
120	<i>Laurocerasus undulata</i> Roem (Rosaceae)	Lekh Arupate (N)	Fruits edible
121	<i>Leea robusta</i> Roxb. (Vitaceae)	Galeni, Gabui (N), Pantom (L)	Seeds edible, Shoots used as fodder for cattle

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122	<i>Leucosceptrum sanum</i> Sm. (Lamiaceae)	Ghurpis (N), Kune chung Rip (L)	Tender shoots used as fodder
123	<i>Litsea cubeba</i> Pers (Lauraceae)	Siltimur (N), Terhilsok, Tanghaeher-Kung (L)	Fruits used for chutneys, pickles, beverages and wines, Tender leaves as fodder
124	<i>Litsea glutinosa</i> (Lour) C.B. Robins (Lauraceae)	Kawala (N), Suppatnyok (L)	Fruits edible, Leaves used as fodder
125	<i>Lophophyllum bicristatum</i> Griff (Menispermaceae)	Batulpate (N), Tamshap-rik (L)	Plant is good fodder for cattle
126	<i>Luffa amara</i> (Roxb.) C.B. Clarke (Cucurbitaceae)	Ban-Ghirola (N), Kul-Hu-bi (L)	Tender fruits used as vegetable
127	<i>Lyonia ovalifolia</i> (Wall) Drude (Ericaceae)	Angeri (N), Tuksol-kung, Kangshior (L)	Fruits edible but leaves are toxic to goats, cattle and yaks
128	<i>Macaranga indica</i> Wight (Euphorbiaceae)	Malata (N), Tuklop (L)	Leaves edible (Sweet tasty)
129	<i>Machilus edulis</i> King ex Hook f. (Lauraceae)	Lapche phal, Pumsi (N), Phum-kung (L)	Large walnut like fruits eaten by Lepchas
130	<i>Macropanax undulatum</i> Seem (Araliaceae)	Chinde (N), Prongzam (L)	Tender shoots used as vegetable
131	<i>Mahonia acanthifolia</i> G. Don (Berberidaceae)	Chutro, Kesari (N), Kerbu- kung (L)	Flowers and shoots edible as vegetable and chutney
132	<i>Mallotus philippensis</i> Muell-Arg (Euphorbiaceae)	Sindhure (N), Tukla (L)	Shoots as fodder
133	<i>Malva rotundifolia</i> Linn. (Malvaceae)	Chamo pachunguna (Bh)	Shoots consumed as vegetable and fodder
134	<i>Mangifera sylvatica</i> Roxb. (Anacardiaceae)	Chuche Anp (N), Kathor- kung (L)	Fruits edible as ripe & as pickles
135	<i>Manihot esculenta</i> Crantz (Euphorbiaceae)	Simal-Tarul (N), Tunglu-buk (L)	Tubers edible used as flour for bread
136	<i>Marsdenia roylei</i> Wight (Asclepiadaceae)		Roots eaten by Lepchas
137	<i>Melia dubia</i> cav. Composita (Meliaceae)	Lapsi (N), Silot-kung (L)	Fruits edible
138	<i>Melothria heterophylla</i> (Lour) Coju. (Cucurbitaceae)	Gol Kakari (N), Nimorkiche- pat (L)	Fruit pulp edible, Kshurpi prepared by seeds
139	<i>Mentha viridis</i> Linn. (Lamiaceae)	Pudina (N)	Shoots as chutney
140	<i>Michelia champaca</i> Linn. (Magnoliaceae)	Aule Champ (N)	Fruits & seeds eaten
141	<i>Morinda citrifolia</i> Linn. (Rubiaceae)	Hardi-kath (N), Huldi-kung (L)	Fruits edible, Leaves as fodder
142	<i>Moringa oleifera</i> Lamk (Moringaceae)	Sajna (N)	Pods as vegetable and pickles, Roots as vegetable
143	<i>Morus indica</i> Linn. (Moraceae)	Sanu-kimbu (N), Mekrap- kung (L)	Buds as vegetable, Shoots as fodder for goats
144	<i>Mucuna monosperma</i> De (Fabaceae)	Bal dhengra (N)	Twigs as fodder
145	<i>Mucuna nigricans</i> Steud. (Fabaceae)	Kaoso (N), Kuzukaluk, Dangyimrik (L)	Roasted seeds edible
146	<i>Murraya koenigii</i> Spreng (Rutaceae)	Mechia Sag (NL)	Leaves used in curries
147	<i>Mussaenda frondosa</i> Linn. (Rubiaceae)	Sheetal Pate (N), Tumberh (L)	Root& shoot edible, Leaves as fodder
148	<i>Naravellia zeylanica</i> Dc (Ranunculaceae)	Rashgagri (N), Tumbum- chilop (L)	Roots, Stem & Flowers are fermented to make local beer
149	<i>Nardostachys jatamansi</i> Dc (Valeriacae)	Jatamansi (N), Pangpey (Tib)	Tender shoot as spice & vegetable, Rhizome as betel nut
150	<i>Oroxylum indicum</i> (L) Vent (Bignoniaceae)	Totola (N), Pugu-rip, Paksam-rip, Pago-reep (L)	Fruits consumed as vegetable and chutney

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151	<i>Osbeckia crinita</i> Benth (Melastomataceae)	Chulari (N), Tukbrum-kung (L)	Leaves used as fodder
152	<i>Ostodes paniculata</i> Bhume		Leaves as fodder
153	<i>Oxalis corniculata</i> Linn. (Oxalidaceae)	Chan-Amilo (N), Muk-Chyor (L)	Leaves are direct edible. Leaves used for chutney. Seeds are direct edible
154	<i>Paederia foetida</i> Linn (Rubiaceae)	Beri Lahara (N), Takpaed-rik (L)	Tender leaves as vegetable. Leaves used as fodder for cattle.
155	<i>Parthenocissus himalayana</i> . Royh Planch (Vitaceae)	Thulu charchare Lahara (N), Hlotagbrej (L)	Leaves as fodder
156	<i>Passiflora edulis</i> Sims (Passifloraceae)	Farendal (N), Gandum-pat (L)	Ripe fruits edible. Ripe fruits as vegetables
157	<i>Perilla ocimoides</i> Linn. (Lamiaceae)	Seelam (N), Nigum (L)	Seeds and Seed oil edible.
158	<i>Phoenix rupicola</i> T. Anders (Arecaceae)	Scrap (L)	The inner part of the stem is eaten by Lepcha
159	<i>Phyllanthus emblica</i> Linn (Euphorbiaceae)	Amla (N)	Fruits used for chutney and pickles. Fresh fruits edible.
160	<i>Physalis minima</i> Linn. (Solanaceae)	Phakphake (N)	Berries edible. Shoots as vegetable.
161	<i>Piper aurantiacum</i> Wall ex DC (Piperaceae)	Chabo (N), Punjok Pan (L)	Leaves used as betel and also used as fodder for cattle
162	<i>Piper longum</i> Linn. (Piperaceae)	Pipla (N), Punthong (L)	Fruits used as condiment
163	<i>Plantago erosa</i> Wall (Plantaginaceae)	Tugjur-muk (L)	Vegetable of leaves is edible
164	<i>Plumbago zeylanica</i> Linn. (Plumbaginaceae)	Seto cheetu (N)	Roots used for fermentation of local drinks
165	<i>Podophyllum hexandrum</i> Royle (Berberidaceae)	Papra (N), Limosisi (Bh)	Ripe fruits edible. Fruits used in the preparation of yeast 'Marcha' for the local drink 'Chang'
166	<i>Polygala arillata</i> Buch-Ham (Polygalaceae)	Marcha (N), Cleem-Soom-creem (L)	Roots used in the fermentation of 'Murwa' beer
167	<i>Polygonum chinense</i> Linn. (Polygonaceae)	Kakurthotne (N), Kundyut-pam (L)	Shoots used as good fodder for cattle. Young shoots used for preparing chutneys & pickles
168	<i>Polygonum hydropiper</i> Linn. (Polygonaceae)	Ratnaulo (N), Numshim-muk (L)	Tender shoots consumed as vegetable. Plants are good fodder for cattle and Roots are fodder for horses
169	<i>Polygonum molle</i> D.Don (Polygonaceae)	Jhotney (N), Kandyen-pam (L)	Young shoots used as fodder for cattle & also used to prepare chutneys, pickles, gundruk & sinkey
170	<i>Porana paniculata</i> Roxb.		Fruits edible
171	<i>Portulaca oleracea</i> Linn. (Portulacaceae)	Dalda sak (N)	Tender shoots as vegetable, Roasted seeds eaten. Fleshy stems pickled
172	<i>Pouzolzia zeylanica</i> (Linn) Benn. (Urticaceae)	Chipli (N)	Tuberous roots edible. Leaves as vegetable
173	<i>Pterospermum acerifolium</i> Wild (Sterculiaceae)	Hathipalia (N), See-em-kung (L)	Flowers edible
174	<i>Quercus lineata</i> Blume (Fagaceae)	Phalant (N), Siri-kung (L)	Decoction of tender shoots used as tea. Decoction of latex used as tea or coffee substitute
175	<i>Raphanus sativus</i> Linn. (Brassicaceae)	Mula (N)	Fleshy roots eaten as Salad. Fruits eaten either raw or cooked, Leaves as vegetable
176	<i>Rheum acuminatum</i> Hk. f. (Polygonaceae)	Khokim (N), Aakchho (Tib), Sinapam (L)	Tendrill stem is direct edible & used for pickles & chutneys. Leaves as tea substitute.
177	<i>Rheum emodi</i> wall ex meisser (Polygonaceae)	Padannchal (N), Acchhume (Tib)	Stem, Leaf, Petiole edible

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178	<i>Rosa sericea</i> Lindl (Rosaceae)	Seva (Tib)	Fruits edible
179	<i>Rubia cordifolia</i> Linn. (Rubiaceae)	Rato manjuta (N), Vhyem (L), Chwe (Bh)	Whole plant is fodder, Dry young twigs as tea substitute
180	<i>Rubus ellipticus</i> Smith (Rosaceae)	Thulo Asayloo (N), Kisen pot (L)	Fruits edible
181	<i>Rubus indaeopsis</i> Focke (Rosaceae)	Lek aselu (N), Kanda kari (Tib)	Fruits edible
182	<i>Rubus niveus</i> Thunb (Rosaceae)	Kalo aselu (N)	Fruits edible
183	<i>Rubus reticulatus</i> Wall (Rosaceae)	Kandepan Lahara (N), Suphuk Jhu	Leaves direct edible in December for sweet taste
184	<i>Rubus rosaefolius</i> Smith (Rosaceae)	Gampe Aselu (N), Kashempong-pot (L)	Fruits used for preparation of local beverages
185	<i>Rumex nepalensis</i> Spreng (Polygonaceae)	Halhale (N), Kandyem-dung (L)	Leaves as fodder for cattle. Tendril shoots eaten as vegetable & used for chutney
186	<i>Salix tetraferma</i> Roxb. (Salicaceae)	Bains (N)	Shoots lopped for cattle fodder
187	<i>Samanea saman</i> Merrill (Mimosaceae)	Bhalimora (N), Tikpikung (L)	Seeds as condiments
188	<i>Saurauja napaulensis</i> DC (Saurauiceae)	Gogun (N), Kasur-king (L)	Fruits edible, Leaves lopped for fodder
189	<i>Saussurea tridactyla</i> Sch & Bip (Asteraceae)	Mahaguru (N), Mathok-khangla (Tib)	Flower direct edible useful at high altitudes. Tender shoots are eaten as vegetable
190	<i>Saxifraga ligulata</i> Wall (Saxifragaceae)	Pakhanded (N), Sotoka (Tib)	Leaves used as substitute of tea. Pounded leaves eaten as chutneys
191	<i>Schima wallichii</i> (DC) Korth (Theaceae)	Aule-chilaune (N), Sambrang-kung (L)	Bark is the fodder for deer
192	<i>Schizandra grandiflora</i> HK. f. & Thoms. (Schizandraceae)	Singato Lahara (N), Takseik-rik (L)	Fruits edible
193	<i>Scoparia dulcis</i> Linn. (Scrophulariaceae)	Kanchhi-Madhu (N), Tuljyor-muk (L)	Leaves direct edible contain sweet taste and used for preparation of local drinks. Plants used as cattle fodder
194	<i>Sechium edule</i> Swartz (Cucurbitaceae)	Squash (N)	Raw fruits used as vegetable. Tender shoots eaten as vegetable. Fruits & tubers used as fodder
195	<i>Selinum Candollei</i> DC (Apiaceae)	Bhutkes (N)	Plant is good fodder for Sheep & Yak
	<i>Solanum crassipetalum</i> Wall ex. Roxb. (Solanaceae)		Leaves cooked & eaten
196	<i>Solanum nigrum</i> Linn. (Solanaceae)	Kalosag, Makoi (N), Muk-nok (L)	Shoots consumed as vegetable
197	<i>Solanum torvum</i> Swartz. (Solanaceae)	Jungli Biya (N), Sahor pot, Akrim (L)	Vegetable and pickle of fruits is edible
198	<i>Sorbus cuspidata</i> Hedlund (Rosaceae)	Tenga (N, L)	Sweet fruits edible
199	<i>Spondias axillaries</i> Roxb. (Anacardiaceae)	Lupsi (N), Silet-kung (L), Lumsee (Bh)	Fruits edible & source of pickles
200	<i>Spondias pinnata</i> (Linn) Kurz. (Anacardiaceae)	Amaro (N), Rumkung (L)	Flowers edible & made into curry, chutney, pickles & stews. Ripe fruits edible. Raw fruits as vegetable
201	<i>Stephania glabra</i> Miers (Menispermaceae)	Tambarki (N), Kanthe-pam (L)	Leaves used as fodder
202	<i>Sterculia fulgens</i> Wall (Sterculiaceae)	Labshi (N)	Tubers of young trees are eaten by Lepchas
203	<i>Stereospermum tetragonium</i> DC (Bignoniaceae)	Pareri (N), Singyen-kung (L)	Leaves lopped for fodder

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204	<i>Taraxacum officinale</i> weber ex. Wiggers (Asteraceae)	Jungali copi (N)	Leaves as vegetables
205	<i>Tetrameles nudiflora</i> R.Br. (Tetramelaceae)	Maina (N), Payomko (L)	Shoots used as fodder
206	<i>Tetrastigma lanceolarium</i> Planch (Vitaceae)	Berseri (N), Tundor-sik (L)	Fruits are edible
207	<i>Thlaspi arvense</i> Linn. (Brassicaceae)	Cheka-chumu (Bh)	Leaves consumed as vegetable
208	<i>Tithonia tagetifolia</i> Desf. Ex. Juss. (Asteraceae)	Jumrang phool (N)	Tender shoots used as fodder for goats. Seeds eaten after roasting
209	<i>Trachospermum lucidum</i> K. Schum. (Apocynaceae)	Dawari Lahara (N), Yok-chounrik (L)	Leaves used as fodder
210	<i>Trevesia palmate</i> vis (Araliaceae)	Phutta (N), Suntong (L)	Flowering buds eaten after cooking. Fruits edible. Leaves lopped for fodder
211	<i>Turpinia pomifera</i> Wall. ex. DC (Staphyleaceae)	Thali, Nagpat (N), Margut, Singnok (L)	Leaves used as fodder for cattle
212	<i>Urtica dioica</i> Linn. (Urticaceae)	Gharya Shisnu (N), Sungri-Surong (L)	Twigs used as good fodder for cattle. Flowering twigs used as vegetable
213	<i>Urtica parviflora</i> Roxb. (Urticaceae)	Charia seusni (N)	Tender leaves consumed as vegetable. Plants good fodder for cattle
214	<i>Viburnum cordifolium</i> Wall. (Caprifoliaceae)	Asare (N)	Fruits edible. Tender shoots as vegetable
215	<i>Vitex quinata</i> (Lour) F.N. Williams. (Verbenaceae)	Panchpate (N), Tongcheepe (L)	Tender shoots as vegetable. Shoots used as fodder
216	<i>Wallichia densiflora</i> Mart. (Arecaceae)	Thakro (N), U-pe, Oho (L)	Tender shoots eaten as vegetable. Shoots used as fodder. Stem pith is sweet & eaten directly
217	<i>Wallichia disticha</i> T. Anders (Arecaceae)	Ketong (L)	The pith is directly edible by Lepchas
218	<i>Withania somnifera</i> Dunal (Solanaceae)	Asgand (n)	Tender shoots consumed as vegetable
219	<i>Wrightia tomentosa</i> Roem & Schult (Apocynaceae)	Karinghi (N)	Leaves and tender fruits are edible
220	<i>Zanthoxylum acanthopodium</i> D.C. (Rutaceae)	Boketmur (N), Nangryu pot (L)	Fruits used for chutney & pickles. Tender shoots also edible
221	<i>Zanthoxylum oxyphyllum</i> Edgew (Rutaceae)	Bhainsi Timur, Lahara Timur (N), Siritakdangji (L)	Tender shoots as vegetable. Fruits used as a condiment

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