

WILD EDIBLE PLANTS OF SIKKIM HIMALAYA

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ABSTRACT

The paper provides an account of wild edible plants of Sikkim Himalaya and throws light on aspects of their conservation.

Sikkim—the tiny but pretty eastern Himalayan state of Indian Union lying between the geographical limits of $27^{\circ} 10' - 28^{\circ} 5'$ N and $88^{\circ} 30' - 89^{\circ}$ E and bounded by Nepal in the West, Bhutan in the South-east, Tibet in the North and Northeast and the Darjeeling district of West Bengal in South, is botanically one of the richest regions of the country.

The topography of this pretty Himalayan state is varied with the elevation ranging from 244 m to over 8598 m. The temperature ranges between $4.2^{\circ} - 17.1^{\circ} / 13.9^{\circ} - 23.9^{\circ}$ C. Relative humidity is 70-80% through out the year and at most of the places. But there is much variation from place to place in min./max. temperature and rainfall in accordance with the altitude and of course, the other factors as well.

The climatic, edaphic, altitudinal and biotic variations with their complex inter-relationships and species composition have resulted in different kinds of vegetation which can be broadly classified as tropical, temperate and alpine. The region is very rich in plant-diversity with ca 5000 species of vascular plants, ca 350 species of pteridophytes and a large number of non-flowering plants such as ferns, liver-worts, mosses, algae and fungi etc.

Maize, Rice, Wheat, Millet, Barley, Buckwheat are the main cereal crops of the state while Urd, Moong, Pea, Soyabean are the important pulse crops (black gram and green gram are also grown to some extent). Mustard is the main oil-seed crop, but sun-flower, castard etc., are also grown. Tea is produced from Temi Tea Estate in South Sikkim District. Important fruit crops

include Pear, Apple, Peach, Plum, Orange, Papaya, Avocado and Banana but Mango and Sapota are also grown. Potato, Tree-Tomato, Tomato, Brinjal, Beans, Ladies-Finger, Bottle-Guard, Snake-Guard, Cucumber, Ridge-guard, Spongy-guard, Iskush, Bhat-karela are the commonly grown vegetable crops. In addition to these main food crops, several wild plants are also eaten not only by the rural folk but even by the most civilized and rich people living at developed townships like Gangtok, Singtam, Namchi, Geyzing, Mangan and Jorethang etc. Many of these wild edible plants are sold in periodical local markets in different parts of the state.

Several edible mushrooms (locally known as chew) are collected from the forest and eaten by the rural folk. Sometimes these are brought for sale as well to the local markets.

The food habits of the people viz. Lepcha, Bhutia and Nepali (including Limbus)- the three main ethnic tribes and Tibetans as well are quite varied. Lepchas and Tibetans relish the roasted tubers of *Satyrium ciliatum*; Bhutia people make brick tea from bark of Birch (*Betula alnoides*). *Allium caesium* is reputed to alloy hunger at high altitudes (5500m). Bamboo shoots, wild Banana, wild Nettle (*Urtica ardens* : Sisnoo in Nepali), Nakima (*Tupistra natans*), fruits of Papri (*Podophyllum hexandrum*) and bracts of Tchuka (*Rheum nobile*) are much relished by the local inhabitants. For many of the rural people the sale of wildfood plants viz. fruits of *Baccaurea sapida*, *Machilus edulis*, *Elaeocarpus sikkimensis*, *Juglans regia*, *Aesaendra butyracea*, *Melia dubia* etc., is the only source of income. Tubers of *Dioscorea*



Ficus auriculata : figs are edible



Nephrolepis tuberosa Tubers edible



Rubus ellipticus Berries are edible



Equisetum debile boiled strobili are edible



Rheum nobile all aerial parts are edible

Table - I : Wild edible plants of Sikkim

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
RANUNCULACEAE					
<i>Caltha palustris</i> L.	—	Marshy shrubs	Zemu valley 3300 m	April-May	Roots & Leaves (after boiling only)
<i>Ranunculus scleratus</i> L.	—	Marshy herb	up to 1700 m	April-Aug.	Whole plant (after boiling only)
ACTINIDIACEAE					
<i>Actinidia strigosa</i> Hook. f. & Thoms.	Tuksing-rip (Lep.) Teki-Phal (Nep.)	Climbing shrubs	1800-2800 m	Oct.-Nov.	Fruits
<i>A. callosa</i> Lindl.	—	Climbing shrubs	ca 2400 m	Sept.-Oct.	Ripe fruits
DILLENIACEAE					
<i>Dillenia indica</i> L.	Kyangmo-zhu (Lep.) Phamsikol (Lep.) Sun-gom (Lep.) Mechia-phal (Nep.) Panch-kule (Nep.) Panch-phal (Nep.)	Medium trees	At lower elevations	Feb.-April	Ripe fruits
<i>D. pentagyna</i> Roxb.	Shukni-kung (Lep.) Tantri, Tatera (Nep.)	Medium trees	up to 1500 m	March-July	Ripe fruits
SAURAUIACEAE					
<i>Saurauia napaulensis</i> DC.	Kasur-kung (Lep.) Gogun (Nep.)	Small trees	up to 2100 m	Sept. Dec.	Ripe fruits
MAGNOLIACEAE					
<i>Kadsura heterocarpa</i> (Roxb.) Craib (<i>Kadsura roxburghiana</i> Arn.)	Salado-rip (Lep.) Patti-amlo (Nep.)	Climbing shrubs	up to 2400 m	Aug. Nov.	Fruits
SCHISANDRACEAE					
<i>Schisandra grandiflora</i> Hook. f. & Thoms.	Taksiel-rip (Lep.) Singoto (Nep.)	Climbers	1800- 3600 m	June - Nov.	Fruits
MENISPERMACEAE					
<i>Aspidocarya uniflora</i> Hook. f. & Thoms.	Meiyankhyen-rip (Lep.)	Climbers	up to 1800 m	June Aug.	Fruits

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
BERBERIDACEAE					
<i>Berberis aristata</i> DC.	Chutro(Nep.)	Shrubs	2500 - 3500 m	June - Nov.	Ripe fruits
<i>B. aristata</i> Roxb. ex DC	Kissie (Nep.)	Shrubs	1200 - 2500 m	May - June	Fruits
<i>Mahonia nepalensis</i> DC.	Kyarbo (Lep.) Lek-chutro, chatri (Nep.)	Shrubs	1500 - 2900 m	March - June	Fruits
LARDIZABALACEAE					
<i>Decaisnea insignis</i> Hook. f. & Thoms.	Nomorchi (Lep.) Loduma (Lep.)	Shrubs	2100 - 2700 m Lachen, Tulung	Oct.	Ripe fruits
<i>Holboellia latifolia</i> Wall.	Kaol-rip (Lep.) Kole pot (Lep.) Pronchatik (Lep.) Beaugul, (Nep.) Chiriyanaugri (Nep.)	Climbers	Kabi, Hanuman-Tok, 1200 - 3000 m	Sept. - Nov.	Ripe fruits
BRASSICACEAE					
<i>Capsella bursa-pastoris</i> (L.) Medikuz	—	Herbs	up to 300 m	April Oct.	Whole plant
<i>Cardamine hirsuta</i> var. <i>sylvatica</i> (Link) Hook. f. & T. Anders.	—	Herbs	Karponang Zemu & Llonak, 2100 - 3600 m	Feb. April	Leaves & Flowers
<i>C. loxostemonoides</i> O.E. Schultz.	—	Herbs	2900 5500 m	April Aug.	Whole plant
<i>Rorippa islandica</i> (Oeder) Borbass. (<i>Nasturtium palustre</i> DC.)	—	Herbs	Lachen & Zemo 2400 3000 m'	April Sept.	Leaves
PAPAVERACEAE					
<i>Meconopsis napaulensis</i> DC.	—	Herbs	2700 5200 m	June Aug.	Seeds
<i>M. paniculata</i> (D. Don) Prain	—	Herbs	3300 - 4400 m	June Aug.	Stalks as Salad
CAPPARACEAE					
<i>Crataeva magna</i> (Lour.) DC. (<i>Crataeva nurvala</i> Buch.-Ham.)	Purbong (Lep.) Purbongyok (Lep.)	Trees	up to 600 m	July - Aug.	Young leaves & fruits
<i>Stixis suaveolens</i> (Roxb.) Pierre (<i>Roydsia suaveolens</i> Roxb.)	Tunggor-rip (Lep.) Kasonli-lahara (Nep.)	Climbers	up to 900 m	Aug. - Jan.	Ripe fruits

Table - 1 : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
FLACOURTIACEAE					
<i>Casearia glomerata</i> Roxb.	Barkaunle (Nep.) Teling-kung (Lep.) Sugvat (Lep.)	Trees	up to 1700 m	April May	Tender shoots & young leaves as vegetable or with rice
<i>Cynocordia odorata</i> R. Br.	Tuk-kung (Lep.) Tul-kung (Lep.) Bandre, Gante Kadu, Ramphal (Nep.)	Trees	up to 1200 m	Nov. Jan.	Fruit - pulp after boiling
POLYGALACEAE					
<i>Polygala arillata</i> Buch. -Ham. ex D. Don.	Cleem soom cream; Michepnor-kung (Lep.) Marcha (Nep.)	Shrubs	1500 1700 m Kabi		Fruits
CARYOPHYLLACEAE					
<i>Drymaria cordata</i> (L.) Willd. ex Roem. & Schult.	Abhijal (Nep.)	Slender Herbs	up to 2000 m Gangtok	July Sept.	Leaves
PORTULACACEAE					
<i>Portulaca oleracea</i> L.		Herbs	up to 1500 m	Jan. Dec.	Young shoots
CLUSIACEAE					
<i>Garcinia stipulata</i> T. Anders	Sanakaden-kung (Lep.) Durlampate (Nep.)	Trees	up to 1500 m	Jan. Feb.	Fruits
<i>G. xanthochymous</i> Hook. f	Taksal-kung (Lep.) Chunyel (Nep.)	Trees	up to 1500 m	Oct. April	Fruits
THEACEAE					
<i>Camellia kissi</i> Wall.	Chau-kung (Lep.) Hinguwa, Kissi (Nep.)	Shrubs	1000 - 2400 m		Leaves as Tea
DIPTEROCARPACEAE					
<i>Shorea robusta</i> Gaertn. f.	Taksal-kung (Lep.) Sakhwa (Nep.)	Tall trees	up to 1200 m Singtam Jorethang	May - July	Seeds

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
MALVACEAE					
<i>Malva verticillata</i> L.	-	Herbs	2100 - 3000 m	March - Oct.	Leaves and tender shoots cooked
BOMBACACEAE					
<i>Bombax ceiba</i> L.	Sunglu-kung, Tunglu (Lep.)	Trees	up to 900 m Singtam, Jorethang	Jan. May	Calyces, tender fruits & seeds after roasting
STERCULIACEAE					
<i>Abroma augusta</i> L. f.	Chuil (Lep.) Ulakamal (Hindi)	Large shrub	up to 3200 m	Aug. - Jan.	Seeds
<i>Firmiana fulgens</i> (Wall. ex Masters) Corner. [<i>Firmiana pallens</i> (Wall. ex King) Steam]	Kaphal (Lep.) Labshi (Nep.)	Trees	up to 900 m	April June	Tuberous roots
<i>Melochia corehorifolia</i> L.		Under shrub	up to 1200 m	July Aug.	Young leaves
<i>Pterygota alata</i> (Roxb.) R. Br.	Khawari, Labshi (Nep.) Muslini (Nep.)	Trees	up to 900 m	Nov. - March	Seeds after roasting
<i>Sterculia indica</i> Merr.	Chiwari-pat, Sitte-udal (Nep.)	Small trees	up to 1800 m	March - May	Tender fruits cooked & seeds after roasting
<i>S. lanceaefolia</i> Roxb. ex G. Don	Kanthior (Lep.) Chiwari-pat (Nep.)	Small trees	up to 1800 m	May - July	Roasted seeds
<i>S. villosa</i> Roxb.	Kanhlyem-kung (Lep.)	Trees	up to 1350 m	March July	Roasted/Baked seeds
TILIACEAE					
<i>Grewia asiatica</i> L.	Siyal Phursi (Nep.)	Medium trees	up to 900 m	April Aug.	Ripe fruits
<i>G. elastica</i> Royle	Kung kunsung (Lep.) Siyal-phorsa (Nep.)	Trees	up to 1500 m	Aug. Nov.	Ripe fruits
<i>G. sapida</i> Roxb.	Taglar-kung (Lep.)	Shrubs	up to 1350 m	Feb. May	Fruit pulp
<i>G. sclerophylla</i> Roxb. ex G. Don	Taglar	Shrubs	up to 1050 m	Nov. March	Fruits
ELAEOCARPACEAE					
<i>Elaeocarpus lanceaefolius</i> Roxb.	Shopkyew (Lep.) Bhadrase (Nep.)	Trees	1500 - 2400	Sept. Dec.	Fruits

Table - I :-Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Elaeocarpus sikkimensis</i> Mast.	Shekyen-kung (Lep.) Bhadrase (Nep.)	Trees	up to 1500 m	July	Fruits
OXALIDACEAE					
<i>Oxalis acetosella</i> L.	-	Herbs	1050 - 3600 m	Feb.- March	Leaves
<i>O. corniculata</i> L.	-	Creeping herbs	up to 3000 m	Jan. Dec.	Leaves
BALSAMINACEAE					
<i>Impatiens racemosa</i> DC.	-	Herbs	1400 - 2400 m	Sept.	Seeds
<i>I. sulcata</i> Wall.	-	Herbs	2100 - 3600 m	July Oct.	Seeds
<i>I. roylei</i> Walp.	-	Herbs	1800 - 3600 m	Aug. Sept.	Seeds
<i>I. glandulifera</i> Royle	-	Herbs			
RUTACEAE					
<i>Clausena dentata</i> (Willd.) M. Roem.	Disemyok (Lep.)	Trees	up to 1000 m	July	Fruits
<i>Evodia fraxinifolia</i> (D. Don) Hook. f.	Kanu (Lep.) Khanakpa (Nep.)	Trees	1200 - 2400 m	Oct. Feb.	Fruits
<i>Fagara hamiltoniana</i> (Wall. ex Hook. f.) Engl.	Parpor-Timur (Nep.)	Shrubs	900 - 2400 m	May - Oct.	Fruits
<i>F. oxyphylla</i> (Edgew.) Reader & Cheo	Siritakdangjii Bhainsi-timur (Nep.) Lahara timur	Shrubs	1800 - 2700 m	April	Tender shoots are cooked
<i>Glycosmis pentaphylla</i> (Retz) Corr.	-	Shrubs	up to 1200 m	Jan. Dec.	Ripe fruits
<i>Toddalia asiatica</i> (L.) Lamk.	Laphijirik (Lep.) Suphyezhy (Lep.) Me-in-Kangra (Nep.)	Shrubs	up to 2100 m	Aug. Jan	Fruits & leaves
SIMAROUBACEAE					
<i>Picrasma quassioides</i> (D. Don) Benn.	Shama-baringi (Nep.)	Small trees or shrubs	up to 2700 m	July - Sept.	Fruits

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
BURSERACEAE					
<i>Canarium benghalense</i> Roxb.	Narockpa (Lep.) Gogul-dhup, Gokul (Nep.)	Trees	up to 1000 m	Nov. - Jan.	Fruits
<i>Garuga pinnata</i> Roxb.	Maldit (Lep.) Aule-debdabe (Nep.) Dabdabbi (Nep.)	Trees	up to 3050 m	May - Dec.	Fruits
MELIACEAE					
<i>Aglaia edulis</i> (Roxb.) A Gray	Sinakadang (Lep.) Lata-mahwa (Nep.)	Trees	up to 1000 m	Feb. May	Fleshy part of fruit
<i>Melia composita</i> Willd.	Silot-kung (Lep.) Lapshi (Nep.)	Trees	up to 1800 m	Dec. Feb.	Fruits
ICACINACEAE					
<i>Natsiatum herpeticum</i> Buch. Ham.	Sungoo-rip (Lep.)	Climbers	up to 9000 m		Leaves and slender shoots are cooked
CELASTRACEAE					
<i>Celastrus paniculatus</i> Willd.	Ruglim (Lep.)	Climbers	up to 1000 m	July - March	Boiled unripe fruits as vegetable
RHAMNACEAE					
<i>Gouania napalensis</i> Wall.	Tungscheongmonrip (Lep.)	Shrubs	up to 900 m		Young leaves
<i>Hovenia acerba</i> Lindl. (<i>H. dulcis</i> Thunb.)	Sungree-kung (Lep.) Bangikath (Nep.)	Trees	up to 2000 m	Aug. Jan	Inflorescence stalk
<i>Ziziphus apetala</i> Hook. f. ex Lawson <i>Z. rugosa</i> Lamk.	- Harray baer, Kanta baer, Rukh-baer (Nep.)	Climbers Shrubs	up to 900 m	April - June June Oct.	Ripe fruits Ripe fruits
VITACEAE					
<i>Ampelocissus barbata</i> (Wall.) Planch	Mikrum-rip (Lep.) Jarila-lahara (Nep.)	Climbers	up to 1200 m	June July	Fruits
<i>Cayratia trifolia</i> (L.) Domin [<i>Cayratia carnosia</i> (Lamk.) Gagnep.]	Takballi-rip (Lep.) Jarilalaohara (Nep.)	Climbers	up to 1800 m	July - August	Young leaves & stem boiled.

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Cissus adnata</i> Roxb.	Kungchen-rip (Lep.) Char-chari, Panilara (Nep.)	Climbers	up to 900 m		Leaves cooked
<i>C. repens</i> Lamk.	Kungchen-rip (Lep.) Puren	Climbers	up to 1500 m		Leaves & tender shoots
<i>Parthenocissus himalayana</i> (Royle) Planch.	Hilotagbret (Lep.) Charchare (Nep.)	Woody climbers	up to 3300m	Aug. Sept.	Fruits
<i>Tetrastigma bracteolatum</i> (Wall.) Planch.	Tunder-rip (Lep.)	Climbers	up to 1800 m	Dec. Feb.	Fruits
<i>T. dubium</i> (Lawson) Planch. <i>(T. lanceolarium</i> auct <i>non</i> Planch.)	Tunder-rip (Lep.) Bherseri (Nep.)	Climbers	up to 1000 m	June Sept.	Fruits
<i>T. planicaulo</i> (Hook. f.) Gagnep	Charchare-lata (Nep.)	Large climbers	up to 1200 m		Water from stem
<i>T. rumicispermum</i> (Laws.) Planch.	Chacheri (Nep.)	Large climbers	up to 2100 m	July - Nov.	Fruits
LEEACEAE					
<i>Leea macrophylla</i> Roxb. ex Hornem	Dampamtom kung (Lep.) Bulyettra (Nep.)	Herbs	up to 1000 m	May June	Ripe fruits and young leaves
SAPINDACEAE					
<i>Aphania rubra</i> (Roxb.) Radlk.	Sirhootungchir (Lep.) Achatta (Nep.)	Shrubs	up to 900m		Ripe-fruits.
<i>Erioglossum rubiginosum</i> (Roxb.) Bl.	-	Shrubs / Trees	up to 900 m	May - Aug.	Ripe fruits eaten; leaves & shoots as veg.
<i>Acer caudatum</i> Wall. <i>(Acer papilio</i> King)	Kabashi, Kapasi (Nep.)	Trees	3000 - 3750 m	July - Sept.	Sweet-sap obtained by making holes in trunk. (Sugar yielding)
STAPHYLEACEAE					
<i>Turpinia pomifera</i> (Roxb.) DC.	Margut, Singnok (Lep.) Nagpat, Thali (Nep.)	Trees	up to 2100 m	May Oct.	Fruits
SABIACEAE					
<i>Meliosma pinnata</i> (Roxb.) Maxim.	Bolay (Nep.)	Trees	up to 900 m		Tender leaves

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Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
ANACARDIACEAE					
<i>Mangifera sylvatica</i> Roxb.	Kathor-kung, Katur (Lep.) Chuche-anp, Chuchi-am (Nep.)	Trees	up to 1200 m	June Aug.	Fruits
<i>Pegia nitida</i> Colebr.	Renchiling (Lep.) Sivong-rip (Lep.) Chutti Lara, Lahari anp (Nep.) Mashul	Climbers	up to 1200 m	April June	Tender leaves
<i>Poupartia axillaris</i> (Roxb.) King & Prain	Silot-kung (Lep.)	Trees	up to 1350 m	July Dec.	Ripe fruits eaten; inner bark chewed as areca nut
<i>Rhus griffithii</i> Hook. f	Bhalayo (Nep.)	Small trees	up to 1800 m		Tender leaves as veg.
<i>R. javanica</i> L.	Takhril, Thang, Hear-kung (Lep.) Bakhimela, Bhagmili, Bhakimlo (Nep.)	Small trees/ Shrubs	700 - 2100 m	July April	Ripe fruits
<i>Spondias pinnata</i> (L.f.) Kurz	Ronchiling (Lep.) Amro (Nep.)	Med. trees	up to 900 m	March Dec.	Flower buds in curry; fruits (young) pickled, ripe fruits eaten.
FABACEAE					
<i>Indigofera atropurpurea</i> Buch. -Ham. ex Hornem.	Hikpi (Lep.)	Shrubs	up to 3200 m	Jan. April	Flowers as veg.
<i>Abrus precatorius</i> L.	Suhusiligrim (Lep.) Lageri, (Nep.)	Climbers	up to 1050 m	July Sept.	Leaves chewed with pan
<i>Desmodium microphyllum</i> (Thunb.) DC.	-	Prostrate herbs	1800 - 2300 m	July Sept.	Young leaves as vegetable
<i>Eriosema himalaicum</i> Ohashi	-	Perennial under-shrubs	up to 3000 m	July Sept.	Tuberous rootstock edible
<i>Moghania macrophylla</i> (Willd.) O. Ktze	Mipit-muk (Lep.) Batwas (Nep.)	Shrubs	up to 1700 m	Aug. Jan.	Pods
<i>Pueraria tuberosa</i> (Roxb. ex Willd.) DC.	-	Woody climbers	up to 1200 m	March	Tubers & new shoots

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Smithia sensitiva</i> Ait.	-	Herbs	up to 1200 m	March	Young leaves
CAESALPINACEAE					
<i>Bauhinia purpurea</i> L.	Chee-kung, Kachik (Lep.) Khwairalo, Tangki (Nep.)	Trees	up to 1500 m	Sept. April	Flower buds & ripe seeds
<i>B. vahlii</i> Wt. & Arn.	Makar-rip, Pegrong-rip Sungung-rip (Lep.) Borla (Nep.)	Climbers	up to 1500 m	Dec. March	Tender pods cooked Seeds eaten after roasting
<i>B. variegata</i> L.	Rha, Rhar-kung (Lep.) Chinghau, Koiralo, Taki (Nep.)	Trees	up to 1800 m	Feb. - May	Flower buds & young leaves as vegetable
<i>Cassia fistula</i> L.	Sungyen (Lep.) Bandariata, Raj-birji, Raj - birshi, Raj - briksha (Nep.)	Trees	up to 1200 m	March Aug.	Young leaves & flower buds
<i>C. occidentalis</i> L.	-	Herbs	up to 1400 m	July - March	Young leaves & flower buds; Seeds as Coffee
<i>C. sophera</i> L.		Shrubs	up to 1200 m	July Sept.	Young leaves cooked
ROSACEAE					
<i>Doxynia indica</i> (Wall.) Decne (<i>D. hookeriana</i> Decne)	Li-kung (Lep.) Mehel (Nep.), Passy (Nep.)	Trees	up to 2000 m	Aug. Sept.	Fruits
<i>Fragaria nilgerrensis</i> Schlecht ex f. Gay	-	Herbs	2800 - 4200 m	July Sept.	Fruits
<i>F. nubicola</i> Lindl. ex Lacaita (<i>F. vesca</i> L.)	-	Herbs	1500 - 3900 m	July - Aug.	Fruit, Rootstock as tea
<i>Mallus baccata</i> (L.) Borkh		Trees	up to 3300 m	Sept. Oct.	Fruits
<i>Prinsepia utilis</i> Royle	-	Shrubs	1500 - 2800 m	March July	Seed-oil edible
<i>Prunus undulata</i> Buch.-Ham. ex D. Don	-	Trees	2400 - 3600 m	July - Oct.	Fruits
<i>P. cerasoides</i> D. Don	Kongki (Lep.) Paiyum (Nep.)	Trees	1300 - 2400 m	April - June	Fruits, also used for making brom
<i>P. cornuta</i> (Wall. ex Royle) Stand.	Hlosa, Hlot-kung (Lep.) Arupatti, Likharu (Nep.)	Trees	1200 - 3000 m	July - Oct.	Fruits

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Rosa macrophylla</i> Lindl.	—	Shrubs	1050 - 3000 m	July - Nov.	Ripe fruits
<i>R. sericea</i> Lindl.		Shrubs	2100 - 4200 m	July - Nov.	Fruits
<i>Rubus biflorus</i> Buch. -Ham ex	—	Shrubs	1600 - 2800 m	May - July	Fruits
<i>R. calycinus</i> Wall.	Bin-Aselu (Nep.)	Shrubs	1800 - 2700 m	July - Nov.	Fruits
<i>R. ellipticus</i> Sm.	Kashyen (Lep.) Aselu, Cesi, Escalu, Tolu-aselu (Nep.)	Shrubs	up to 2400 m	April - June	Fruits
<i>R. fruticosus</i> var. <i>discolor</i> Hook. f.	—	Shrubs	up to 2100 m	June - Nov.	Fruits
<i>R. lineatus</i> Reinw.	Gempe-aselu (Nep.)	Shrubs	1800 - 2700 m	Sept. - Nov.	Fruits
<i>R. macilentus</i> Camb.		Shrubs	1500 - 2700 m	May - July	Fruits
<i>R. rugosus</i> (<i>R. moluccanum</i> auct. L.)	Sufok-ji (Lep.) Pripem-kanta Satai-selu (Nep.)	Shrubs	900 - 2100 m	Jan. Dec.	Fruits
<i>R. niveus</i> Thunb.	Kaju talam (Lep.) Kala-aselu (Nep.)	Shrubs	up to 3000 m	May - Oct.	Ripe fruits
<i>R. paniculatus</i> Sm.	Numing-rip (Lep.)	Shrubs	1000 - 2400 m	June Oct.	Fruits
<i>R. rosifolius</i> Sm.	Kashempongpot (Lep.) Gempe-aselu (Nep.)	Shrubs	1000 - 3000 m	March Oct.	Fruits
<i>Sorbus cuspidata</i> (Spach.) Hedl.	Tungru (Lep.) Gulior, Mayhell, Tenga (Nep.)	Trees	2400 - 3000 m	Oct. - Dec.	Fruits
CRASSULACEAE					
<i>Rhodiola discolor</i> (Franch.) Fu		Herbs	3600 - 4800 m	June - Sept.	Leaves as salad or cooked as veg.
COMBRETACEAE					
<i>Terminalia bellirica</i> (Gaertn.) Roxb. ex flaming	Kanon (Lep.) Barra (Nep.)	Trees	up to 400 m	Dec. Feb.	Seed kernel
<i>T. chebula</i> Retz	Salim-kung (Lep.) Herro (Nep.)	Trees	up to 1200 m	Dec. Feb.	Seed kernel

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
MYRTACEAE					
<i>Syzygium claviflorum</i> (Roxb.) Wall. ex Cowan & Cowan	Mentet (Lep.) Tonglong (Kung) Harre - jamuns (Nep.)	Trees	up to 1200 m	March - May	Fruits
<i>S. cumini</i> (L.) Skeels	Dhober-kung (Lep.) Jamuna (Nep.)	Trees	up to 1500 m	June July	Fruits
<i>S. formosa</i> Wall.	Famsikol (Lep.) Ambake, Bara-Jamun (Nep.)	Trees	up to 1350 m	March June	Fruits
<i>S. kurzii</i> Duthie	Kyamuna, Piamun (Nep.)	Trees	up to 600 m	July August	Fruits
<i>S. wallichii</i> (Wt.) Walp.	Jamun (Nep.)	Trees	up to 300 m	March - April	Fruits
<i>S. tetragonum</i> Wall ex Walp.	Sunom (Lep.)	Trees	up to 1800 m	March May	Fruits
LECYTHIDACEAE					
<i>Careya arborea</i> Roxb.	Bok Tok (Lep.)	Trees	up to 1200 m		Root-bark pounded & ground to make bread
MELASTOMATACEAE					
<i>Medinilla erythrophylla</i> Lindl.		Shrubs	600 - 1800 m	Jan. May	Leaves, cooked fruits edible
<i>Melastoma malabathricum</i> L.	Tungbram (Lep.) Choulisi, Tulasi (Nep.)	Shrubs	up to 1800 m	Nov. Dec.	Fleshy placenta & seed
LYTHRACEAE					
<i>Woodfordia fruticosa</i> (L.) Kurz	Chunghyekdun (Lep.) Dahiri (Nep.) Laldairo (Nep.)	Shrubs	up to 1500 m (Ranipool-singtam)	Nov. April	Flowers
CUCURBITACEAE					
<i>Coccinia grandis</i> (L.) Voigt.		Climbers	up to 900 m	Sept. March	Unripe fruits vegetable Tender shoots
<i>Diplocyclos palmatus</i> (L.) C. Jeffrey	-	Climbers	up to 1500 m	July - Oct.	Young leaves as veg.
<i>Hodgsonia heteroclita</i> (Roxb.) Hook. f. & Thoms.	Darsani, Ghin-Phal (Nep.)	Climbers	up to 1200 m (Linza-Dzongu)	Aug. - Dec.	Seed- Kernel

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Momordica dioica</i> Roxb. ex Willd.	Kaksa (Hindi)	Climbers	up to 1500 m	June July	Leaves, fruits & roots
<i>Mukia maderaspatana</i> (L.) Roem.		Climbers	up to 1800 m	July Dec.	Unripe & ripe fruits
<i>Solena heterophylla</i> Lour.		Climbers	up to 3200 m	March Dec.	Whole plants
BEGONIACEAE					
<i>Begonia roxburghii</i> (Miq.) DC.		Herbs	up to 1200 m	July - Aug.	Leaves as pot herb
<i>B. hatacoa</i> Buch.-Ham. ex D. Don (<i>B. rubrovenia</i> Hook.)	-	Herbs	up to 2200 m	July Aug.	Leaf-stalks
APIACEAE					
<i>Bupleurum falcatum</i> L. var. <i>marginata</i> Clarke	-	Herbs	up to 3600 m	May	Roots
<i>Oenanthe thomsonii</i> Clarke	Jungli-sounf	Herbs	1350 - 2400 m Lachung-yunthing	May - Oct.	Leaves
ARALIACEAE					
<i>Trevesia palmata</i> (Roxb.) Vis.	Suntong (Lep.) Kajpati, Phutta (Nep.)	Trees	up to 1500 m	Feb. May	Flower-buds cooked; fruits eaten
<i>Panax pseudoginseng</i> Wall.	Ajambari Buti	Herbs	3000 - 5000 m	Aug. - Sept.	Roots
CORNACEAE					
<i>Swida macrophylla</i> (Wall.) Sojak (<i>Cornus macrophylla</i> Wall.)	Bangi-kath (Nep.) Patmero (Nep.)	Trees	900 - 2400 m	May - July	Fruits
CAPRIFOLIACEAE					
<i>Lonicera angustifolia</i> Wall. ex DC.		Shrubs	1800 - 3600 m	July - Oct.	Fruits
SAMBUCACEAE					
<i>Sambucus hookeri</i> Rehder	Galeni (Nep.)	Under trees	1200 - 2400 m		Leaves
<i>S. javanica</i> auct. non Reinw. ex Bl.					
<i>Viburnum nervosum</i> D. Don	Baraasare (Nep.)	Under trees	2700 - 3600 m	July Oct.	Fruits
<i>V. cordifolium</i> Wall. ex DC.					

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Viburnum cassinifolium</i> D. Don	-	Shrubs	1200 - 3300 m	July Oct.	Ripe fruits
RUBIACEAE					
<i>Chassalia curviflora</i> (Wall.) Thw.	Antavi (Lep.)	Shrubs	600 1800 m	June Dec.	Leaves
<i>Galium aparine</i> L.	-	Herbs	2400 3600 m	Aug. Sept.	Seeds as substitute of coffee
<i>Gardenia campanulata</i> Roxb.	-	Small tree	up to 360 m	Oct. - Nov.	Leaves cooked
<i>Mussaenda roxburghii</i> Hook. f.	-	Large shrub	up to 1200 m	July - Aug.	Leaves as veg.
<i>Oldenlandia auricularia</i> (L.) K. Schum	-	Herbs	up to 1800 m	June - Aug.	Leaves
<i>Hedyotis scandens</i> Roxb.	Kalhenyok (Lep.) Bakre-lara (Nep.)	Climbing shrubs	up to 1800 m	July Aug.	Leaves
<i>Pavetta indica</i> L.	Sundok (Lep.) Kange-phul (Nep.)	Bushy shrubs	up to 1200 m	May Feb.	Fruits
<i>Randia longispina</i> (Roxb.) DC.	Panji (Lep.) Amuti (Nep.) Maidelphul (Nep.)	Small tree	up to 1200 m	Jan. Feb.	Ripe fruits roasted or cooked
DIPSACACEAE					
<i>Dipsacus inermis</i> Wall.		Herbs	1500 - 3600 m	May Sept.	Tender shoots & young leaves are cooked
ASTERACEAE					
<i>Sonchus asper</i> Hill.		Herbs	up to 3600 m	Jan. July	Tender shoots (as salad)
<i>Spilanthes calva</i> DC.		Herbs	up to 2300 m	July Oct.	Leaves (as pot herb); seeds are chewed
<i>Vernonia cinerea</i> (L.) Less	-	Herbs	up to 2300 m	July Sept.	Young leaves
CAMPANULACEAE					
<i>Codonopsis parviflora</i> Wall. ex DC.	-	Perennial herb	300 - 1500 m	June Aug.	Young leaves cooked
ERICACEAE					
<i>Gaultheria fragrantissima</i> Wall.	Kalomba (Lep.) Machino (Nep.)	Shrubs	1500 - 2400 m	May - Oct.	Fleshy blue calyx around fruit

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
VACCINACEAE					
<i>Agapetes serpens</i> (Wt.) Sleumer	-	Epiphytic shrub	up to 2400 m	April June	Fruits
<i>Vaccinium vacciniaceum</i> (Roxb.) Sl. (<i>V. serratum</i> Wt.)	Charu (Nep.)	Shrubs epiphytic	up to 2400 m	April May.	Flowers
MYRSINACEAE					
<i>Ardisia thrysiflora</i> D. Don (<i>A. floribunda</i> Wall.)		Shrubs	up to 1400 m	Dec. Feb.	Ripe fruits
<i>A. macrocarpa</i> Wall.	Dang peyong, Denyok (Lep.) Chumlani (Nep.) Dannai-phul	Tall shrub	up to 2400 m	Oct. April.	Fruits
<i>Embelia gamblei</i> Kurz ex Cl.	Monkyou-rik Saladok-rik (Lep.) Amili, Amilpati, Patiamlo (Nep.)	Evergreen climber	1800 - 2700 m	April May	Leaves
<i>E. undulata</i> (DC.) Mez.	Amilpati (Nep.)	Climbing shrub	900 - 3000 m	March - Dec.	Leaves cooked with fish, fruits eaten
<i>Maesa argentea</i> Wall.	-	Shrubs	up to 2100 m	Sept. - Feb.	Fruits
<i>M. chisia</i> D. Don	Purmo (Lep.) Bilaune (Nep.)	Shrubs / Small tree	up to 2100 m	Nov. May	Young shorts & fruits
SAPOTACEAE					
<i>Aesandria butyracea</i> (Roxb.) Bachni [<i>Diplokema butyracea</i> (Roxb.) H. J. Lamb]	Yel (Lep.) Yelpote (Lep.) Churi, Chiwari (Nep.)	Trees	up to 1500 m	Oct. - June	Seeds
OLEACEAE					
<i>Olea gamblei</i> Clarke	Jamu (Nep.)	Small trees	up to 900 m	Dec. March	Fruits
APOCYNACEAE					
<i>Melodinus monogynus</i> Roxb.	-	Large climbers	up to 1350 m	Oct. - Jan.	Fruit pulp
<i>Wrightia arborea</i> (Dennst) Schluss (<i>W. tomentosa</i> R. Br.)	Lelemyok (Lep.) Khirra (Nep.)	Trees	up to 1200 m	April May	Leaves as veg.

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
ASCLEPIADACEAE					
<i>Holostemma adakodien</i> J. A. Schultes [<i>H. annularis</i> (Roxb.) K. Schum]	—	Climbers	up to 1500 m	July - Sept.	Leaves and flowers as vegetable
<i>Marsdenia roylei</i> Wt.	—	Climbers with milky juice	up to 2100 m		Roots
LOGANIACEAE					
<i>Buddleja asiatica</i> Lour.	—	Shrubs	up to 2040 m	Dec. - June	Flowers cooked; roots powder used in prep. of a liquor
CORDIACEAE					
<i>Cordia dichotoma</i> Forst. f.	Minat (Lep.) Aule-bohori (Nep.)	Trees	up to 1500 m	March Aug.	Ripe fruits & other flowers
<i>Ehretia acuminata</i> var. <i>serrata</i> (Roxb.) Johnst	Chille (Nep.) Bohori	Trees	up to 1800 m	March - Dec.	Fruits
<i>E. laevis</i> Roxb.	—	Trees	up to 1100 m	Sept. May	Fruits & innerbark
SOLANACEAE					
<i>Solanum surattense</i> Burm f.	—	Herbs	up to 1100 m	Dec. May	Fruits
<i>S. crassipetalum</i> Wall.	Kadombee (Lep.)	Shrubs	up to 2400 m	May Aug.	Leaves cooked
<i>S. anguivi</i> Lour.	Kadombee (Lep.)	Shrubs	up to 1500 m	Dec. Feb.	Fruits as veg.
<i>S. indicum</i> L.	Bihi (Nep.)				
<i>Solanum erianthum</i> D. Don					
<i>S. verbascifolium</i> L.	Sivor (Lep.)	Shrubs	up to 1500 m	Aug. Dec.	Fruits cooked
<i>S. nigrum</i> L.	—	Herbs	up to 2700 m	Almost throughout the year.	Young shoots, leaves & ripe fruits
<i>S. viarum</i> Dunal	—	Herbs / Shrubs	up to 2600 m	Aug. Sept.	Fruits
GESNERIACEAE					
<i>Rhynchotechum ellipticum</i> A. DC.	—	Under shrub	up to 1800 m	Oct. Dec.	Leaves as veg.

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
BIGNONIACEAE					
<i>Oroxylum indicum</i> (L.) Vent	Karamkande (Nep.) Tatola, Totola (Nep.)	Trees	up to 1200 m	May - Dec.	Flowers & seeds
ACANTHACEAE					
<i>Phlogacanthus thyrsiflorus</i> (Roxb.) Nees	Rhecom (Lep.)	Shrubs	up to 1700 m	Dec. March	Flowers as veg.
<i>Thunbergia grandiflora</i> (Rottl. & Willd.)	Chontefib (Lep.)	Climbers	up to 1400 m	July Sept.	Leaves as veg.
VERBENACEAE					
<i>Clerodendrum colebrookianum</i> Walp.	Kadungbi (Lep.) Kaombi (Lep.)	Shrubs	up to 1500 m	May Aug.	Young leaves
<i>C. indicum</i> (L.) O. Ktze.	Agniya (Nep.)	Shrubs	up to 1400 m	June Aug.	Leaves as veg.
<i>Gmelina arborea</i> Roxb.	Mumbong (Lep.) Khameri (Nep.)	Trees	up to 1200 m	April July	Fruits
<i>Premna mucronata</i> Roxb.	Ginavi (Nep.)	Trees	up to 900 m		Bark
<i>Pygmaeopremna herbacea</i> (Roxb.) Moldenke		Herbs	up to 900 m	May - July	Ripe fruits
LAMIACEAE					
<i>Leucas cephalotes</i> Spr.	-	Herbs	up to 2400 m	May - Aug.	Young leaves as pot herb
<i>L. lanata</i> Benth.	-	Herbs	up to 1100 m	Oct. May	Tender shoot
<i>Mentha longifolia</i> (L.) Hudson	-	Herbs	1500 - 2700 m	Aug. Sept.	Leaves
<i>Organum vulgare</i> L.	-	Herbs	up to 4000 m	Aug. Sept.	Tender shoots as veg.
<i>Perilla frutescens</i> (L.) Britton	-	Herbs	up to 2400 m		Leaves as veg. seed, yield oil also
NYCTAGINACEAE					
<i>Boerhavia diffusa</i> L.	-	Herbs	up to 1200 m	April Aug.	Young leaves
AMARANTHACEAE					
<i>Alternanthera sessilis</i> (L.) DC.	-	Herbs	up to 2000 m	July Sept.	Tender shoots and leaves are eaten at pot herb or soup

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Amaranthus spinosus</i> L.	-	Herbs	up to 1700 m	Almost throughout the year	Tender shoots and leaves
CHENOPODIACEAE					
<i>Chenopodium album</i> L.	Bethu	Herbs	up to 4200 m	July Oct.	Stem & leaves as salad or veg.
<i>C. murale</i> L.	Bethu	Herbs	up to 1200 m	July Dec.	Leaves
PHYTOLACCACEAE					
<i>Phytolacca acinosa</i> Roxb.	Jaringo	Perennial Herb	up to 2700 m	April - Sept.	Leaves cooked
POLYGONACEAE					
<i>Oxyria digyna</i> (L.) Hill. (<i>Rumex digynus</i> L.)		Herbs	2100 5000 m	April June	Young leaves as salad
<i>Bistorta vivipara</i> (L.) S. F. Gray (<i>Polygonum viviparum</i> L.)		Herbs	3300 5000 m	July Aug.	Young leaves
<i>Rheum spiciformae</i> Royle	-	Herbs	3300 - 4800 m	June	Leaves cooked
<i>Persicaria glabra</i> (Willd.) Gomes (<i>Polygonum glabrum</i> Willd.)		Herbs	up to 1800 m	May - July	Leaves & shoots
<i>Aconogonum molle</i> (D.Don) Hara (<i>Polygonum molle</i> D. Don)	Kandyco-pam (Lep.)	Shrubs/Climbers	1200 - 2100 m	April Aug.	Tender shoots
<i>Persicaria polystachyum</i> (Wall. ex Meisn) H. Gross		Shrubs	2100 - 3500 m	May - July	Young leaves & shoots
<i>Rheum nobile</i> Hook. f. & Thoms.	Tehuka	Herbs	3600 4500 m	May Aug.	Acidulous stem is eaten; dried leaves used as tobacco
<i>Rumex hastatus</i> D. Don	Halhale	Herbs	up to 2400 m	May Oct.	Young leaves as salad
SAURURACEAE					
<i>Houttuynia cordata</i> Thunb	Hillejhsat	Herbs	up to 1800 m	April - July	Rootstock veg.; leaves eaten by lepcas
<i>Litsea cubeba</i> (L.) Pers (<i>Lourus cubeba</i> L.)	Tanghaercherkung (Lep.) Kang (Lep.), Siltimbe (Nep.)	Trees	up to 2700 m	March July	Fruits.
<i>Machilus edulis</i> King ex Hook. f.	Phum-kung, Phani(Lep.) Dudri (Nep.)	Trees	1200 - 2400 m	Jan. - March	Fruits eaten by Lepchas

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
PROTEACEAE					
<i>Helicia nilagirica</i> Bedd.	Zheyong-kung (Lep.) Bandre	Trees	up to 1800 m	Sept. May	Fruits edible
ELAEAGNACEAE					
<i>Elaeagnus infundibularis</i> Momiyama (<i>E. latifolia</i> Auct. non L.)	Jarila (Nep.) Nalinda (Nep.)	Shrubs	1500 - 2500 m	March June	Ripe fruits
SANTALACEAE					
<i>Pyrularia edulis</i> (Wall.) DC.	Safhyi (Lep.) Toktor-kung (Lep.)	Trees	600 - 1800 m	July Nov.	Fruits eaten
EUPHORBIACEAE					
<i>Antidesma acidum</i> Retz.					
<i>A. diandrum</i> (Roxb.) Roith	Kunchur-kung (Lep.) Archel (Nep.) Kimpalini (Nep.)	Shrubs	up to 900 m	July Jan.	Leaves as chutney, fruits pickled or eaten raw
<i>A. acuminatum</i> Wall.	Kunchur-kung (Lep.) Kalo-bilaune (Nep.)	Small Trees	up to 1200 m	Winter	Fruits edible
<i>A. bunius</i> (L.) Spr.	Kunchur-kung (Lep.) Kantjer, (Lep.) Himalchuri (Nep.)	Trees	up to 900 m	July Oct	Leaves & juicy fruits eaten
<i>A. ghaesembilla</i> Gaertn	Chipli (Nep.)	Trees	up to 900 m	Nov. May	Fruits are eaten; leaves as chutney
<i>Aporosa octandra</i> (Buch.-Ham. ex D. Don) A. R. Vickery					
<i>A. dioica</i> (Roxb.) Muell.-Arg.	Barkaunli (Nep.) Chipli-khari (Nep.)	Shrubs or Small dense trees	Lower elevation up to 900 m	April July	Fruits
<i>Baccaurea rambiflora</i> Lour. [<i>Baccaurea sapida</i> (Roxb.) Muell.-Arg.]	Sanbhyo-kung Sumbling (Lep.) Somblyo pot Kala Bogati (Nep.)	Trees	Lower Elev.	May -July	Aril around seed coat

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Bridelia retusa</i> (L.) Spreng	Pengji (Lep.) Gayo (Nep.)	Small trees	up to 1050 m	Oct. Jan.	Ripe fruits
<i>B. stipularis</i> (L.) Bl.	Lahara - Gayo (Nep.)	Climbers	up to 600 m	Dec. March	Fruits
<i>Phylanthus emblica</i> L. (<i>Emblica officinalis</i> Gaertn)	Amlo-kung (Lep.) Amala (Nep.)	Trees	up to 1400 m	Dec. Feb.	Fruits
<i>Euphorbia hirta</i> L.	-	Herbs	up to 1500 m	July - Sept.	Tender shoots & leaves
<i>Pterococcus corniculatus</i> (Sm.) Pax. & Hoffm.	-	Climbers	up to 700 m		Leaves as veg.
<i>Sapium baccatum</i> Roxb.	Ial-kainzal (Nep.) Ankhataruwa (Nep.) Padlikat (Nep.)	Trees	up to 1200 m	Aug. Oct.	Fruits
<i>Securinega virosa</i> (Roxb. ex Willd.) Pax & Hoffm.	Phalame (Nep.)	Trees	up to 1800 m	June - Nov.	Fruits
CANNABACEAE					
<i>Cannabis sativa</i> L.	-	Herbs	up to 2700 m	July - Oct.	Roasted seeds
URTICACEAE					
<i>Debregeasia longifolia</i> (Burm. f.) Wedd.	Kamhyem (Lep.) Tisari, Tashiari (Nep.)	Shrubs/Trees	up to 2100 m	Nov. Feb.	Ripe fruits
<i>D. wallichiana</i> Wedd.	Bop-kung, Marem seven (Lep.) Lek-pangara, Bahuni lehara (Nep.)	Shrubs	1200 - 2100 m	July - Oct.	Fruits
<i>Girardinia diversifolia</i> (Link) Friis	Kaju (Lep.) Lello (Nep.)	Herbs	1700 - 3000 m	July Oct.	Leaves & young shoots
<i>Laportea terminalis</i> Wt.	Patte-sisnu (Nep.)	Herbs	1200 - 2400 m	July Sept.	Boiled tender shoots
<i>Pouzolzia sanguinea</i> (Bl.) Merr. (<i>P. viminea</i> Wedd.)	Kyngbi (Lep.) Chipile (Nep.)	Shrubs/Trees	up to 3000m	July - Oct.	Leaves as veg.; bark-powder during scarcity
<i>Urtica dioica</i> L.	Sisnoo	Herbs	up to 3000 - 4500 m	May	Young shoot - tops as pot herb & seeds

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Urtica hyperborea</i> Jacq.	-	Under shrubs	4100 5100 m	July Aug.	Young leaves cooked as pot herb
<i>U. ardens</i> Link	Sisnoo	Herbs	up to 3000 m	June Dec.	Young leaves and apical portion of branches after boiling
<i>U. mairei</i> H. Lev.		Herbs	2600 - 3200	June Sept.	Young leaves
ULMACEAE					
<i>Gironniera cuspidata</i> (BL.) Kurz.	Shee-kung (Lep.) Sukar (Nep.)	Trees	1800 2400 m	Dec. Feb.	Fruits
MORACEAE					
<i>Artocarpus lakoocha</i> Roxb.	Sungyen-kung (Lep.) Barrar (Nep.)	Trees	up to 1200 m	Feb. Aug.	Fruits (Raw or Pickled)
<i>Ficus auriculata</i> Lour. (<i>F. roxburghii</i> Wall.)	Nebharo (Nep.) Kandong-kung (Lep.)	Trees	up to 1800 m	Nov. - Aug.	Fruits as veg.
<i>F. geniculata</i> Kurz.		Trees	ca 900 m	July - Aug.	Young leaves are cooked
<i>F. hirta</i> Vahl	Dechu-kung (Lep.) Gyassay (Lep.) Kashari, Kashreto, Dusu (Nep.)	Shrubs	up to 1500 m	Jan. Aug.	Young leaves
<i>Ficus hispida</i> L. f.	Kharwa, koksa (Nep.) Taksot, Tyung, mo-ped (Lep.)	Shrubs	Up to 1200 m	July Aug.	Unripe fruits as vegetable
<i>F. nerifolia</i> Sm. var. <i>nemoralis</i> (Wall. ex Miq.) Corner	Nyen-kung (Lep.) Dudilo (Nep.)	Trees	Up to 2400 m	April Dec.	Ripe fruits
<i>F. oligodon</i> Miq.	Nevara, Timil (Nep.)	Trees	Up to 1300 m	Nov. - Jan.	Ripe fruits
<i>F. racemosa</i> L.	Techongtay (Lep.)	Trees	up to 1200 m	April - July	Ripe fruits
<i>F. racemosa</i> var. <i>elongata</i> (King) Barrett	-	Shrubs or small trees	Up to 1200 m	May - June	Ripe & unripe fruits
<i>F. semicordata</i> Buch. Ham. ex Sm.	Khaniu (Nep.) Sangji, Songsor (Lep.)	Trees	Up to 1200 m	May Sept.	Ripe fruits

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Ficus virens</i> Ait	Kahra, Pakkar, Safed-kabra (Nep.) Kangji(Lep.)	Trees	Up to 1950 m	Jan. April	Young shoots
<i>Morus australis</i> Poir	Mekrap, Nambyong (Lep.) Sanu-kimbu (Nep.)	Shrubs or tree	Up to 2100 m	April - July	Ripe fruits
<i>Mactura cochinchinensis</i> (Lour.) Corner [<i>Cudrania cochinchinensis</i> (Lour.) Kudo & Masam ex Sauer]	Rungong-Zhu (Lep.) Maidel-kanra (Nep.)	Thorny shrubs	Up to 1500 m	July Dec.	Ripe fruits
JUGLANDACEAE					
<i>Juglans regia</i> L.	Okhar (Nep.) Kowel (Lep.)	Trees	1200 - 2100 m	July Nov.	Seeds & Sap from trunk
MYRICACEAE					
<i>Myrica esculenta</i> Buch. -Ham. ex D. Don	Kabusi (Nep.)	Trees	1200 - 2300 m	April June	Fruits
BETULACEAE					
<i>Betula alnoides</i> Buch. Ham.	Hlosunli (Lep.) Payong, Saur (Nep.)	Trees	1200 - 2600 m	March - April	Inner portion of soft bark
CORYLACEAE					
<i>Corylus ferox</i> Wall.	Hlo-koshu-kung (Lep.) Curri, Lekh-katus (Nep.)	Trees	2400 - 3000 m	July - Nov.	Kernel of fruits
FAGACEAE					
<i>Castanopsis hystrix</i> Miq.	Kushu-kungu (Lep.) Arkhal, Dalve Katus (Nep.)	Trees	1000 - 2500 m	Sept. Oct.	Nuts
<i>C. indica</i> (Roxb.) DC.	Sherob-kung (Lep.) Aule-Katus (Nep.) Banj-Katus (Nep.)	Trees	up to 1800 m	Sept. Dec.	Fruits
<i>C. tribuloides</i> (Sm.) A. DC. (<i>Quercus tribuloides</i> Sm.)	Kashioshem (Lep.) Musre-katus (Nep.)	Trees	up to 2300 m	Aug. Dec.	Fruits

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Quercus glauca</i> Thunb.	Musre-phalant (Nep.) Phalat (Nep.)	Trees	up to 3100 m	Aug. Nov.	Nuts
EPHEDRACEAE					
<i>Ephedra gerardiana</i> Wall. ex Royle		Tufted, rigid shrubs	1950 4800 m	July Oct.	Fruits
GNETACEAE					
<i>Gnetum montanum</i> Markf.		Climbers	up to 1800 m	Sept. - Oct.	Fruits
PINACEAE					
<i>Taxus baccata</i> L.	Yew (Eng.) Cheongbu (Lep.) Dhengresalla (Nep.)	Trees (up to 12 m)	1800 - 3300 m	Nov.	Fruit edible; bark as tea
CYCADACEAE					
<i>Cycas pectinata</i> Griff.	Siapdung (Lep.) Thakal (Nep.)	Very small trees	up to 600 m	Dec. Jan.	Tender leaves used as veg. seeds are edible. Coarse sago is obtained from trees
ORCHIDACEAE					
<i>Satyrium ciliatum</i> Lindl.	Khirru (Tib.)	Herbs	2000 - 3500 m	Sept. - Oct.	Tubers
MUSACEAE					
<i>Musa sikkimensis</i> Kurz.		Tree-like	up to 900 m	March July	Inflorescence
<i>M. balbisiana</i> Colla	Kera, Bankera (Nep.)	Tree-like	up to 900 m	March July	Inflorescence
<i>M. rosacea</i> Jacq. (<i>Musa ornata</i> Roxb.)	-	Tree-like	up to 900 m	May - July	Core of scape is taken as vegetable or is dried and made into flour
ZINGIBERACEAE					
<i>Costus speciosus</i> Sm.		Herbs (up to 1.5 m tall)	up to 1750 m	June Nov.	Tender young shoots (boiled in coconut juice & tubers)
<i>Curcuma angustifolia</i> Roxb.	Wild Arrowroot (Eng.) Tikhur (Hindi)	Herbs (up to 40 cm tall)	up to 1200 m	Oct. Jan.	Tubers

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Curcuma zerumbet</i> Roxb.	Zedoray (Eng.) Kali haldi (Hindi)	Herbs	At lower elevation	Sept. Jan.	Tubers yield 'Shoti' starch
HYPOXIDACEAE					
<i>Circuligo capitulata</i> (Lour.) Kuntz.	-	Herbs	1800 - 2000 m	July Aug.	Fruits
<i>C. orchioides</i> Gaertn.	-	Herbs	up to 1800 m	Nov. Dec.	Roots (boiled)
DIOSCOREACEAE					
<i>Dioscorea belophylla</i> Voigt ex Prain & Burk	Wild-yam (Eng.)	Climbers	up to 1500 m	April	Tubers
<i>D. glabra</i> Hook. f.					
<i>D. bulbifera</i> L.	Ghita-tarul (Nep.) Kunchong (Lep.) Kacheo (Lep.)	Climbers	up to 1800 m	Jan. - June	Tubers Bulbils after boiling
<i>D. hamiltonii</i> Hook. f.	-	Climbers		Dec. March	Tubers
<i>D. hispida</i> Dennst.					
<i>D. daemona</i> Roxb.		Climbers	up to 1200 m	Nov. Jan.	Tuber eaten after thorough processing
<i>D. melanophylla</i> Prain & Burk.		Climbers	up to 3000 m	Oct. Jan.	Tubers
<i>D. pentaphylla</i> L.	Kussok, Ranibegur (Nep.)	Climbers	up to 1650 m	Sept. Jan.	Leaves, flowers & tubers
<i>D. puber</i> Bl. (<i>D. anguina</i> Roxb.)		Climbers	900-1500 m	Jan. June	Tubers & Bulbs
AMARYLLIDACEAE					
<i>Allium prattii</i> C. H. Wright apud Forbes & Hemsl.		Herbs	2400 - 4500 m	April Aug.	Leaves for seasoning curries
<i>Allium wallichii</i> Kunth.	-	Herbs	2350 - 4000 m	July Oct.	Leaves
LILIACEAE					
<i>Asparagus filicinus</i> Buch. Ham.		Shrubs	up to 3000 m	April	Tender shoots as veg.
<i>A. racemosus</i> Willd.	Kurilo (Nep.)	Climbing shrubs	up to 1200 m	May - Aug.	Tuberous roots & tender shoots

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Asphodelus tenuifolius</i> Cav.		Herbs	up to 2100 m	June April	Plants & Seeds edible
<i>Chlorophytum arundinaceum</i> Baker		Herbs		March July	Flowers
<i>Smilax zeylanica</i> L.	Chopchini (Nep.)	Climbers	up to 1800 m	May - Jan.	Young leaves & ripened berries
<i>Tulipa clusiana</i> DC. f. <i>stellata</i> (Hook.) Das Gupta & Deb (<i>T. stellata</i> Hook.)		Herbs	up to 3600 m	April Aug.	Bulbs
<i>Drimia indica</i> (Roxb.) Jessop <i>Urginea indica</i> Kunth	-	Herbs	up to 1800 m	May June	Leaves
PONTEDERIACEAE					
<i>Monochoria vaginalis</i> (Burm. f.) K. B. Presl.	-	Marshy herbs	up to 1500 m	July Sept.	Young leaves
COMMELINACEAE					
<i>Commelina benghalensis</i> L.		Herbs	up to 1800 m	July Sept.	Tender shoots and young leaves with flour as Pakodas
<i>C. maculata</i> Edgew. (<i>Commelina paludosa</i> Bl.)		Herbs	up to 1800 m	July Sept.	Tender shoots
ARECACEAE					
<i>Phoenix rupicola</i> T. Anders	Schap (Lep.)	Palm tree	up to 300 m (Tista valley)	June Aug.	Pith (raw) & ripe fruits
<i>Wallichia disticha</i> T. Anders	Katong (Lep.)	Palm tree (3-6 m tall)	up to 600 m Tista valley		Pith of trees of the upper portion
ARACEAE					
<i>Colocasia esculenta</i> (L.) Schott		Herbs	up to 2400 m	July Oct.	Young leaves petioles
<i>Lasia spinosa</i> (L.) Thw.	-	Marshy herbs	at lower elevations (sub-tropi Himalayas)	July - Sept.	Roots, petioles and young leaves as vegetable
<i>Scindapsus officinalis</i> Schott	-	Epiphytic climbers	up to 3000 m	June - Aug.	Young leaves as vegetable

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
<i>Arisaema concinnum</i> Schott	-	Herbs	1600 - 2400 m	April June	Corms after boiling
<i>A. speciosum</i> (Wall.) Mart.	-	Herbs	2300 - 3500 m	April June	Corms after boiling
<i>A. tortuosum</i> (Wall.) Schott	-	Herbs	1300 - 2900 m	April June	Corms used in making bread
CYPERACEAE					
<i>Cyperus rotundus</i> L.	-	Herbs	up to 1700 m	Throughout the year. Young tubers	
POACEAE					
<i>Schizostachyum capitatum</i> (Munro)					
R. Majumdar					
(<i>Cephalostachyum capitatum</i> Munro)	Payong (Lep.) Gobia, Gope bans (Nep.)		up to 2400 m	May Nov.	Grains (as rice)
<i>S. fuchsianum</i> (Gamble)					
R. Majumdar					
(<i>Cephalostachyum fuchsianum</i> Gamble)	Pafom (Lep.)		1800 - 2400 m	April	Grains (as rice)
<i>Chimonobambusa hookeriana</i>	Pareng, Singhare (Nep.) Pagiok-pao, Praong (Lep.)	Bamboo (5-6 m tall)	up to 2400 m	April Nov.	Grains (as rice)
(Munro) Makai					
<i>Dendrocalamus hamiltonii</i> Nees et Arn. ex Munro	Pao, Ywmyot-pao (Lep.) Choya-bans, Tama (Nep.)	10 - 17 m tall Bamboo	up to 900 m	April Oct.	Grains as rice & boiled tender shoots eaten as veg.
<i>Thamnocalamus aristatus</i> (Gamble) E. G. Camus	Babam, Babain (Lep.) Rato-Nigalo (Nep.)		2700 - 3300 m	Sept. May	Grains
<i>Himalayacalamus falconeri</i> (Hook. f. ex Munro) Keng, f. (<i>Thamnocalamus falconeri</i> Hook. f. ex Munro)	Pasmung, Pummoon (Lep.) Phusre-nigalo (Nep.)		1800 - 2700 m	April June	Grains
CYATHEACEAE					
<i>Cyathea spinulosa</i> Wall ex Hook.	Pasen (Lep.) Unyo, Pakpa (Nep.)	Tree-fern (6-12 m tall)	1200 - 2250 m		Soft tender inner part of trunk

Table - I : Contd.

Bot. Name	Local Name	Habit	Occurrence	Flowering season	Parts used
ATHYRIACEAE					
<i>Diplazium esculentum</i> (Retz.) Sw.	Ningro	Herbs	600-2100 m	May Aug.	Young fronds
DICRANOPTERIDACEAE					
<i>Dicranopteris linearis</i> (Burm. f.) Underw. [<i>Gleichenia linearis</i> (Burm. f.) CL.]		Herbs	up to 1800 m		Rhizomes yield starch
ANGIOPTERIDACEAE					
<i>Angiopteris evecta</i> (Forst) Hoffm.	Gokhuri (Nep.)	Stout herbs	up to 2100 m		Flour is prepared from the Rhizome
BOTRYCHIACEAE					
<i>Botrychium virginianum</i> (L.) Sw.	-	Large herbs	1500 - 2400 m	May - June	Whole plant (boiled)
OPHIOGLOSSACEAE					
<i>Ophioglossum vulgatum</i> L.		Small herbs	up to 2400 m	April June	Leaves
EQUISETACEAE					
<i>Equisetum debile</i> Roxb. ex Vauch.	-	Herbs	up to 4050 m	May	Boiled strobili
NEPHROLEPIDACEAE					
<i>Nephrolepis tuberosa</i> Presl.	Pani amla (Nep.)	Herbs	up to 1800 m	April- Oct.	Tubers

1994]

SRIVASTAVA : WILD EDIBLE PLANTS OF SIKKIM HIMALAYA

hamiltonii is culturally linked with the folk owing to its use in Maghi Sankranti festival.

In the present communication, an attempt has been made to provide an account of the wild edible plants, of the state. It deals with 339 species, 246 genera belonging to 118 families of flowering plants and Pteridophytes. The data are presented in tabulated form (Table-1). The family names are given in capital letters. The botanical names of the plants are followed by the common synonyms in bracket. Local names are provided wherever known (Lep-Lepcha, Nep-Nepali, Bhut-Bhutia, Tib-Tibetan). Usually the altitude range of the occurrence of the species has been given but in some cases the names of the places have also been mentioned from where the sample has been collected. Information about flowering and fruiting period and parts used are also given. (The data are presented in Table-1).

DISCUSSION

The tribal population in Sikkim have primitive but important germ plasm of several crops. Still, there is tendency to preserve the local land races and varieties of crop-plants which are the products of many years of natural selection and contain genetic treasures for resistance to pests and diseases and adaptability to stress conditions. Noteworthy among these is the prevailing enormous genetic diversity in Iskush, Maize, Ginger,, Cardamom, Wheat, Orange, Banana, Saccharum etc. The area is particularly important for Maize (origin centre), Brassicas, Rice, Cucumber, Banana, Mango, Cardamom, Dioscorea, Alocasia, Colocasia, Amorphophallus, Orchids, Rhododendrons, Primulas, Pedicularis etc. Apart from these several other elements of the flora which may not have an obvious economic value at present as the same has been perceived as yet but in future they may prove to be of much economic value in view of the changing patterns of our needs. It is the sum total of such remarkable diversity which has made this state "Gene-bank" for a number of food-crops and other economically important plants as well. Even today any serious botanical exploration yields a number of interesting observations.

Therefore, our present knowledge about the plant resources of Sikkim is not the last word on the real situation in this region. Still much is to be done and much is to be known about the hidden "Green Gold" treasure of the state.

But during the recent past a great deal of damage has been done to the richness of the plant-diversity of Sikkim Himalaya. The vegetation cover has been denuded by the haphazard felling of trees for timber through unmanaged grazing, road-construction activities, for developing agricultural fields etc. These have resulted in frequent land-slides which are swallowing several habitats of economically and biologically important plants even before their utility is known to the society.

The prime need of the time is to draw a well-planned strategy of utilisation of plant resources of Sikkim Himalaya after taking into consideration all the factors and to ensure that the large variety of the flora of this region not only continues to survive but flourish well.

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