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Gift of the Himalayas



Non-Timber Forest Products of the Sacred Himalayan Landscape - Nepal

Gift of the Himalayas

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Allo

Botanical name

Girardinia diversifolia (Link) Friis

Family

Urticaceae

Trade name

Allo (Nep.); Himalayan giant nettle (Eng.)

Trade value

Bark: NRs. 160-180 per kg; Thread: NRs. 200-220 per kg

Habitat and distribution

Moist, shady, forested areas; 1200-3000m, WCE Nepal. Also distributed in N India, Bhutan, Sri Lanka, CE China, Myanmar and Malaysia.

Diagnostic characters

Stout herb about 3m high. Leaves stalked, palmately and deeply divided, dentate, covered with long, stinging hairs, base three-ribbed. Flowers yellowish, clustered in a panicle.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering

Fruiting

Parts used

Leaf, seed, root and bark

Uses

Young leaves and inflorescences are cooked as green vegetable. Roasted seeds are pickled. Ash of the plant is applied in cases of ring worm and eczema. Juice of the roots used as gastritis and constipation. Juice of the leaves applied to treat headaches and joint aches. Bark of the stem furnishes fine silky fiber used for coarse clothes, bags, nets, fishnets and ropes.

Harvesting

The leaves are harvested during May-Jun. and bark harvested during Aug.-Sep.

Status

Not vulnerable



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Argeli

Botanical name

Edgeworthia gardneri (Wall.) Meisn.

Family

Thymelaeaceae

Trade name

Argeli (Nep.); Nepalese paper bush (Eng.)

Trade value

White skin: NRs. 45-60 per kg

Handmade paper (20"x30"; 20gm): NRs. 1300-1400 per kori
(1kori=200pcs)

Habitat and distribution

Open slopes, forests and shrubberies; 1500-3000m, CE Nepal. Also distributed in Bhutan, NE India, N Myanmar, W China.

Diagnostic characters

Large, much-branched bush. Leaves elliptic-lanceolate, acuminate, glabrous above, pubescent or silky beneath; heads naked at the base or surrounded with short, linear, silky bracts. Flowers densely crowded, golden yellow, sweet-scented.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Flowering ———— Fruiting

Parts used

Inner bark (White skin)

Uses

Inner bark is used for paper making. Traditionally bark is used for making ropes in villages.

Harvesting

The bark is harvested from the matured plant in Dec.-Mar.

Status

Not vulnerable

Bajradanti

| | |
|---------------------------------|---|
| Botanical name | <i>Potentilla fruticosa</i> L. |
| Family | Rosaceae |
| Trade name | Bajradanti, Bhairung pati (Nep.); Bush cinquefoil (Eng.) |
| Trade value | Root: NRs. 25-30 per kg |
| Habitat and distribution | Open slopes, shrubberies, WCE Nepal, 2400-5500m. Also distributed in Kashmir, Bhutan, China. |
| Diagnostic characters | Low spreading much branched shrub, forming thickets. Leaves pinnate with 3-7 small, silvery-haired, ovate-lanceolate leaflets. Flowers large, bright yellow, solitary terminal. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering ———— Fruiting</p> |
| Parts used | Root, leaf and flower |
| Uses | Roots are used for breast disease, stomach and lung disorders, and indigestion. It is also used as incense. |
| Harvesting | Roots, leaves and flowers are selectively harvested from the matured stock during Jul.-Sep. |



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Status

Not vulnerable



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Ban Lasun

Botanical name

Fritillaria cirrhosa D. Don

Family

Liliaceae

Trade name

Ban lasun (Nep.); Snake's-head fritillary (Eng.)

Trade value

Bulb: NRs. 2,000-2,500 per kg

Habitat and distribution

Exposed alpine grasslands; 3500-4500m, WCE Nepal. Also distributed in Bhutan, Tibet, N India and N Myanmar.

Diagnostic characters

Erect herb about 75cm high. Leaves sessile, linear, lower leaves opposite, upper leaves in a whorl, uppermost with tendril like tips. Flowers solitary, drooping, yellowish with dark purple spots.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— ————— Fruiting

Parts used

Bulb

Uses

The bulb is used to treat asthma, bronchitis, and bleeding during cough, possibly caused by tuberculosis. A paste of the bulb is applied to check bleeding from wounds and to treat pimples. Boiled and roasted roots are edible.

Harvesting

Bulb of matured plant is collected during Jul.-Aug.

Status

Vulnerable



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Ban Timur

| | |
|---------------------------------|---|
| Botanical name | <i>Zanthoxylum oxyphyllum</i> Edgew. |
| Family | Rutaceae |
| Trade name | Ban timur, lek timur (Nep.); Nepalese pepper (Eng.) |
| Trade value | Fruit: NRs. 90-120 per kg; Zanthoxylum oil: NRs. 3,500-4,000 per kg |
| Habitat and distribution | Open, rocky places; 2100-2800m, CE Nepal. Also distributed in N India and Myanmar. |
| Diagnostic characters | Shrub with hooked prickles. Leaves stalked, odd-pinnate, leaflets usually seven, elliptic, acuminate, serrulate, gland dotted beneath. Flowers stalked, purplish, in branched cymes. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering Fruiting</p> |
| Parts used | Fruit |
| Uses | Fruits are pickled and also used as spice. A paste of immature fruit is kept between the teeth to relieve toothache. Fruits contain essential oil. |
| Harvesting | Matured fruits are harvested during Sep.-Oct. |

Status

Not vulnerable



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Bhale Sunpati

Botanical name

Rhododendron lepidotum Wall. ex G. Don

Family

Ericaceae

Trade name

Bhale sunpati (Nep.)

Habitat and distribution

Forests, shrubberies, open slopes; 2100-4700m, WCE Nepal. Also distributed in Kashmir, Arunachal Pradesh, NE India, N Myanmar, China.

Diagnostic characters

Small evergreen, resinous, matforming shrublet. Leaves small, obovate, narrow, elliptic, scaly above and beneath. Flowers pink on dull purple in terminal clusters. Capsules densely scaly.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering

Fruiting

Parts used

Leaf and flower

Uses

Leaf and flower used for bile and lung disease, headache from bile, back pain, cold and blood disorders and borne disease.

Leaves are used for incense.

Harvesting

Plant parts are harvested during Jul.-Sep.



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Status

Not vulnerable

Bhui Chuk

| | |
|-----------------------|--|
| Botanical name | <i>Hippophae tibetana</i> Schlecht. |
| Family | Elaeagnaceae |
| Trade name | Bhui chuk (Nep.); Seabuckthorn (Eng.) |
| Trade value | Fruit: NRs. 40-50 per kg; Seabuckthorn juice: NRs. 150-200 per bottle (650 ml) |

Habitat and distribution Stony places, river-sides; 3300-4500m, WCE Nepal. Also distributed in Afghanistan, N India, Bhutan, S Tibet, NW China.

Diagnostic characters Much branched shrub with long, stout terminal spines formed from the branch tips. Leaves narrow-elliptic or linear-oblong covered with rusty scales. Flowers stalkless, yellowish, in clusters appearing on leaflets stems. Fruits orange-red when ripe.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— ————— Fruiting

Parts used

Fruit

Uses

Fruits are used in cold and cough, blood disorders. Also used as appetite stimulant, diuretic, anthelmintic and tonic. Fruits are edible raw. Yellow dye obtained from fruits.

Harvesting

Fruits are collected during Nov.-Dec.

Status

Not vulnerable



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Bhutkesh

Botanical name

Selinum tenuifolium Wall. ex C. B. Clarke

Family

Umbelliferae

Trade name

Bhutkesh (Nep.); Ragwort (Eng.)

Trade value

Rhizome and root: NRs. 80-90 per kg

Habitat and distribution

Shrubberies, open slopes, edges of fields; 2700-4800m, WCE Nepal. Also distributed in Kashmir, Bhutan, NE India, China.

Diagnostic characters

Tall perennial herb. Leaves 3-5 times divided into numerous elliptic segments. Lower leaves long stalked, sheathing at base, upper smaller, the uppermost reduced to a sheath. Flowers white, in compound umbels. Fruits with broad lateral wings.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— Fruiting

Parts used

Root and fruit

Uses

Roots are used for cuts and wounds as antiseptic and to check bleeding. Roots and fruits are used for colic, gastritis and intestinal pain.

Harvesting

Roots are harvested during Aug.-Sept.

Status

Not vulnerable



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Bikh

Botanical name

Aconitum spicatum (Bruhl) Stapf.

Family

Ranunculaceae

Trade name

Bikh (Nep.); Aconite (Eng.)

Trade value

Root : NRs. 150-160 per kg

Habitat and distribution

Open, moist, grassy place, steep slopes; 1800-4300m, WCE Nepal. Also distributed in Bhutan, S Tibet.

Diagnostic characters

Erect herb to 1m tall. Leaves palmately divided into broadly ovate lobes which are further cut into toothed and pointed lobules. Flowers purplish white to deep purple blue, in a long and erect dense flowered inflorescence. Fruit a follicle.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— ————— Fruiting

Parts used

Root

Uses

The root tuber is used as poison. Root tuber is also used medicinally after proper detoxification of the poison.

Harvesting

A paste of roots is applied for neuralgia, cholera & rheumatism. The root tuber is harvested from the matured plant during Oct.-Nov.

Status

Commercially threatened



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Chirayito

Botanical name

Swertia chirayita (Roxb. ex Fleming) Karsten

Family

Gentianaceae

Trade name

Chirayito (Nep.); Chiretta (Eng.)

Trade value

Whole parts: NRs. 200-250 per kg

Habitat and distribution

Open, moist places and forest openings; 1500-2500m, WCE Nepal. Also distributed in Kashmir, Bhutan, Assam.

Diagnostic characters

Annual herb about 1.5m high. Leaves sessile, opposite, elliptic, entire, tip pointed. Flowers yellowish or greenish.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering

Fruiting

Parts used

Whole plant

Uses

The plant is tonic, stomachic, febrifuge and laxative. A paste of the plant is applied to treat skin diseases such as eczema and pimples.

Harvesting

The whole plants are harvested during Nov.-Dec.



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Status

Vulnerable

Chutro

| | |
|-----------------------|---------------------------------------|
| Botanical name | <i>Berberis asiatica</i> Roxb. ex DC. |
| Family | Berberidaceae |
| Trade name | Chutro (Nep.); Berberry (Eng.) |
| Trade value | Bark: NRs. 60-80 per kg |

Habitat and distribution Exposed, rocky hillsides; 900-2500m, WCE Nepal. Also distributed in Bhutan, NE India and SW China.

Diagnostic characters Spiny shrub about 3m high. Leaves short-stalked, clustered, ovate, leathery, margin coarsely spinous, venation netted. Flowers stalked, yellow. Fruit fleshy, blue black when ripe.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— ————— Fruiting

Parts used

Fruit, bark and root

Uses

Ripe fruits are eaten fresh or pickled. Alcohol is distilled from ripe fruit. Bark decoction is used to treat conjunctivitis, inflammation of the eyes, laxative and tonic. Fruit has cooling and laxative properties. Roots and stems are a source of yellow dye.

Harvesting

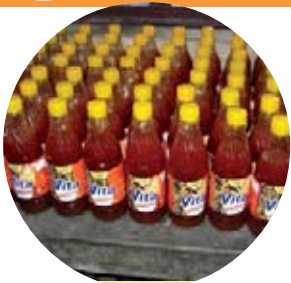
Matured fruits are harvested during Jun.-Jul. and bark is harvested during Aug.-Oct.

Status

Not vulnerable



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Dale Chuk

Botanical name

Hippophae salicifolia D. Don

Family

Elaeagnaceae

Trade name

Dale chuk (Nep.); Seabuckthorn (Eng.)

Trade value

Fruit: NRs. 40-50 per kg; Seabuckthorn juice: NRs. 150-200 per bottle (650 ml)

Habitat and distribution

Along riversides, alluvial gravels; 1800-3500m, WC Nepal. Also distributed in N India, Bhutan, S Tibet, China.

Diagnostic characters

Thorny deciduous shrub or small tree. Leaves oblong-lanceolate, white downy beneath. Male flowers yellow-brown in small catkins that appear before leaves; female in small racemes appearing with the leaves. Fruits globular, orange or red berry.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering Fruiting

Parts used

Fruit

Use

Fruits are used for toothache, joint pain, liver, lungs and phlegm diseases, menstrual disorders, dysentery, gum infection, blood disorders, diabetes and intestinal parasites. Fruits are edible raw, also used extensively for the preparation of chuk (vinegar).

Harvesting

Fruits are collected during Nov.-Dec.

Status

Vulnerable



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Dhasingre

| | |
|---------------------------------|---|
| Botanical name | <i>Gaultheria fragrantissima</i> Wall. |
| Family | Ericaceae |
| Trade name | Dhasingre (Nep.); Wintergreen (Eng.) |
| Trade value | Leaf: NRs. 1 per kg; Wintergreen oil: NRs. 900-1,000 per kg |
| Habitat and distribution | Open places, shrubberies, forests, rocky slopes; 1100-2800m, CE Nepal. Also distributed in Arunachal Pradesh, NE India, Bhutan, N. Myanmar, Sri Lanka. |
| Diagnostic characters | Robust shrub approximately 2-3m high. Leaves stalked, oblong-lanceolate, serrate, coriaceous, bright green. Flowers white, scented. Fruits deep purplish-blue when ripe. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering Fruiting </p> |
| Parts used | Young twig with leaves |
| Uses | Leaf extract antiseptic, diuretic, stimulant, antirheumatic and in scabies. Immature fruits for stomach trouble. Leaves bear essential oil. |
| Harvesting | The twigs with leaves are harvested from the matured plant during Mar.-Nov. |

Status

Not vulnerable



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Dhupi



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Botanical name

Juniperus indica Bertol.

Family

Cupressaceae

Trade name

Dhupi (Nep.); Black juniper (Eng.)

Trade value

Leaf: NRs. 5-7 per kg; Juniper oil: NRs. 2,200-2,500 per kg
Berry: NRs. 15 per kg; Juniper berry oil: NRs. 6,000-6,500 per kg

Habitat and distribution

Open slopes, forest, shrubberies; 3700-4500m, WCE Nepal. Also distributed in Kashmir, NE Tibet, W China.

Diagnostic characters

Shrubs or small tree. Leaves on lower branches awl-shaped, spreading; those on terminal branches scale like, overlapping in 4-ranks. Male cones ovoid; female cones fleshy, berry like, black, 1-seeded.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Cones ■ ■ Maturing

Cones and maturing

Parts used

Leaf and fruit

Uses

Berry and leaf used in kidney disorders, skin and lymph disease, fever, cough and cold, sores, wounds, and paralysis of limbs. Leaves and branches are used for incense. Berries and leaves bear essential oil.

Harvesting

Leaves are harvested throughout the year and fruits during Jul.- Aug.

Status

Vulnerable

Dhupi

| | |
|-----------------------|--|
| Botanical name | <i>Juniperus recurva</i> Buch.-Ham. ex D. Don |
| Family | Cupressaceae |
| Trade name | Dhupi (Nep.); Drooping juniper (Eng.) |
| Trade value | Leaf: NRs. 5-7 per kg; Juniper oil: NRs. 2,200-2,500 per kg Berry: NRs. 15 per kg; Juniper berry oil: NRs. 6,000-6,500 per kg |

Habitat and distribution Open, rocky places in alpine regions; 3300-4600m, WCE Nepal. Also distributed in N India, W China and Myanmar.

Diagnostic characters Evergreen coniferous shrub, procumbent stems curling upward at the tips. Leaves in whorls of three, lanceolate, sharply pointed, loosely imbricated, incurved, base not jointed, decurrent. Cones yellowish in terminal, short, lateral branches. Seed cone ovoid, black.

Cones and maturing

Parts used

Uses

Harvesting

Status

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Cones Maturing

Wood, leaf and fruit

Wood and leaves are used as incense. Berries and leaves contain essential oil.

Leaves are harvested throughout the year and fruits during Nov.

Vulnerable



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Gurans



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Botanical name

Rhododendron arboreum Sm.

Family

Ericaceae

Trade name

Gurans, lali gurans (Nep.); Rhododendron (Eng.)

Trade value

Flower: NRs. 35-40 per kg; Juice: NRs. 70-80 per bottle (650 ml)

Habitat and distribution

Hillsides in mixed Oak forests; 1400-3300m, WCE Nepal. Also distributed in Sikkim, Bhutan, S Tibet and Myanmar.

Diagnostic characters

Tree about 15m high. Leaves stalked, crowded toward the ends of branches, oblong to lanceolate, narrowed at both ends, entire, silvery beneath. Flowers red, white or pink, crowded in large rounded corymbs. Fruit a capsule, cylindrical, longitudinally ribbed.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ■ Fruiting ■

Parts used

Leaf, bark and flower

Uses

Flowers used for making pickles and juice. Juice of the flower is taken to treat menstrual disorder. Juice of the bark is taken in cases of diarrhea and dysentery. When a fish bone gets stuck in the throat, people eat the petals to help extract the bone.

Harvesting

Flowers are harvested during Mar.-Apr.

Status

Not vulnerable

Jangali Gulaf

Botanical name

Rosa macrophylla Lindl.

Family

Rosaceae

Trade name

Jangali gulaf (Nep.); Himalayan rose (Eng.)

Habitat and distribution

Forests, shrubberies; 2100-3800m, WCE Nepal. Also distributed in N Myanmar, W China, Kashmir and Bhutan.

Diagnostic characters

Erect shrub, stems sometimes with paired straight prickles below leaves. Leaves ovate, elliptic, finely serrate leaflets. Flowers pink, terminal on short lateral shoots. Fruits very large, red, flask shaped, with persistent calyx.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering



Fruiting

Parts used

Fruit

Uses

Fruits are used for fever, diarrhea and bile disorders. Fruits are edible raw and also used for making local wine.

Harvesting

Fruits are harvested during Sept- Oct.



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Status

Not vulnerable



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Jangali Gulaf

Botanical name

Rosa sericea Lindl.

Family

Rosaceae

Trade name

Jangali gulaf (Nep.); Himalayan rose (Eng.)

Habitat and distribution

Open hill slopes, forests and shrubberies, 2100-4600m, WCE Nepal. Also distributed in Bhutan, NE India, N Myanmar, W China.

Diagnostic characters

Stiff erect shrub, 1-4m high. Stems naked or bearing straight paired or scattered slender or broad prickles. Leaves pinnate; leaflets elliptic to oblong, margins serrate at apex, terminal leaflet larger. Flowers white or cream, solitary axillary with persistent calyx. Fruits bright red, globular to pear shaped.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering

Fructing

Parts used

Flower, fruit and bark

Uses

Flowers and ripe fruits are used in liver, bile, wind and lung diseases and menstrual disorders. Bark is used in cases of poisoning and lymph fluid disorders. Ripe fruits are eaten raw.

Harvesting

Flowers and bark are harvested during May-Jul. and fruits during Sep.-Oct.

Status

Not vulnerable



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Jatamansi

| | |
|---------------------------------|--|
| Botanical name | <i>Nardostachys grandiflora</i> DC. |
| Family | Valerianaceae |
| Trade name | Jatamansi (Nep.); Spikenard (Eng.) |
| Trade value | Root: NRs. 150-180 per kg; Jatamansi oil: NRs. 7,000-9,000 per kg |
| Habitat and distribution | Rocks, open slopes, scrubs, forests; 3500-5300m, WCE Nepal. Also distributed in Uttar Pradesh, Bhutan, W China. |
| Diagnostic characters | Perennial herb with thick aromatic rhizome covered by reddish brown fibers. Leaves basal, elliptic-lanceolate to spatulate, sessile. Flowers rosy, pale pink or white, in dense terminal cymes. Fruits obovate, 1-seeded. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering ———— Fruiting</p> |
| Parts used | Rhizome and leaf |
| Uses | Rhizomes are used for wounds, cough, cold, chronic fever, fever due to poisoning, spleen disease, intestinal parasites, high blood pressure, tumors, stomach diseases and swellings. Leaves are used for high altitude sickness, headache, fever and wounds. Rhizomes are highly used for incense. Rhizomes contain essential oil. |
| Harvesting | Leaves are collected during Jul.-Aug. and rhizomes during Sep.-Oct. |
| Status | Highly vulnerable; CITES II; government protected (Ban for export outside the country in unprocessed form) |



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Jhyau

Botanical name

Usnea longissima Ach.

Family

Usneaceae

Common name

Jhyau (Nep.); Lichen, old-man's beard (Eng.)

Trade value

Thallus: NRs. 60-70 per kg

Habitat and distribution

Corticolous, grows on twigs of Oak, Rhododendron, Fir, Birch, Sorbus etc; 2500-3900m, WCE Nepal. Also distributed in India, China.

Diagnostic characters

Pendulous, thread like, fruticose lichen; thallus upto 45cm long, pale yellow to yellowish-green, with solid axis, basal disc not found, much branched, covered by whitish green soredia.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Fructification season

Parts used

Whole thallus

Uses

Wounds, lung, liver and fever from poisoning. Also used as incense.

Harvesting

Thallus is collected during Aug.-Sep.



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Status

**Vulnerable; government protected
(Ban for export outside the country in unprocessed form)**

Jimbu

| | |
|-----------------------|----------------------------------|
| Botanical name | <i>Allium wallichii</i> Kunth |
| Family | Alliaceae |
| Trade name | Jimbu (Nep.); Wild garlic (Eng.) |
| Trade value | Leaf: NRs. 20-40 per mana |

Habitat and distribution Moist, rocky places; 2500-4500m, WCE Nepal. Also distributed in India, Bangladesh, Sri Lanka, SE Tibet and W China.

Diagnostic characters Bulbous herb about 65cm high; bulbs small, clustered, stem base covered with leaf sheath. Leaves linear, flat, longer than the main flower stalk having garlic like odor. Flowers purple, stalked, in terminal clusters of cymes.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering ———— Fruiting

Flowering and fruiting

Parts used

Whole plant

Uses

Young leaves are eaten as vegetables. Dried leaves are used as spice in curry, meat and pickle. Bulbs are boiled, fried in clarified butter, and then eaten in cases of cholera and diarrhea. Bulbs are chewed to treat cough, colds and altitude sickness.

Harvesting

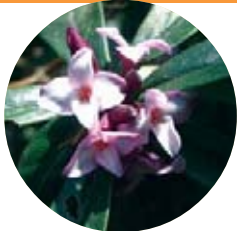
The whole plants are harvested during Aug.-Sep.

Status

Vulnerable



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Kalo Lokta

Botanical name

Daphne bholua Buch.-Ham. ex D. Don

Family

Thymelaeaceae

Trade name

Lokta (Nep.); Nepalese paper plant (Eng.)

Trade value

Bark: NRs. 80-90 per kg

Handmade paper (20"x30";20gm): NRs. 1300-1500 per kori
(1kori=200pcs)

Habitat and distribution

Understorey shrub growing naturally in Oak, Rhododendron, Laurel and Fir forests; 1800-3100m, WCE Nepal. Also distributed in Arunachal Pradesh, NE India, W. China.

Diagnostic characters

Erect deciduous shrub. Leaves elliptic to oblanceolate, entire, dull green, leathery, hairless, alternate, short-stalked. Flowers white, sweet scented, flushed externally pink or purplish, borne in terminal rounded stalkless clusters. Fruit ellipsoid, black when ripe.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering and fruiting

Flowering

Fructing

Parts used

Inner bark

Uses

Bark used in the manufacture of handmade paper on a cottage industry scale.

Harvesting

The bark is harvested from the matured plant during Jun.-Oct.

Status

Commercially threatened



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Kurilo

Botanical name

Asparagus racemosus Willd.

Family

Liliaceae

Trade name

Kurilo, satavari (Nep.); Wild asparagus (Eng.)

Trade value

Root: NRs. 120-150 per kg

Habitat and distribution

Dry places in sub-tropical regions, moist places in temperate regions; 300-2200m, WCE Nepal. Also distributed in Pakistan, India, SE Asia, Australia and Africa.

Diagnostic characters

Straggling, much branched, slender shrub about 1.5m high. Shoots covered with reflexed spines. Cladodes needle shaped, somewhat curved, channeled beneath. Flowers small, stalked, white, fragrant, in racemes. Fruit a berry, globose.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— ————— Fruiting

Parts used

Root and tender shoot

Uses

Tender shoots are cooked as a vegetable. The root is diuretic, demulcent, aphrodisiac, laxative, refrigerant, tonic, expectorant, galactagogue, astringent, antiseptic, alterative, appetizer, antispasmodic, stomachic. It is helpful in expelling the placenta of animals after delivery. The tubers are also used to treat amenorrhea, diarrhea, dysentery, biliousness, kidney and liver troubles, throat complaints, epilepsy, rheumatism, dyspepsia, gonorrhoea and are considered beneficial in the treatment of impotency. Squeezed root is used for washing clothes.

Harvesting

Roots are harvested during Jul.-Nov.

Status

Not vulnerable



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Kutki



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| | |
|---------------------------------|---|
| Botanical name | <i>Neopicrorhiza scrophulariiflora</i> (Pennell) Hong |
| Family | Scrophulariaceae |
| Common name | Kutki (Nep.); Gentian (Eng.) |
| Trade value | Rhizome and Root: NRs. 150-200 per kg |
| Habitat and distribution | Rocky slopes, gravelly areas, shrublands; 3500-4800m, WCE Nepal. Also distributed in N India, Bhutan, S Tibet, China and Myanmar. |
| Diagnostic characters | Perennial herb with woody, creeping rhizome. Leaves sub-radical, rosette, spatulate to ovate, serrate. Flowers dark-purple, in a dense terminal raceme, borne on aerial stem arising from rosette. Capsule ovoid. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering ———— Fruiting</p> |
| Parts used | Rhizome and root |
| Uses | Rhizomes are used for bile disease, intestinal pain, blood and lung fever, high blood pressure, sore throat, eye disease, gastritis, cough and cold. |
| Harvesting | Rhizomes are harvested selectively from matured plants during Oct.-Nov. |
| Status | Highly vulnerable; Government protected (Ban for collection, use, sale, distribution, transportation and export) |

Lauth Salla

Botanical name

Taxus wallichiana Zucc.

Family

Taxaceae

Trade name

Lauth salla (Nep.); Himalayan yew (Eng.)

Trade value

Leaf: NRs. 50-55 per kg

Habitat and distribution

Exposed slopes, under forest canopy; 2200-3400m, WCE Nepal. Also distributed in Afghanistan, Pakistan, N India, W China and SE Asia.

Diagnostic characters

Evergreen coniferous tree about 12m high. Bark reddish brown, rough, exfoliating in irregular papery scales. Leaves short stalked, linear, flattened, distichous, acute, shiny dark above, rusty beneath, narrowed toward the base. Cones yellowish, axillary. Seed cones red. Seeds olive green.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering



Fruiting

Cones and maturing

Parts used

Leaf

Uses

Juice of leaves is given for cough, bronchitis and asthma. Leaves are sold in the trade as a cancer cure. The red and fleshy cup-shaped aril that surrounds the seed is edible.

Harvesting

Leaves are harvested from the matured plants during Jan.-Apr.

Status

Highly vulnerable; CITES II; government protected (Ban for export outside the country in unprocessed form)



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Majitho



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Botanical name

Rubia manjith Roxb. ex Fleming

Family

Rubiaceae

Trade name

Majitho (Nep.); Indian maddar (Eng.)

Trade value

Stem and root: NRs. 30-35 per kg

Habitat and distribution

Moist, open places; 1200-2300m, WCE Nepal. Also distributed in N India.

Diagnostic characters

Trailing herb, stems and branches four-angled, minutely prickly. Leaves stalked, ovate to cordate, long pointed, basal veins prominent. Flowers dark red. Fruit globose, succulent.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering

Fruiting

Parts used

Stem and root

Uses

The root is alterative astringent and tonic. A paste of the stem is applied to scorpion bites. The root is used for dye.

Harvesting

The roots and stems are harvested during Nov.-Dec.

Status

Not vulnerable

Malingo

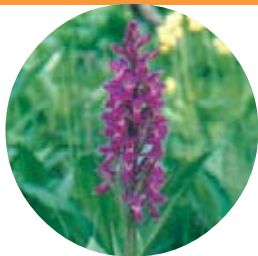
| | |
|---------------------------------|--|
| Botanical name | <i>Arundinaria maling</i> Gamble |
| Family | Gramineae |
| Trade name | Malingo (Nep.); Himalayan bamboo (Eng.) |
| Trade value | Tender shoot: NRs. 20-25 per bundle (7-10 pcs) Handicraft & basketry depending on design and size: Varies according to design & size |
| Habitat and distribution | Open and rocky places; 1500-3500m, CE Nepal. Also distributed in NE India. |
| Diagnostic characters | Tufted bamboo about 9m high, culms slender, hollow, culm sheaths striate. Leaves papery, linear lanceolate, glabrous on both surfaces, apex terminating in a bristly acuminate point, margin minutely rough. Inflorescence brownish. |
| Parts used | Culm, young shoot |
| Uses | Young shoots are cooked as a vegetable or pickled. Strips from the culms are used to make mats, fishing equipments, basketry & handicrafts. Culms are also used for roofing and fences. Leaves are used for fodder. |
| Harvesting | Harvesting of culms from matured plants during May-Aug. |



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Status

Not vulnerable



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Paanch Aule

Botanical name

Dactylorhiza hatagirea (D. Don) Soo

Family

Orchidaceae

Trade name

Paanch aule (Nep.); Orchis, marsh orchid, salep (Eng.)

Habitat and distribution

Moist places; 3000-4000m, WCE Nepal. Also distributed in Pakistan, N India, Bhutan and SE Tibet.

Diagnostic characters

Orchid about 45cm high. Roots tuberous, slightly flattened and divided into 3 or 5 fingers like lobes. Leaves oblanceolate, base sheathing. Flowers purple, narrowly lanceolate.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering Fruiting

Parts used

Root

Uses

Young leaves and shoots are eaten as a vegetable. The root is expectorant, astringent, demulcent and highly nutritious. Powdered root is spread over wounds to control bleeding. A decoction of the root is given in cases of stomach trouble.

Harvesting

Roots are harvested during Aug.-Sep.



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Status

Commercially threatened; Government protected (Ban for collection, use, sale, distribution, transportation and export)

Padamchaal

| | |
|---------------------------------|--|
| Botanical name | <i>Rheum australe</i> D. Don |
| Family | Polygonaceae |
| Trade name | Padamchaal, chulthi amilo (Nep.); Himalayan rhubarb (Eng.) |
| Trade value | Rhizome and root: NRs. 40-50 per kg |
| Habitat and distribution | Open, rocky grounds; 3200-4500m, WCE Nepal. Also distributed in N India and S Tibet. |
| Diagnostic characters | Herb about 1.5m high with woody rootstock. Leaves stalked, orbiculate or broadly ovate, cordate, entire, glabrous above, sparsely hairy on the veins beneath. Flowers dark purple. Fruit oblong, ovoid, purple, winged, notched at the apex. |
| Flowering and fruiting | <p>Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec</p> <p>Flowering ————— ————— Fruiting</p> |
| Parts used | Petiole and rhizome |
| Uses | Petioles are pickled after drying. The rhizome is purgative, astringent, tonic and stomachic. The rhizome yields a bright yellow dye. |
| Harvesting | Rhizomes are harvested from the matured plants during Aug.-Sep. |
| Status | Commercially threatened |



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Pakhanved

| | |
|-----------------------|---------------------------------------|
| Botanical name | <i>Bergenia ciliata</i> (Haw.) Sternb |
| Family | Saxifragaceae |
| Trade name | Pakhanved (Nep.); Rockfoil (Eng.) |
| Trade value | Rhizome and root: NRs. 12-15 per kg |

Habitat and distribution Moist, shady, rocky places; 1300-4000m, WCE Nepal. Also distributed in Afghanistan, N India, Bhutan, N Tibet, W China and N Myanmar.

Diagnostic characters Herb with thick rootstocks. Leaves stalked, suborbiculate, entire, fringed with short, stiff hairs. Flowers pink.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering Fruiting

Parts used

Root

Uses

Powder of the whole plant is taken to treat urinary trouble. Juice of the root is taken in cases of hemorrhoids, asthma, urinary trouble, coughs and colds. A paste of the rhizome is applied to boils and considered good for backache. Powdered rhizome is used to treat fever, colic and diarrhea. Juice of the leaves is used as drops to relieve earache.

Harvesting

The rhizomes are harvested during May-Oct.

Status

Commercially threatened



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Satuwa

| | |
|-----------------------|----------------------------------|
| Botanical name | <i>Paris polyphylla</i> Sm. |
| Family | Liliaceae |
| Trade name | Satuwa (Nep.); Love apple (Eng.) |
| Trade value | Root: NRs. 150-160 per kg |

Habitat and distribution Shady and moist places, forests; 1800-3300m, CE Nepal. Also distributed in Kumaon, Bhutan, Assam, S Tibet, Burma, Thailand, China.

Diagnostic characters Erect herb to 60cm tall with creeping rootstock. Leaves in a whorl of 4-9, petioled, oblong or lanceolate, acuminate. Flowers greenish, solitary, terminal, 4-6 ovate –lanceolate perianth segments.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ————— Fruiting

Parts used

Root

Uses

A paste of the root is applied to cuts and wounds. Pieces of the root are fed to cattle with diarrhea and dysentery. Juice of the root is taken as an anthelmintic.

Harvesting

Roots are harvested from the matured plant during Aug.-Sep.

Status

Vulnerable



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Seto Lokta



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| | |
|---------------------------------|--|
| Botanical name | <i>Daphne papyracea</i> Wall. ex Steud. |
| Family | Thymelaeaceae |
| Trade name | Lokta (Nep.); Nepalese paper plant (Eng.) |
| Trade value | Bark: NRs. 80-90 per kg Handmade paper (20"x30"; 20gm): NRs. 1300-1500 per kori (1kori=200pcs) |
| Habitat and distribution | Understorey shrub growing naturally in Oak, Rhododendron, Laurel forests; 1500-2500m, WCE Nepal. Also distributed in Kashmir, NE India and W China. |
| Diagnostic characters | Much branched, erect, evergreen shrub. Leaves dull green, narrow, lanceolate to oblanceolate, leathery. Flowers scented white or greenish white, borne in terminal clusters with persistent hairy bracts. Fruit fleshy, at first orange then deep red when fully ripe. |
| Flowering and fruiting | Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Flowering ■ ■ Fruiting |
| Parts used | Inner bark |
| Uses | Bark used in the manufacture of handmade paper on a cottage industry scale. |
| Harvesting | The bark is harvested from the matured plant during Jun.-Oct. |
| Status | Commercially threatened |

Somlata

| | |
|-----------------------|--|
| Botanical name | <i>Ephedra gerardiana</i> Wall. ex Stapf |
| Family | Ephedraceae |
| Trade name | Somlata (Nep.); Ephedrine (Eng.) |
| Trade value | Seed: NRs. 50-60 per kg |

Habitat and distribution Open stony slopes, gravel terraces; 3000-5200m, WCE Nepal. Also distributed from Afghanistan, Pakistan, Kashmir, Bhutan.

Diagnostic characters Tufted shrub, with densely clustered, erect, joined branches. Leaves scale like, ovate, uniting to form a sheath around node, Male cones ovate, 2-3, each with 4-8 flowers. Female flowers in opposite, sessile pairs at each node, with 2 ovules enveloped by red, succulent bracts.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 Flowering ———— Fruiting

Parts used

Stem and fruit

Uses

Juice of the plant used for liver fever, fever due to common cold, bleeding, blood pressure, and cuts. Fruits are digestive.

Harvesting

Plant parts are harvested during Sep.-Oct.

Status

Not vulnerable



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Sugandhawal



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|---------------------------------|---|-----|-----|-----|-----------|-----|-----|-----|----------|-----|-----|-----|-----|--|--|--|--|--|-----------|--|--|--|----------|--|--|
| Botanical name | <i>Valeriana jatamansii</i> Jones | | | | | | | | | | | | | | | | | | | | | | | | |
| Family | Valerianaceae | | | | | | | | | | | | | | | | | | | | | | | | |
| Trade name | Sugandhawal (Nep.); Valerian Oil (Eng.) | | | | | | | | | | | | | | | | | | | | | | | | |
| Trade value | Root: NRs. 110-120 per kg; Valerian oil; NRs. 21,000-24,000 per kg | | | | | | | | | | | | | | | | | | | | | | | | |
| Habitat and distribution | Open slopes, moist places in forests; 1500-3600m, WCE Nepal. Also distributed in Afghanistan, Kashmir, Bhutan, NE India, Myanmar, and China. | | | | | | | | | | | | | | | | | | | | | | | | |
| Diagnostic characters | Perennial herb, with tufted stem and long fibrous roots descending from aromatic rhizome. Basal leaves ovate-heart shaped, long stalked, toothed, stem leaves few, small, entire. Flowers small white, or pink in terminal cluster. | | | | | | | | | | | | | | | | | | | | | | | | |
| Flowering and fruiting | <table> <tr> <td>Jan</td> <td>Feb</td> <td>Mar</td> <td>Apr</td> <td>May</td> <td>Jun</td> <td>Jul</td> <td>Aug</td> <td>Sep</td> <td>Oct</td> <td>Nov</td> <td>Dec</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Flowering</td> <td></td> <td></td> <td></td> <td>Fructing</td> <td></td> <td></td> </tr> </table> | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | | | | | Flowering | | | | Fructing | | |
| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | | | | | | | | | | | | | | |
| | | | | | Flowering | | | | Fructing | | | | | | | | | | | | | | | | |
| Parts used | Rhizome and root | | | | | | | | | | | | | | | | | | | | | | | | |
| Uses | Rhizomes are used for headache, eye trouble, sore throat, indigestion and wounds. Also used as incense. Rhizomes and root contain essential oil. | | | | | | | | | | | | | | | | | | | | | | | | |
| Harvesting | Rhizomes are collected during Jul.-Sep. | | | | | | | | | | | | | | | | | | | | | | | | |
| Status | Highly vulnerable; government protected (Ban for export outside the country in unprocessed form) | | | | | | | | | | | | | | | | | | | | | | | | |

Sunpati

Botanical name

Rhododendron anthopogon D. Don

Family

Ericaceae

Trade name

Sunpati (Nep.); Fragrant rhododendron (Eng.)

Trade value

Leaf and flower: NRs. 5 per kg;

Anthopogon oil: NRs. 4,000-4,500 per kg

Habitat and distribution

Open slopes, shrubberies, 3500-5100m, WCE Nepal. Also distributed in Kashmir, Bhutan, China.

Diagnostic characters

Evergreen, aromatic shrublet. Leaves oval to obovate, densely scaly beneath. Flowers white, pink or yellow, in compact clusters; capsule enclosed in the persistent calyx.

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Flowering



Fruiting

Flowering and fruiting

Parts used

Leaf and flower

Uses

Leaves and flowers used for stomach, liver and lung disorders, indigestion, sore throat and phlegm disease. Also used as appetizer, diuretic, in vomiting. Leaves and flowers used as incense. Leaves bear essential oil.

Harvesting

Plant parts are collected during Aug.-Sep.

Status

Not vulnerable



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Timur

Botanical name

Zanthoxylum armatum DC.

Family

Rutaceae

Trade name

Timur (Nep.); Prickly ash (Eng.)

Trade value

Fruit: NRs. 90-120 per kg;
Zanthoxylum oil: NRs. 3,500-4,000 per kg

Habitat and distribution

Open slopes, shrubberies; 1100-2500m, WCE Nepal. Also distributed in Kashmir, Bhutan, N India, E China, Taiwan, Philippines, Lesser Sunda Islands.

Diagnostic characters

Shrub or small tree often 3m high, with strong prickles on the branches. Leaves stalked, alternate, rachis narrowly winged; leaflets, lanceolate, more or less serrate. Flowers small, polygamous, yellow. Fruits globose, red when matured, tubercled.

Flowering and fruiting

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
Flowering Fruiting

Parts used

Fruit

Uses

Fruits are used as carminative, stomachic and anthelmintic; fever and dyspepsia; deodorant, disinfectant and antiseptic, used in dental troubles and scabies. Fruits contain essential oil.

Harvesting

Matured fruits are harvested during Aug.-Oct.

Status

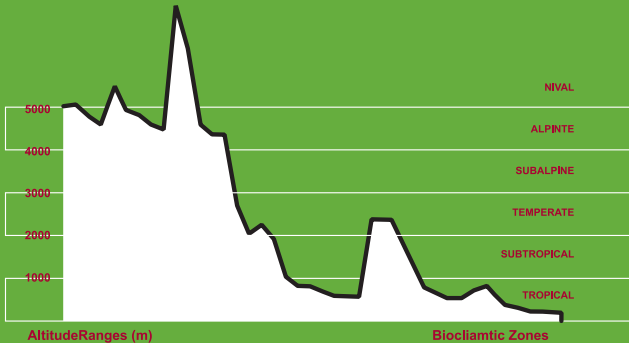
Not vulnerable



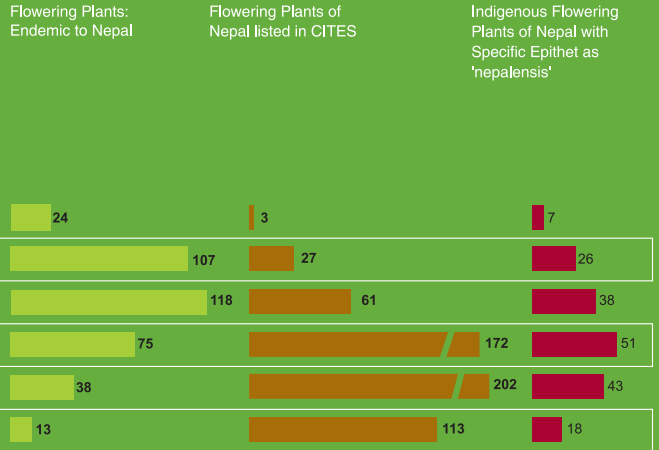
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Globally Significant Flowering Plants of Nepal

Total number of Nepal's endemic flowering plants = 246
 Total number of Nepal's CITES listed flowering plants = 356
 Total number of Nepal's flowering plants with specific epithet as 'nepalensis' = 93



and their Distribution Pattern



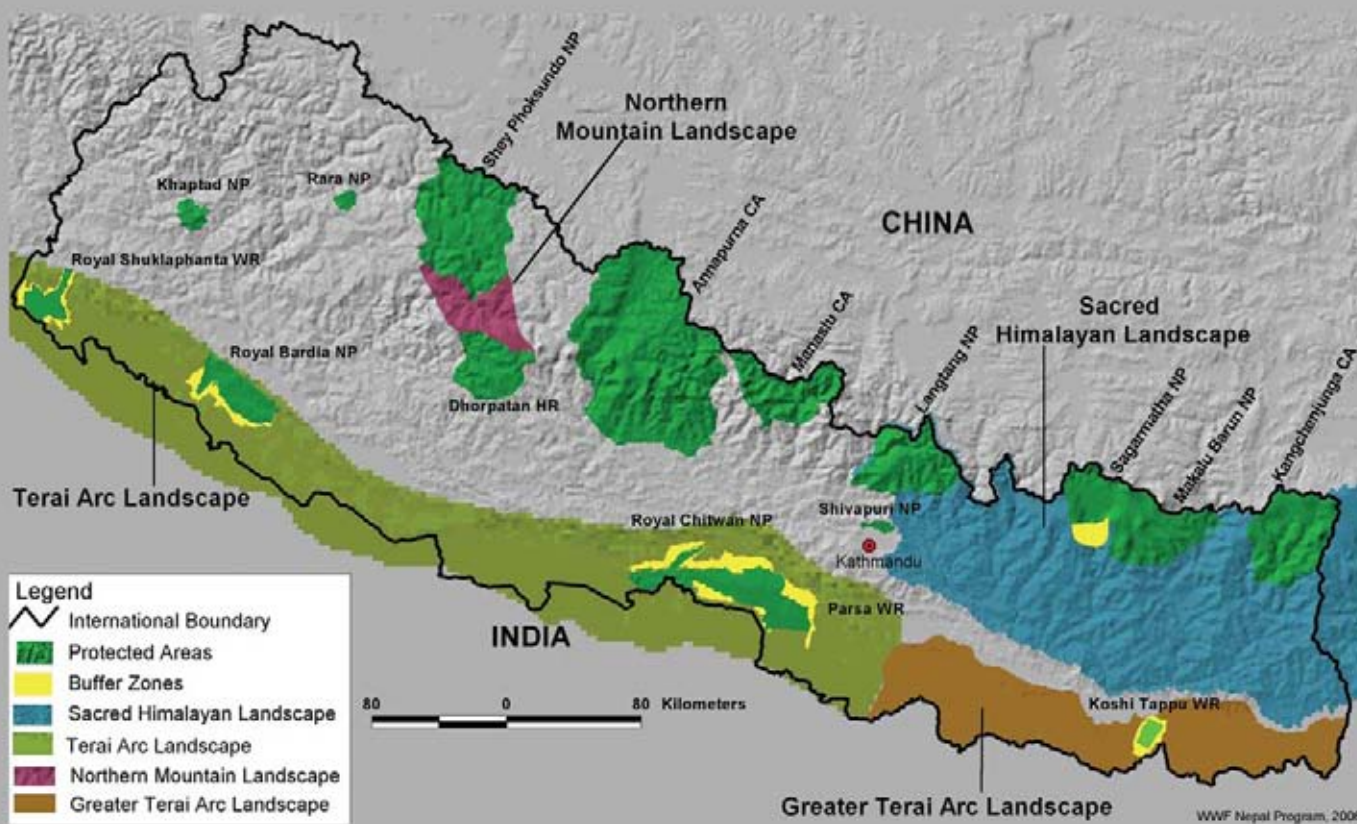
Source: Shrestha, T.B. and R.M.Joshi (1996), Rare, Endemic and Threatened Plant of Nepal, WWF Nepal Program, Kathmandu Nepal

The Sacred Himalayan Landscape (SHL) is a transboundary conservation area covering 39,021 km² across Nepal, India and Bhutan. Its vision is a Himalayan landscape where the biological and cultural treasures of the world's highest sacred mountains and deepest valleys are safeguarded while traditional rights over sustainable resources are ensured and livelihoods of mountain people are enhanced.

In Nepal, the Sacred Himalayan Landscape

extends from Langtang National Park in central Nepal through the Kangchenjunga Conservation Area in the east.

WWF Nepal in collaboration with Department of National Park and Wildlife Conservation implements conservation initiatives in Langtang National Park and Buffer Zone, Sagarmatha National Park and Buffer Zone and Kangchenjunga Conservation Area.





for a living planet

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- Conserving the world's biological diversity
- Ensuring that the use of renewable natural resources is sustainable
- Promoting the reduction of pollution and wasteful consumption

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