AN INTRODUCTION TO MEDICINAL PLANT

**Botanical Name:** *Asparagus adscendens* Buch.-Ham. ex Roxb.

**Local Name:** Satavari, Satawar, Jhirni, Kairu

**Family:** Liliaceae

**Habit:** Spinous Shrub

**Habitat:** Tropical and Sub-tropical forests

**Altitude:** Up to 1800 m

**Distribution:** It is distributed throughout tropical and sub-tropical regions of the country mainly Uttarakhand, Uttar Pradesh, Himachal Pradesh, Jammu-Kashmir, Punjab and Haryana.

**Description:** Straggling or suberect, undershrubs or shrubs, with fusiform tuberous roots; stem pale-green, glabrous; spines 1.5-1.8cm long, straight, with woody base. Cladodes in tuft of 6-20, erect, terete, acute, 1.2cm long. Flowers white in colour and in 3-5cm long racemes, forming terminal panicles. Berries globose or ovoid, 4-5mm across, green or red.

**Phenology:**
- **Flowering:** August to September
- **Fruiting:** September to November

**Part Harvested:** Tuberous root.

**Medicinal Uses:** Tuberous roots are used as demulcent and toxic and they are said to be useful in diarrhea, dysentery and general debility.

**Propagation:** It can be propagated through seed.
Mainstreaming Conservation and Sustainable Use of Medicinal Plant Diversity in Uttarakhand State
A GoI, UNDP-GEF Sponsored Project (Project No: 00049929)

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Botanical Name: *Tinospora sinensis* (Lour.) Merrill
Local Name: Giloy, Guduchi, Gilai
Family: Menispermaceae
Habit: Climber
Habitat: Deciduous and Dry Forests
Altitude: Up to 1200 m
Distribution: The species is distributed in India, Sri Lanka and Bangladesh with in the through the tropical region of India.
Description: Deciduous, fleshy climbers, to 10 m high; stem striate with scattered lenticels. Leaves suborbicular or ovate, 6-18 x 4-16cm, sinuate at base, abruptly cuspidate-acuminate at apex, pilose beneath with glandular patches; basal nerves 5-7, palmate; petioles 4-15 cm long. Inflorescence pseudo-rhomboid, 3-10 cm long. Male flowers fascicled in the axis, yellowish green. Drupes globose, 1-3, red or scarlet, 8-13 mm across.
Phenology: Flowering & Fruiting: February - July
Part used: Stem
Medicinal properties: The stem is reported to be useful in case of burning sensation intermittent, fevers, chronic fevers, inflammation, gout, Vomiting, cardiac debility, skin diseases, leprosy, cough, asthma, general debility, jaundice and seminal weakness.
Propagation: It can be propagated by seed as well as vegetative means.
Seed Propagation: Seeds are soaked in cold water for 24 hours found to germinated faster. The treated seeds are shown in polybags in May - July germination takes about 10 to 12 days germination of 80 to 90 % is obtained. but only 30 to 35% germination is obtained with seeds shown without presoaking the seedling are maintained nursery for a duration of up to one and a half months.
Vegetative Propagation: Through cuttings in the first year, support plants for this climber have to be grown. When these plants are about one year old, cuttings Tinospora have to be planted beside it. Semi- hard wood cutting of pencil thickness 10 to 15 cm long, with 4 to 8 nodes are planted in polybags in a slanting manner with two nodes inside the soil mixture in June – July nearly all the cutting root in about 20 to 30 days. 90 % cutting sprout in 45 days.
Botanical Name : *Cinnamomum tamala* (Buch.-Ham.) Nees & Ebermaeir.

Local Name: Tejpat

Family : Lauraceae

Habit: Evergreen small tree.

Habitat: Tropical and Sub-tropical Himalaya.

Altitude: 300-2400 m

Distribution : It is distributed in India, in Assam, South India and in Uttarakhand. Also found in China and Sri Lanka in natural Habitat.

Description : *Cinnamomum tamala* is a moderate sized evergreen tree attaining a height of 8m, and a girth of 150 cm. Its bark produces mucilage. Leaves lanceolate, glabrous; alternately placed, opposite and short stalked. 3-nerved from the base.

Phenology: Flowering: March – April
Fruiting: April - May

Part harvested : Leaves and Bark

Medicinal properties: It is used for respiratory disorders including flu, sinus, asthma and chronic inflammation of the mucous membrane. It is useful in treating gastritis, chronic fatigue, poor circulation, rheumatism, diarrhea and leucorrhea.

Propagation: It is propagated through seeds.
Botanical Name: *Berberis asiatica* Roxb. ex DC.
Local Name: Kingod, Kilmora
Family: Berberidaceae
Habit: Shrub.
Habitat: Temperate and Sub-tropical forests.
Altitude: 1200-2000 m
Distribution: Found in Himalayan region. Distributed from Kashmir to Uttarakhand.
Description: Shrubs 2-4 m tall; stem pale-yellow, terete; spines 1-3, trifid, rarely solitary towards tip. Leaves shortly pectioled, broadly obovate-elliptic, 2-7x0.8-3.5 cm, acute or obtuse and mucronate at tip, entire or distantly 2-6 spinous along margins, thickly coriaceous, finely reticulate. Inflorescence racemose, 15-25 flowered, elongated in fruits. Flowers yellow; bracts obovoid. Berries oblong-ovoid to ellipsoid.
Phenology: Flowering: April – June
Fruiting: June – August
Part harvested: Root, bark and stem
Medicinal properties: Mainly used in eye diseases, hemorrhoids, amenorrhea, leucorrhea, piles, sores, peptic ulcers, dysentery, heartburn, indigestion, hepatitis, intermittent fever.

Roots is useful in malaria, skin diseases, diarrhea and jaundice.

A decoction is used as mouth wash for treating swollen gums and toothache. It is also used to treat infections, eczema, parasites and psoriasis.
Propagation: It is propagated through seeds, stem cuttings and root cuttings.