

# Agri Articles

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## Wild Flora of Low Hills of Himachal Pradesh

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Himachal Pradesh is located in the central part of India at 300'2240" N to 330'12'20" and in western longitude 750 45'55" E to 790'0420" N. Wild Flowers are those that develops naturally or without human intervention in wild. In other words, any foliage or flowering plant that grows without intentional human assistance or plants that grows natural or in uncultivated conditions. In addition to its aesthetic value some of these plants also have medicinal properties. These plants are rich in numerous vitamins and antioxidants and are used to cure a variety of medical conditions, including cancer, fever, colds, and coughs. These plants are rich in numerous vitamins and antioxidants and are used to cure a variety of medical conditions, including cancer, fever, colds, and coughs.

## Introduction

Himachal Pradesh is known for its beautiful forest landscapes and diverse wild plant species, which thrive in its varied climate. The state's diverse climate makes it perfect for raising a variety of floral crops. Despite the huge diversity in wild flora and the considerable climatic variance, the state's floriculture business is limited to a few conventional flower crops. All the flowering plants are originated from wild. Therefore, by studying the wild flora of an area we can make some addition to the traditionally grown crops of that area as these plants are well adapted to the local climate, making them an ideal addition to any garden. Due to their adaptability to climate, the wild flowers require less care as they will be disease resistant, drought tolerant, and incredibly resilient as compared to the traditional plants. Wild flowering plants need to be watered or fertilized less, once they get established. Therefore, they are inexpensive to maintain and beneficial to the environment. Plant life is finite and we shouldn't be ignorant about it, since many of our natural habitats are now permanently destroyed. Due to fast population increase, urbanisation, industrialization, and general lack of awareness and understanding about environmental protection, the existence of these plants in the wild is currently threatened. There is an urgent need to protect these plants in the wild, since many of our natural habitats are now permanently destroyed. People should be made aware of the need to actively participate in the cultivation of these crops in order to protect regional history and boost biodiversity. In this article, we tried to gather the information about wild flora of low hills of HP and its potential.

# **Bush Morning Glory**

Ipomoea carnea (hindi: Behaya)

Family-Convolvulaceae

This is an evergreen flowering shrub, which grows 1-5 m high. It is characterized by the presence of heart shaped alternate leaves. This plant produces clusters of pink flowers upto 4 inches long throughout

the spring and summer months. Like morning glories, the name implies that the flowers fade as the sun heats them, but while they persist, they are striking, blossoming in enormous clusters at the tips of the long branches. Plant is also used as a good source of green manure. In some parts of the country the species is also used as a raw material for paper bag production.

## **Hill Glory Bower**

Clerodendrum infortunatum (hindi: Bhant)

Family- Verbenaceae

Hill glory bower is a convivial shrub that grows up to 1-2 m in height, but can grow even taller. The leaves are tough, oval and arranged oppositely on stem. Flowers are white in colour with a pink tinge at the base along with four long stamens that protrude out of the flower. This plant often give a strong odour. The blooming and fruiting period of this flower is from February to May.



#### MALABAR NUT

Justicia adhatoda (hindi: Arus)

Family-Acanthaceae

This small sub-herbaceous evergreen shrub is often seen growing in broad plains, particularly in the lower Himalayas. The wide lanceolate, minutely hairy leaves are 10–16 centimeters in length. An exceptionally hardy herbal plant that needs very little watering. The plant is characterized by its upright, ascending stems which produces a bitter flavor and an unpleasant odour. When dried, the leaves turn a brownish green color and have a



bitter taste with a strong tea like aroma. This plant's leaves are occasionally used as an insect repellant.

# **Indian Squirrel Tail**

Colebrookea oppositifolia (hindi: Bhambar)

Family- Lamiaceae

It is a branching shrub that can reach a height of 1-3 meters. Plant comprised of many pale branches which are hairy when young. Light green leaves are grouped at the ends of branches in an opposite arrangement. The leaves are oblong, dark green above, and hairy on the underside with fine serrations at the margins. Tiny white blooms, about 5 to 10 cm in length, are arranged in panicles of erect spikes. The hairy flower spikes have a squirrel tail-like appearance. Remains in flowering from the month of December to April.



# Blue Sage

Eranthemum pulchellum (Gulsham)

Family- Acanthaceae

It is a 0.5–2 meter tall woody perennial tropical shrub. Blue Sage is found in the subtropical Himalaya, Punjab to Bhutan, Burma, Indo-China, W. China, at altitudes of 200-1200 m. Leaves opposite, simple, stalked, typically



whole, elliptic or ovate-elliptic, constricted at base, with around 10 pairs of long, pointed lateral nerves. Flowers are blue, purple, violet or purplish-white in colour, appear as solitary or in dense branching spikes in the axils of leaves. The shoots have a brownish tint and a few elevated lenticels, the younger shoots have a bushy, green surface. They bloom during February-April.

# **Curry Tree**

*Murraya koenigii* syn. *Bergera koenigii* (hindi: Kari patta) Family- Rutaceae

It is semi-deciduous, aromatic shrubs of height upto 6 meters with a slender but strong woody stem and dark grey bark on the branches. The leaves are glabrous and highly aromatic. Flowers are small, fragnant and are white in color. It blooms during feb to april. Curry leaves are cooked in coconut oil until they are reduced to a powdery residue. This powder then used as a hair tonic to maintain natural hair color.



# **Night Blooming Jasmine**

*Nyctanthes arbor-tristis* (hindi: harsingaar)

Family-Oleaceae

Har singar is often mistaken with the shrub *Cestrum nocturnum*, which is also referred as queen of the night. Depending on training, it can grow into a little tree or a huge shrub. The bark of the plant is dark grey and brown in color and rough & firm. The glossy, big leaves have a rough, hairy texture. It is commonly used as an attractive shrub, with their white petals and orange-red tube in the middle, the tiny flowers have a lovely aroma. They bloom in large quantities, opening at dusk and closing in the



morning, as the name suggest 'night blooming jasmine'. The flowers are utilized for religious purposes. The night scent of flower is very strong. Flowering time is from August to September.

#### **Black Oil Plant**

Celastrus paniculatus (hindi : malkangani)

Family- Celastraceae

In Ayurveda, it is known as Jyotishmati or Malkangni. It is an unbranched large woody climber. The leaves are arranged alternately and can be elliptic, ovate, wide, obovate, or round and they can grow up to  $6 \times 11$  cm in size. Large panicles of flowers are born at the tips of the branches. Flowers are yellow or greenish white in color. Flowering period is from November to January. Malaria is treated with powdered root bark of this plant.



# **Rosary Pea**

Abrus precatorius (hindi: Chirmithi)

Family- Fabaceae

It is commonly known as Ratti. Native to India, it is woody twin plant with unique poisonous red seeds with black spots at the base. The stem is cylindrical, wrinkled



with a smooth & brown bark. The leaves are pinnate and pinnately compound. Inflorescence is axillary raceme with pink or pinkish white flowers which are shorter than leaves. The herb is also used in certain traditional medical practices to cure wounds, scratches, and sores caused by mice, cats, and dogs.

## **Star Jasmine**

Trachelospermum jasminoides

Family- Apocynaceae

It is a woody, evergreen shrub that grow to a maximum of 10 meters in height and have brownish stem and lenticular leaves. They have ovate to slightly elliptical ovary shaped leaves. The fragrant white blooms have five twisted petals and are pinwheel shaped, about 1-2 cm in diameter. Like other members of Apocynaceae, they release a white latex when cut that looks like sticky milk. They bloom between March and July. Fruit usually arrives between July and December.



## Flame of the Forest

Butea monosperma (hindi: Dhak)

Family- Leguminaceae

Flame of the forest is native to India and is a medium sized deciduous tree, growing up to a height of 20-40 feet. As the flower develops it loses its leaves. The tree is irregularly branched with crooked and twisted trunk having rough and grey bark. Flowering takes place from January to March and it becomes a tree of flame with orange and vermillion blooms. Its leaves are indispensable in various religious rituals in Hindu homes. Tesu flowers were traditionally used to create color during the Holi celebration. In some places these are used for wrapping tobacco to make biddies. Flowers produce an orange color dye.



#### **Indian Coral Tree**

Erythrina variegata (hindi: Pangar)

Family-Leguminosae

With its vivid red or white blooms, the Indian Coral Tree is a striking, spreading, leguminous tree. It is a medium sized tree which grows upto a height of 9m. This extremely valuable decorative tree is one among the floral world's jewels. The leaves are complex, with three roughly 6-inch-long, diamond-shaped leaflets. Red color flowers are present in terminal raceme. The leaves and bark are used to cure joint pain. Leaves juice is mixed with honey are ingested to treat tapeworm and roundworm. Seeds are kidney- shaped. They bloom during April-May.



## Fire Flame Bush

Woodfordia fruticosa (hindi: Dhawai)

Family- Lythraceae

It is spreading, deciduous, perennial shrub of height 3.5m. The color of the bark is brown, peels off in fibres. Leaves almost stalkless, ovate- or lance-shaped, subleathery, white velvety woolly, with small dots of orange or black below. Sizes: 4-11 x 2-4 cm. Flowers are crimson or bright red in color, 2 to 16 number flowered in leaf-axils cymes. The plant is highly astringent. They bloom during March-April.



#### **Yellow Flax**

Reinwardtia indica (hindi: basanti)

Family- Linaceae

It is commonly known as pyoli. Yellow flax is a small, erect to spreading evergreen shrub that grows to a height of about 1m. Leaves are ellipticoblong to lanceolate and branches are erect. Flowers are yellow in colour, with 5 obovate petals. The yellow dye from the flowers is used to dye clothes and making paints. This plant is used to cure paralysis, headache, backache and pimples. Flowering time is from November to May.



## Kachnar

Bauhinia variegata (hindi: Kachnar)

Family – Leguminosae

Bauhinia variegata, commonly known as Kanchnar, belongs to the family Leguminoasae and is usually found in the regions of South India. It is an indigenous plant of Asia and China, present in the tropical regions of the world. Bauhinia variegta is a blooming tree that is deciduous and medium in stature. The leaves are 10-15cm in length and width and deeply cordate. Flowers are white or purple, with five irregularly overlapping scented petals. Flowers. The



blooming starts in late winter while the tree is bare of leaves and then lasts until early summers.

#### **Amaltas**

Cassia fistula

Family - Fabaceae

Native to India this tree is deciduous, with greenish grey bark and compound leaves. It is one of the most beautiful tropical trees with its unique flowering. A semi-wild tree with stunning yellow blossoms growing up to 40 feet. A fruit is a cylindrical pod containing black seeds. Pulp is dark brown in color, sticky, sweet, and mucilaginous, with a characteristic odor that is rather repulsive. It blooms during late spring.



## Red Silk - Cotton Tree

Bombax ceiba (hindi: semal)

Family – Bombacaceae

It is a huge, elegant, and deciduous tree, originated in Northern Australia. The plant grows up to 25-30m tall, with young stems covered with strong prickles. The bark ranges in color from pale ash to silver grey. The leaves are big, palmate, glabrous, and lanceolate. The leaves normally drop during the winter session and reappear when it is time to



blossom. Flowers are enormous in diameter, red in color, and abundant with nectar and flowers during January to March. The fruits are brown in color and capsule-shaped. It blooms from February month. These are packed with fibers that resemble cotton. The people collect the semul fruit and extract the cotton material known as "kopak" specifically for its fiber. This stuff is used to fill reasonably cheap sofas, pillows, and quilts, among other things.

## Kathi/Neel

Indigofera pulchella (hindi: pharsi ghas)

Family – Papilionaceae

It is a deciduous, perennial shrub, 1 to 1.5m in height, with grey branches. Leaves are compound, alternate, 7-15 cm long with 11-21 leaflets, oblong to elliptic. Flowers are purple in colour, shaped like pea flowers. Fruit is a brownish pod. It blooms in March – May.



#### Conclusion

Wild flowers are an easy and less expensive way to add a touch of natural beauty to any place as they require less care. The wild flowers have tendency to reappear year after year without much efforts. Their vibrant colours add beauty to the garden. In addition to this, wild flowers provide food and habitat for a wide range of native pollinators, birds, butterflies and other beneficial insects. They support biodiversity by attracting a variety of species and promoting a more balanced ecosystem. These are a good option for road side planting as the maintenance is low. Apart from this some of these flowers have a high medicinal value and were used in traditional Ayurvedic medicines, as natural dyes for colouring food and fabric, as a source of fiber for manufacturing various goods. Hence, it is clear that the wild flowers have a lot of potential which need to be explored and utilized.

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