



BRIEF INFORMATION ON MEDICINAL PLANTS

ASHWAGANDHA

- **Botanical Name** : *Withania somnifera*
- **Family** : Solanaceae
- **English Name** : Winter cherry
- **Used Part** : Roots
- **Active Principle** : Withanine, Somniferine, Withaferine –A, etc.



- **Botanical Description:** An erect under shrub. Leaves ovate, greenish and fruits round and red in colour.
- **Propagation:** Propagated through seeds. Grows well in well-drained sandy loam soil of 7-8 pH. The seeds are sown during rainy season in June/July.
- **Used:** Ashwagandha is useful in general weakness. It gives vitality and vigor and helps in building greater endurance. It promotes urination, removes functional obstruction of the body. It reduces stress and tensions, controls depression.

AMLA

- **Botanical Name** : *Emblica officinalis*
- **Family** : Euphorbiaceae
- **English Name** : Indian Gooseberry
- **Used Part** : Fruit
- **Active Principle** : Vitamin-c, Gallic acid, Ellagic acid, Phyllembic acid, Emblicol



- **Botanical Description:** A deciduous tree leaves simple & many in each branchlet. Flowers unisexual, greenish yellow, in dense axillary fascicles along the branchlets. Fruit depressed globose, fleshy, shining yellowish green when ripe.
- **Propagation:** By seeds but budding and grafting can be done in February or rainy season on its own rootstock. It can be grown in any soil barring very sandy soil. Hot and moist climate is good for growth of the tree.
- **Used:** The fruit is the rich source of vitamin 'C' & extensively used in Ayurvedic Industry. It cures insomnia and is healthy for hair. It is also used as a Cardio protective. Fruits are good liver tonic and fruit juice is useful in indigestion & jaundice.

ARJUN

- **Botanical Name** : Terminalia arjuna
- **Family** : Combretaceae
- **English Name** : Arjuna
- **Used Part** : Bark
- **Active Principle** : Arjunine, Arjuneotin, Triterpene, Arjunditin



- **Botanical Description:** Evergreen tree with drooping branches, bark smooth, green-ish white, flaking off in flat pieces. Leaves alternate, flowers minute, sessile, greenish yellow in short axillary spikes.
- **Propagation:** Propagated by seeds and seedlings raised in Nursery. Seedlings are planted during rainy season in rows, optimum flowering and fruiting are obtained after 7-8 years of age.
- **Used:** Arjuna mainly used in heart disease, and for strengthening the bones. It is prescribed for all sorts of conditions of cardiac failure and dropsy. The tonic made from bark is believed to have a stimulant effect on the heart.

ASHOKA

- **Botanical Name** : *Saraca indica*
- **Family** : *Leguminosae*
- **English Name** : Jonesia Ashoka
- **Used Part** : *Bark, seeds and flowers*
- **Active Principle** : *Glycosides, Saponins, Tannins, Essential oil, Ketosterol, Apigenin, Cyanidin*



- **Botanical Description:** A medium sized evergreen tree, mostly found near water banks spreading and drooping glabrous branches. Leaves paripinnate, leaflets 4-6 pairs, sub-coriaceous, having a wavy margin.
- **Propagation:** By seeds sowing in Nursery, well grown plants, planted in field during July/August. Manures and watering is necessary during growing season. Young plant should be protected against hot and very cold condition.
- **Used:** Bark is bitter and used as astringent, refrigerant and stomatic. It is also used in biliousness, dyspepsia, fever, ulcer, dysentery, colic, piles and pimples. Dried flowers used in diabetes and haemorrhagic dysentery. Seeds used for treatment of bone fractures. Bark stimulates uterus, contractions more frequent.

BRAHMI

- **Botanical Name** : *Bacopa*
- **Family** : *Scrophulariaceae*
- **English Name** : Thyme Leaved Gratiola
- **Used Part** : *Whole Plant*
- **Active Principle** : *Bacosides-A, and Brahmine*



- **Botanical Description:** Perennial, creeping, glabrous, succulent much branched herb, giving roots at the nodes. Leaves simple, opposite, obovate-oblong. Flowers white to pale violet, axillary, solitary on long pedicles.
- **Propagation:** Propagated vegetatively during Junr-August. Stem cuttings of 10 cm long are put in well-prepared bed in rows 20 cm apart and heavily watered. The roots strike from every node and would be ready after 4-5 months.
- **Used:** It is an excellent brain tonic useful, for nerves and used in mental diseases. It is also used to improve intellect, treatment of asthma, hoarseness, insanity, and epilepsy.

BAHERA

- **Botanical Name** : *Terminalia belerica*
- **Family** : *Combretaceae*
- **English Name** : *Beleric Myrobalan*
- **Used Part** : *Fruit, Bark*
- **Active Principle** : *Tannins, Oils*



- **Botanical Description:** Deciduous tree, leaves clustered at the end of branchlets, broadly elliptic to obovate, coriaceous, glabrous, entire, apex sub-acute, or shortly acuminate. Flowers small, sessile, yellowish green, in axillary spikes.
- **Propagation:** Propagated by seeds, prefers loamy soil, grown up seedlings planted in pits at 10-12m distance during rainy season. Nursery is established for seedlings.
- **Used:** The Bahera fruit is useful in stomach disorders such as indigestion, diarrhoea etc. It is also given as a brain tonic and is applied on eyes as a soothing lotion. It is useful in asthma, bronchitis, inflammations, sore throat, and treatment of eyes, nose, heart and bladder diseases.

BAEL

- **Botanical Name** : *Aegle marmelos*
- **Family** : *Rutaceae*
- **English Name** : *Stone Apple*
- **Used Part** : *Fruit, leaves and root*
- **Active Principle** : *Marmolosin, Aegalin, Psoralen*



- **Botanical Description:** A medium sized deciduous tree, having strong axillary thorns. Leaves aromatic, alternate, trifoliate, stalked. Flowers in axillary panicles, greenish white, fragrant. Fruit is globose with woody shell.
- **Propagation:** Propagated by seeds and vegetative methods. Grown up seeding or vegetative propagated saplings are planted 8x8 m distance during rainy season. Grafted plants bear fruits 5/6 years and seedlings 7/8 years.
- **Used:** It is a tonic, Carminative, laxative, antipyretic, antibiotic and appetizer. It has also been used in the treatment of constipation. Fruit juice is beneficial during summer season.

BACH

- **Botanical Name** : *Acorus*
- **Family** : *Araceae*
- **English Name** : *Sweet flag*
- **Used Part** : *Rhizomes*
- **Active Principle** : *Asarone & -Asarone*



- **Botanical Description:** Perennial aromatic growing herb, very hardy and flowers from May to July and the seeds ripen from July to August. The flower has both male and female organs. Flowers pale green, fragrant, sessile, cylindrical, short and fruit 3-celled fleshy capsule.
- **Propagation:** Raised mostly by rhizome cuttings in rainy season. The plant prefers sandy, loamy & clay soil and requires wet soil. Seed sown in a very moist soil also gives good results.
- **Used:** It is an aromatic stimulant and mild tonic. It is valued as a rejuvenator for the brain and nervous system and as a remedy for digestive disorders. Useful in stomach ache & kidney stones.

COLEUS

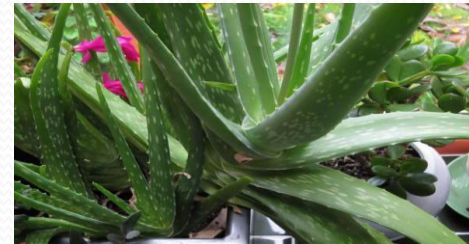
- **Botanical Name** : *Coleus forskohlii*
- **Family** : *Lamiaceae*
- **English Name** : *Coleus*
- **Used Part** : *Roots*
- **Active Principle** : *Forskohlin*



- **Botanical Description:** It is a attractive perennial aromatic, succulent herb. Leaves simple, opposite broadly ovate. Flowers in racemes and root tuberous and well developed. Species is herbaceous with annual stems and perennial rot stock.
- **Propagation:** Propagated by stem cutting very easily or by separation of rooted plants. Grows on the sun exposed, loamy or sandy loam soil. It is a subtropical & warm temperate species. Rooted plants are suitable for planting in the field during rainy seasons.
- **Used:** Used to treat heart and lung disease, intestinal disorders, insomnia and convulsions. It support overall vitality and wellbeing of body. Today it is employed in the treatment of glaucoma, hypertension, asthma, eczema, psoriasis, congestive heart failure and weight loss.

GWARPATHA

- **Botanical Name** : *Aloe barbadensis*
- **Family** : *Liliaceae*
- **English Name** : *Aloe*
- **Used Part** : *Leaves*
- **Active Principle** : *Barbaloin, Aloe emodin*



- **Botanical Description:** Dwarf, perennial succulent plant, leaves fleshy in radical rosettes, margin spring, apex gradually tapering, flowers orange-red, in terminal racemes.
- **Propagation:** Grown in sandy and lateritic soils in drier part of India. Prefers full sun light and sandy loam soil with good drainage facilities. Propagation by suckers and young plants.
- **Used:** Leaf pulp used in liver and spleen ailments and for eye troubles. Also used in colic and constipation, skin disorders, burns & cuts. It is widely used in modern cosmetics and in anti-aging creams.

JAMUN

- **Botanical Name** : *Syzygium cumini*
- **Family** : *Myrtaceae*
- **English Name** : *Black plum*
- **Used Part** : *Seed and Bark*
- **Active Principle** : *Anthocyanins, Glucoside, Flavonoids, Ellagic acid, Jambosine*



- **Botanical Description:** Evergreen tree, leaves simple leathery, glabrous. Flowers numerous, small, sweet scented, dull white in axillary or terminal panicle cymes. Fruit an oblong or globose berry, dark purplish black when ripe.
- **Propagation:** By seeds. Soil rich in organic matter is good for cultivation. Nursery raised seedlings transplanted during rainy season. Grows well under good rain fall conditions.
- **Used:** It is traditional medicine for diabetes and sore throat. Seed powder and juice is used for diabetes. Bark of the tree is used in dysentery and leucorrhea.

KADIPATTA

- **Botanical Name** : *Murraya koenigii*
- **Family** : *Rutaceae*
- **English Name** : *Curryleaf tree*
- **Used Part** : *Whole plant, leaves and Root bark*
- **Active Principle** : *Koenimb, Cadinine, Pinene, Cavirol, Isosafrol, Terpeneol, Koenidine, Koenigine*



- **Botanical Description:** A small deciduous, strong smelling, shrub or tree with compound aromatic leaves, leaflets 5-9 flowers whit in panicles.
- **Propagation:** Nursery is prepared by seed sowing. Fresh seeds to be used for sowing purposes, well grown plant after one year should be planted in field, time to time watering is essential.
- **Used:** Diarrhoea, Dysentery, Piles, Paste of leaves applied locally on Erruptions, Root bark: Relieves renal pain: leucoderma, blood disorders.

KALMEGH

- **Botanical Name** : *Andrographis paniculata*
- **Family** : *Acanthaceae*
- **English Name** : *Creat*
- **Used Part** : *Whole plant*
- **Active Principle** : *Andrographolide, Kalmeghin, Andrographin, Panicolin*



- **Botanical Description:** Much branched erect annual herb, stem and branches sharply four angled. Leaves simple, opposite, short petioled, glabrous, elliptic to lanceolate, narrowed at both ends.
- **Propagation:** Propagated by seeds and sandy loam soil rich in organic matter is good for cultivation. Nursery Seedlings transplanted after 45 days in the field with spacing 30 x15 cm.
- **Used:** Decoction of plant used for all types of fevers, skin diseases, acidity. It is laxative, cooling and overcomes difficulty in breathing. Plant used in dysentery, cholera, diabetes, bronchitis, p-iles, cough, burning sensation and gas formation in stomach.

KONCH

- **Botanical Name** : *Mucuna Prurita*
- **Family** : *Papilionaceae*
- **English Name** : *Cowhage, velvet bean*
- **Used Part** : *Seeds, roots*
- **Active Principle** : *L-dopa, Saponins, Lecithin, Mucunin,*
- **Botanical Description:** It is an annual climbing shrub up to 6m length. Leaves are ovate, alternate, and large. Flowers white to dark purple and hang in long racemes. It produces clusters of pods that are curved. Seeds vary in colour from black, white to mottled.
- **Propagation:** The plant can grow in a range of habitats. Propagated by seeds and needs support to climb. Seeds sown in rainy season.
- **Used:** Seeds used for Parkinson's disease. It has anti-oxidant properties and is known to enhance mental alertness and improve coordination.



SENNA

- **Botanical Name** : *Cassia angustifolia*
- **Family** : *Caesalpinaceae*
- **English Name** : *Indian Senna*
- **Used Part** : *Leaves, Pods, Stems*
- **Active Principle** : *Sannoside A&B, Anthraquinones*



- **Botanical Description:** Erect shrub, leaves pinnate with narrow acute lanceolate and glabrous leaflets of pale green colour. Flowers yellow, pods flat and obovate in shape, dark brown in colour.
- **Propagation:** By seeds in month of February-March or October-November. The crop can thrive on a variety of soils having well-drained conditions. Best suited for arid and semiarid conditions.
- **Used:** Leaves and fruits are laxative and considered as liver tonic and useful in constipation, abdominal disorders, skin diseases, jaundice, cough and typhoid fever etc.

STEVIA

- **Botanical Name** : *Stevia rebaudiana*
- **Family** : *Asteraceae*
- **English Name** : *Stevia, Sweetleaf*
- **Used Part** : *Leaf*
- **Active Principle** : *Steviosides, Rebaudioside*



- **Botanical Description:** Small perennial shrub, semi-woody, weak stem, leaves sessile, lanceolate, opposite with above half serrated. Flowers small, white arranged in indeterminate heads. Seeds are small and dispersed in the wind via a hairy pappus.
- **Propagation:** Propagated by cuttings and seeds in the months of July-August. Fertile soil with irrigation facilities is needed for quality production. Frequent light irrigation might be necessary during dry spells.
- **Used:** Used as high potency low-calorie sweetener for Food and drink. The powdered herb is added directly to tea or to food. Also used in diabetes, obesity and high blood pressure etc.

SHATAVARI

- **Botanical Name** : *Asparagus racemosus*
- **Family** : *Liliaceae*
- **English Name** : *Indian Asparagus*
- **Used Part** : *Roots*
- **Active Principle** : *Shatavarin I to Iv, Sarasapogenin, Arasosapogenin*



- **Botanical Description:** Profusely branched, spiny shrub, rootstock bearing numerous, long, fusiform roots. Leaves reduced to minute spinescent structures. Flowers whit, strong scented, in solitary or fascicled racemes.
- **Propagation:** Propagated from seeds as well as by tubers. Well drained rich soil with high fertility and plentiful of organic matter are ideal. The plant is adapted to the temperate regions and in hills in tropics and subtropics and can also be grown in plains.
- **Used:** It is used as a galactagogue to increase milk secretion during lactation. It is also used as a general tonic, and as an aphrodisiac. It is useful in nervous disorders, tumors, throat infections, cough, bronchitis and general debility.

SARPGANDHA

- **Botanical Name** : *Rauwolfia serpentina*
- **Family** : *Apocynaceae*
- **English Name** : *Rauwolfia, serpentina*
- **Used Part** : *Roots*
- **Active Principle** : *Reserpine, Serpentine, Ajmalicine, Ajmaline*



- **Botanical Description:** A small erect perennial shrub. Leaves dark green, glabrous, elliptic lanceolate, in whorls of 3 to 4. Flowers whit, fruit purple black when ripe; fruiting from July to November.
- **Propagation:** Propagated from seeds (poor germination), stem & root cuttings, and young suckers during rainy season. Soil rich in organic content and well drainage conditions are suitable for cultivation.
- **Used:** Root is used as a sedative and for reducing Blood pressure. The alkaloid stimulates Central Nervous System. Roots has been used for relief from nervous disorders including anxiety, insanity, insomnia and epilepsy.

SADABAHAR

- **Botanical Name** : *Catharanthus roseus*
- **Family** : *Apocynaceae*
- **English Name** : *Periwinkle*
- **Used Part** : *Leaves, flower, root*
- **Active Principle** : *Vinblastine, Reserpine, Ajmalicine, Vincristine*



- **Botanical Description:** It is an erect perennial herb up to 45-120 cm. Tall, with glossy opposite leaves, 2-3 flowers in cymes. Flowers whit and pink.
- **Propagation:** By seeds and cuttings. Propagated through seeds throughout the year. It can grow in wide range of soil conditions even poor soil. Seedlings are planted at 1 ft x 1 ½ ft spactig.
- **Used:** Infusion of leaves used in diabetes and decoction of roots is used for hypertension, sedation and in toothache. Extract oof leaves is anti-carcinogenic.

TULSI

- **Botanical Name** : *Ocimum sanctum*
- **Family** : *Labiatae*
- **English Name** : *Basil, Sacred Basil, Holy Basil*
- **Used Part** : *Leaves, Seeds*
- **Active Principle** : *Eugenol, Carvocrol, Methyleugenol*



- **Botanical Description:** Numerously branched woody herb. Leaves are dark green in colour, hairy opposite, entire or serrate, toothed with minute glands. Stem purple, hairy, giving out numerous branches.
- **Propagation:** Propagated by seeds. The plant grows in wide variety of soil and climatic conditions. Well-drained soil, humid weather, long days and high temperature are favorable for good growth and yield of high essential oil.
- **Used:** The herb is widely used in cough, cold and fever. IT possesses anti fungal, antimicrobial, antiviral, insecticidal, activity. It is used in malaria, bronchitis and gastric disorders.