

PLANTS USES IN PRIMARY HEALTH CONDITIONS (PHC)



RUKUNA HATAPOCHA

Plants profile:

Rukuna hatapocha is a small growing plant which can grow up to a height of 1-2 feet. Its stem has little strength and fleshy in nature. The leaves are strong odor and little oval, thick having hair like structure. Its flowers are small and purple colored and cultivated in temperature climate in India.

Family: Lamiaceae

Odiya name: Rukuna hatapocha

Botanical name: *Coliuous amboinicus*

English name: Indian borage

Sanskrit name: Karpuravalli

Hindi name: Patta ajavayin

Chemical composition:

The leaves of *Plectoranthus amboinicus* contain carvacol and camphor as the major constituents. Other constituents of leaves are flavonoid, oxaloacetic acid, beta-sitosterol, cirsimaritin etc. Other parts of the plant contain an essential oil known as thymol.

According to Ayurveda properties & Action:

- Rasa - Katu, Tikta
- Guna – Laghu, Ruksha, Tikshana
- Virya - Ushna
- Vipaka - Katu
- Karma – Balances kapha and vata dosha

Part use: Leaves

Medicinal Uses:

- Increases immunity – It contains high amounts of Vitamin C that make this herb an immune buster. Vitamin A and carotenoids present in it improve the vision, reduce oxidative stress and prevent macular degeneration.
- Intestinal worms – 10 ml of fresh juice of Rukuna hatapocha should be given twice daily for seven days with hot water.
- Indigestion & Improving appetite – 10ml of fresh juice of leaves is administered with one pinch of black piper powder. It is quite useful for digestive system and gastro-intestinal complaints.
- Headache – Fresh paste of leaves can be applied on the head to relieve headache.
- Cold & Cough – 10ml of fresh leaves juice adding with sugar candy given twice daily empty stomach for relieve cold and cough.
- Diarrhea & Irritable Boil Syndromes – 10 ml of fresh leaves juice adding with one pinch of black piper powder thrice a day.



VASANGA

Plants profile:

This plant has lance-shaped leaves which are 10-15 cm tall. They are smooth edged, arranged oppositely and borne on short petioles. They are dull brownish green in color. They are bitter in taste. When a leaf of this plant is cleared and if examined, then the oval stomata can be seen. Stomata are surrounded by the two crescent shaped celled that are at right angles to the ostiole. The epidermis contains simple celled warty hairs as well as small glandular hairs. Trunk of this plant has many long and ascending branches and is arranged oppositely. Flower area white in color and bark of this plant is yellow in color. Inflorescence shows the presence of large, dense and axillary spikes. The fruits of this plant are with club shaped capsule and are pubescent.

Family: Lamiaceae

Odiya name: Vasanga

Botanical name: *Adhatoda vasica*

English name: Malbur nut

Sanskrit name: Vasa

Hindi name: Adosa

Chemical composition:

The plant contains alkaloids, tannins, phenolics etc. The leaves of this plants are rich sources of carotenes and vitamin C. Vasicine is the major alkaloid present in this plant. The leaves of this plant contain vasicinol, vasicinolone, vasicol etc.

According to Ayurveda properties & Action:

- Rasa – Tikta, Kasaya
- Guna – Laghu
- Virya - Sita
- Vipaka - Katu
- Karma – Balances kapha and pitta dosha

Part used: The entire plant, including its leaf, stem, flower, bark and root is used in medicine.

Medicinal Uses:

Its fresh leaves juice makes sputum more fluid thereby facilitating its removal. It is used in the treatment of cough, asthma and bleeding piles.

Dose: two teaspoon (10ml) fresh leaves juice adding with equal quantity of honey three times a day for seven days.



GUDUCHI

Plants profile:

This creeper climbs over the bigger trees and has many medicinal values. There are a lot of researches going on Guduchi worldwide because of its healing properties and benefit in health care. The Guduchi creeper which grows in a neem tree is said to possess more medicinal values than growing on its own because neem itself is bitter in taste and having excellent blood-cleansing properties, it enhances the efficacy of Guduchi in cancer and other blood disorders.

Family: Menispermaceae

Odia name: Guduchi

Botanical name: *Tinospora cordifolia*

English name: Giloy

Sanskrit name: Amrita

Hindi name: Giloy

Chemical composition: Barberine, Giloin

According to Ayurveda properties & Action:

- Rasa – Tikta, Kasaya
- Guna – Laghu
- Virya - Usna
- Vipaka - Madhura
- Karma – Tridosasamaka, samgrahi, balya, dipana, rasayana, raktasodhaka, jwaraghna

Part Use: Stem and leaves

Medicinal Uses:

- Fiver – 10 ml of fresh stem juice adding with 5 ml of honey two times a day for three days.
- Jaundice – 10ml of fresh stem juice adding with 5ml of ginger juice, twice a day for 21 days.
- Burning urination - 10 ml of fresh stem juice two times a day for three days.
- Hyper Acidity – Two teaspoon of fresh stem juice adding with one pinch of black piper powder two times a day after food for one month.
- Dysentery – four teaspoon of fresh stem juice adding with equal quantity of water twice a day for three days.



GHRITAKUMARI

Plants profile:

It is a dwarf and freshly leaved bush. Leaves are long and spiny-toothed at the margin. Red colored flowers in the bunch appear during late winter.

Family: Asphodelaceae

Odiya name: Ghikuari

Botanical name: *Aloe vera*

English name: Aloe

Sanskrit name: Kumari

Hindi name: Ghritakumari

Chemical composition:

- Anthraquinone – There are about 12 anthraquinones. Aloin and emodine are from those 12 anthraquinones. These compounds are enriched with anti-bacterial, anti-viral and anti-analgesic properties.
- Amino acids – Contains 20 amino acids which are required by humans and 7 to 8 essential amino acids. These amino acids are known to provide anti-bacterial and anti-inflammatory effects.
- Carbohydrates – Ghritakumari consists of monosaccharides and polysaccharides.
- Hormones – Hormones of Ghritakumari play a vital role to treat various diseases. Some of the hormones are gibberellins and auxins. These have healing and anti-inflammatory properties.
- Vitamins – Ghritakumari contains vitamin A, C and E, folic acid, choline and B12. These nourish blood, body cells and neutralize free radicals.
- Enzymes – It consists of various enzymes like catalase, alkaline phosphatase, amylase, bradykinase, cyclooxygenase, cyclooxygenase, lipase, oxidase, carboxylase and superoxide dismutase. These are essential in the metabolism of fats and carbohydrates.

According to Ayurveda properties & Action:

- Rasa – Tikta
- Guna – Laghu
- Virya - Seeta
- Vipaka - Katu
- Karma – Tridosasamaka, raktasodhaka, jwaraghna

Part Use: Leaves

Medicinal Uses:

- Burn wound – The juice or pulp of the fresh leaf is applied externally.
- Sprains – the pulp or juice may be gently rubbed over the affected part two or three times a day.
- For loss of appetite, hyperacidity, habitual constipation, leucorrhoea and jaundice, fresh leaves juice 15 ml adding with honey two times a day empty stomach for 30 days.



GANGASEULI

Plants profile:

According to mythological stories, Parijat is a heavenly tree brought to earth by Lord Krishna. Parijat is commonly known as a night-jasmine is a small shrub that has fragrant flowers. Parijat flowers have seven to eight petals arranged on an orangish-red stem. These beautiful flowers are used in many spiritual activities. This flower loses its brightness during daytime and blooms at the night.

From leaves to the roots, the whole Parijat plant is very useful for various healing properties. It is known to improve the function of insulin and reduce the symptoms of diabetes.

Family: Asphodelaceae

Odiya name: Gangaseuli

Botanical name: *Nyctanthes arbor-tristis*

English name: Night jasmine

Sanskrit name: Parijat

Hindi name: Parijat

Chemical composition:

- Leaves: The leaves contain D-mannitol, si,osterol, flavanol glycosides, astragalin, nicotiflorin, oleanolic acid, nyctanthic acid, tannic acid, ascorbic acid, methyl salicylate, an amorphous glycoside, an amorphous resin, trace of volatile oil, carotene, friedeline, lupeol, mannitol, glucosee, fructosee, iridoid glycosides, and benzoic acid.
- Bark: The bark contains glycosides and alkaloids.

According to Ayurveda properties & Action:

- Rasa – Tikta
- Guna – Laghu
- Virya - Ushna
- Vipaka - Katu
- Karma – Kapha vata samaka

Part Use: Leaves, bark

Medicinal Uses:

- Various types of fevers - Gangaseuli is known as a great anti-pyretic. It cures various nauseous types of fever including malaria, dengue, and chikungunya fevers. For management of fever 30ml of decoction adding with 10 ml honey twice a day for seven days.
- Cold & Cough - A tea made from Gangaseuli leaves and flowers is used to reduce cough, cold, and bronchitis. It also works beautifully in asthma.



THALKUDI

Plants profile:

It is a creeper. It spreads on the ground. From each node of the stem, leaves, roots and flowers emerge. Leaves are green in color and round in shape with a depression at the centre. Red flowers appear in the spring.

Family: Umbellifers

Odiya name: Thalkudi

Botanical name: *Centella asiatica*

English name: Indian penny wort

Sanskrit name: Manduka parni

Hindi name: Brahmi

Chemical composition:

Various glycosides have been isolated from this plant which includes Asiaticoside, Madecassoside, Brahmoside, Centelloside, Thakuniside, etc. Among them, asiaticoside, asiatic acid, madecassoside and madecassic acid are the most biologically active compound. Asiaticoside helps in collagen I synthesis in human clinically used as a wound healing agent in combination with madecassic and asiatic acids.

According to Ayurveda properties & Action:

- Rasa – Tikta, kasaya, madhura, katu
- Guna – Laghu
- Virya - Sita
- Vipaka - Madhura
- Karma – Kapha pittahara, hradya, medhya, svarya, rasayana, dipana, balya, smurtiprada

Part Use: Leaves

Medicinal Uses:

- Urinary tract infection – Fresh juice of the Thalkudi balances the pitta and increases the urine flow. The production of urine cures the urinary tract infection. Dose – one teaspoon of juice twice a day for seven days.
- Asthma & Bronchitis - Fresh juice of the Thalkudi reduces the formation of cough in lungs and throat, hence cures the cough, asthma and bronchitis. Dose – 10 ml of fresh thalkudi juice twice a day for three months.
- Indigestion & Hyperacidity – Thalkudi is usefull for cure indigestion and hyperacidity, In take of 10 ml of fresh juice empty stomach in morning three months.
- Jaundice – When the pitta decreases, the liver functions start to lack behind. Thalkudi balances the pitta dosa by increasing it and hence curing the jaundice. Dose- 10 ml of fresh thalkudi juice twice a day for one month.



TULASI

Plants profile:

It is a small plant 60-90 cm. Leaves are oval with heavy margin and fragrant. Flowers and seeds appear in winter season. Two types of exist, varying in the color of the leaves and flower from green and coppery.

Family: Lamiaceae

Odiya name: Tulasi

Botanical name: *Occimum sanctum*

English name: Holy basil

Sanskrit name: Tulashi

Hindi name: Tulsi

Chemical composition:

Some of the phytochemical constituents of *tulsi* are oleanolic acid, ursolic acid, rosmarinic acid, eugenol, carvacrol, linalool, and β -caryophyllene (about 8%). Tulasi essential oil consists mostly of eugenol (~70%) β -elemene(~11.0%), β -caryophyllene (~8%), and germacrene (~2%), with the balance being made up of various trace compounds, mostly terpenes.

According to Ayurveda properties & Action:

- Rasa – Katu, Tikta, Kasya
- Guna – Tikshna, Rukshya, Laghu
- Virya - Ushna
- Vipaka - Katu
- Karma – Pittavardhini, Vatahara, Kaphahara, Hradya, Dipana, Rucya, Durgandhdihara.

Part Use: Leaves, root, seed

Medicinal Uses:

- Enhances immunity - Tulasi contains zinc and vitamin C, two components that help fight infections. Daily intake of Tulasi leaves or Tulsi tea helps to boost immunity.
- Protection against infection and treating wounds - Tulasi is long known to have anti-inflammatory properties and anti-bacterial, anti-fungal and anti-viral properties. It can also act as a painkiller.
- Improves digestion system -Tulasi plant is known to enhance livers health which is why it aids in improving the digestion system..Two teaspoon of tulsi leaves juice adding with half teaspoon of ginger juice used twice a day for one month.
- Relives Headache - Tulsi is a natural headache reliever which can also relieve migraine pain. The fresh leave is applied externally will relives from headache.
- Relives Fiver - It is one of the prime ingredients in the formulation of various ayurvedic medicines & home remedies for relives fiver, two teaspoon of the tulasi leaves juice adding with half teaspoon of honey thrice a day for seven days.
- Relives Cold & Cough - Due to the presence of compounds like camphene, eugenol, and cineole, tulasi cures viral, bacterial, and fungal infections of the respiratory system. It can cure various respiratory disorders like cold and cough. Two teaspoon of the tulasi leaves juice adding with half teaspoon of honey thrice a day for seven days.



PUDINA

Plants profile:

Mints have square stems and opposite aromatic leaves. Many can spread vegetatively by stolons and can be aggressive in gardens. The small flowers are usually pale purple, pink, or white in color and are arranged in clusters, either forming whorls or crowded together in a terminal spike. The flowers are not typical of other members of the family, having four rather than five united petals. The volatile oils are contained in resinous dots in the leaves and stems.

Family: Lamiaceae

Odiya name: Pudina

Botanical name: *Mentha spicata*

English name: Mint

Sanskrit name: Pudina

Hindi name: Podina

Chemical composition:

The main constituents were menthol (40.7%) and menthone (23.4%). Further components were menthyl acetate, cineole, limonene, beta-pinene, and beta-caryophyllene.

According to Ayurveda properties & Action:

- Rasa – Katu
- Guna – Tikshna, Rukshya, Laghu
- Virya - Ushna
- Vipaka - Katu
- Karma – Vatahara, Kaphahara, Mutrala, Balya, Rochana

Part Use: Whole plant

Medicinal Uses:

- **Indigestion** – Pudina is rich in antioxidants, menthol and phytonutrients that help the enzymes to digest food. The essential oils in mint possess strong antibacterial and antiseptic effects that calm stomach cramps and help ease acidity and flatulence. One teaspoon of fresh pudina leaves juice twice a day is more effective for management of indigestion, hyperacidity and flatulence.

- Cold & Cough - Regularly taking 5ml of fresh pudina juice can ease chest congestion. The methanol in mint acts as a decongestant, it helps loosen mucus collected in the lung and also shrinks swollen membranes in the nose to allow you to breathe easier.
- Headache - Pudina contains menthol that can help relax muscles and ease the pain. Applying pudina juice on your forehead and temples can give you relief from headache. Also, balms of pudina base or mint oil are effective in curing headaches.
- Make your healthy skin - Pudina has anti-inflammatory and anti-bacterial properties that help treat acne and pimple on the skin. Pudina leaves contain a high amount of salicylic acid which acts as anti-acne. It also acts as an effective skin cleanser. Pudina has antioxidant properties that help you get clean and youthful skin by removing free-radicals from the body. Other ways pudina makes your skin healthy is that it retains the moisture in the skin, clear off dead skin cells, and dirt from the skin pores, and makes the skin look radiant and toned.



HEMASAGAR (AMARPOI)

Plants profile:

Kalanchoe laciniata is a succulent herb. The plant grows up to a height of 0.9–1.2 m. The stems are succulent, glabrous or more or less pubescent, and slightly branched. Leaves are numerous, large, and very succulent, 7.5 cm–10 cm long. The petiole is 2.5 cm–3.8 cm long, flattened above, fleshy, and amplexicaul. The blade is narrow oblong, acute, dentate, serrate or crenate. Flowers are regular, bisexual, large, bright in color yellow, and occur in paniculate cymes. The calyx is 3-5 mm long, glabrous or glandular- pubescent. Corolla is 1.6 cm long. Sepal, and petals are four in number. A few hypogenous scales of 3-4 mm long are present. Stamens are eight, inserted in two rows on the tube of the corolla. Ovary is superior.

Family: Crassulaceae

Odiya name: Amarpoi

Botanical name: *Kalanchoe laciniata*

English name: Christmas tree plant

Sanskrit name: Parnabijah

Hindi name: Hemsagar

Chemical composition:

Bufadienolide compounds isolated from *Bryophyllum pinnatum* include bryophillio A, bersaldegenin-3-acetate, and bryophillin C. Bryophillin C also showed insecticidal properties.

According to Ayurveda properties & Action:

- Rasa – Kashaya, Amla
- Guna – Rukshya, Laghu
- Virya - Sheeta
- Vipaka - Madhura
- Karma – Vatahara, Pittahara, Mutrala, Rochana

Part Use: Whole Plant

Medicinal Uses:

- Diarrhea, dysentery -Fresh leaves juice in given to treat of diarrhea and dysentery. Two teaspoon of juice twice daily for three days.
- Chronic sores, and ulcers – Fresh leaves paste is applied effected area.
- Cold and Cough - Two teaspoon of juice twice daily for seven days.



SATAVARI

Plants profile:

Tall climber with thin leaves. Roots are white, long and tapering at both ends. These roots come out in branches and spread in the earth. Older plants have longer and thicker roots. Small white and fragrant flowers appear on this plant in the beginning of rainy season. Fruits in the shape of small berries in the autumn.

Family: Asparagaceae

Odiya name: Satavari

Botanical name: *Asparagus recemocus*

English name: Asparagus

Sanskrit name: Satamuli

Hindi name: Satavar

Chemical composition:

This plant contains vitamins A, B₁, B₂, C, E, Mg, P, Ca, Fe, and folic acid. Other primary chemical constituents of Asparagus are essential oils, asparagine, arginine, tyrosine, flavonoids (kaempferol, quercetin, and rutin), resin, and tannin.

According to Ayurveda properties & Action:

- Rasa – Madhura, Tikta
- Guna – Snigdha
- Virya - Sheeta
- Vipaka - Madhura
- Karma – Vrusya, sukraja, Balya, Medhya, Rasayana, kaphavataghna, pittahara, sukrala.

Part Use: Rhizomes.

Medicinal Uses:

- Female Reproductive Health -Shatavari supports women through every stage of their lives. The main constituents of Shatavari are steroidal saponins that suggest its use as an estrogen regulator. This modulation helps to regulate menstrual cycles, manage PMS symptoms, alleviate menstrual cramps, and control the amount of blood lost. It may help with fluid retention and uncomfortable bloating often suffered before a period.
- Helps with Breast milk production - Young mothers usually find it difficult to breastfeed their newborns due to very little milk production. This can happen due to a variety of reasons such as anemia, low blood pressure, or simply stress. Taking Shatavari every day helps to facilitate and regulate milk production. This method is ideal for the nourishment of young babies so that their immune system becomes stronger. Shatavari is a natural herb so it doesn't cause any harm to the child.
- Gastric problems - Shatavari is known to treat gastric problems. The dried roots of Shatavari are turned into powder and it can be made into a juice. The consumption of this juice is ideal to cure ulcers and other ailments occurring in the gastrointestinal tract. If this plant is consumed regularly, it can also cure gastroparesis.
- Immune System Support - Research has shown that Shatavari plays a very important role in stimulating immune cells. This is assumed to be due to the steroidal plant compound contained within the root "sapogenin", a potent immune stimulator. It increases the body's resistance during normal and immune-suppressed conditions, helping to boost immunity during immune-suppressed conditions and aiding in the recovery of the immune system itself. Sapogenins will also stimulate the cells that fight infection, reducing the overall population of infection-causing cells.

Doses – One teaspoon satavari rhizome powder added with warm milk twice daily after food.

