



Matchless healing properties of *Ocimum sanctum* (Review)

KEYWORDS

Ocimum sanctum, Tulsi, antioxidant, Medicinal plant

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ABSTRACT

Tulsi (Ocimum sanctum), Belongs to the Lamiaceae/Labiatae mint family, cultivated annually from seed, but it can also be propagated from tip or root cuttings. The name Tulsi is derived from 'Sanskrit' which means "matchless one". It is usually planted immediately after the rainy season ends. The colour of leaves ranges from light green to dark purple; the tiny flowers range from white to reddish purple. Different varieties of Tulsi may smell and taste having distinct characteristics of their own. Tulsi has medicinal values and has been worshiped and highly valued in India for thousands of years. Tulsi contains hundreds of beneficial compounds and possess strong antioxidant, anti-bacterial, anti-viral, adaptogenic and immune enhancing properties. It is used to cure various diseases such as common cold, inflammation, heart diseases, kidney stone, stress, skin diseases and many more. Tulsi also aids in the purification of atmosphere. It is being used as an important component of Ayurvedic medicines. It is regarded in Ayurveda as an "elixir of life" and is well known to promote longevity. It is because of these numerous benefits this herb is worshiped as a goddess in India.

Leaves of Tulsi are most commonly used for their health benefits and woody stalks are used to make Tulsi Beads which are commonly strung in meditation malas or rosaries which is believed to have spiritual benefit. Tulsi contains many nutrients and other biologically active compounds. Nutritional and pharmacological properties of Tulsi results from synergistic interactions of many different active phytochemicals. Eugenol (an essential oil) and Ursolic acid are active compounds that have been identified and extracted. In spite of absence of caffeine or other stimulants, Tulsi is known as a general vitalizer and it increases physical endurance.

Some of the main chemical constituents of Tulsi are: oleanolic acid, ursolic acid, rosmarinic acid, eugenol, carvacrol, linalool, β -caryophyllene (about 8%), β -elemene (c.11.0%), and germacrene D (about 2%).

Several medicinal properties have been attributed to the Tulsi plant not only in Ayurveda and Siddha but also in Greek, Roman and Unani systems of medicine (Vishwabhan et al., 2011)

Health benefits of TULSI:

The Tulsi leaves act as nerve tonic and also sharpen memory. They are helpful in removal of the catarrhal matter and phlegm from the bronchial tube hence used in many Ayurvedic cough syrups and expectorants. The leaves strengthen the stomach, induce copious perspiration and beneficial for Fever & Common Cold.

Water boiled with Tulsi leaves can be taken as drink in case of sore throat and is useful in the treatment of respiratory system disorder.

Tulsi is a great diuretic and detoxifier. It helps reduce the uric acid levels in the blood, cleanses the kidneys, the presence of acetic acid and other components helps in breaking down kidney stones and its painkiller effect helps dull down the pain of kidney stones. The juice of Tulsi leaves and honey, if taken regularly for 6 months is help-

ful in expelling them via the urinary tract. Tulsi reduces the level of blood cholesterol and is beneficial for cardiac disease.

Studies have shown that the chewing of Tulsi leaves protects against stress (Bhargava & Sing, 1981), it helps to maintain the normal levels of the stress hormone – Cortisol in the body. The leaf also has powerful adaptogen properties. It helps soothe the nerves, regulates blood circulation and beats free radicals that are produced during an episode of stress, purifies blood and helps prevent stomach ulcer (Jalil, 1970) and infections.

The herb is a prophylactic or preventive and curative for insect stings or bites and basil juice is beneficial in the treatment of ringworm and other skin diseases.

Tulsi is very good for maintaining dental health, counteracting bad breath and for massaging the gums. Dried and powdered leaves can be used for brushing teeth. It can also be mixed with mustered oil to make a paste and used as toothpaste.

When eaten raw, it purifies the blood and prevents the appearance of acne and blemishes. Its anti-bacterial and anti-fungal properties are much beneficial for skin. It also helps in reducing itchiness of the scalp and helps to reduce hair fall.

Extracts of Tulsi acts against *E. coli*, *S. aureus* and *P. aeruginosa* (Golshahi et al., 2011)

Studies suggest due to its high concentration of eugenol (Prakash, & Gupta, 2005) Tulsi may be a (cyclooxygenase-2) COX-2 inhibitor, like many modern painkillers, an alcoholic extract of Tulsi modulates immunity, thus promoting immune system function (Mondal et al., 2011). Because of its pain relieving and decongestant properties, Tulsi relieves headaches caused due to allergies, cold and migraines.

β -Elemene present in Tulsi has been studied for its potential anticancer properties, but human clinical trials have yet to confirm its effectiveness.

CONCLUSION; Tulsi has been used for thousands of years for its healing properties. It is considered to be helpful for balancing different processes in the body, and reduces stress. Tulsi contains hundreds of beneficial compounds and possess strong antioxidant, anti-bacterial, anti-viral, adaptogenic and immune enhancing properties.

Marked by its strong aroma and astringent taste, it is believed to promote longevity. Tulsi extracts are used in ayurvedic remedies for common colds, inflammation, heart diseases, kidney stone, stress, skin diseases, headaches, stomach disorders and ulcers.

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