

Tulsi Queen of Herbs

India's Holy Basil

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TULSI, QUEEN OF HERBS, THE LEGENDARY "INCOMPARABLE ONE" OF INDIA, IS ONE OF THE HOLIEST AND MOST CHERISHED OF THE MANY HEALING AND HEALTH-GIVING HERBS OF THE ORIENT. The sacred basil Tulsi* is renowned for its religious and spiritual sanctity, as well as for its important role in the traditional Ayurvedic and Unani systems of holistic health and herbal medicine of the East.

An impressive array of health promoting, disease preventing and life prolonging properties of Tulsi have been described and documented over five millennia. In the past few decades, many of these benefits have been investigated and verified by modern scientific research.

According to ancient Indian legend, the plant came into being as an incarnation of the Hindu goddess Tulsi. In her botanical form she is the favoured herb of the gods Vishnu, Krishna and Ram, as well as being greatly revered by Brahma and Shiva. Tulsi is thought to open the heart and mind, and bestow love, compassion, faith and devotion. The plant is widely incorporated in religious rituals and auspicious ceremonies throughout the subcontinent, and is carefully grown and worshipped by traditional Hindu families today.

Medical, religious and culinary use of Tulsi has also been documented for centuries in China and the rest of Asia, the Middle East, North Africa and Australia.



Tulsi initially met with mixed reactions in Europe as it traveled west along the early trade routes from the Orient. After a period of cultural assimilation, the plant became known to Christians as sacred or holy basil, and was hailed as "The King of Herbs" by European herbalists and physicians, as well as cooks. The name *basil* is likely derived from Greek words referring to "royalty" or "king."

Holy basil became routinely included in legends, offerings and worship rituals of many of the Christian denominations of Europe—perhaps most noteworthy being the Greek Orthodox Church. The sacred plant was given an especially festive central role in the annual celebration of the birth of St. Basil. Also known as St. Josephwort in parts of Europe, the herb is looked on by many as a gift of Christ.

Tulsi is often enjoyed as a simple herbal tea and is frequently blended with other herbs and spices for various medicinal and culinary purposes.



Traditionally, Hindus revere Tulsi as a goddess in the form of a plant bestowed with great spiritual and healing powers.

According to legend, no amount of gold could outweigh Krishna, but a single Tulsi leaf placed on the pan in loving devotion tilted the scale.

To inaugurate the winter wedding season in many parts of India, Tulsi, as a plant, is ceremonially married to Krishna in the form of a sacred stone.

Center image.

Indian woman performing morning Tulsi puja (worship ritual).

Right image.

Tulsi plant with deities Krishna and Radha.

*Tulsi is pronounced "tool-see."



Tulsi's Health Benefits

Top image.
Husband and wife team in northern India enjoying a cup of Tulsi tea in their Rama Tulsi field near harvest time.

Along with several hundred other farmers, they grow Tulsi for Organic India, one of India's largest international suppliers of organic Tulsi.

In recent years there has been a resurgence of interest in investigating the traditional health promoting uses of Tulsi. A considerable, rapidly expanding body of modern scientific information is currently available confirming many of the life-supporting benefits described in ancient Indian Ayurvedic ("Knowledge of Life") writings.

Key historical documents include the *Rigveda* ("Book of Eternal Knowledge"), thought to have been developed around 5000 BC, the *Carak* and *Susrut Samhita* medical texts, circa 2700 to 600 BC, and *Nighantu Adarsha*, revised in 800 AD. In such Ayurvedic scriptures, Tulsi is frequently mentioned as one of the main pillars of herbal medicine. The sacred plant is described as a protector of life, preventing misery and disease from birth through old age and death—and even then aiding the passage to the heavens.

Traditional medical uses

Renowned as a general tonic and vitalizer, "The Elixir of Life", Tulsi has been traditionally employed in hundreds of different formulations for the treatment of a wide range of disorders, including those of the mouth and throat, lungs, heart, blood, liver, kidney, and the digestive, metabolic, reproductive and nervous systems. Tulsi is commonly used to treat coughs, colds and flu, head and ear aches, rheumatism and arthritis, malaria, fever, allergies, and various skin diseases, to reduce the toxicity of various poisons, including insect and reptile bites, to expel intestinal parasites, repel insects and purify the air.

The holy basil Tulsi is one of the most potent general adaptogens known to modern science, strengthening the body's natural capacity to adapt to a wide variety of stresses, and restore and maintain healthy homeostatic equilibrium.

Tulsi thus offers remarkable preventative and curative potential with respect to many stress-related degenerative disorders, such as cancer, heart disease, arthritis, diabetes and neurological dementia.

Modern perspectives

Current scientific research offers substantial evidence that Tulsi protects against and reduces stress; enhances stamina and endurance; increases the body's efficient use of oxygen; boosts the immune system; reduces inflammation; protects against radiation damage; lessens aging factors; supports the heart, lungs and liver; has antibiotic, antiviral and antifungal properties; enhances the efficacy of many other therapeutic treatments; and provides a rich supply of antioxidants and other nutrients.

Overall, Tulsi is a premier adaptogen, helping the body and mind to adapt and cope with a wide range of physical, emotional, chemical and infectious stresses, and restore disturbed physiological and psychological functions to a normal healthy state.

These general vitality enhancing and health promoting properties, in addition to Tulsi's many more specific therapeutic actions, likely account for much of the exceptionally broad range of Tulsi's traditional medical uses, as well as contributing to its mythological importance and religious sanctity.

Health Benefit Highlights

Modern scientific research provides evidence that Tulsi offers the following benefits.*

Holistic Health Promotion

Enhances general health and well-being, having positive overall effects on the body and mind.

Stress Resilience

Increases the capacity to cope and adapt to changing and challenging environments, and reduces the negative physical and psychological effects of stress (adaptogenic).

Energy and Performance Enhancement

Improves stamina and endurance, and increases the body's efficiency in using oxygen. Enhances protein synthesis and strength.

Anti-Aging Effects

Slows the biological aging process by reducing the impact of physiological aging factors.

Antioxidant Activity

Provides significant antioxidant and free radical scavenging protection. Neutralizes dangerous biochemicals that contribute to premature aging, cataracts, cancer and other degenerative diseases.

Radiation Protection

Reduces the cell and tissue damage caused by harmful rays of the sun, TV, computers, X-rays, radiation therapy, high altitude air travel, etc.

Immunity Tune-Up

Strengthens and modulates the immune system. Reduces allergic histamine, asthmatic and other adverse immune reactions.

Anti-inflammatory Action

Reduces the painful and dangerous inflammation that plays a key role in various forms of arthritis, cancer and degenerative neurological disorders.

Antibiotic Protection

Offers significant natural antibacterial, antiviral and antifungal protection and is, thereby, helpful in treating many serious systemic diseases, as well as localized infections.

Heart and Vascular Protection

Lowers dangerous cholesterol and stress-related high blood pressure, protects the heart and blood vessels, and has mild blood thinning qualities, thereby decreasing the likelihood of strokes.

Liver Support

Generally contributes to healthy liver function, improves the metabolic breakdown and elimination of dangerous chemicals in the blood, and counteracts various liver diseases.

Lung and Bronchial Support

In addition to contributing generally to respiratory health, Tulsi has been shown to be helpful in the treatment of a variety of serious allergic, inflammatory and infectious disorders affecting the lungs and related tissues.

Nutrition

Contains vitamins C and A, and minerals calcium, zinc and iron, as well as chlorophyll and many other phytonutrients. Also enhances the efficient digestion, absorption and use of nutrients from food and other herbs.

Allopathic Medicine Complement

Enhances the effectiveness and reduces the negative and often dangerous side effects of many standard modern medical treatments.

Other Benefits

Lowers fevers, protects against gastric ulcers, reduces dangerous blood sugar levels in diabetics, and supports dental and periodontal health (and diminishes "bad breath"). Also protects against mercury poisoning, speeds healing of bone fractures, reduces nausea, vomiting and cramping, and repels insects, including mosquitoes and lice.

High Safety Margin

Research indicates that Tulsi has a very high safety margin with exceptionally low toxicity, providing general beneficial effects at doses without adverse reactions or other undesirable side effects.

"When I was first introduced to the sacred Tulsi, my first reaction, as a Western scientist, was disbelief. There seemed to be far more wide-ranging health benefits attributed to this plant than could be possible for a single agent. Yet, I realized that there must be compelling reasons why Tulsi has, for thousands of years, remained one of the most cherished of India's sacred healing plants."

— Dr. Ralph D. Miller

From the Introduction to *Tulsi, The Mother Medicine of Nature*.

* Full references provided in *Tulsi, Mother Medicine of Nature* (Singh, Hoette and Miller, 2002) and available on request.



Left image.

Rama Tulsi has green leaves, white-to-purplish flowers, and a green or purplish stem.

Center image.

Pure Krishna (or Shyama) Tulsi is completely purple—leaves, stem and blossoms. Since Krishna and Rama Tulsi are varieties of the same basil species, they often cross-pollinate if grown in the same vicinity, producing mixed varieties.

Right image.

Vana (or Van) Tulsi has green leaves and stem, and generally white flowers. Its leaves are usually larger and more pointed than those of Rama or Krishna.

Tulsi is known in different regions, languages and dialects of India by a variety of other names, including Tulasi, Surasah, Ajaka, Parnasa, Manjari, Haripriya (beloved of Lord Vishnu) and Bhutagni (destroyer of demons). Hindu denominations may regard Tulsi Devi as representing the Goddess as Lakshmi, Sita, Vrinda, Radha, Rukmani or other feminine deities.

Tulsi's Botanical Identity

Tulsi is identified by botanists primarily as *Ocimum sanctum* (Rama and Krishna Tulsi varieties) or more recently *Ocimum tenuiflorum*, and *Ocimum gratissimum* (Vana Tulsi variety). Belonging to the *Lamiaceae/Labiatae* mint family, these and other closely related species and varieties (e.g., *Ocimum canum*) are cousins of the familiar sweet basil cooking herb *Ocimum basilicum*. In parts of India, all of the basil species are honoured as Tulsi.

Basils are native to tropical Asia, likely having originated in India. Robust Tulsi varieties readily grow wild in many areas of Asia and Africa. Tulsi is a bushy perennial shrub, usually cultivated annually from seed, although it can also be propagated from tip or root cuttings. It is usually planted (or transplanted) immediately after the rainy season ends. In good soil and hot sunny weather, Tulsi may grow to a meter or more in height and be ready for harvest in a few months. Much larger specimens have been noted and under special circumstances an individual plant may live for a decade or more.

Leaf color ranges from light green (Vana) to dark purple (Krishna); the tiny flowers range from white to reddish purple. Highly aromatic, different varieties of Tulsi may smell and taste of peppermint, cloves, licorice or lemon, as well as having distinct characteristics of their own.

The leaves of Tulsi are most commonly used for their health benefits, although all parts of the plant, including the roots, stems, flowers and seeds, have significant and differing medicinal and religious symbolic properties. Tulsi beads, made from the woody stalks, are commonly strung in necklaces, bracelets, belts, and meditation malas or rosaries, which are believed by many to have spiritual as well as physical protection benefits.

Tulsi's Chemistry

The chemical composition of Tulsi is highly complex, containing many nutrients and other biologically active compounds, the proportions of which may vary considerably between strains and even among plants within the same field. Furthermore, the quantity of many of these constituents is significantly affected by differing growing, harvesting, processing and storage conditions that are not yet well understood.

The nutritional and pharmacological properties of the whole herb in its natural form, as it has been traditionally used, result from synergistic interactions of many different active phytochemicals. Consequently, the overall effects of Tulsi cannot be fully duplicated with isolated compounds or extracts. Because of its inherent botanical and biochemical complexity, Tulsi standardization has, so far, eluded modern science. Perhaps best known of the many active compounds that have been identified and extracted are eugenol (an essential oil) and ursolic acid. Although Tulsi is known as a general vitalizer and increases physical endurance, it contains no caffeine or other stimulants.

Tulsi is traditionally taken in a variety of forms, including cold and hot fresh or dried leaf tea infusions (herbal teas), fresh green leaf, leaf juice, ground or powdered leaf, alcohol tinctures, poultices and oil (ghee) preparations, as well as seed, root and stem formulations, both internally and topically. In addition, modern human clinical studies and animal experiments also employ various extracts and isolated compounds, sometimes administered by injection. The differing Tulsi preparations likely vary to a considerable degree, both chemically and in their overall pharmacological effects.



Indian farming family and helpers harvesting a rich crop of pure Krishna Tulsi.

Tulsi in Modern Society

In spite of the many impressive accomplishments of Western medical science, the typically fragmented approach of modern allopathic medicine has not been able to cope with the growing array of chronic degenerative environmental, lifestyle and personal stress-related disorders that plague modern society. The mental and biological stressors of the demanding and rapidly changing social and physical environments of modern urban life are leading factors in illness and premature death throughout the industrialized nations, and are emerging as health crises in developing countries worldwide.

Stress-related disorders, such as cancer, cardiovascular disease, diabetes, neurological dementia, arthritis and other autoimmune disorders, have almost become synonymous with Western-style material progress. Furthermore, many modern medical treatments entail substantial adverse side effects and compounding secondary health risks.

A significant complementary role is emerging for traditional herbal medicines and holistic approaches to health in the prevention and treatment of the pervasive illnesses of modern civilization. Recognizing the importance of broadening Western medical perspectives, the World Health Organization has recommended that traditional health and folk medicine systems be integrated with modern medical therapies to more effectively address health problems worldwide. This ongoing evolution in health care includes the growing scientific

examination and verification of many previously unexplored or prematurely rejected traditional treatments and holistic perspectives.

Substantial evidence has accumulated that, in addition to Tulsi's many specific therapeutic applications, the herb's powerful general adaptogenic properties offer significant preventative and curative potential with respect to the stress-related degenerative diseases endemic to industrialized societies. Ongoing clinical investigation of Tulsi's health promoting qualities is sure to bear rich fruit.

Relatively little known in the West, the holy basil Tulsi is certain to emerge in the near future as a major player in the growing field of herbal health supplements and medicines, both in daily self-care and in professionally managed health care systems.

For many benefits, Tulsi is effective taken in daily dosages of 1–2 grams of dried leaf (e.g., in capsules) or as a few cups of herbal tea (e.g., 1 tsp/cup).

Tulsi Tea is often prepared singly, as a blend of Tulsi varieties, or in combination with other herbs, spices, sweeteners, lemon or milk, for varying tastes and medicinal benefits. Combinations may include ginger, lemon grass, licorice, brahmi (gota kola) or other herbs, masala chai spices (such as cardamom, cinnamon, cloves and pepper) and regular black or green tea. Tulsi tea is prepared from fresh or dried leaf and served hot or cold.



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*A more complete bibliography is provided in *Tulsi, Mother Medicine of Nature* (Singh, Hoette and Miller, 2002) and is available on request.