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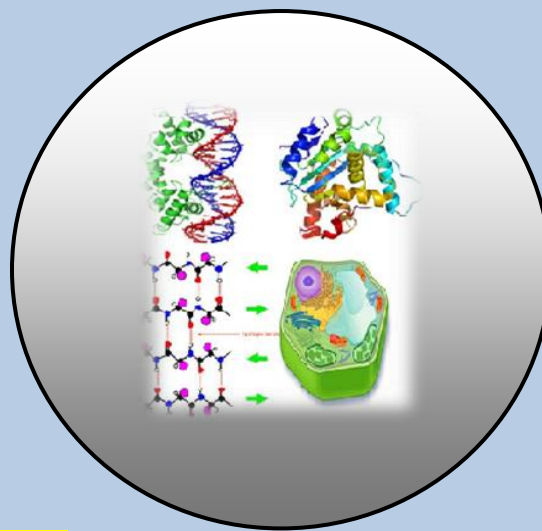
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Tulsi: The Mother of Herbal Medicine

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ABSTRACT

Tulsi is important for its therapeutic potential .Tulsi plant had been used by all cultures throughout the history but India has one of the oldest & diverse cultural traditions associated with the use of Tulsi plant. The Sacred Basil Tulsi is renowned for its religious & spiritual sanctivity as well as for its important role in the traditional Ayurvedic and Unani system of holistic health and herbal medicines. Holy Basil is known as 'The Incomparable One' 'The Mother of Medicine of Nature' and 'Queen of Herb'. There are numerous uses of tulsi plant & it is increasingly finding its way in the Ayurvedic treatment of diseases. Tulsi plant has lot of significance for mankind due to its manifold medicinal benefits.

Key words: *Ocimum sanctum, Chemical Composition, Medicinal Properties and Uses.*

Ocimum sanctum

Ocimum sanctum Holy basil or Tulasi is an aromatic plant from family Lamiaceae. It is commonly known as 'Vishnu - Priya', 'Tulsi' in Sanskrit, 'Kala-Tulsi' in hindi & Indias Holy Basil in English (Mohan et al., 2011). Ocimum genus contains between 50 to 150 species of herbs and shrubs from the tropical regions of Asia (Bailey, 1924). Plant have square stem, fragrant opposite leaves and whorled flowers on spiked inflorescence (Darrah, 1980).

Tulsi plant or Indian Basil is an important symbol in the Hindu religious traditions. Dark or Shyama tulsi and light or Rama tulsi are two main varieties of tulsi. Tulsi plant had been used by all the cultures throughout the history but India has one of the oldest, richest and most diverse cultural traditions associated with the use of tulsi plant (Tandon et al., 2004). The sacred basil tulsi is renowned for its religious and spiritual sanctivity as well as for its important role in the traditional ayurvedic and unani systems of Holistic health and herbal medicines. Holy Basic is known as 'The incomparable one', 'The Mother of Medicines of Nature' and 'Queen of Herbs'.

Chemical composition

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 with in the same field.

The nutritional and pharmacological properties of 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 general vitalizer and increase physical endurance, it contains no caffeine and other stimulants (Miller and Miller).

Medicinal Properties and Uses

There are numerous uses of Tulsi plant. The plant is increasingly finding its way in the ayurvedic treatment of diseases. Tulsi plant has lot of significance for mankind, due to the manifold medicinal benefits it provides. Tulsi is considered as 'Queen of Herb' and widely used in ayurvedic, unani and naturopathic system of medicine.

1. Common cough and cold: Leaves of Tulsi boiled with tea act as preventive medicine against malaria & dengue fever, which are usually prevalent during rainy season. Tulsi is an important constituent of many ayurvedic cough syrups and expectorants. It helps to mobilize mucus in bronchitis and asthma. Chewing tulsi leaves also relieve cold and flu like symptoms (Miller and Miller).

2. Antifungal, Antibacterial and Antiviral Properties: *Ocimum sanctum* has significant natural antibacterial, antiviral and antifungal activities and is helpful in treating many serious systemic diseases as well as localized infections.

3. Antioxidant & Anti inflammatory Properties: Tulsi is full of anti-oxidants. It contains minerals like vitamin A, beta-carotene potassium, iron, copper, manganese and magnesium. The Biochemical compounds such as orientin and vicenin act as anti-oxidants. Tulsi shows beneficial effect on blood glucose levels due to its antioxidant properties. It is very effective in the treatment of diabetes by reducing blood sugar level (Das and Vasudevan, 2006).

5. Stress Resilience: It can increase the capacity to cope and adapt to changing and challenging environment and reduces the negative physical and psychological effects of stress (Mohan et al., 2011).

5. Prevent Heart Disease: Basil leaves show positive impact in reducing of cholesterol level in the body there by helpful in prevention of cardiac disease. Tulsi leaves are also act as tonic for heart. The flow of blood circulation enhance when juice of fresh leaves are applied locally ([http://hinduismabout.com/od/ayurved/a/tulsi benefits.htm](http://hinduismabout.com/od/ayurved/a/tulsi%20benefits.htm)).

6. Remove kidney stones: Tulsi juice drinking along with honey for a period of six month help to expel the kidney stone (calcium oxalate) via. Urinary tract Tulsi acts as detoxifier there by reduces the level of uric acid in the body (([http://health.india.com/diseases-conditions/top10– health–benefits – of tulsi](http://health.india.com/diseases-conditions/top10-health-benefits-of-tulsi))).

7. Teeth Protection: Powder of Tulsi dry leaves is used as brushing of teeth thus help in teeth protection. It is also used as toothpaste when used with mustard oil.

Tulsi mouth wash, help in keeping away from many teeth and gum disease. Chewing of tulsi leaves prevents mouth ulcer and gives protection against bacteria and germs (Rajput, 2012).

8. Headache treatment: Inhalation of powder of dried leaves of basil cures from migraine and head ache (http://hinduismabout.com/od/ayurved/a/tulsi_benefits.htm).

9. Used in Herbal Cosmetics: Tulsi face packs, oils, soap etc. are likely used due to its anti bacterial activities. It can also slow the biological aging process.

10. Eye Disorders: The leaf juice of *Ocimum sanctum* along with triphala is used in ayurvedic eye drop preparations recommended for glaucoma, cataract, chronic conjunctivitis and other painful eye diseases (*Ocimum Sanctum* 1992 and Panday and Anita 1990).

11. Stomach Problems: Tulsi support digestive system and makes you feel less bloated and more comfortable. It also helps people suffering from vomiting and lack of appetite.

12. Anti - cancer activity: The anti - cancer activity of *Ocimum sanctum* has been proved and cited by several investigators. The alcoholic extract (AIE) of leaves of *ocimum* has a modulatory influence on carcinogen metabolizing enzymes such as cytochrome P450 cytochrome b5, aryl hydro carbon, hydroxylase and glutathione s-transferase (GST), which is important in detoxification of carcinogens and mutagens (Govind, and Madhuri, 2006).

13. Insect bite: Tulsi can prevent insect stings and bites. Fresh juice of Tulsi leaves and paste of fresh roots is very effective in case of bites of insects and leeches.

14. Anti - ulcer activity: Holy basil is reported to possess potent anti-ulcerogenic as well as ulcer healing properties (Dharmani et al., 2006) and it is due to its ability to reduce acid secretion and increase mucous secretion (Mandal et al., 1993).

CONCLUSION

Owing to its versatile characteristics tulsi is rightly called the 'Queen of herb', 'Elixir of life' and believed to promote longevity. Tulsi is one of the most promising of all the plants and the fact is that it may eventually benefit every person on this planet.

Tulsi plant contributes to human health, plant nutrition and environmental conservation. It has a huge spectrum of pharmacological activities and great scope for further new area of investigations. Future researches on holy basil should be emphasized for the welfare & services of mankind.

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