

# A REVIEW OF MEDICAL AND AYURVEDIC USES OF TULSI

## Abstract

The Scientific name of Tulsi is *Ocimum sanctum*. It is a small fallow, braches, and full fill of medicinal herbs. Tulsi botanicals are not only Ayurvedic pharmaceuticals but also used in other medicines they have many good properties such as antibacterial, anticancer, antioxidant, immunoregulatory, etc. It is effective for reducing glucose levels in the blood. Therefore, it is useful for diabetic patients. All part of Tulsi is also used as medicine. "It is also called the queen of herbs" because it contains many nutrients and the leaf of Tulsi contains calcium, and magnesium ions in rich amounts. It also presents vitamins and proteins. The plants "tulsi" have great importance in "Indian culture". It has been used in India since the old times to prevent colds, fever, coughs, skin diseases, and digestive problems. The height and length of the Tulsi plant is usually 20-50 cm. It is mostly cultivated in Hindu houses and temples for worship.

**Keywords:** Tulsi, herbs, antioxidant, antifungal, pharmaceutical.

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## I. INTRODUCTION

In India, various plants are used for medicine. Since time immemorial plants have been used as medicine which are practically indigestible, they are safe, effective, and easily available. According to the botanical survey of India, India houses more than 8,000 species of medicinal plants. Such plants have been used since ancient times in recruitment culture, of which Tulsi is one.

The name of Tulsi comes from Sanskrit it means “The Matchless One.”<sup>(1)</sup> Tulsi is the one most holy plant, healthy and conventional medicine. It is also known as Vishnu-Priya. It has various possessions of Tulasi or tulsi such as antibacterial, antioxidant, natural immunity booster, and antipyretic.<sup>(2)</sup> Tulsi are divided from the secondary metabolite components including flavonoids and tannins.<sup>(3)(4)</sup> It plays traditional and ayurvedic and is also used as a biofertilizer. tulsi is one of those great wonder plants, it is also used in the natural material of the cosmetic industry.<sup>(5)</sup> *Ocimum sanctum* Linn is the scientific name of Tulsi.

### 1. Classification:

**Table 1:** Classification of *Ocimum sanctum* (Tulsi)<sup>(6)</sup>

<b><i>Kingdom</i></b>	<i>Plantae</i>
<b><i>Division</i></b>	<i>Magnoliophyta</i>
<b><i>Class</i></b>	<i>Magnoliopsida</i>
<b><i>Order</i></b>	<i>Lamiales</i>
<b><i>Family</i></b>	<i>Lamiaceae</i>
<b><i>Genus</i></b>	<i>Ocimum</i>
<b><i>Species</i></b>	<i>Ocimum sanctum</i>

### 2. Morphology:

*Ocimum sanctum* (Tulsi) belongs to the *Lamiaceae /Labiatae* family.

Height:-20-50cm

Leaves:-Green color (new leaf), pink (old leaf)

Leaf Length:- 2.5-5 cm long and 1.6-2.9 wide.<sup>(5)</sup>

Flower:-Purple

Branch:-Subshrub

Seed :-Reddish black

Cultivation:-India (majorly)

Nutlets :- Pale brown

### 3. Type of Tulsi<sup>(9)</sup> :

- Sri Ram Tulsi - green leaf
- Krishna Tulsi - purple leaf



**Table 2<sup>(10)(1)</sup>: Other Name of Tulsi in Different Indian Language**

S. no.	Language	State	Name
1.	Sanskrit	India	Tulsi, major
2.	Bengali	W. Bengal	Tulsi, kural
3.	Gujrati	Gujrat	Sabje, talsi
4.	Punjabi	Punjab	Tulsi
5.	Tamil	Tamil Nadu	Triuttizhai, Tiviragandam
6.	Manipuri	Manipur	Naoshek lei
7.	Odisha	Odisha	Karpura, dhalatulsi
8.	Kannada	Karnataka	Tulasia, karitulsi
9.	Marathi	Maharashtra	Sabja, Tulsa
10.	Nagpuri	Jharkhand	Tulsi

**Table 3<sup>(10)(1)</sup>: Other Name of Tulsi in International Language**

S. No.	Language	Region	Name
1.	Arabic	North Africa	Vasub, Dohsh
2.	Dutch	Netherlands	Baziel
3.	English	England	Sweetbasil
4.	French	France	Herbe royale
5.	Korean	Korea	Narukpul, yanggajuk
6.	Thai	Thailand	Horapa
7.	Khmer	Cambodia	Chetak, mareahproeu
8.	Chinese	China	Yu heungchoi
9.	Japanese	Japan	Kami-miboki, bajiru
10.	Italian	Italy	Basilico

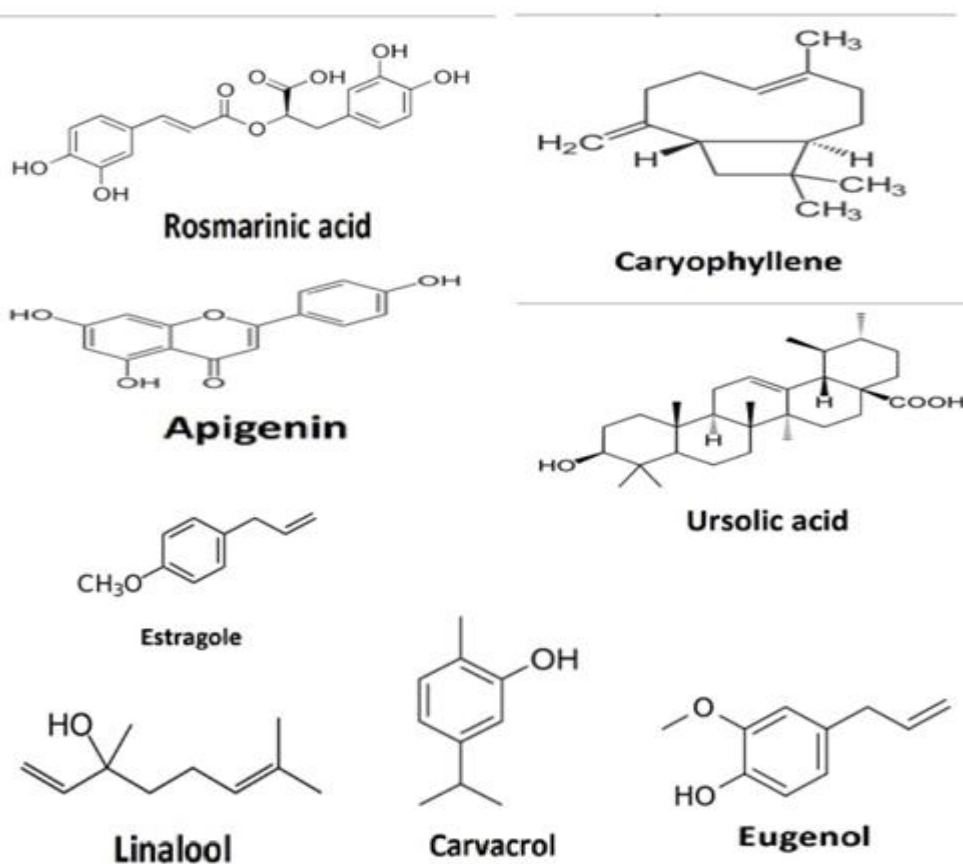
#### 4. Properties:

- The Ocimum sanctum test is the light or post-digestive effect.
- Seeds are oily and slimy and have cold potency. It is known effective in fevers <sup>(11)</sup>.

**Chemical Properties:** All medicinal properties of this plant for because of the essential oil and secondary metabolites that are present in its leaves and other parts of the tulsi plant. The major components of the tulsi plant such as Rosmerinic acid, Carnosic acid eugenol (57.82%)<sup>(12)</sup>, thymol (9.80%)<sup>(13)</sup>, vicenin, apigenin, methyl eugenol (20%), printing ( a form of flavonoids ) Beta-Caryophyllene (3.03%),p-Cymene(2.11%) and Cis beta Guaieno (1.06%)<sup>(14)</sup> are present in large quantity and main components: Caryophyllene oxide (0.82%), germacrene D –Farnese (0.39%), and mycrene (0.34%) are in low amounts. The nutritional composition of tulsi has been investigated. <sup>(15)</sup> Mucilage polysaccharides and bets sitosterol and linoleic acid are obtained and they are present in the seed oil of this plant. (16)

**Flavonoids:** They contain methoxy flavonoids and cirsimartin and orientin (that are components of glycosides) of the OG (Ocimum gratissimim\ Ocimum sanctum ) plants. <sup>(17)</sup>

#### 5. Stucture of Some Component <sup>(18)</sup>:



## 6. Uses of Tulsi:

- **Traditional Uses:** The plant of tulsi has much traditional importance in INDIA but apart from that it also has many medicinal benefits. That is why it is worshiped by all castes in Sanatan dharma<sup>(19)</sup>.

It is believed that Tulsi never gets contaminated, so it is used to purify the home and remove impurities and negative energy/ vibrations.

The Tulsi leaves are used in worship to make the charan-amrit and get blessings. This charna-amrit is consumed by the devotees. Also, it is still used for medical purposes in many villages of INDIA From very old times.

**For Example:** Even today in many homes Tulsi leaves are used to make tea. In a cough, cold, or viral infection, a tea or decoction of Tulsi leaves is drunk.

- **Industrial Uses:** Tulsi is a very broad-spectrum antimicrobial activity, which includes activity against a range of human and animal pathogens, but suggests it can be used to make a hand sanitizer, mouthwash, and water cleaner as well as preservation of food and herbal raw materials<sup>(20)</sup>.
- **Pharmaceutical Uses:** In the modern age various products of tulsi are easily available in the market, which are uses of ayurvedic medicines. This type of medicine is very useful has no side effects, and is used for the treatment of various diseases<sup>(21)</sup>. People like it, because of its familiar characteristics and they are easily available in the market and our neighboring around<sup>(22)</sup>.

## 7. Pharmacological Activity:

- **Anticancer Activity:** Various plants are used as a potential source of anticancer and antitumor properties in Ayurveda. This type of plant has some special signification reduction in tumor cells.<sup>(23)</sup>
- **Antibacterial Activity:** The plant of Tulsi has also antibacterial properties so it is used for the aqueous, alcoholic, chloroform, and oil extraction from leaves of the Tulsi plant. The extract obtained from *O. sanctum* was observed to be effective against pathogens<sup>(24)</sup>.
- **Antioxidant Properties:** The chemical composition of Tulsi has Carvacrol and terpene, which is a powerful antioxidant<sup>(25)</sup>.

## 8. Medicinal Uses:

- **Immunomodulatory:** Increase RBC, WBC, Hemoglobin, and antibody production without affecting other biochemical activities when tested in mice<sup>(26)</sup>.

- **Memory Enhancer:** It was reported that the inactive resident was used to access memory<sup>(27)</sup>. It has some immune modulators in the body that stabilize maintain and recover our immune system<sup>(28)</sup>.
- **Eye Disorder:** Juice of tulsi is a good home remedy for eye pain and night blindness, a condition often caused by a deficiency of vitamin A. Tulsi oil with honey also improves our eyesight.<sup>(29)(30)</sup> This juice uses two drops on your eyes every day at night.
- **Immuno-Modulator:** Tulsi is a great immune booster that prevents external substances such as pathogens, allergies, viruses, etc.<sup>(31)</sup>

## II. CONCLUSION

The plant Tulsi which is traditionally used in INDIA with some cultural values and also for some medicinal purposes, has multiple benefits currently we can't know all the facts and importance about this plant and we can't identify all the chemical compounds present in this plant.

So that we have more useful medicinal benefits as well as some more uses in our life make our lives better and healthier. it can be used as a replacement for tea due to it having a beneficiary effect but tea has some harmful compounds like nicotine and some unknown compounds.

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