

A BRIEF REVIEW ON: INDIAN TRADITIONAL SHRUB TULSI (OCIMUM SANCTUM) : THE UNIQUE MEDICINAL PLANT

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Abstract: Tulsi plant belonging the family “LAMIACEAE”. The binomial name of tulsi is “OCIMUM SANCTUM linn. Tulsi are helpful in various diseases and treatments. The leaves and seeds of Tulsi plant are used to treat cough cold fever. The properties of Tulsi plant is anti- inflammatory, anti-oxidant, anti-microbial, insect repellent. The Tulsi are used in various diseases but disadvantage of Tulsi is (Chemical constituents) the overdose of chemical present in Tulsi they are affect the reproductive health of male as well as female. morphology- the Tulsi has branched stem usually in purple colour, height of plant is about 35-70cm. In the mythology the Indians particularly the Hindus believe the Tulsi to be the “mother of universe”.

Holy basil found in most of countries like India, Bangladesh, West Asia, China, Malaysia, Thailand, etc. The Tulsi plant is used in Indian traditional system.

Keywords: OCIMUM SANCTUM, MORPHOLOGY, TAXONOMY, MYTHOLOGY, ANTI-INFLAMMATORY, ANTI-OXIDANT, ANTI-BACTERIAL, TULSI.

INTRODUCTION:

Tulsi is an aromatic shrub in the basil family lamiaceae that is thought to have originated in North central India and now grown native throughout the eastern world topics.

This plant is grown in all over India for its medicinal as well as for religious purposes in houses, temples, and garden's. This plant are used in the Indian traditional system of medicine that is Ayurveda, Unani, Siddha, and Asian folk medicine in india. Tulsi has been used in thousands of year for its diverse healing properties.

Tulsi leaves are helpful in to treat the diseases like bronchitis, influenza, and asthma. This plant are provide oxygen in high quantity than compare to others plants. In the rainy season, the Tulsi leaves are highly beneficial when the diseases like malaria, and dengue occurs. The best remedy for bringing down the fever is by extraction the juices from the leaves of the Holy Basil.

Holy Basil found in the most of countries like India, Balangladesh, srilanka, south west Asia, china, Thailand, and malaysia.

Tulsi leaves used for consumption as tea and wood, seeds are used to make the garland which is the string of beads used to help in meditation, focusing of mind and the spirit.

CLASSIFICATION

Genus Ocimum has various species

- Ocimum sanctum Linn (Tulsi)

- *Ocimum grtissium* (Ram Tulsi)
- *Ocimum canum* (Dulal Tulsi)
- *Ocimum bascillicum* (Ban Tulsi)
- *Ocimum kilimandschricum*
- *Ocimum americanum*

TAXONOMY

- Kingdom – Plantae
- Division – Magnoliophyta
- Class – Magnoliopsida
- Order – Lamiales
- Family – Lamiaceae
- Genus – *Ocimum*
- Species – *Sanctum*
- Binomial name – *Ocimum sanctum* Linn

VERNACULAR NAMES

- Hindu – Kalatulasi, Tulasi
- Kannada– Vishnu Tulasi, Kari Tulasi, Sri Tulasi, Tulashigida
- English – Holy Basil
- Malayalam –Tulasi, Trttavu Karuttarttavu, NiellaTirtua,

Shiva Tulasi

- Telugu– Tulasi, Gaggera Chettu
- Tamil – Tulaci, Karuttulaci
- Bengali –Tulasi, Krishna Tulshi
- Gujarati – Tulasi, Talasi
- Punjab –BanTulsi, Tulsi
- Marathi– Tulasa, Tulasi
- Konkani– Tulsi

TULSI – MYTHOLOGY IN INDIA

Indians, particularly the Hindus believe the Tulsi to be the “Mother of the Universe”. The Hindu scriptures respect Tulsi as the Mother who protects her children from the evils of the world. A Hindu family is often found to have planted Tulsi in their garden as it is believed that Lord Vishnu resides in the house that houses a Tulsi plant. It is worshipped for its might and disease, poverty, ailment and any kind of suffering is kept away from a family that has grown a Tulsi in its premises. Naturally, no Hindu puja, marriage, or a sacred event of any form goes without the presence of Tulsi. Hindus regard it as an earthly manifestation of the goddess Tulsi; she is regarded as the avatar of Lakshmi, and thus the consort of God Vishnu. According to some mythological stories, it was said that Tulsi is actually an ardent lover of Krishna whom Radha has cursed to be a plant. In Hindus another name of Tulsi is Vrinda.

MORPHOLOGY:

Tulsi (Holy Basil) has a branched stem usually in purple colour, 35-70 cm in height, sub quadrangular, clothed with soft spreading hair. The leaves of Tulsi are 1.7–3.3 cm broad, 2.5–5 cm long, acute obtuse or oblong, elliptical, margin serrate; the surface is pubescent on both the sides, gland-dotted, the base is acute or obtuse, petioles are 1.3–2.5, slender is long, hairy. The flower forms the verticillate inflorescence, generally 15-20 cm present in racemes. The bracts are long and broad and have a 3mm diameter, broadly ovate; slender calyx, pubescent, bilabiate, the upper lip is smaller than the lower lip. Corolla is purple and 4mm, bilabiate upper lip pubescent on the back. Stamens are exerted, slender filaments and the upper pair is a small appendage consisting of a branch present at the base. The nutlets are smooth, yellow with black marking, broadly ellipsoid and 1.26 mm long. Seeds are brownish. The taste is sharp, having a strong aromatic odour. The family of Lamiaceae consists of Tulsi, which belongs to the Basil genus. Tulsi is an aromatic plant widely spread throughout the world as a cultivated plant and an escaped weed. The plant consists of green leaves which have a strong scent. The flowers in racemes have a purple appearance in close whorls. In India and Nepal, mainly two morphotypes are cultivated: green-leaved and purple-leaved.

ADVANTAGES OF PHYTOCONSTITUENT OF TULSI:

In Tulsi, Apigenin has neurogenesis stimulating activity.

Bisabolol has perfumery wound healing, anti-inflammatory, antimicrobial, anti-irritant, and anti-cancer activity.

Borneol has insect repellent activity due to the essential oils in Tulsi. Coffee acid also has anti-cancer, antioxidant, and antifungal activity.

The presence of calamine shows dermatological activity.

Tulsi is also used as an anticoagulant, sunscreen cream, and medicine diagnostic due to the presence of Esculetin.

DISADVANTAGE OF CONSTITUENTS IN TULSI:

The overdose of Tulsi and its products affects the reproductive health of both males and females.

The effects of this are low weight in testes, mortality of sperm and cause a reduction in sperm count.

It is also observed that there is an antiestrogenic activity.

The side effects in females cause contraction, which leads to abortion in pregnant women. It also affects lactation.

Females also observe cramps, backache, diarrhoea, bleeding, etc.

The scientific studies include the acute side effects of Tulsi, i.e., lead poisoning, dental problems due to lead, hypoglycemia, prolonged bleeding times thin blood etc. It is hepatotoxic

PHARMACOLOGICAL ACTIVITY:

• ANTI-OXIDANT:

• In OCIMUM SANCTUM Linn. (Tulsi). By using standard anti-oxidant ascorbic acid, the antioxidant activities were compared oxidation is necessary for several living organisms. Free radicals possess one or more unpaired electron leading to caustions of several diseases.

• DNA and carbohydrates are mainly required for life, these may destruct from the reactive species. Due to this reason, various disorders such as cirrhosis, cancer, diabetes, etc. Hence anti-oxidant prevent the destruction of reactive oxygen species in the human body against the free radicals, which distroy the liver microorganisms enhance the dismutase property and supress the lipid preoxidation, primary the antioxidant activities ascorbic acid.

ANTIMICROBIAL ACTIVITY: • Holy Basil or OCIMUM SANCTUM has been investigated to possess the anti-microbial activity as well as various other activities like (anti-oxidant, analgesic, antipyretic, antiinflammatory, etc.) Tulsi plant has the property to inhabit the growth of pathogenic microbes such as bacteria, fungus and viruses. The aqueous extract seed, oil, and alcoholic extract of SANCTUM exhibited anti- microbial properties against pathogen, bacteria, and microbes. • Tulsi extract and essential oil is effective against gram positive and gram negative bacteria. Tulsi seed oil is very helpful to kill pathogen. The Tulsi seed, oil are showing activity

CONCLUSION:

• In OCIMUM SANCTUM (Tulsi) plant these are all medicinal properties make Tulsi an unquestionable requirement for a more serene life after in depth and specific reasearch. It has been proven that it is safe to consume for human body or animals. Tulsi protect from many modern and traditional health related disorders like radiation, stress, cancer, diabetes, ageing, and. Various infection in human beings. In Tulsi plant many properties are present like this anti-oxidant and anti-microbial. The Tulsi are used as flavouring agent as well as nutritional property are present. The Tulsi plant provide high quantity oxygen in compare to others plants. It also helps in reduce the pollution in environment and supply the oxygen.

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