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Review Article

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# AN INCREDIABLE HERB; TULSI (OCIMUM SANCTUM LINN)

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#### **ABSTARCT**

The present review article focus is on Tulsi (ocimum sanctum linn). This plant belonging to labiates family and characterized by square stem and specific aroma. Tilsi is Sanskrit word which means "matchless one "it has several medicinal properties and therapeutic use. These properties are present in roots, leaves and seeds which has wide range of action on human body. It heals many diseases chronically due to its chemical constituents. It also passes anti – aging and immuno modulatory property.

#### INTRODUCTION

Plants are one of the most important source of medicines among them ocimum species belonging to the family Lamicease are very important

for their thearapeutic potentionals. Ocimum sanctum linn (tulsi), o. gratissinum linn.(ram tulsi). O.canum sinus (dulal tulsi) o.basilicum (Ban tulsi), o americanum linn (hoary basil) and o.micranthum wild. Are examples of known important species- among them holy basil, ocimum sanctum has been well documented for its therapeutic potentional. holy basil has a rich and fanciful history known since the vedic – age for its immense curative and multipurpose utility. it has been the "herb royale" to the French, a sign of love by Italians and scared herb in India.

Tulsi is Sanskrit word which means "matchless one". Tulsi queen of herbs, the legendary "Incomparable one" is one of the holiest and most cherished of the many healing and health – giving herbs distributed mainly in the oriental region. 3.

#### Khanapurkar et al.

#### World Journal of Pharmaceutical Research

#### MATERIAL METHOD

1) Taxonomy Kingdom: plantae

Division: magnoliophyta

Class:magnolipsida

Order:lamiates

Family:labiatae

Genus:ocimum

Species: sanctum

# 2) Morphology

It is erect, branched fragmented shrub with the height of about 30-6- cm when mature. Its leaves are simple, aromatic, branched, opposite, obtuse, elliptical and have dentae margins. They are up to 5 cm long. Flowers are elongate raceme in close whorls and purple I color seeds are radish yellow and frits are small. It is planted after rainy season and harvested after few month.

3) Pharmacognistic study: it sis much branched small herb and 30 to 75 in height. All parts of tulsi are used in medicine, especially fresh and dried leaves. leaves are oblong acute with entire or serrate margin, pubscent on both sides and minutely glamd- dotted. The leaves are green in color with aromatic flavor and slightly pungent taste flowers are purplish in color in the form of racemes. nutlets are subglobose, slightly compressed, pale brown or red in color, seeds are reddish—black and subglobose.2

Phytochemical present in tulsi

- 1. Fixed oil linoleic acid, oleic acid, palmatric acid,
- 2. Mineral content vit-c, calcium, copper,
- 3. Essentional oil- aromadendrene oxide, borneol, camphor leaves
- 4. Alcoholic extract aesculin, apgenin, gallicauid leaves, areal plant

#### Cultivation

Tulsi grows in tropical and warm regions. plant is originated in india and is distributed and cultivated throughtout the country – it is cultivate up to 1800m above the sea level.

## Types of tulsi

1. Tulsi plant with green leaves known Ram Tulsi.

2. Tulsi plant with purple leaves known as Krishna Tulsi.

#### **Habitat**

*Ocimum sanctum* is native to India, Iran and now cultivation in Egypt, France, Italy USA. Basil is naturally found wild in tropical and sub torpical regions of the world. Basil is an aromatic, low growing herb the leaves of which have a bright green to purple ovate color and is grown in warm tropical climate.

# **Medicinal Properties**

1. Hypoglycaemic and hypolipidemic activity.

O sanctum has numerous pharmacological activities. Oral administration of alcoholic extract of leaves led to marked lowering blood sugar level in normal, glucose fed hyperglycaemic and streptozotocin induced rats.

# 2. Immunomodulatory activity.

The seed oil can modulate both humoral and cell mediated immunae responsiveness and these immunomodulatory effects may be mediated by GABAergic pathways.

#### 3. Antimicrobial activity

The narroweast spectrum of antimicrobial activity was observed in o. sanctum. the crude aqueous extract of leaf possesses some antibacterial and immunodulatory active principles. *Neisseria gonorrhoeae* clinical isolates and WHO strains were found to be sensitive to extracts.

# 4. Anti ulcer activity

Holy basil reported to posses potent anti ulcerogenic as well as ulcer healing properties. And it is due to its ability to reduce acid secreation properties.

## 5. Anti-oxidant activity

It has significant ability to scavenge highly reactive free radicals. Anti oxidant bioassay directed extraction of fresh leaves and stems of *Tulsi*.

# 6. Anti –inflammatory activity

Gas liquid chromatographic analysis of fixed oil of o.sanctum revealed the presence of five fatty acids(stearic, palmitic, oleic, linoleic and linolenic acid.).

# 7. Antistress activity

Treatment of animals with ethanol extract prevents the changesin plasma level of corticosterone induced by exposure to both acute and chronic noise stress, indicating antistress property.

# 8. Chemoprotective and radioprotective activity

Oral treatment with the leaf extract significantly elevated the activities of cytochrome p-450in liver, all of which are important in det.

#### **CONCLUSION**

Tulsi has been widely used for curing various ailments due to its great therapeutic potentional. A number of pharmacological effects like hypoglycemic, immunomodulatory, antistress, anti-inflammatory, anti carcinogenic will help to increase immune deffence mechanisam of our body. However more work is needed to proves his potentional.

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