Tulsi Holy Basil

The "Queen of Herbs" in Ayurveda, TCM and Homeopathy

Ryder Management Inc.



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By Ryder Management Inc.

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In order to facilitate assisting others with information respecting alternatives in health care, this book introduces another very important and cherished medicinal herb used for over five thousand years in Ayurveda medicine. The publisher has made every effort possible to ensure that the information contained in this book is accurate, complete and up to date at press time. However, the publisher, under advisement, does not assume and hereby disclaims any liability to any party for any loss, damager or disruption caused by errors or omissions, whether such errors or omissions result from negligence, accident or any other cause.

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Introduction

Ayurvedic or Ayurveda medicine is a system of natural healing originating in India over five thousand years ago. Often called the "*Mother of All Healing*", Ayurveda actually means "the Science of Life". Both Tibetan medicine and Traditional Chinese Medicine (TCM) have their roots in Ayurveda, as does Homeopathy practices in the West. In addition, early Greek medicine also includes concepts taken from Ayurvedic texts dating back thousands of years.

Ayurvedic healing includes, but is not limited to the use of herbs, nutrition and body detoxification and cleansing. Ayurvedic practice seeks to restore an balance and harmony in the body, which then enables the body to heal itself thus promoting health and longevity.

Western allopathic medicine tends to focus on symptoms and disease and uses drugs and surgery as a method of removing pathogens and diseased tissues (including organs) from the body. Unfortunately, due to the toxic nature inherent in pharmaceutical drugs, more often than note, this method of treatment has a tendency to weaken the body's immune system.

An important goal of Ayurveda is to identify a person's ideal state of balance, determine if and where a person is out of balance and subsequently provide a combination of herbs, diet and other forms of natural therapies with the aim at restoring balance, to regain optimal health and vitality.

Used in Ayurveda medicine for thousands of years this herb, referred to as "the Queen of Herbs" called Tulsi Holy Basil (or Tulsi, or Holy Basil) is one of India's most sacred herbs due to its distinct healing abilities. While basil is found

throughout the world, **Tulsi Holy Basil** is indigenous to the Indian subcontinent and is the topic of this book.

History



Tulsi, also spelled Tulasi, has been cultivated in India for over five thousand years (as already mentioned) and has been included in key historical documents including the *Rigveda* ("Book of Eternal Knowledge") believed to have been developed around 5,000 BC; an early text on traditional Indian medicine known as "Caraka Samhita" (discovered around 1500 BC); along with the *Nighantu Adarsha*, another historic medical text. In all cases, it was found that Tulsi was one of the top medicinal herbs used in ancient times.

The Holy Basil plant, believed to protect against misfortune as well as an aide to the heavens, and many **traditional** Hindu homes display a holy basil plant in their garden or planted in an earthenware pot also prominently displayed.

This plant represents harmony, serenity, purity and good fortune and due to its spiritual significance, holy basil roots are used in Hindu rosary beads on which they count the number of recitations of their deity's name. This plant also has a history in traditional Hindu weddings and

funerals. The Tulsi plant is thought to open the heart and mind, and bestow love, compassion, faith and devotion. (tulsiplant.org)

In addition to religion, culture and medicinal uses, Tulsi is highly regarded in the culinary industry due to its aroma, taste and nutritional value. This plant can be prepared as a calming tea or a thirst-quenching juice – both of which are rich in aroma and flavor and stimulating, healthy nutritional benefits.

Tulsi Varieties

Holy Basil belongs to the genus Ocimum in the Lamiaceae or mint family. Ocimum is a genus which includes many species of both perennial and annual herbs and shrubs. There are three distinct varieties of Tulsi as follows:

Rama Tulsi (Ocimum sanctum or tenuiflorum);

Krishna or Shyama Tulsi (Ocimum tenuiflorum or sanctum);

Vana Tulsi (Ocimum gratissimum).

Sweet basil is scientifically known as Ocimum basilicum, also contains many powerful benefits but won't be discussed in this book.

Although each of the above varieties have specific use in ayurveda, it is Rama and Krishna (both related) thought to be used the most for medicinal purposes. However, recent studies show Vana (Ocimum Gratissimum) as and effective treatment for breast cancer.

The parts of the plant generally used include the leaves, seeds and dried roots.

In all varieties, Tulsi is a bushy shrub that grows to about 18 inches in height. Its leaves are oval and serrated with colors ranging from light green to dark purple, depending on the variety. In the wild, Tulsi is an annual but it can be kept as a perennial by trimming it before the seeds or formed.

Rama Tulsi (Ocimum sanctum)



Rama Tulsi, also known as *Green Leaf Tulsi* is a short annual, heavily flowered variety of Tulsi and was the variety originally introduced to North America. Known for its mellow and somewhat cooling taste, Rama Tulsi has a stronger fragrance than the other varieties of Tulsi Holy Basil. Rama is the most common type found in North America, it is also found in China, Nepal, Brazil and India.

Krishna Tulsi (Ocimum Tenuiflorum)



Krishna Tulsi, also known as *Shyam or Purple Leaf Tulsi* has a distinct peppery, sharp taste. It also has a purple tinge to its darker colored leaves. This variety tested highest in concentrations of **adaptogenic triterpenoic** compounds.

Vana Tulsi (Ocimum gratissimum)



Vana Tulsi is thought to be the original bush basil and the original great adaptogen. It is very high in eugenol which is an essential oil also found in cloves. Eugenol has many uses including dentistry, perfume, and medicine. This variety is found in the Himalayas, throughout the plains of India, and throughout Africa and Asia.

Medicinal Qualities

Tulsi Holy Basil is loaded with antioxidants, which are powerful nutrients that protect the body from free radicals and preventing oxidative cell damage. Free radicals are reactive molecules that steal electrons from the body. It is becoming common knowledge that antioxidants play a key role in maintaining health along with reducing the risk of all sorts of disorders including heart disease, Alzheimer's, Parkinson's, cancer and may even slow down the aging process.

Tulsi's unique chemistry is very complex but offers benefits considered beyond that offered from other herbs. Tulsi contains hundreds of phytochemicals containing health-promoting properties.

The synergies offered by the phytochemicals found in Holy basil contain potent antioxidant, adaptogenic and immune enhancing benefits that fight stress, promote better health and also the following:

Supports and builds immune system;

Improves digestive system, boosts healthy metabolism;

Increases sense of calm as it relieves stress due to its adaptogenic properties;

Contains anti-aging properties;

Helps maintain normal blood sugar levels;

Skeletal joint support;

Helps to maintain normal cholesterol levels;

Relieves insect bites;

Treats ringworm and other skin disorders;

Anti-parasitic;

Fights malaria and various forms of poisoning;

Enhances stamina and stimulates energy;

Mood stabilizer.

Specific Health Benefits of Tulsi

Tulsi Holy Basil is a known herbal remedy used to treat a plethora of ailments and disorders. The leaves are used as a tonic for nerves, as an agent to strengthen the stomach and rid toxins from the body. The following includes other uses:

Chewing the leaves of Tulsi can cure many types of fevers. Boiling the tender leaves in water can prevent malaria and dengue fever (a virus that is the leading cause of death in the tropics and subtropics); a decoction of Tulsi leaves gently boiled in two cups of water mixed with cardamom powder, milk and honey can reduce the body's temperature associated with a high fever.

As a germicidal agent and disinfectant, Tulsi protects against many forms of viral infections.

Cough and Respiratory Ailments: Chewing Tulsi leaves helps fight coughs and flu and mobilizes bronchitis and asthma attacks. A decoction of leaves, honey and ginger is a remedy effective against bronchitis, asthma, colds and flu and a decoction of leaves, cloves and Himalayan pink salt also relieves flu symptoms. Sipping and/or gargling Tulsi leaves gently boiled in water can help relieve the discomforts of sore throats. Tulsi is an important ingredient in cough syrups and expectorants.

Kidney Stones:

Tulsi leaves have a strengthening effect on the kidneys and therefore, drinking juiced Tulsi leaves mixed with honey can effectively remove renal stones throughout the urinary tract. Since Tulsi is a detoxifying agent, it can assist in reducing uric acid levels, the cause of kidney stones.

Heart Disorders:

Tulsi contains Vitamin C and other anti-oxidants such as eugenol, and camphene, and is very beneficial in fighting heart disease and the associated weakness it causes. Studies also show that the eugenol component can block the activity of an COX enzyme in the body. Many over the counter NSAIDS medications including aspirin, ibuprofen and acetaminophen also work by inhibiting this same enzyme. Since Holy Basil has this same, albeit safer, enzyme inhibiting effect, it qualifies Holy Basil as a very important "anti-inflammatory" Tulsi can also reduce cholesterol levels and blood pressure and protect the heart from harmful free radicals.

Teeth Disorders:

Powdered Tulsi leaves can be used to clean teeth, as a mouthwash and to relieve toothaches. In addition, mixing Tulsi with mustard oil acts as an effective toothpaste and rubbing this paste on gums can help with inflammation. Using Tulsi in this way helps to promote gum health, counteract breath odor and can even help with more serious periodontal disease. Tulsi, as an oral disinfectant and destroys almost 100% of germs and bacterial found in the mouth. The leaves are also effective as a remedy for oral ulcers.

Anti-cancer:

Neutralizes bio-chemicals known to contribute to cancer, Tulsi also restricts the blood vessels that feed tumors. It also inhibits the growth in oral cancer caused by tobacco.

Headache:

Powdered leaves mixed with sandalwood to form a paste and applied to the forehead is an effective relief from

headaches.

Eye Disorders:

Juicing Tulsi leaves is an effective remedy for night blindness and sore eyes. The effectiveness of two drops of this juice has the ability of soothing the eyes and even reducing stress. This remedy also protects the eyes from conjunctivitis (pink eye) and other problems caused by bacterial or fungal infections. Another remedy to help in these matters includes washing the eyes with water in which Tulsi leaves have been soaked.

Stomach Disorders:

Tulsi leaves also cures problems caused by acidity, constipation and flatulence. Tulsi can also remedy digestive disorders and bloating and can help those suffering from a lack of appetite that causes vomiting.

Diabetes:

Tulsi, as with many herbs, helps control blood sugar levels.

Aid in Quitting Smoking:

Tulsi juice cools the throat similar to mint drops. Chewing the leaves acts by distracting from the need to smoke and therefore, it is recommended to keep fresh leaves available to chew on whenever the urge to smoke is strong. The anti-oxidants helps undo years of damage caused by smoking.

Skin Disorders:

Whether applying a paste to the face or eating raw leaves, Tulsi is very beneficial for the skin. When eaten raw, it purifies the blood from toxins and helps prevent acne. A toner made from boiling Tulsi leaves in water and applied to

the face after cooling for 15 minutes helps to eliminate acne and provides a glow to the skin.

Liver Support

Improves the metabolic breakdown and elimination of toxic chemicals in the blood, and therefore counteracts various liver disorders and contributes to a healthy functioning liver.

Childhood Ailments and Diseases:

Tulsi juice given to children is an effective remedy for cough, colds, diarrhea and vomiting. Holy Basil leaves gently boiled and mixed with honey is effective with keeping chicken pox at bay too. Warmed Tulsi juice is an effective remedy in ridding the stomach of worms.

Nutrition

Contains vitamins C and A, along with iron, zinc, calcium and chlorophyll and many other phytonutrients, Tulsi enhances an efficient digestive system while promoting so many other benefits.

Precautions

Research shows a very high safety margin and very low toxicity with no known undesirable adverse reactions. However, moderation is the key if pregnant or nursing.

Results from Clinical Studies

Tulsi leaves offer a rich supply of essential oils including eugenol, nerol, camphor and a variety of terpenes and flavonoids. The oil is a strong antiseptic agent against many disease-causing organisms including bacteria, fungi and parasites. The oil is also an antioxidant used in pain and arthritis relief. Recent scientific studies have confirmed its healing abilities in numerous health conditions that include cancer, diabetes and heart disease, the leading cause of death in the western world. Furthermore, Tulsi contains antibiotic compounds that show a lowering effect on blood pressure.

The flavonoids found in Holy Basil can protection at the cellular level. Specifically, two water soluble flavonoids found in Tulsi- orientin and vicenin protect cell structures and protects chromosomes from radiation and oxygen-based damage. A number of studies on animals have shown that Tulsi protects healthy cells from the toxicity associated with chemotherapy and radiation. Studies also shown that Tulsi influences have neurochemistry of the brain similar to antidepressant meds without the harmful toxic effects prevalent pharmaceutical medications.

In a February, 2004 issue of Food Microbiology, studies have shown that washing produce in a solution containing either basil or thyme essential oil, at a very low concentration of 1%, resulted in a significant drop in infectious bacteria that can trigger intestinal damage. This study should certainly encourage adding fresh thyme or basil to a vinaigrette that, not only will enhance the flavor of salads, but ensures that it is safe to consume.

In 2005 at Assam Medical College and Hospital in India, studies have shown the leaves of Tulsi (Ocimum sanctum) to have highly significant hepatoprotective properties. The motivation for the study was a desire to identify reliable hepatoprotective drugs and agents for use in modern medicine to prevent and treat drug induced liver damage similar to that caused by acetaminophen.

According to a published statement on June 3, 2013 from Wayne State University, "In the realm of biotherapeutics and natural plant therapy, holy basil could be the next big breakthrough in the field's bustling anticancer movement." This came about after researchers showed that Tulsi Holy Basil inhibited the growth of human breast carcinoma cells. More specifically, the study showed that "the herb inhibits the degrading enzyme responsible for facilitating breast cancer invasion and metastasis to other parts of the body."

Researchers from Rajasthan University in India have discovered that the Tulsi plant is able to significantly reduce the amount of fluoride in drinking water. The researchers soaked 75 mg of Tulsi leaves in 100 ml of water that contained 7.4 parts per million of fluoride in the water. After only soaking the Tulsi leaves for eight hours, it was discovered that the level of fluoride in the water was reduced from 7.4 parts per million to only 1.1 parts per million. http://www.realfarmacy.com/tulsi-plant-found-to-remove-fluoride-from-water/#BaoJ8gPeyzDoJPe3.99

Growing Tulsi Holy Basil



Tulsi Holy Basil is from the Lamiaceae family that also includes mint and lemon balm.

All basils are tender herbs that prefer daytime temperatures between 25 – 30 degrees Celsius. Since basil is unable to survive frost, nighttime temperatures above 12 degrees Celsius is required for its survival.

Tulsi can be started indoors on a sunny windowsill beginning in late February or outdoors in containers or directly in the garden from late March onwards. Tulsi requires a significant amount of full sun for approximately six to eight hours per day for optimal growth and the plants should be located in a position sheltered from cold winds.

Once the plants are established, they require very little care. When this herb flowers, its leaves produce more of a bitter taste. Therefore, to avoid this bitter taste in the leaves, it is necessary to pinch or remove the flowers on a regular basis. After the plant is established, the leaves can be lightly harvested.

Basil takes around 80 days to flower. To extend its growing period at that time, it is recommended to remove

about two thirds of the plant, leaving just enough for regeneration. Dry or freeze excess leaves and sow another batch of seeds to provide a continual supply of Holy Basil leaves.

Many gardeners prefer to freeze the herb, rather than dry it in order to preserve the flavor and color. One can strip clean and freeze the leaves on baking sheets before transferring them to bags. Alternatively, chop the leaves with olive oil and freeze in bags. You can also process the leaves with olive oil or a little water and initially freeze in ice cube trays prior to transferring them to bags.

Conclusion

In Sanskrit, Tulsi means "the incomparable one" and with all it can do, it would be hard to disagree with this definition. As a plant indigenous to the subcontinent of India, this sacred herb is termed the "Queen of Herbs" as this feminine plant is regarded with high esteem.

Tulsi's active constituents include eugenol, (numerous applications in dentistry, medicine perfume and flavor industries), cinnamyl acetate (flavor and fragrant agents) and beta-elemene (constituent occurring in citrus fruits and curcuma found in ginger root).

The pungent scent and strong flavor of Tulsi, is a clue to suggesting that this plant contains more than just garnish appeal. The volatile chemical compounds responsible for these appealing culinary characteristics play an important role in its biochemical activity.

Holy Basil is valued for its versatility in helping to restore and promote health. Its beneficial effects are found across a number of categories of medicinal activities including, but not limited to anti-carcinic, anti-stress, anti-lipidemic, anti-diabetic and glycemic lowering properties. It also offers hepatoprotective effects including prevention of drug induced liver damage.

Tulsi Holy Basil has FDA's "GRAS" status applicable in the United States ("generally recognized as safe").

It is long overdue that Western medical perspectives revisit the importance of previously unexplored or prematurely rejected traditional holistic treatments and perspectives practiced for thousands of years in the east. Despite these centuries of empirical use, substantial

accepted methods of scientifically proving the value of the Tulsi Holy Basil plant continue.

A number of varieties of Holy Basil tea is now available in North America-including online at Amazon. In addition to tea, other ways of obtaining the health healing activities are in capsule or tincture formats, all of which can be found online at Amazon. Please do ensure, as with all food products, you choose organic.

Tulsi Holy Basil Recipes

Tulsi Chai Tea

½ cup of Holy Basil leaves

2 cups of cold water

Two heaping teaspoons of green tea

Seed of one cardamom pods

One 1/4-inch thick slice of ginger

One 2-inch piece of cinnamon stick

Two whole cloves

Pinch of nutmeg

1 Tablespoon of honey

Milk to taste

In a small saucepan, boil Tulsi and water. Reduce heat, cover and simmer for three minutes. Stir in tea, spices and honey and bring to a slight boil then remove from heat. Cover and steep for three minutes. Pour mixture through fine mesh strainer and serve with milk.

Single Tulsi Chai (variation on above tea)

One clove

1 tsp black pepper

1 tsp ginger powder

Five leaves of Tulsi

2 cups of water

1 tsp honey

1/4 tsp ghee

Combine all in a small saucepan and boil for 3-4 minutes until reduced to one cup. Serve with Tulsi leaves.

Nutritional Composition of Tulsi Holy Basil per 100 Grams

Compound		RDA
Energy	23 Kcal	1%
Carbohydrates	2.65 g	2%
Protein	3.15 g	6%
Total Fat	0.64 g	2%
Cholesterol	0 mg	0%
Dietary Fiber	1.60 g	4%
Folates	68 µg	17%
Niacin	0.902 mg	6%
Pantothenic acid	0.209 mg	4%
Pyridoxine	0.155 mg	12%
Riboflavin	0.076 mg	6%
Thiamin	0.034 mg	2.5%
Vitamin A	5275 IU	175%
Vitamin C	18 mg	30%
Vitamin E	0.80 mg	5%
Vitamin K	414.8 μg	345%
Sodium	4 mg	0%
Potassium	295 mg	6%
Calcium	177 mg	18%
Copper	385 mg	43%
Iron	3.17 mg	40%
Magnesium	64 mg	16%
Manganese	1.15 mg	57%
Zinc	0.81 mg	7%
Carotene-ß	3142 µg	_
Crypto-xanthin-ß	46 μg	_
_utein-zeaxanthin	5650 μg	-

Bio-piracy and Holy Basil

It is horrifying to learn that certain corporations in the west will claim that not enough scientific proof exists regarding the efficacy of Tulsi Holy Basil, on the one hand yet, - on the other hand, they aggressively pursue patenting this same plant for their invention of a "novel high herb yielding essential oil" – naming eugenol.

The following is a direct quotation from the United States Patent Office

 $\frac{http://appft1.uspto.gov/netacgi/nph-arser?}{Sect1=PTO1\&Sect2=HITOFF\&d=PG01\&p=1\&u=/netahtml/PTO/srchnum.html\&r=1\&f=G\&l=50\&s1=20050091705.PGNR$

"United States Patent Application 20050091705

Kind Code A1

Lal, Raj Kishori; et al. April 28, 2005

High essential oil and eugenol yielding cultivar of Ocimum sanctum 'CIM-AYU'

Abstract

The present invention relates to a high herb yielding essential oil herb variety of Krishna Tulsi (Ocimum sanctum, Family--Lamiaceae, 2n=32) named as `CIM-AYU`, more particularly, the invention is related to the development of a high eugenol yielding variety of Krishna Tulsi named `CIM-AYU` through open pollination in the germplasm followed by recurrent progeny selection and evaluation for the yield characters of selected population for 3 years in field conditions, the selected variety is high yielding and stable in subsequent generation. This invention thus relates to the high yielding seeds, plants and plant parts of plant named `CIM-AYU` and its components, to a method of producing named `CIM-AYU`, and to a method for producing high eugenol using `CIM-AYU` as a pollinator or parent."

By genetically modifying this herb, their claim is that of a higher yield and efficacy in substantiating "novel" invention.

Biopiracy will always be wrong. Biopiracy refers to the unauthorized extortion of biological resources and traditional knowledge from indigenous people in developing countries. International law seems to offer little to no support in this unjust practice. The effects of biopiracy is harmful to not only the health and welfare of indigenous people, but also to global relations. Biopiracy has the effect of pricing essential and "traditional knowledge" out of reach to those in developing countries where its medicinal use has been passed down through generations and where this atrocity took place.

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