

Medicinal Values of Pomegranate (Madhulai) – Siddha View

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Abstract: Siddha system of medicine is one of the component of AYUSH systems in India. The system of medicine is a traditional system more popular among the people of Southern states of India, particularly in Tamilnadu. Based on the principles of Iymboothangal (Five elements), Aarusuvaigal (Six tastes), Mutthathukkal (Three life forces), the system solves various health issues of the human kind. Though the sources of the drugs are of three types (plants, minerals and animal origin), most of the preparations or medicines are plant based. The drugs are administered as medicines in thirty two forms as Internal Medicines and thirty two forms as External Medicines which are described in Siddha literatures. Among the plant based drugs, almost each and every plant of both natural and cultivated vegetation of the region are in practice. Not only that, the important medicinal plants of other parts of the country and the world is also found a place in the Pharmacopoeia. One among them is *Punica granatum* – Pomegranate locally named as Madhulai which is in common Siddha practices with varied therapeutic properties. This review article screens the medicinal values of pomegranate in view of Siddha system of Medicine.

Key Words: *Punica granatum*, Pomegranate, Madhulai, Medicinal uses, Siddha system of medicine

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I. INTRODUCTION

Pomegranate (*Punica granatum* L.)⁽¹⁾ is an ancient fruit that is widely consumed as fresh fruit and juice. The use of pomegranate fruit dates back from ancient times and its therapeutic values are enormous. The Babylonians regarded pomegranate seeds as an agent of resurrection. The edible parts of pomegranate fruits are consumed fresh or used for the preparation of fresh juice, jelly, jam, and paste and also for flavoring and coloring the culinary preparations. The pomegranate has been regarded as a “healing food” with numerous beneficial effects in several diseases. Every traditional of medicine in the world has a mention about the medicinal importance of the fruit.

TAXONOMIC HIERARCHY

Hierarchy	MADHULAI
Kingdom	Plantae
Subkingdom	Viridiplantae
Infrakingdom	Streptophyta – Land plants
Superdivision	Embryophyta
Division	Tracheophyta – Vascular plants
Subdivision	Spermatophytina – Seed plants
Class	Magnoliopsida
Superorder	Rosanae
Order	Myrtales
Family	Lythraceae
Genus	<i>Punica</i> L.
Species	<i>Punica granatum</i> L.

Description:

Pomegranate is a small tree widely cultivated in India and is drought tolerant. Arid and semiarid zones are required for growing pomegranate trees. The trees can grow up to 30 feet in height. The leaves are opposite, narrow, oblong with 3-7 cm long and 2 cm broad. It has bright red, orange, or pink flowers, which are 3 cm in

diameter with four to five petals. Edible fruit has a rounded hexagonal shape, with 5-12 cm in diameter and weighing 200 g. The thick skin surrounds around 600 arils, which encapsulates the seeds.



REGIONAL NAMES^(1,2)

Language	Names
Tamil	Thadimam, Peesapuram, Madhulangam, Madhulam, Madhulungam, Madhulai, Madalai, Madalam, Madalangkai, Kazhumul
Telugu	Dadima, Dalimba, Danimma
Malayalam	Mathalam, Matalam
Kannada	Dalima
Hindi	Anar, Dhalim
Sanskrit	Dadima-phalam, Kuchaphala, Darimba
English	Pomegranate

Habitat⁽¹⁾:

Persia, Arabia, Afghanistan, Baluchistan – Wild tree
 All over India – Cultivated

Varieties⁽¹⁾:

Poona, Dholka, Muscat, Cabul – Mumbai Presidency
 12 varieties – Sind.

Parts Used⁽¹⁾:

Flowers, rind of fruit, fresh fruits and juice, dried bark of the stem and root.

Taste, Nature, Division⁽¹⁾:

Flowers, rind of the fruit, Bark – Astringent, Thatpam, Spicy
 Fruits, seeds – Sweet, Thatpam, Sweet

CONSTITUENTS⁽²⁾

Bark and the rind of the fruit	- Tannin	- 22 - 25 p.c
Root bark	- Punico-tannic acid	- 20 – 25 p.c
Mannite	Sugar	
	Gum	
	Pectin	
	Ash	- 15 p.c
	Active liquid alkaloid	- Pelletierine
	Oil liquid	- isopelletierine

2 inactive alkaloids

- methyl pelletierine
Pseudo-pelletierine

Pomegranate is a nutrient rich fruit. Plants produce low molecular weight compounds which are broadly called phytochemicals that gives the therapeutic properties of the fruit. Debjit Bhowmik et al, listed out the presence of various nutrients, minerals and vitamins per 100 grams of edible portion of Punica granatum (Madhulai) including iron about 0.3 mg⁽³⁾.

- Moisture - 78.0%
- Calcium - 10 mg
- Protein - 1.6%
- Phosphorus - 70 mg
- Fat - 0.1%
- Iron - 0.3 mg
- Minerals - 0.7%
- Vitamin C - 16 mg
- Carbohydrates - 14.5%
- Small amount of Vitamin B Complex
- Fibre - 5.1%
- Calorific Value – 65

ACTIONS⁽¹⁾

General

- Astringent
- Anthelmintic
- Taenifuge
- Styptic

Flowers, rind of the fruit, bark of stem and root

- Astringent
- Stomachic
- Anthelminthic

Fruits and Juice

- Cooling
- Refrigerant

Seeds

- Astringent
- Anthelminthic
- Aphrodisiac

II. PROPERTIES AND USES

Pomegranate fruit has been used as food and medicine for a long time. It is used as diet in convalescence after diarrhea. According to the holy book of Muslims, The Quran, Pomegranates are considered to be an example of God's good creations and are grown in the gardens of paradise. Because of this reason, it is recited twice in the Quran⁽⁴⁾.

The fruit juice in the form of syrup is used as a febrifuge in malaria and seasonal fevers and as a cooling drink to ameliorate the action of bile in all bilious complaints. The fruits are consumed daily as an aphrodisiac diet⁽⁵⁾. It is evident from the following lines,

"மாதுளைக் கனியுணமதனகாமேசுரத்
சூதென வாயுளர் சொல்லுவர் மிக்கவே".

The fruits have the healing effect in Sanni and stops vomiting in fevers. The fruit pulp is crushed and squeezed in water and mixed with sugar candy is used as a refrigerant to reduce heartburn. It is also used to stop hiccough and excess salivation from the mouth. The mixture is used to regulate the menstrual cycle in women and promotes conception. Consumption of the fruit maintains healthy blood flow. Pomegranate seeds are rich in iron and thus, help to decrease the anaemic symptoms like fatigue, dizziness and weakness and hair loss⁽³⁾.

The pomegranate flower buds are dried and about 130 mg of that dried powder is used to reduce cough. The dried powder mixed with the powders of cardamom, poppy seeds and mastiche is having the property of stopping diarrhea, dysentery in the dose of 65 mg of the mixture for two times a day. The decoction prepared with the tender fruits of pomegranate as the main ingredient is given for diarrheal fever. The juice of the flowers with equal part of juice of the Cynodon dactylon is given to stop bleeding from the nose. The dried flowers are called as "Goolnar" which is useful in haematuria, haemoptysis.

The dried fruit rind of Pomegranate, Myrrh powder and chalk powder are mixed together and is used as a tooth powder for tooth ache. The antimicrobial activity of pomegranate glycolic extract (PGE) in opposition to the periodontal pathogen *Porphyromonas gingivalis* by using *Galleria mellonella* as in vivo model. showed that the PGE exhibits antimicrobial action against *P. gingivalis*⁽⁶⁾.

The bark of the stem and the roots are best natural intestinal wormicide and is used for Paediatric⁽⁷⁾ management of various diseases.

The fruit juice mixed with sugarcandy and a syrup is prepared which is a good refrigerant and is used in fevers, peripheral neuritis etc.,

A syrup prepared with the fruit juice as a main ingredient along with honey, jaggery, rosewater is a good haematenic⁽⁸⁾. The syrup is used to stop morning sickness in first trimester of gestation, burning sensation in palms and soles, nausea, vomiting. The syrup's synergistic action with Annabedhi chendooram in the treatment of iron deficiency anaemia enhances the therapeutic efficacy of both the drugs⁽⁹⁾.

In the management of acute pancreatitis, madhulai manappagu showed encouraging improvement along with regular line of treatment with Siddha medicines⁽¹⁰⁾.

Central Council of Research in Ayurveda and Siddha (CCRAS) recommends the intake of fresh juice of Pomegranate 15 ml twice with honey to control anaemia⁽¹¹⁾. The ghee made of pomegranate is also recommended⁽¹¹⁾ the control of anaemia in rural areas with Siddha and Ayurveda drugs.

Almost all the parts of pomegranate such as leaves, flower buds, flowers, tender fruits, fruits, fruit rind, bark of both root and stem are having therapeutic values against various diseases of the man. It is because of this reason pomegranate is called as an agent of resurrection.

III. CONCLUSION

In Siddha system of medicine, all the parts of Madhulai (Pomegranate) is widely been used in various preparations that are useful for many diseases. The unique preparation of Madhulai Manappagu mentioned in Siddha texts is widely used by the practitioners for morning sickness in pregnant women, anaemia in children and adolescent girls and for fertility disorders. Pomegranate's medicinal values according to Siddha system of medicine is a treasure to mankind.

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