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# A REVIEW ARTICLE ON MEDICINAL VALUE OF KARANJ TAILA IN SKIN DISORDERS

### Dr. Mohammad Faheem\*1

P.G. Scholar in the Department of Rasashastra, DBACH, Mandi Gobindgarh, Punjab.

\*Corresponding Author: Dr. Mohammad Faheem

P.G. Scholar in the Department of Rasashastra, DBACH, Mandi Gobindgarh, Punjab.

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#### **ABSTRACT**

There are so many formulations *Ayurvedic* as well as modern for the treatment of skin disorders but *Karanj* is very unique and easy to have. Skin disorders mainly consist of rashes, itching, and redness like symptoms. Somewhere for wound healing also *Karanj* is recommended by *Ayurvedacharya's* Many *Nighantukara* mentioned *Karanj* as *Krimighna, Kandugna, Vrana Ropaka*. The current work is based on the compilation of data related to *Karanj* so that with help of this work a new ideas opens for the research in clinical field.

KEYWORDS: Karanj, Kushth, Kandu, Vrana etc.

#### INTRODUCTION

The aim of Ayurveda is fulfill with the help of Aushadha Dravya and Aahaar Dravya. Aushadha Dravya's are used for the prevention and cure from disease and Aahaar Dravya are used for maintenance of a good health. Both these Dravya's are describes in our ancient texts like Charaka Samhita, Susruta Samhita, Astang Hridyam and Bhavprakash Nighantu etc. The methods of preparation of both types of Dravya are well described in Rasa Shastra and Bhaishajya Kalpana. Karanj (Pongamia glabra Linn.) a well known drug mentioned in almost all the Ayurvedic classical texts basically used for skin related problems. It is mentioned in Aragvadhadi<sup>[1]</sup>, Varunadi<sup>[2]</sup> & Arkadi<sup>[3]</sup> Dravya of Astang Hridyam.

#### **Need of Study**

Rasa Shastra is subject which deals with the herbomineral formulations and their effects. Karanj Taila (Pongamia glabra Linn.) like wound healing and helps in skin related disorders as mentioned in Ayurvedic classical texts. Present study help in conclusion of efficacy of Karanj Taila (Pongamia glabra Linn.) by knowing its Pharmaceutical properties of Karanj Taila (Pongamia glabra Linn.) will be done. So we could use Karanj Taila (Pongamia glabra Linn.) in these problems freely.

#### **Objectives of Study**

- 1. Review literature of *Karanj*.
- 2. Review literature of Karanj Taila.

#### Nighantu Period

Description of Karanj (Pongamia glabra Linn.) in different Nighantus

S. No.	Nighantu	Varga
1.	Dhanwantri Nighantu <sup>[4]</sup>	Amradi Varga
2.	Madanpala Nighantu <sup>[5]</sup>	Vatadi Varga
3.	Raj Nighantu <sup>[6]</sup>	Prabhadradi Varga
4.	Priya Nighantu <sup>[7]</sup>	Haritkyadi Varga
5.	Bhavprakash Nighantu <sup>[8]</sup>	Guduchiyadi Varga

## **Botanical Description**<sup>[9]</sup>

*Karanj* (*Pongamia glabra* Linn.) is a fast-growing, multipurpose tree of the humid tropic. It is one of the few N-fixing trees that produce oilseeds. With the increasing production of oil for biofuel, large amounts of oil cake are available for livestock feeding.

Karanj (Pongamia glabra Linn.) is a medium-sized evergreen or briefly deciduous tree, usually about high

but that can grow to 15-25 m. the trunk is straight or crooked, 50 cm in diameter, covered with grey to grayish brown bark, smooth or vertically fissured. *Karanj* (*Pongamia glabra* Linn.) has a deep and thick taproot with several secondary lateral roots. The branches are spreading or dropping and form a board hemispherical crown of dark green leaves. Branchlets are hairless with pale stipule scars. Leaves are alternate, pinnately compound, pinkish-red when young becoming glossy

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dark green at maturity. The leaves consist of 5-7 glabrous leaflets borne in pairs on slender stalks, and a single end leaf. The inflorescence is a 6-27 cm long raceme of typically papilionaceous, very fragrant flowers. The flowers are lavender, pink white in color, finely pubescent and 15-18 mm long. Fruits are numerous, elliptical, 3-6 cm long x 2-3 cm broad, hard and woody indehiscent pods. Pods contain 1-2 seeds; seeds are bean-like, 1.5-2.5 cm long x 1.2-2.0 cm wide, dark brown in color. They are oily, containing about 30-40% oil. The tree sheds its pods which produce long lasting ground litter. The seeds germinate after the pods husk decay, several months after dropping.

# Geographical Description<sup>[10]</sup>

The natural distribution of Karanj (*Pongamia glabra* Linn.) is along coasts and river banks in India and Myanmar. In India, its occurrence and distribution of diversity is reported throughout the country in general and particularly in the Western Ghats.

# Summary of Ayurvedic Properties Of Karanj (Pongamia Glabra Linn.) $^{[11]}$

- Rasa- Tikta, Katu, Kasaya
- Guna- Tiksna, Lagu
- Virya- Ushna
- Vipaka- Katu
- Karma- Kapha-Vata-Samaka, Shothara, Vranaghna, Raktprasadana etc.

# $Indications^{[12]} \\$

Dadru, Pama, Vicharchika, Visarpa, Parisarpa, krimiroga, Arsha, Gulma, Raktivikara, Kukurkasa, Premeha, Kustha, Vishmajwara etc.

### Therapeutic Uses<sup>[13]</sup>

- *Granthi Visarpa* Paste of *Karanj* bark may be applied locally (C.S.Ci.21).
- Romasanjanana Kasisa and tender leaves of Karanj are pounded with the juice of Kapittha is useful (S.S.Cci1).
- *Rakta Pitta* Seed powder of *Karanj* should be given with sugar & hones (S.S.Ut.45).

#### Parts Used<sup>[14]</sup>

- Leaves
- Stem Bark
- Root Bark
- Seeds
- Seed oil

# Dosage<sup>[15]</sup>

- Patra Kwatha 40-80 ml
- *Sawaras* 5-10 gm

## **Important Formulations**<sup>[16]</sup>

- Karanjadi ghrit
- Karanjadi Tailam
- Karanj Tailam
- Karanjadi Churna

Pharmacodynamic Properties of Karanj (Pongamia Glabra Linn.) in Nighantus

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S. No.	Texts	Rasa	Guna	Virya	Vipaka	Karma			
1.	Dhanwantri Nighantu <sup>[17]</sup>	Tikta	-	Ushna	-	Kapha-Pitta-Samaka, Krimighna, Bhutbadha- Nashaka, Yoniroga-Nashaka, Paliharoga-Nashaka, etc.			
2.	Madanpala Nighantu <sup>[18]</sup>	-	Tikshna	Ushna	-	Kapha-Vata-Samaka, Kushthaghna, Gulmanashaka, Arshoghna, Vranaropaka, Krimighna etc.			
3.	Bhavprakash Nighantu <sup>[19]</sup>	Katu	Tikshna	Ushna	ı	Yoniroga Nashaka, Kushthaghna, Gulmanashaka, Arshoghna, Krimighna, Vranaropaka etc.			
4.	Raj Nighantu <sup>[20]</sup>	Katu	-	Ushna	1	Vata Shamaka, Chakshushya etc.			
5.	Priya Nighantu <sup>[21]</sup>	Tikta, Katu	-	Ushna	=	Kushthaghna, Vranaropaka, Krimighna etc.			

Synonyms of Karanj (Pongamia glabra Linn.)

S. No.	Synonyms	D.N. <sup>[22]</sup>	B.P.N. <sup>[23]</sup>	M.P.N. <sup>[24]</sup>	R.N. <sup>[25]</sup>	P.N. <sup>[26]</sup>
1.	Karanj	+	+	-	+	+
2.	Naktmaal	+	+	+	+	+
3.	Udkiya	-	+	-	-	-
4.	Parkirya	-	-	-	+	-
5.	Chirbilva	+	-	+	+	-
6.	Putika	+	+	+	+	-
7.	Ghritvarnaka	-	+	-	-	-
8.	Putivarna	-	+	-	-	-
9.	Parkeerana	-	+	-	-	-
10.	Putiparni	-	-	-	+	-

www.ejpmr.com Vol 9, Issue 3, 2022. ISO 9001:2015 Certified Journal 77

# Varieties of Karanj (Pongamia glabra Linn.)[27]

There are four varieties of *Karanj* (*Pongamia glabra* Linn.) mentioned in classical texts-

- 1. Karanj
- 2. Karanji
- 3. KantaKaranj
- 4. Chirbilva

# Major Chemical Constituents of *Karanj (Pongamia Glabra* Linn.)

 Karanj (Pongamia glabra Linn.)in, Kanjone, Pongapin, Pongapin, Karanj (Pongamia glabra Linn.) a chromene, (-)I-solonchocarpin, Glabrachromene-I, Pongamol, Glabrin etc. [28]

# Biological Activities of Karanj (Pongamia Glabra Linn.)

- Antibacterial activity of leaf extracts of *Pongamia* pinnata from India. [29]
- Bioactivity of ethanol extract of Karanj (Pongamia glabra Linn.) (Pongamia glabra vent) seed coat against mosquitoes.<sup>[30]</sup>
- Antibacterial activity of Karanj (Pongamia glabra Linn.) (Pongamia pinnata) and Neem (Azadirachta indica) seed oil: a preliminary report. [31]
- Study of pongamia pinnata flower and seed extracts for their antioxidant and antibacterial activity. [32]
- Antioxidant, Antimicrobial Properties and Phenolics of Different Solvent Extracts from Bark, Leaves and Seeds of *Pongamia pinnata* (L.) Pierre. [33]
- Phytochemical Investigation And Antibacterial Activity Of Pongamia pinnata(L). Against Some Multidrug Human Pathogens. [34]
- Study of Antimicrobial Activity of Stem Extracts of Pongamia pinnata L. [35]
- Evaluation of Pongamia pinnata Products against the Sclerotium rolfsii Extracted from Chickpea. [36]
- Phytochemical screening and antibacterial properties of leaves of Pongamia pinnata Linn. (Fabaceae) from India. [37]
- In-vitro Antimicrobial Activities of Pongamia glabra and Phyllanthus niruri. [38]
- Studies on *Pongamia pinnata* (L.) Pierre leaves: understanding the mechanism(s) of action in infectious diarrhea. [39]
- A phyto pharmacological review on a versatile medicinal plant: Pongamia pinnata (L.) pierre. [40]

### **DISCUSSION**

Karanj is well known drug basically used for wound healing and skin related problems and almost explained by every Nighantukara in their texts. The Karanj Taila possess Ushna Virya<sup>[41]</sup> and it is a known fact that, drug acts by its Virya. Ushna Virya is necessary to counteract the Vata and Kapha Dosha, hence this Taila<sup>[42]</sup> is found effective in the management of skin disorders, wound healing. The benefits of Karanj<sup>[43]</sup> (Pongamia glabra Linn.) Oil" are in skin disorders, wound healing, herpes, eczema, hair growth etc. Acharya Charaka stats that

Vata, Pitta, Kapha, Twak, Rakt, Mamas and Ambu (Lasika) all they are immediate causative factors for skin disorders. [44] As Karanj (Pongamia glabra Linn.) is having qualities like Laghu-Guna [45], properties like Kapha-Vata-Samaka [46], Raktprasandana [47] hence it is capable to treat skin disorders with these qualities on the basis of Ayurvedic fundamental principles. The Karanj (Pongamia glabra Linn.) seed oil is affordable and effective as many theories suggests.

#### CONCLUSION

As we know today's is an era of innovation and entrepreneurship so any one starts his/her starts up by making the *Karanj (Pongamia glabra* Linn.) seed oil and marketing it. It is durable, effective and affordable for everyone.

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