



**SHINSHAPA(DALBERGIA SISSOO ROXB.) –A REVIEW.**

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Article Received on 17/01/2016

Article Revised on 06/02/2017

Article Accepted on 26/02/2017

**ABSTRACT**

Shinshapa (*Dalbergia sissoo* Roxb.) has been detail historical aspects [Vedic, Samhita, Nighantu, Adhunik], the classification of the drug according to Gana and Vargaas per different Samhitas and Nighantus, Synonyms, Interpretation of some synonyms, Different types mentioned in ancient as well as modern texts, Type wise Rasa Panchaka according to various texts, effect on Dosha-Dhatu-Mala, Rogagnata, Therapeutic utilities, related to drug Shinshapa was noted down.. People are treating it just as a timber tree. The next deals with the botanical review of *Dalbergia sissoo* Roxb., where the taxonomic position, different vernacular names, family, Subfamily characters, Morphological description of species *Dalbergia sissoo* Roxb. and some allied species, were presented in a systemic manner. Further its habitat, distribution, Cultivation, Foliage, Flowering and Fruiting time, Part used, Doses, Formulations and Preparation, Substitute, adulteration of drug is dealt in detail.

**KEYWORDS:** Simshapa, Dose, Family, Cultivation.

**INTRODUCTION**

Medicinal plants are looked upon not only as a source of affordable health care but also a source of income. The plants which can be used as source of income, they gradually started to be forgotten as its medicinal value. Shinshapa is one among such type of tree. Heart wood of the drug Shinshapa is being widely used as a timber because of its durability and hardness. This is the reason that though it is being mentioned from the Vedic Kala and therapeutic value have been mentioned from Samhita Kala, people or even Ayurvedic Vaidyas have neglected towards its therapeutic value.

**[A]VEDIC KALA**

The oldest Veda Rigveda and Artharvveda both have references of Shinshapa in Rigveda, Shinshapa is found to be useful to make cart wheel and falls under the category of "Shanta Vriksha". The drugs which are useful in shanti Karma, are kept under Shanta Vriksha.

The word "Shinshapa" has been used in Rigveda and Atharvveda for Shisham tree. According to "Vedic Kosh".

**[B] SAMHITA KALA**

**1. Charaka Samhita**

Charaka Samhita, the ancient literature on Indian science, especially deals with the clinical medicines. About 7 references are found in Charaka Samhita regarding the drug Shinshapa. It is used as ingredient of

kashayasakandh and Pranakamiya, Rasayana Amlakayas Brhma Rasayana. Mahakhadir Ghrita.

**2. Sushruta Samhita**

9 references of Shinshapa have been found in Sushrut Samhita. It is used as content of Salsaradigana, In Mushkakadigana. Ayushkariti and Shinshapasura. Shinshapa Kashaya is also indicated in Vasa meha.

**3. Ashtang Hridaya (7 AD) Comment. Arunadatta – Sarvangasundara**

5 references have been found in Astanga Hridaya. Shinshapa is included in Asanadigana, Mushkakadigana. Shinshapasara Sidhha Kshira Pichhabasti Gudabhrnsha and Rasayana.

**[C] NIGHANTU KALA**

**1. Dhanvantari Nighantu**

It is most ancient Nighantu available now days. Have references of Shinshapa under Amradi Varga. The author has been described two types of Shinshapa i.e. Shinshapa and Kushinshapa and their preparation and actions.

**2. Sodhala Nighantu**

Acharya Sodhala has mentioned synonyms and Guna-Karmas of Shinshapa. He has also mentioned Guna-Karma of Shinshapa Sara Taila. It is used in Shvitra(vitiligo) and Kushtha.

**3. Madhava Dravyaguna**

Madhva Dravyaguna mention text as 'Bhavaswabhav Vada.' Reference of Shinshapa has been found in 'Vividhaushadhi Varga' and 'TailaVarga'.

**4. Madanapal Nighantu**

There are 2 types has been mentioned of Shinshapa i.e. Shinshapa and Kushinshapa in this Nighantu. It also explain their synonyms and their properties. Shinshapa act as Kushtha Nashaka and Dushta Varana Nashaka.

**5. Kaideva Nighantu**

Pathyapathyavibodhaka Nighantu written by Acharya Kaideva has kept Shinshapa under Aaushdhi Varga. He has mentioned 2 types of Shinshapa i.e. Shinshapa and Kushinshapa.

**6. Bhavaprakasha Nighantu**

Bhavaprakasha Nighantu known as Haritakayadi Nighantu. He has included the drug in Vatadi Varga. It also explain the same properties and Karma as Kaideva.

**7. Raja Nighantu**

Vaidyacharya Narhari Pandita, has mentioned this drug under Prabhadradi Varga. He has described Shyama, Shweta and Kapila **Shinshapatritiyam** with their Guna-Karma in detail. Its Karma explain as Pita-Daha Prasamnam, Balya and Ruchikarka.

**8. Shaligram Nighantu**

Shaligram Nighantu is Nighantu of Adhunik Kala. Shaligram Vaidyahas mentioned synonyms and Guna-Karmas of 3 types of Shinshapa i.e. Shinshapa, Shweta Shinshapa and Kapila Shinshapa. He followed Raja Nighantu while mentioned Trividha Shinshapa. And also quoted reference of Bhavaprakasha Nighantu.

**[D] ADHUNIK KALA****1. Materia Medica of Ayurveda**

Vaidya Bhagvandas has given 2 types of Shinshapa i.e. Shinshapa and Kushinshapa in this text.

**Table 01 Gana in Bruhatari**

Name of Classic	Gana
Charka Samhita	Yoni- Sara vriksha, KashayaSkandha, Asav
Sushruta Samhita	Salasaradigana, Mushkakadigana
AshtangaHrudya	Asanadigana, Mushkakadigana

**SYNONYMS**

Synonyms description of a medicinal plant was through various ways which are indicative of its physical characters, properties, actions, habitat, therapeutic uses, specific natural characteristics etc.

**2. The Wealth of India**

This precious book describes the plant with all its pros and cons. Detail description regarding cultivation of plant has been given in this book. Its commercial use and physical and chemical constants also had been given of this plant. There is no description related therapeutic use of drug Shinshapa.

**3. Indian Medicinal Plants**

The Family - Leguminosae, Genus - Dalbergia and characters of species -sissoo and morphology of the plant, vernacular names have been described elaborately, along with its uses and therapeutic applications.

**4. Forest Flora of the Chakrata, Dehradun and Sahranpur**

In this flora detail description of genus and species has been given. *D. latifolia* is another variety, which is known there 'WalayatiShisham'.

**5. Records of the Botanical Survey of India**

According to this survey, it is frequent near the town of Chamba but does not grow above 3500 ft.

**6. Annual Reviews of Plant Sciences, Vol. II**

Chemical composition is given.

**7. Indian Materia Medica (Vol. I)**

Vernacular names, Uses etc had been given. Besides from this, description of this drug is also available in, Nighantu Vigyna also.

**8. Flora of British India (Vol. II), Flora of Assam**

Classical uses of Medicinal Plants, A Manual of Indian Botany, Prodromus Florae Peninsulae India Orientalis.

No synonym of Shinshapa was found during Samhita Kala.

**Table 02 showing Synonyms described in Nighantus**

Sr.	Synonyms	Dh.Ni.	So.Ni.	M.Ni	K.Ni	Bh. Ni	Raj. Ni	Sha. Ni.	Ni.Aa
1	Aguru	+						+	
2	AngaRasara				+				
3	Sita		+						
4	Vira							+	

5	Yuga patra							+	
6	Tivradhungangadhuma		+						
7	Dhira		+				+		
8	Dhumrika						+	+	
9	Krishna Shinshapa						+		
10	Kapila			+	+		+	+	+
11	Shinshapa	+	+	+	+	+	+	+	+
12	Grusarika				+				
13	Shyama						+		
14	Guru nabho		+				+		
15	Dribhdaru						+		
16	Guru		+				+		
17	Pipla							+	
18	Saramandlapatrika			+					
19	Pichhila		+				+		
20	Pichhala				+		+		
21	Karishnsara	+	+	+	+	+	+	+	+
22	Mahashyama	+		+			+		
23	Karishnshinsap						+		
24	Mandalpatrika				+				

### Synonyms and their meanings

- 1. Dhira:** Tree or wood is durable.
- 2. Veera:** Tree or wood is stable, remains unspoiled or undiseased for longer period.
- 3. Kushinshapa:** This variety of Shinshapa which is lower in quality and appearance (deep black colour) of original Shinshapa is known as Kushinshapa.
- 4. Vritpatra:** leaves are round in shape.
- 5. Mandalpatrika:** leaves are round in shape.
- 6. patrika:** leaves are in pairs.
- 7. Anupushpika:** Flowers are small.
- 8. Guchhapushpa:** Flowers in cluster.
- 9. Kapilakshi:** Flowers are yellowish in colour.
- 10. Shimbiphala:** Fruits are in legumes.
- 11. Krishna sara:** Its internal portion of wood (heart wood) is black in colour.
- 12. Krishna/ Shyama:** The colour of the part use (heart wood) is black or the drug is black in colour.
- 13. Guru/ Guru nabho/Guru sara/Mahasara/Drudhsara etc.:** Its heart wood is very heavy.

### MODERN SCIENCE

In modern science, the drug *Dalbergiasissoo* Roxb. is taken as Shinshapa among all the varieties. However other varieties are also taken as Shinshapa.

### TAXONOMIC POSITION

- Kingdom : Plantae
- Subkingdom : Spermatophytæ (Phanerogams)
- Division : Angiospermae
- Class : Dicotyledons
- Subclass : Polypetalae
- Series : Calyciflorae
- Natural Order : Rosales
- Family : Leguminosae
- Sub-Family : Fabaceae (Papilionaceae)
- Genus : Dalbergia
- Species : sissoo

### VERNACULAR NAMES

- Sanskrit: Shinshapa, Krishnasara etc.
- Botanical Name: *Dalbergiasissoo* Roxb.
- English: Sissoo, Malabar black wood, South Indian Red wood Black wood, Rose wood.
- Hindi: Sisam, Sissu, Shisham, Sissai, Shishi.
- Gujarati: Sisam, Tanach
- Marathi: Sissu, Shishav
- Bengali: Shishu, Sisu, Shishu, Shishugachh,
- Kannad: Agaru, Biridi, Cishmabage, Eragundimavu, Bindi
- Malayalam: Irupal, Sisam, Iruvil, Tali, Sissui, Pivala-sesaba, Irupoola
- Punjabi: Tali, Shisham, Shishai, Safeda, Shin, Nelkar, Shewa, Shia, Sharai
- Oriya: Sisu, Simsapa,
- Bombay: Sissu
- Arabic: Sasam, Sasim
- Assam: Sissu
- Bannu: Shawa, Shewa
- Canarese: Agaru, Biridi, Birade, Ibadi, Irukuntimavu, Simsape, Sishmabage
- French: Bois de palissandre
- Jhalawan: Jag
- Konkani: Sisso, Sissu
- Kotra: Tahali
- Kumaon: Shisham
- Lepcha: TukreeKung
- Rajasthani: Shisham.

### Species – *Dalbergiasissoo* Roxb.

**Habit:** A fairly large, deciduous, handsome tree; reaching 18 m. high; young parts pubescent or tomentose; branches numerous, downy, grey and spreading.

**Bark:** Grey or light brown, somewhat reticulately longitudinally furrowed, exfoliating in narrow strips;

young parts grey downy, inside lightbrown, soon turning to dark brown, very fibrous.

**Heart wood:** The heart wood is brown, mottled with darker longitudinal veins, hard and close grained, annual rings not distinctly marked; medullary rays very fine; pores uniformly distributed, joined by wavy white concentric bands; wt 45-55 lbs. per c.ft.

**Leaves:** Alternate, bifarious, imparipinnate; leaf-rachis 2-4" long, zigzag, pubescent when young.

**Petioles:** Terete, very downy when young;

**Stipules:** Lanceolate, caduceous.

**Leaflets:** 3-5, firm, 3.8-6.3 by 3-5.4 cm. (the terminal the largest and the lowest the smallest), distant, alternate, broad ovate or rhomboid, tough, slightly waved on the margin. suborbicular, conspicuously and abruptly acuminate, puberulous when young, soon glabrescent and shining when old, base narrowed or cuneate, lateral nerves about 5 on either half, rather in distinct, very slender, tertiaries prominent.

**Petiolules:** 3-6 mm. long.

**Flowers:** 0.2-0.3" long, yellowish white, scented, each shaped after the plan of a pea flower, sessile or nearly so, in axillary panicles shorter than the leaves and composed of several short subsecund spikes; rachis and branches of the panicle densely hairy; bracts linear-subulate hairy.

**Calyx:** Downy, about half the length of the flower. Standard with a long claw; 4-5mm. long, hairy; teeth short, ciliate the 2 upper connate except at the tip, the lateral linear, obtuse, the lowest the longest, subacute.

**Corolla:** Pale yellow, 6-8 mm. long; standard 4 mm. broad, with a long claw, the limb obovate-orbicular.

#### PHOTOS



**Stamens:** 9 in one bundle. The sheath of the filaments slit only at the top.

**Ovary:** Pubescent; ovules 2-4, style much shorter than ovary, stigma large glandular.

**Pods:** 3.8-10 by 0.6-1.3 cm. narrowed at the base into a long stalk which is twice as long as the calyx, thin, strap-shaped, linear lanceolateglabrous, pale brown when ripe.

**Seeds:** 1-4, 0.25" long, kidney shaped, flat.

#### CULTIVATION

*Dalbergiasissoo*Roxb. Grows on sandy alluvial, porous soil of sand, pebbles and boulders. It is also found on freshly exposed soil along roads and streams. It can grow on very poor soils. It prefers an annual rainfall between 760 to 2500 mm butable to withstand short period of drought. (Data base on Medicinal Plants, Vol. 2).

#### PARTS USED

Root, Bark, Heart wood, leaf (Data base on Medicinal Plants, Vol 2).

#### DOSES

Decoction: 50-100 ml, 10-20 gm. for Heart wood.

Powder: 3-6 gm., 1.5-10 gm. for Heart wood.

#### FORMULATIONS & PREPARATIONS

Ayaskriti, Shalasaradileha, Narsimhaghrita (Data base on Medicinal Plants, vol. 2) Narsinhaghrita Rasayana from stem bark Ayaskriti, Narsimhaghrita, Mahakhadira Ghrita (API, Vol. III).

#### SUBSTITUTE AND ADULTERATIONS

*Dalbergialatifolia* Roxb. is an another species known and used by the same name Shinshapa. (Data base on Medicinal Platns, vol. 2).



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