

PALĀŚĀ (*BUTEA MONOSPERMA (LAMK.)TAUB.*) AND ITS MEDICO- HISTORICAL STUDY

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ABSTRACT

Palāśā (*Butea monosperma* (Lamk.) Taub.) is considered sacred both by Hindus and Buddhists. It is known to the Hindus under the *Sānskrit* name *Palāśā* as it possesses valuable medicinal properties. This sacred tree is being called the treasurer of the gods and of sacrifice. It grows throughout India except in very arid parts and is a medium sized deciduous tree. Parts used are bark, leaf, flower, seed and gum. It is mainly useful as anti-helmenthic appetizer, aphrodisiac, laxative etc. Thus its medico- historical aspects are being presented in this paper.

Introduction

The tree *Palāśā* is considered sacred both by Hindus and Buddhists. The Hindus consider it sacred because of the tri-foliolate formation of its leaves which represents the Holy trinity of *Viṣṇu* the preserver in the middle, *Brahma* the creator on the left and *Śiva* the destroyer on the right. The tree is associated with the moon and is believed to have sprung from the feather of a falcon imbued with *Sōma*, the intoxicating drink of gods and is thus immortalized. It is a common practice to use the leaves of the tree in ceremonies connected with blessing the calves to ensure their becoming good milk producers. Dry twigs of the plant are used in the sacred fire *Hōma*. Its wood is sacrificial and is mentioned in the *Vēdās*. Out of the wood utensils are made and used for different purposes. The staff placed in the hands of a *Brāhmin* boy at the time of his initiation ceremony is made from the *Palāśā* wood.

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Historical information

In *R̥gvēda* this tree is mentioned in the wedding hymn and the bridal vehicle is said to be adorned with its flowers. In the *Tantrās* and *Purāṇas* also there are verses recommending the uses of *Palāśa* in various diseases. *Palāśa Patra Yōga* mentioned in *Dattātrēya Tantra* for pregnant woman. If given internally with milk helps to get a male child and the same thing when administered to a sterile woman just after menstruation, helps to cure her sterility.

The orange red flowers of the tree are offered to the gods; especially to goddess *Kāli*. Flowers of this tree are supposed to have erotic significance. Amir Khusru, a Sufi poet, compared the flowers, of the tree to lion's claw stained with blood. *One R̥gvēdik* hymn describes the bridal chariot adorned with its flowers (*su-Kimśuka*). *Palāśa patraṃ* or a vessel made of *Palāśa* wood was used by the trees for milking the cow earth. Its wood is used in ceremonies connected with *Kṛṣṇāṣṭami Vrataṃ*.

This tree is believed to be associated with *Brahma* because of the following history. Once *Pārvati* cursed the whole host of Gods and Deities to be born as trees. Because of the curse, *Brahma* was converted into the *Palāśa* tree, *Viṣṇu* into the *Aśvattha* and *Rudra* into the *Vāta* tree (*Padma-purāṇa, Uttara Khaṇḍa*).

Buddhists associate this tree with flower to penitent person dressed in orange red. Orange red color being the color of flame worn symbolically by those who have burnt all their desires. This tree is often depicted in Buddhist's *Jātakās*. It is sacred to the host of the heaven such as *Sōma* or *Candra*.

Kauṭilya Arthaśāstra, a text on Indian polity also mentions this plant in its Book XIV, Chapter-1 and section 177. Its author, *Kauṭilya* refers *Palāśa* while describing the secret practices by using different formulations for the destruction of enemy's troops. *Palāśa* is one of the ingredients in those formulations.

Pharmacographia Indica refers this tree which has been known to the Hindus under the *Sānskṛt* name *Palāśa* possesses valuable medicinal properties. It is a sacred

tree, being called the treasurer of the gods and of sacrifice; from its wood sacred utensils and the staff are made. The red flowers are offered in the temples at the bloody sacrifices of the Goddess *Kāli*.

The dry twigs of the plant called *Samidhās* are used to feed the *Hōma*, or sacred fire. The tree is also known in *Sānskṛt* as *Lākṣātaru* or lac tree, because large quantities of lac are collected from its branches.

Whitelaw Ainslie, the author of *Materia Indica* notices the use of the seeds by Tamil practitioners as an anti-helminthic, in doses of a table spoonful and a half twice daily, both in cases of tapeworm and ascariasis. He quotes Roxburgh's description of the gum and flowers, but remarks that the natives appear to make no use of either of them. From the *Hortus malabaricus*, it appears that the bark is given in conjunction with ginger in cases of snake bite. Dr. Sherwood informed Ainslie that a decoction of the seeds with nitre was prescribed in grave complaints by native practitioners.

In India at present the gum is used much. Gum from Kino is used by natives and Europeans with satisfactory results. Seeds have been tried as anti-helminthic; they have an aperient action. An infusion of two to three seeds is used for this purpose. When pounded with lemon juice and applied to the skin they act powerfully as a rubefacient. Seeds can be used successfully for the cure of a form of herpes known as Dhobie's itch. In the Konkan a poultice of the flowers boiled in water is applied to the abdomen in difficult micturition and two Tolas of the water with nitre is given internally. Dr. Fancourt Willis claims us that the Arab horse-dealers put one seed into each feed of corn to keep their horses fit.

Botanical description

Name: *Butea monosperma* (Lamk.) Taub.

Synonym: *Butea frondosa* Koenig ex Roxb.

Natural order: **Fabaceae**

Distribution

Throughout India, except in very arid parts. This tree grows in open plains in natural habitat and is highly drought resistant. It reproduces by seeds and suckers. Natural reproduction starts early in the rainy season.

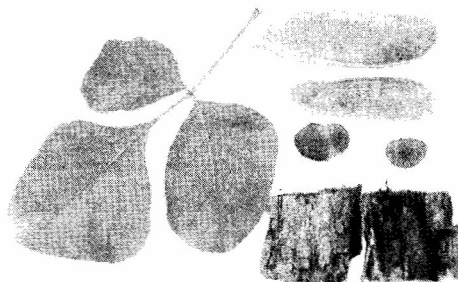
A medium sized deciduous tree, with a somewhat crooked trunk (10-15 feet) in height and 5-6 feet in girth. The bark is bluish-grey or light-brown and yields a gum. Its bright orange-red flowers (1.5-2" long) bloom in great profusion at the beginning of the hot season before the appearance of new leaves. The pod contains a single seed at its apex.

Palāśa is common throughout India, Burma and Ceylon (Up to 4,000'), except in very arid parts. Generally, it grows gregariously on open grasslands and scattered in mixed forests along with *Śāla* (*Shorea robusta*). It is frost-hardy and drought-resistant and is a valuable species for reclaiming saline soils.

Parts used: Bark, leaf, flower, seed, gum.

Chemical Constituents

Seven flavonoid glucosides- Butrin, Isobutrin; two compounds viz. monospermoside and isomonospermid; three glucosides viz. Coreopsin, Isocoreopsin and Sulphurein from flowers have been reported. Red coloured gum obtained from the stem is rich in gallic and tannic acids.



Palāśa (Butea monosperma)

Courtesy : Database on Medical Plants used in Ayurveda (CCRAS)

Vernacular names

Assamese	:	Palash
Bangla	:	Palas
Barman	:	Pauk, Pin, Pouk, Poukpen
English	:	Flame of forest, bastard teak, downry branch Butea
French	:	Butee touffue, Erythrine monosperme
Gujarati	:	Khakara, Khakda, Khakhado, Khakhar, khakharo
Hindi	:	Dhak, Palas
Kannada	:	Muttagamara
Kashmiri	:	Dhak
Konkan	:	Palash
Malayalam	:	Plasu, Pilacham, Palashin samat
Marathi	:	Palas, Khakara, Khakharo
Nepali	:	Bulyetra Palasi
Oriya	:	Porasur
Persian	:	Palah
Portuguese	:	Favas de engenho
Punjabi	:	Chichra, Dhak, Palas
Sanskrit	:	<i>Bījasnēha, Brahmapāda, Brahmavṛkṣa, Brahmopanōta, Kamalāśana, Karaka, Kāṣṭhadṛ, Kimśuka, Krimighna, Kṣāraśrēṣṭha, Lākṣātaru, Palāśa, Parṇa, Pūtadṛ, Raktapuṣpaka, Samīdvāra, Suparṇī, Tripatraka, Tripatrika, Vakrapuṣpaka, Vatapotha, Yāgnika</i>
Singhalese	:	Parasu
Tamil	:	Palashamaram, Camata
Telugu	:	Kimshukamu, Moduga, Palasamu, Tellamoduga, Togarumoduga, Vatapodhamu
Tulu	:	Palasa
Urdu	:	Palashpapra

In India, *Palāśa* ranks next to *kusum* (*Schleichera trijuga*) as a host-tree for the lac insect. Although the quality of lac produced on *Palāśa* is not so good, the quantity is greater than on any other species. Trees are pollarded in May.

A variety of *Palāśa* known as *Butea superba* Roxb., is also available. Its vernacular names are, Sanskrit & Bangla-*Latāpalāśa*; Hindi-Palash lata; Marathi- Belia palas; Gujarati-Velkhakar; Telugu- *Tīga*-moduga; Tamil-Kodi marukkan; Kannada-Balli Mutthuga.

Latāpalāśa is an extensive woody climber, with gorgeous orange-scarlet flowers, found wild in forests over a large part of the country, from Oudh Eastwards through Bihar and Bengal to Assam, and Southwards to Burma. It is a common climber in the hill forests of central and south India, by its heavy growth, it tends to crush the trees on which it grows. A gum –lino, very similar to that obtained from *Palāśa*, exudes from its stem. The root and the young branches yield a strong fibre, which is made into ropes in central India. The leaves are eaten by cattle.

Medicinal properties and uses

Properties are similar to Kino, for which it is an efficient substitute; it is used in India for several ailments. It is also used as a tanning and dyeing agent. *Āyurvēda* carries information on *Palāśa* and Gandha *Palāśa*.

Seeds have a considerable reputation amongst the Hakims in India, as a vermifuge. From these seeds oil is also obtained; it is regarded as an anthelmintic.

Flowers are used to produce beautiful yellow and orange- red dyes; but the tints are not permanent. Coarse fibrous material is also obtained from inner bark, which is termed Pulas cordage; it is principally used instead of oakum, for caulking the seams of boats. The substance known as stick-lac, which is employed in the manufacture of sealing wax, and in dyeing is also derived from this tree. It is produced on the young twigs by the punctures of a species of *Coccus*.

Āyurvēdic literature

Palāśa has been referred in *Bṛhatrāyī* (three big compendia) of *Āyurvēda* by *Caraka*,

Suśruta and *Vāgbhaṭa* approximately at 54 places, 42 places and 37 places respectively. Its properties are as follows:

	Flower	Bark, leaf, seed, gum
<i>Rasa-</i>	<i>Tikta, Kaṭu, Kaṣāya</i>	<i>Kaṭu, Tikta, Kaṣāya</i>
<i>Guṇa-</i>	<i>Snigdha, Laghu</i>	<i>Laghu, Rūkṣa</i>
<i>Vīrya-</i>	<i>Śīta</i>	<i>Uṣṇa</i>
<i>Vipāka-</i>	<i>Madhura</i>	<i>Kaṭu</i>

In *Bhāvaprakāśa* the use of the seeds of *Palāśa* as an aperient and anti-helminthic is available; they are directed to made into paste with honey for administration. *Śāraṅadhara* also recommends them as an anti-helminthic. The use of the gum as an external astringent application is mentioned *cakrapānidatta*; it is directed to combine with other astringents and rock salt. He recommends this mixture as a remedy for pterygium and opacities of the cornea. The author of the *Makhzan-e-Adwiya* describes the leaves of *Palāśa* as strong astringent, tonic and cure for pimples and are given internally in flatulent colic, worms and piles.

As per *Āyurvēda* the root of *Palāśa* cures night blindness and other defects of vision ; leaves are also good for eye diseases; useful in elephantiasis. The bark is hot acrid, bitter, oily; appetizer, aphrodisiac, laxative, anti-helminthic; useful in fractures of the bones, diseases of the anus, dysentery, piles, hydrocele; cures ulcers and tumors. The gum is astringent to the bowels; good in dysentery, stomatitis, cough, pterygium, corneal opacities; cures excessive perspiration. The flowers are sweet, bitter, hot, acrid; astringent to the bowels; increase *Vāta*; cure *Kapha* vitiation, leprosy, strangury, gout, skin diseases, thirst, burning sensation; the juice is useful in eye diseases. The fruit and seed are hot, dry, digestible, anti-helminthic; aperient; used in urinary problems, piles; cures *Vāta* and *Kapha* vitiation, skin diseases, tumors, abdominal troubles; given for scorpion- sting.

The bark and the seeds are given for snake bite (*Caraka, Suśruta*). The ash of a young branch is prescribed by *Caraka* in combination with other drugs for scorpion-

sting. *Caraka* had also elougises an external application of *Palāśa* for leprosy. *Suśruta* prescribes pulverized seeds of *Palāśa* mixed with rice- water as a very effective remedy in eliminating intestinal worms and chronic diarrhoea.

Whereas in *Bhāvaprakāśa* its therapeutic uses are described in the following words:

Palāśō dīpanō Vṛṣyaḥ saroṣṇō Vranagulmajit
Kaṣāya: Kaṭukastiktaha Snigdho Gudajarogajit
Bhagnasandhānakṛddōṣa Grahanyārśaha Kṛminharet
Tatpuṣpam swādu Pākētu kaṭutiktam Kaṣāyakam
Vātaḥ Kaphapittāśrakṛcrajit Grāhi Śītaḥ
Tṛtdāha śāmakam Vātaraktakuṣṭaharam Param
Phalam Laghūṣṇam Mehārśaha Kṛmivātakaphāpaham
Vipāke Kaṭukam Rukṣam Kuṣṭagulmodarapraṇut

Palāśa is considered as an appetizer, aphrodisiac, laxative, curer of boils and cystic growths, cooling, useful in diseases of the anus, sprue, piles and worms. The flowers are sweet in action, bitter, pungent and astringent in taste, increase *Vāyu*, cooling and effective in curing *Kapha*, haemoptysis, thirst, burning, eruptive skin diseases and leprosy. The fruits are light, heating, pungent, dry, and are indicated in spermatorrhoea, piles, worms, leprosy, cystitis, abdominal diseases and in disintegration of *Vāyu* and *Kapha*. In addition to this *Bhāvamiśra* recommends *Palāśa* for *Raktagulma* (abdominal tumor), opacity of cornea and to beget a strong and healthy male child. If a leaf of *Palāśa* smashed with milk and taken during pregnancy helps to beget a healthy male child.

Sōḍhala Nighaṇṭu mentions that the juice of *Palāśa* root is useful in corneal opacities. *Caraka* and *Vāgbhata* recommend *Palāśa* in *Raktapitta* (haemoptysis), piles. *Vaṅgasēna* recommends the gum of *Palāśa* as an application over the eyes in eye diseases due to *Pitta*. Paste of seeds of *Palāśa* and milk juice of *Arka* (*Calotropis gigantea*) are useful in allaying the pain caused by scorpion bite. *Śārangadhara*, mentions it is useful in scorpion sting. *Matsyapurāṇa* mentions it is useful in sterility and senility.

Some important formulations of *Palāśa* are, *Kṛmikuṭāraras*, *Mahānārāyaṇa taila*, *Janam ghutti*, *Palāśabījādi Cūrṇa*, *Palāśakṣāra Ghṛta*. Commercially the gum, seeds and dried flowers are articles of commerce.

Dosage: Decoction (of bark): 50-100ml; Juice(of leaf): 10-20ml; Powder(of flower): 3-6gm; Gum: 1-3gm; Seed powder: 3-6gm.

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सारांश

पलाश और उसका चिकित्सिकीय ऐतिहासिक अध्ययन

पी.वी.वी.प्रसाद, पी.के.जे.पी. सुभक्ता, अला नारायण एवं एम. मृत्युंजय राव

पलाश को हिन्दू और बौद्ध दोनों सम्प्रदाय पवित्र मानते हैं। हिन्दू मूल्यवान् औषधीय गुणों से सम्पन्न इस वृक्ष को इसके संस्कृत नाम पलाश के रूप में जानते हैं। यह पवित्र वृक्ष देवताओं का भण्डार एवं यज्ञ के रूप में पुकारा जाता है। यह अत्यधिक शुष्क प्रदेशों के अतिरिक्त समस्त भारत में भी उत्पन्न होता है। यह एक मध्यम आकार का पतझड़ी वृक्ष है। इसके छाल, पत्र, पुष्प, बीज एवं गोंद आदि अंग प्रयुक्त होते हैं। यह प्रमुख रूप से कृमिनाशन, दीपन, कामोद्दीपन एवं मृदुविरेचन आदि कार्यों के लिए प्रयुक्त होता है। अतः इस लेख में पलाश के चिकित्सिकीय ऐतिहासिक तथ्यों को प्रस्तुत किया जा रहा है।