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☎ 9940 572 462

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✉ ijareeie@gmail.com

@ www.ijareeie.com



Flame of the Forest- Significance and Uses

DR. SANJAY KUMAR ACHARYA

PROFESSOR, DEPT. OF BOTANY, GOVT. DUNGAR COLLEGE, BIKANER, RAJASTHAN, INDIA

ABSTRACT: Palash as a tree is of immense medicinal value and its bark is used to treat cuts and wounds. Its gum, Bengal Kino is used for the treatment of diarrhoea and dysentery. Its flowers are rich in sulphur and used for the treatment of skin-related diseases.

KEYWORDS: palash, flowers, sulphur, treatment, skin-diseases

INTRODUCTION

Palash Tree is a beautiful medicinal plant with a wide range of applications. Palash is the common name for it. It is commonly found in Bangladesh, India, Nepal, Pakistan, Thailand, Sri Lanka, Western Indonesia, and Myanmar.¹ It is famously called as the Flame of the Forest and belongs to the Fabaceae family. Palas, palash, mutthuga, bijasneha, dhak, khakara, and chichra are other local names of this plant that is commonly found in Indian forests.²

It grows in flooded areas, saline and alkaline soil, black cotton soil, and barren lands too. It grows upto 10-15 metres in height, with uneven branches and a crooked trunk. The branches are ash-coloured. The leaves have three leaflets. The flowers are bright orange-red colour, and can be spotted even from afar like a flame burning amidst the green and browns of a forest, earning it the title Flame of the Forest.



Owing to its powerful pharmacological properties, this plant is extremely important.¹ Palash contains alkaloids, flavonoids, phenolic compounds, amino acids, glycosides, resin, saponin, and steroids, among other phytoconstituents. Gallic and tannic acids are abundant in the red gum produced from the stem. Palash flowers contain seven flavonoid glucosides (Butrin, Isoobutrin, monospermoside, isomonospermide, coreopsin, Isocoreopsin, sulphurein).³

Properties of Palash Tree:

All parts of palash plant are potentially beneficial for health due to their properties. Several beneficial properties of palash tree are as follows:

- It may show diuretic properties



- It might exhibit antimicrobial activity
- it may be Chemoprotective (protect against harmful effects of cancer treatment) activity²
- It may show anthelmintic (against parasitic worms) properties
- It help with antidiabetic properties
- It might have antidiarrheal activity
- It may have anticonvulsive (helpful for seizures) activity
- I may have helpful hepatoprotective (liver protecting) activity²
- It may also show stress-relieving properties³
- It might have anti-ulcer activity³
- It may also beneficial properties for wound healing³
- It may have bone protective property³
- It may show anti-inflammatory activity³
- Antioxidant property of the plant may have several benefit[1,2,3]

DISCUSSION

Potential Uses of Palash Tree:

Palash trees are recognised for their vibrant colours. It consists of several beneficial compounds that may contribute to its beneficial properties and potential uses such as:

Potential Uses of Palash Tree for Diabetes:

Powder of palash tree seeds showed antihyperglycemic effects in studies. It might reduce blood sugar levels by improving glucose tolerance and regulation of excessive blood sugar levels.^{2,3} However, serious conditions like diabetes must be diagnosed and treated by a doctor. Therefore, kindly consult a doctor and do not self-medicate.

Potential Uses of Palash Tree for Intestinal Worms:

The seeds of palash tree have anthelmintic properties. It can be useful in removing parasitic worms from the digestive tract.¹ However there is not enough research and scientific evidence to support this effect of palash tree.

Potential Uses of Palash Tree for Diarrhoea:

The bark from the stem of palash tree possesses antidiarrheal activity. It does this by decreasing gastrointestinal motility.¹ It is better to get expert advice from a qualified doctor for digestive disorders.

Potential Uses of Palash Tree for Liver Disorders:

The flowers of palash tree might exhibit liver protective activity as they decrease the levels of serum alanine phosphatase and alkaline transaminase. The two flavonoids, butrin and isobutrin, found in palash may potentially have some benefit for liver against toxicity.¹ This property of palash tree flowers need further studies to know the extent to which it can benefit humans. You must consult a doctor before consuming any herb for its benefits for liver.

Potential Uses of Palash Tree for Kidney Stones:

Palash tree seed powder maybe beneficial in lowering the risk of kidney stones by potentially reducing the growth and number of calcium oxalate stone deposits in the kidney.⁵ Since the studies and evidence available here is insufficient , you must consult a doctor and consume any herb only under their supervision.

Potential Uses of Palash Tree for Wound Healing: [4,5,6]

The bark of palash tree might help in expediting wound healing by enhancing the rate of collagen synthesis and cellular proliferation at the site of infection.³



Other Potential Uses of Palash Tree

Several other uses of different parts of palash tree are as follows:

- Palash flowers may be used to help with gout, and skin ailments. They are known to have astringent, diuretic, and tonic properties.
- Palash stem bark might be used in traditional medicine system to treat dyspepsia, diarrhoea, ulcers, sore throat, and snakebite.
- Palash wood pulp may be used to treat liver problems, gonorrhoea, wound infections, night blindness and snakebite treatment.
- Inflammation, skin and eye problems, piles, kidney stones, intestinal worms, and tumours might be benefitted by palash seed.²
- The leaves of palash tree have demonstrated anti-inflammatory activity in eye inflammation in studies.⁶
- The leaves of palash tree might stimulate a nonspecific immune response. Hence, they could be useful for parasitic infections.
- Palash tree root distillate, may be used as eye drops, helps in the treatment of cataract by improving visual acuity and vision quality under doctor's supervision.⁸
- Palash tree might boost white blood cells that engulf the parasites, thereby potentially removing them.⁷

RESULTS

Palash tree is available in different forms. Your doctor will prescribe you the appropriate form based on your individual needs. [7,8,9]

- Palash bark decoction⁹
- Palash leaf juice⁹
- Palash gum⁹
- Palash flower powder⁹
- Palash seed powder⁹
- Palash churna¹⁰

You must consult a qualified doctor before taking palash tree or any herbal supplements. Do not discontinue or replace an ongoing treatment of modern medicine with an ayurvedic/herbal preparation without consulting a qualified doctor.

Precautions to Take with Pash Tree:

It is essential to follow these precautions when using palash tree and its parts for the following conditions:

- Allergies- Some individuals might be allergic to palash tree. You must stop using palash tree and its components if you develop allergic reactions like swelling, rashes, etc.
- Pregnancy- There is not much scientific evidence to prove whether palash tree can be consumed by pregnant women. Thus, it is better to avoid it during pregnancy.
- Children and Elderly- It must be given to children and elderly under supervision of a qualified doctor.

Interactions with Other Drugs: [10,11]

Ayurvedic preparation can interact with your ongoing medications. Ayurvedic physician's advice is to be followed thoroughly, as their prescription is based on keeping your health condition in mind. Please ensure to disclose all medications prescribed and currently being used to your doctor at the time of consultation.

A feather of an eagle dipped in Soma, the elixir of the Gods, falls to earth and from it springs a tree with magical properties – The Flame of the Forest.

The Flame of the Forest (*Butea monosperma*), found extensively in Kabini, is native to India and is usually between twenty to forty feet in height. Characterized by its crooked trunk and twisted and irregular branches, it is not the most endearing of sights. Come January and it bursts forth with a riot of orange and vermilion flowers that covers its entire



crown. In its dry deciduous forest home, it looks like it's on fire and It should therefore come as no surprise that it is considered to be a form of Agni – the God of Fire.



Closely associated with Hinduism, its tri-foliolate leaves are said to represent the Hindu Holy Trinity of Brahma, Vishnu and Shiva. Its leaves are used in various religious ceremonies such as the blessing of calves to ensure that they yield good milk. The wood of the tree is considered sacrificial and its dry twigs are used in the sacred fire or Homa. The wood is also used to make utensils that are used in religious functions such as the ladle that is used to pour Ghee into the sacred flame. The staff that is placed in the hand of a Brahmin boy at the time of his thread ceremony is also made from the wood of the Flame of the Forest. When he renounces the world to become a Sadhu, he is made to either eat a leaf of the tree or to eat off a plate made from its leaves.

The flowers of the Flame of the Forest are used to make a dye which is used during the festival of Holi. As red is the colour of passion, a young man smearing a woman's face with the dye has powerful erotic significance. In Indian poetry the flowers are compared to the new nail marks on the body of the beloved while Amir Khusru, the Sufi Saint, compares the flowers of the tree to a lion's claw stained with blood.

In the real world, the tree is considered a medicinal plant as it balances Vata and Pitta. It is used extensively in Ayurveda, Unani and Homeopathy. Extracts from various parts of the tree possess a host of properties including anti-microbial, anti-bacterial, anti-fungal, anti-inflammatory, astringent, tonic, aphrodisiac and diuretic properties.[12,13]

In the dry deciduous forests of India, it is a vital lifeline for a large number of species as it is one of the few trees that flower during the dry season when food is scarce, making it truly a gift from the Gods.

CONCLUSION

Indian Flame of the Forest plays an important ecological role in India. The tree is a host plant for many species of butterflies, including the common crow, plain tiger, and blue tiger. The flowers of the tree attract a wide range of pollinators, including bees, butterflies, and birds. The tree is also known to fix nitrogen in the soil, which is beneficial for the growth of other plants in the surrounding area.



Importance to Birds, Animals, and Insects

Indian Flame of the Forest is an important food source for many birds and animals, including parakeets, mynahs, and monkeys. The tree also provides shelter for a variety of animals, including squirrels and insects such as beetles and ants.

Type of Soil Needed for Growing

Indian Flame of the Forest is a hardy tree that can grow in a wide range of soils. However, it prefers well-drained soils that are rich in organic matter.

Climatic Conditions

Indian Flame of the Forest grows best in warm and humid conditions. It prefers a tropical or sub-tropical climate and can tolerate temperatures ranging from 10°C to 40°C.[14,15]

States in India Where the Tree is Found Naturally

Indian Flame of the Forest is found naturally in many states across India, including Uttar Pradesh, Bihar, West Bengal, Madhya Pradesh, Maharashtra, Karnataka, and Andhra Pradesh.

Different Stages of Tree Growth in Detail

The Indian Flame of the Forest grows in three stages: the juvenile stage, the young adult stage, and the mature stage. During the juvenile stage, the tree grows rapidly and develops a strong root system. The young adult stage is characterized by the growth of the tree trunk and the formation of the crown. The mature stage is when the tree reaches its maximum height and starts to produce flowers and seeds.

How Farmers are Benefited

Indian Flame of the Forest is often grown under agroforestry systems in India. Farmers benefit from the tree by using its leaves and flowers as fodder for their livestock. The tree is also used as a shade tree in coffee and tea plantations, providing shade to the crops and improving soil fertility. The timber of the Indian Flame of the Forest is also highly valued for its strength and durability and is used in the construction of furniture, buildings, and boats.

Uses

Indian Flame of the Forest has a number of uses, both practical and cultural. Some of these uses are:

Timber: The wood of the Indian Flame of the Forest tree is hard and durable, making it ideal for construction, furniture making, and other carpentry applications.

Medicinal uses: Various parts of the tree are used in traditional medicine to treat a range of ailments, including fever, diarrhea, skin diseases, and respiratory problems.

Ornamental purposes: Indian Flame of the Forest is widely cultivated as an ornamental tree in parks, gardens, and along roadsides for its attractive flowers.

Dyeing: The tree produces a red dye that can be used to color fabrics.



Honey production: The tree's flowers are a source of nectar for honeybees, making it an important tree for honey production.

Cultural significance: The tree has cultural significance in India, and is associated with the festival of Holi, during which people throw the tree's flowers as part of the celebration. It is also believed to have religious significance in Hinduism.

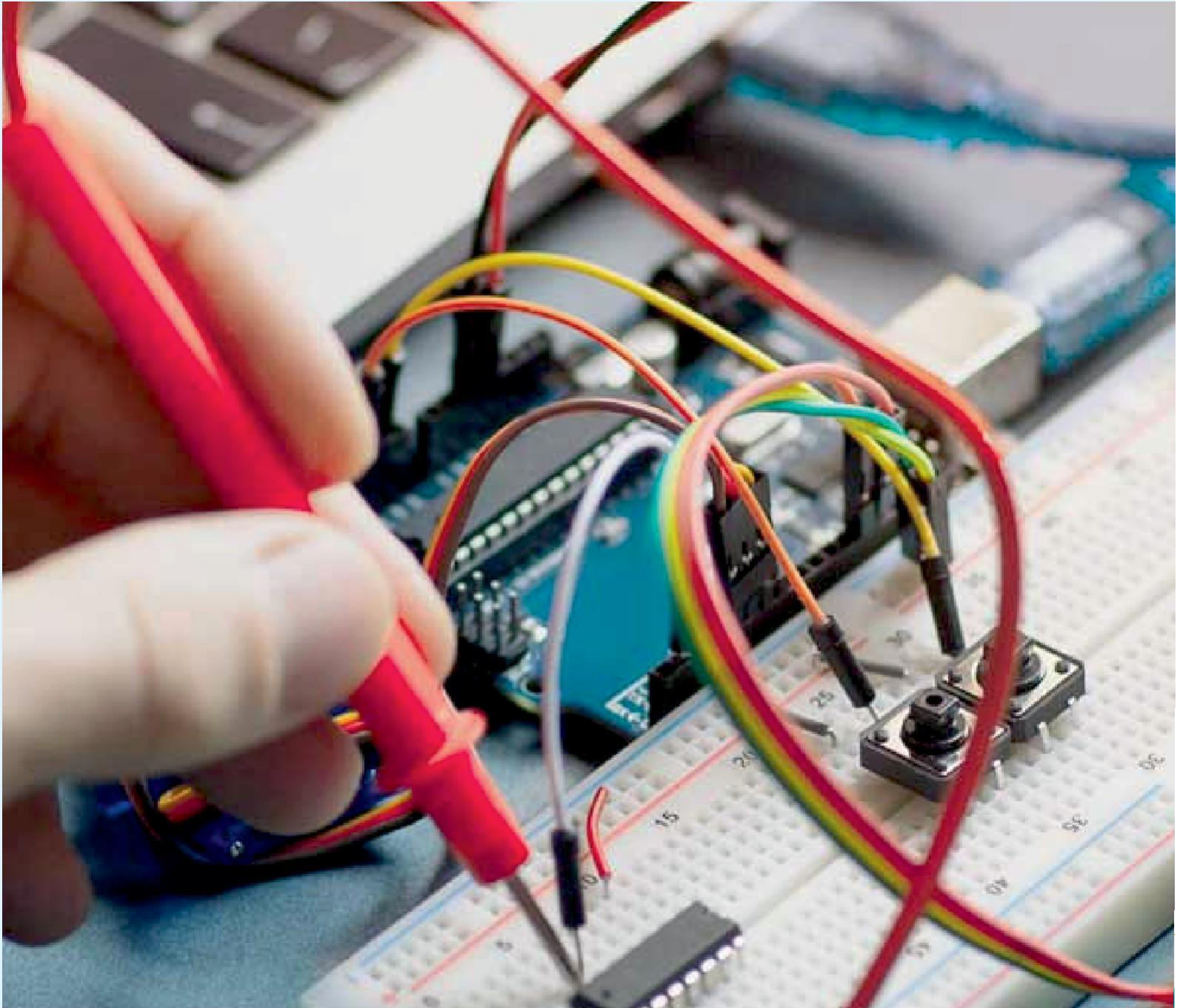
Shade and windbreak: Indian Flame of the Forest is a good shade tree and is often planted as a windbreak in agricultural areas.

Soil conservation: The tree's deep roots help to bind soil and prevent erosion, making it useful in soil conservation efforts.

Indian Flame of the Forest is a valuable tree species in India, providing a range of ecological and economic benefits. Its striking flowers and broad canopy make it a popular ornamental tree, while its importance to wildlife and role in soil fertility make it an important tree for agroforestry. Its ability to grow in a wide range of soils and climates makes it a versatile tree species that can be grown in many different regions of India.[16]

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