BUTEA MONOSPERMA: A REVIEW ARTICLE

Dipak Bhagwanrao Dirange¹* and Aparna M. Ghotankar²

¹PG Scholar Department of Dravyaguna, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi-Aurangabad.
²Professor, HOD and Guide Department of Dravyaguna, C.S.M.S.S. Ayurved Mahavidyalaya, Kanchanwadi- Aurangabad.

ABSTRACT

The plant Butea monosperma is a wonderful medicinal plant with lots of uses. The plant is used for many therapeutic properties like astringent, antidiarrheal activity, anti-implantation activities, etc. Due to different pharmacological effects, intense studies have been done on its chemical constituents. It is called as the ‘Flame of Forest’ due to its look. The flowers look like fire and therefore considered as a form of Agnidev (God of Fire). Mostly found in the greater parts of India, and less found in the arid regions. It is known by different names according to the region or place in which it is found. Its gum is called as Bengal Kino or Butea Gum and is used for many purposes. Other parts of the plant are well known for different uses and this article is all about the wonderfulness of Butea monosperma.

KEYWORDS: Fabaceae, Astringent, Palash, Butea Monosperma.

INTRODUCTION

Butea belongs to the subfamily Caesalpinioideae, of family Fabaceae or Leguminosae. This moderate sized deciduous tree is widely distributed throughout India. It is traditionally reported to possess astringent, bitter, alterative, aphrodisiac, anthelmintic, antibacterial and anti-asthmatic properties.

The most popular name of this plant is “Flame of Forest.” The flowers are Red vibrant coloured. Synonyms of Butea monosperma are Raktapushpaka, Ksharshreshta, Brihmavruksha, Samidwar. Butea is also known as Dhak, Palas, Palash, Flame of The Forest,
Bastard Teak, Parrot Tree, Bengal kino. It is medium-sized tree found in tropical and subtropical regions of Indian sub-continent such as India, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand, Indonesia, Vietnam, and Malaysia.

Butea Monosperma is an erect tree rising upto 40-60 feet with uneven branching. The bark is ash colored. The leaves are trifoliated, glabrous, petiolate with stipules. 4-8 inch long, glistening. The flowers are with *Pushpamanjiri*, which are bright red in color. Butea is having seedpod, which is 6-8inch long. In spring season, the flowers come on plant. This plant is with *Mansal* leaves.

The blooming season of the tree is from April and it looks magnificent due to its orange flowers. After flowering, fruiting happens to appear from the month of May to July. A Gum is also obtained from the tree known as gum kino or Bengal kino gum. The gum is prepared from red juice secreted by the bark.

Butea gum has anthelmintic, anti-conceptive, anticonvulsive, antidiabetic, antidiarrheal, antiestrogenic and antifertility, antimicrobial, antifungal, antibacterial, antistress, chemopreventive, haemagglutinating, hepatoprotective, radical scavenging, thyroid inhibitory, antiperoxidative and hypoglycemic effects and wound healing activities.

**Synonyms of butea monosperma**

- **Name:** Butea monosperma (Lamk.) Taub.
- **Synonym:** Butea frondosa Koenig ex Rox
- **Hindi:** Dhak, Palas, Tesu, Palash
- **English:** Flame of the forest, bastard teak, Bengal kino
- **Bengali:** Palas
Dirange et al.  
World Journal of Pharmacy and Pharmaceutical Sciences

- **Gujarati**: Khakharo
- **Marathi**: Kakracha
- **Telugu**: Mooduga, Palasamu
- **Tamil**: Parasa
- **Kannada**: Muttuga
- **Malayalam**: Brahmabriksham, Kimshukam
- **Punjabi**: Dhak, Palash
- **Thai**: Tong kwao
- **Ayurvedic**: Palasha, Kimshuka, (Charaka, Sushruta) Palashaka, Raktapushpak, Ksharashreshtha, Brahma-vraksha, Samidvar
- **Unani**: Darkht-e-Palah (Persian), Dhaka, Tesu
- **Siddha**: Parasa

गण - रोधादी , मुष्ककादि , अम्बष्ठादि,न्यवोधादी ( सु.)

पर्यायी नावे- पलाश, किंशुक, रक्तपुष्पक, क्षारश्रेष्ठ, ब्रह्मवृक्ष, समिद्वार

कुल - शिम्बी कुल (Leguminosae)

उपकुल- अपराजिता (Papilionatae)

**Parts used for medicinal purposes**
- Flowers
- Leaves
- Bark
- Stem
- Gum

**Chemical constituents**

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

**Ayurvedic properties of palas tree**

“पलाशो दीपनो वृष्ण्य: सरोष्णो व्रणगुल्माजित।
भग्नसंद्रानकृद दोषग्रहन्ययः क्रिमिन हरेत ॥
कषायः कटुकस्तिक्तः सिन्धयो मुद्जरोगजित ॥
तत्पुष्पम स्वादुपके तु कटौ तिक्तम कषायकं ॥
- भा.प्र

Flowers

- **Rasa (taste on tongue):** Kashaya (Astringent), Katu (Pungent), Tikta (Bitter)
- **Guna (Pharmacological Action):** Laghu (Light), Snigdha (Unctuous)
- **Virya (Action):** Shita (Cooling),
- **Vipaka (transformed state after digestion):** Madhura (Sweet)

Bark leaf seed gum

- **Rasa (taste on tongue):** Kashaya (Astringent), Katu (Pungent), Tikta (Bitter)
- **Guna (Pharmacological Action):** Laghu (Light), Ruksha (Dry)
- **Virya (Action):** Ushna (Heating)
- **Vipaka (transformed state after digestion):** Katu (Pungent)

Biomedical action

- Anti-diarrheal (Stem bark)
- Anthelmintic (Seeds)
- Anti-diabetic
- Anti-stress
- Anti-Implantation flowers
- Hepatoprotective flower
- Antifungal
- Aperient (Seeds)
- Anti-helminthic (Seeds)
- Astringent (Leaves)
- Tonic (Leaves)
- Appetizer, aphrodisiac, laxative, anthelmintic (Bark)
- Astringent to the bowels (Gum)
- Astringent to the bowels (Flowers)
Traditional medicinal uses of palash tree

Butea tree grows up to the height of 8 m at the age of 50 years. The various parts of Butea are used for different medicinal purposes as phytochemically, they are rich in flavonoids, terpenoids and lipid constituents.

The leaf is used along with other ingredients to make tonics and aphrodisiacs. Due to astringent action, the leaves are also used for stopping bleeding or secretion.

Butea is used both internally and externally.

In Ayurveda, the root, bark, leaves, etc are used for constipation, colic, dysuria, menstrual disorders, seminal weakness, obesity, piles, urinary calculi, urinary discharges, malfunctioning. Of the liver, persistent dysentery, internal abscesses, abdominal glands, non-healing ulcers, in skin diseases and leprosy. The parts have antitoxic, antiseptic, styptic and astringent action. The Ayurvedic formulations prepared from tree balances Vata and kapha.

The gum is a powerful astringent and given internally for diarrhea and dysentery.

Pyorrhea

Brushing with twig gives relief in foul mouth smell.

Toothache

Apply the resin powder on the affected gums.

Dental Cavities, Spongy, Bleeding Gums, Malodour

Mix fine powders of Triphala, Acacia bark and Butea gum 50 g each, dried ginger powder and black pepper powder 10 g each, finely ground alum, common salt, turmeric, Cyperus scariosus, Embelia Ribes, Azadirachta leaves and Quercus gall, each 20 g each. Sieve through the cloth so that there are no coarse or gritty particles.

Massage this powder on the gum, not on the teeth. Let the powder remain there for about 20 minutes then rinse.

Wounds and Ulcers

Externally Butea bark is applied to the affected area.
Diarrhea and Dysentery
Gum of the tree is used.

Skin disorders
The flowers are soaked in water. This water is used for bathing purpose.

Leucorrhoea
The leaf decoction is used.

Intestinal parasites
The seeds of the Palash tree are anthelmintic. But clinical use of seeds is not considered safe, as it may produce nephrotoxicity.

Urinary disorder
Take orally the decoction (10ml) of the bark of Semal and flowers of Palash (Butea monosperma (Lamk.) Taub.) mixed in 2:1 ratio.

Sore throat
The leaf is boiled in water and used as a mouthwash to relieve a sore throat.

Leucorrhoea
The leaf decoction is used to wash the genital parts.

Leucorrhoea, female sterility and premature ejaculation
Majoon-e-Supari Pak can be taken.

Nocturnal emission
Take 25 g each of gum arabica, gum tragacanth, gum kino and gum mastagi roomi (Pistacia lentiscus). Heat and ground to make powder. Take One teaspoon powder with cold water twice daily.

Haematemesis, Haemoptysis, bleeding piles, and bacillary dysentery
Safoof-e-Habsuddam can be taken.

Hair lice
Apply the leaf juice on the scalp.
Acidity
A poultice made from cooked lukewarm flowers is tied over the abdomen.

Pimples
The bark is used as a poultice for pimples.

Fungal infection, herpes
Palash seeds powder (1 teaspoon) is mixed with lemon juice (1 teaspoon) on applied topically.

Joint pain
Take the resin powder with milk.

Cuts and Wound
In Veterinary practice, bark juice is fed to the animal for faster healing.

Dosage of palas tree
- **Stem bark powder:** 3-6 gm
- **Gum:** 25-50mg
- **The decoction of bark:** 50-100ml
- **Fresh leaf juice:** 5-10ml
- **Flower powder:** 3-6gm
- **Seed powder:** 0.5-1gm

Warnings and Side effects of butea
Palash seeds have anti-conceptive and anti-implantation activity.
Seeds are used traditionally as a contraceptive.

REFERENCES


