## Butea monosperma (Lam.) Kuntze

## **Systematic Position**

Kingdom: Plantae

Phylum: Tracheophyta

Class: Equisetopsida

Order: Fabales

Family: Fabaceae

Genus: Butea

Species: Butea monosperma

Popular names: Flame of the forest, Dhak, Palas, Palasha, Tesu, Moduga.

Nature: Tree

Flowering time: February to April

Fruiting time: May to July

**Plant distribution:** It is native of tropical and sub-tropical parts of the Indian Subcontinent and Southeast Asia and ranging across India, Bangladesh, Nepal, Sri Lanka, Myanmar, Thailand, Laos, Cambodia, Vietnam, Malaysia, and western Indonesia.

## Gardening notes:

- 1. Light: It requires full sun for proper growth.
- 2. Water: It has average water requirement.
- **3. Propagation**: By seeds.



## **Economic importance:**

- 1. Leaves used throughout the country for making platters, cups etc.
- 2. Dried leaves used as beedi wrappers.
- 3. Young shoots yield a fiber used for ropes.
- **4.** The bark yields a dye known as kina, used during holi festival.
- 5. The plant serves as host for the lac insect.
- **6.** It is used in medicine preparation for the treatment of worm infestation, diarrhea, dysentery, chronic indolent ulcers, bronchitis and fevers.
- 7. The flowers yield a yellow dye.
- 8. The ripe fruits are edible.
- **9.** The tree is regarded as holy since it is considered to be sacred to Lord Brahma because of its tri-foliate leaves.
- 10. The timber is used for making well-curbed and scoops.
- **11.** It is also burnt to make gunpowder-grade charcoal.

**Plant description:** It is a medium sized dry season-deciduous tree, growing to 25 feet tall.

**Root-** Tap root, branched; Stem- Aerial, erect, branched, branches twisted and irregular, cylindrical, solid, woody, crooked, bark- fibrous, brown or grey, rough;

**Leaf-** Compound, trifoliate, unipinnate, imparipinnate, petiolate, petiole long, 7-10 cm long, green, hairy, pulvinus base, stipulate, stipules, 2, small, green, 3 leaflets, rough, thick, velvety, adaxial surface dark green, abaxial surface light green, blade 7-9 cm long, 7-9 cm wide, petiolulate, petiolule small, 1-2 cm long, shed in february-march, unicostate reticulate venation, entire margins;

Inflorescence- Racemose.

**Flower-** Bright flaming scarlet orange, in clusters, complete, hermaphrodite, hypogynous, bracteate, bracts small, brown, hairy, zygomorphic, pedicellate, pedicel hairy, brown, 2-4 cm long, curved, ; Sepals – 5, gamosepalous, inferior, brown, hairy, valvate aestivation; Petals- 5, orange, polypetalous, papilionaceous, descending imbricate, odd petal, posterior (standard or vexilium), largest, two lateral petals (the alae or wings) and the two inner or anterior petals (the keel or carina); Stamens- 10, diadelphous, 9 united to form a staminal tube around the ovary, the 10th, posterior one free, dorsifixed anthers, small, yellow, introse, inferior; Carpel – 1, ovary superior, unilocular, numerous ovules, marginal placentation, style long, curved, hairy base, greenish yellow, stigma terminal.

Fruit- A legume, thin, greyish-green or velvety, upto 12 cm long, few seeds, flattened;Seed-Small,brown,flattened,



Fig. 1: Butea monosperma (a) tree (b) flowers (c) leaves (d) seeds.



