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# Bombax ceiba

Red Silk-Cotton; Red Cotton Tree; Kapok; Silk Cotton



Fort Myers, Florida, late-February

## Silk-Cotton Tree

Synonyms (Discarded Names): Bombax malabaricum; Gossampinus malabaricus; Salmalia malabaricatralia Origin: India; South China; Taiwan; Myanmar to Vietnam; Philippines to Papua New Guinea; Australia U.S.D.A. Zone: 10a-12b (Minimum 30°F) Growth Rate: Medium **Typical Dimension:** 80'x50' Flowering Months: Two or more months January, February, March and April **Intense Blooming Days: 29** Leaf Persistence: Species mostly deciduous while flowering and fruiting from January to April Messiness: High in January to April; leaf and petal drop Light Requirement: High Salt Tolerance: Low Drought Tolerance: Medium to high Soil Requirements: Wide Nutritional Requirements: Medium Hazards: Conical spines on trunk **Propagation:** Seeds; large cuttings; air layers **Uses:** Park; shade; specimen; xerophytic

### Natural Geographic Distribution

The exact origin of the red silk-cotton tree is unknown but it is thought to originate in southern China and Indomalaysia. It is a tropical humid lowland species, often found near stream banks. The tree was introduced into the U.S. in 1912 by Royal Palm Nurseries. It is not an uncommon tree in south Florida but it grows to such huge proportions that it is best suited for parks and other large open space. The red silkcotton tree is now found in many warm, seasonally dry and humid areas around the world.

**Family: Malvaceae** Flower Display: A+

#### **Bombax not Kapok**

The red-silk cotton tree, *Bombax ceiba*, is sometimes mistakenly called "Kapok" because it produces floss. The true Kapok is *Ceiba pentandra* and is not common in Florida. The red-silk cotton is in the Malvaceae family, but is sometimes placed in the Bombacaceae family by some authors.

#### Form, Morphology and Seed Dispersal

The tree forms a straight bole with horizontal or upward branches that grow in regular whorls, tier above tier, like a gigantic upside down candelabrum. The red silk-cotton has a medium growth rate and grows up to 100 feet tall. The trunk and branches are usually covered with conical thorns especially when young. Thorns on older trees are often absent. The tree often forms buttress roots but they are not as pronounced or as massive as those of *Ceiba pentandra*.

Leaves are palmate and up to 24 inches long. They have 3 to 7 entire, leathery and smooth lanceolate to elliptic leaflets, with pointed tips. The petioles are longer than the leaflets. Sometime in January or February the tree begins to drop its leaves in preparation for flowering. The flowers begin appearing when the tree is deciduous or nearly so. The flowers are 6 to 7 inches long and are up to 7 inches wide. They are borne solitary or in clusters at or near the ends of the branches. The flower consist of five satiny, red, scarlet, or sometimes white petals. They surround five groups of stamens that are tipped with little black anthers. The petals reflex strongly after opening, then gradually relax. The spectacle attracts all kinds of birds, especially crows. The flocks feed and simultaneously pollinate the flowers for 29 days of intense bloom. When flowering, the ground under the tree becomes littered with fallen petals. The tree does not begin to releaf until almost all the flowers have fallen in March or April. Releafing is completed as the fruits develop and begin to open on the tree.

The fruits are large, up to 6 inches long, ovoid, pointed, woody capsules, filled with silky hairs. In April and May the pods split open (dehiscent) on the tree and disgorges quantities of silky cotton in which small brown seeds are imbedded. The bursting pods cover the neighborhood with drifting floss and are carried far by the winds. Propagation is by seeds, large cuttings or by air layering.



Conical thorns on the trunk, Orlando, Florida

Close-up of conical thorns

The tier arrangement of branches. This tree was severely prune and has developed foliage at the end and along its stubbed branches.



Sarasota, Florida, 2 February

Naples, Florida, 22 March



**Leaves:** Palmate, to 24 inches long, with rarely 3 to 4, and commonly 5 to 7, lanceolate to elliptic leaflets up to 10 inches long, attached to a long flexible petiole. **Flowers:** Heavy, up to 7 inches wide having 5 satiny red, scarlet and sometimes white petals; reflexing strongly after opening.





White form, Alibag, India

- 14 February
- Red form, Fort Myers, Florida

24 February



25 February



26 February



27 February, PM



28 February, PM



1 March, AM



3 March, PM



5 March, PM



6 March, PM

Eight pictures of flower development and expenditure.





**Top and left pictures:** A deciduous tree in full bloom, Fort Myers, Florida, 23 February



Dehiscent capsule, Fort Myers, Florida, 29 April



Dehiscent capsules, Fort Myers, Florida, 27 April



Small brown seeds, Fort Myers, Florida, 27 April

#### **Planting and Maintenance Guidelines**

The red silk-cotton tree is a handsome specimen that never fails to attract attention when it blooms. Grow it where it will have ample room and where its seasonal litter of fallen leaves and flowers will not be a bother. For dark green leaves, grow it in deep acidic soils. Alkaline soils tend to induce yellow leaves and manganese deficiency. Fertilize young trees as needed. Established trees may not need fertilization. Trees from seeds begin flowering when 8 to 10 feet tall, and can reach 30 feet in five years. Water freely in the winter to induce spectacular bloom. The Sri Lanka weevil sometimes damage leaves but is usually not necessary to treat to control them.

#### References

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Schuetz, F., 1990. Flowering Trees for Central and South Florida Gardens. Great Outdoors Publishing Company. St. Petersburg, Florida.

Click here to view a YouTube video of a red silk-cotton tree in bloom. Click here for other fact sheets on flowering trees for South Florida.

This fact sheet was reviewed by Peggy Cruz, Lee County Extension; Cathy Feser, Naples, Florida

All pictures were taken by Stephen H. Brown except where indicated.

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