

Ceiba pentandra

[Synonyms : *Bombax guineense*, *Bombax occidentale*, *Bombax orientale*, *Bombax pentandrum*, *Ceiba anfractuosa*, *Ceiba caribaea*, *Ceiba casearia*, *Ceiba guineensis*, *Ceiba guineensis* var. *ampla*, *Ceiba pentandra* var. *caribaea*, *Ceiba pentandra* var. *clausa*, *Ceiba pentandra* var. *dehiscens*, *Ceiba pentandra* var. *indica*, *Ceiba thonnerii*, *Ceiba thonningii*, *Eriodendron anfractuosum*, *Eriodendron anfractuosum* var. *africanum*, *Eriodendron anfractuosum* var. *caribaeum*, *Eriodendron anfractuosum* var. *indicum*, *Eriodendron caribaeum*, *Eriodendron guineense*, *Eriodendron occidentale*, *Eriodendron orientale*, *Eriodendron pentandrum*, *Gossampinus alba*, *Gossampinus rumphii*, *Xylon pentandrum*]

KAPOK TREE is a deciduous or semi-evergreen tree. Native to tropical America (including the West Indies) and tropical Africa, it has greenish-white or pinkish flowers.

It is also known as *Araba* (Cameroonian, Gabonese), *Banda* (Sierra Leonean), *Bonga* (Colombian), *Bouma* (Cameroonian, Gabonese), *Búlak* (Filipino/Tagalog), *Ceiba*, *Ceiba de lana* (Colombian), *Ceiba yuca* (Venezuelan), *Ceibo* (Spanish), Cotton tree, Cottonwood, *Doum* (Cameroonian, Gabonese), *Enia* (Ivorian), *Fromager* (French, French West Indian, Ivorian), *Fuma* (Congolese), *Ghe* (Liberian), *Ilavum* (Tamil), *Kabukabu* (Malay), *Kapokbaum* (German), *Kapokier* (Creole), *Katoenboom* (Dutch), *Kekabu* (Malay), *Kotta-pulung* (Singhalese), *Mapou* (French), *Mulli-lavu* (Malayalam), *Ngwe* (Sierra Leonean), *Nun* (Thai), *Odouma* (Cameroonian, Gabonese), *Okha* (Nigerian), *Onyina* (Ghanaian), *Pochota* (Mexican), Public Works Department tree, *Pulung* (Singhalese), PWD tree, *Randu* (Javanese, Sundanese), *Safed simal* (Hindi), *Samali* (Marathi), *Schwet simul* (Bengali), Silk-cotton tree, *Sumaúma* (Brazilian), *Sveta salmali* (Sanskrit), *Tella-burga* (Telugu), *Toborochoi* (Bolivian), *Vlnovec pät' tyčinkový* (Slovak), *Vlnovec pětimužný* (Czech), White cotton tree, White silk cotton tree, and *Yaxchè* (Mexican).

The flowers, which have an unusual scent, open at night for a few hours and are pollinated by bats. (In the rainforests of south-eastern Peru non-flying mammals pollinate the trees.)

When ripe the fruit pods burst open releasing the seeds on their gossamer 'parachutes'.

The tree seems to be haphazard in appearance. It can flower all over or on one side and then the other, or only on some branches, it can have a spiny or smooth trunk, it can have spiny or smooth branches, parts can be leafless while other areas are producing new shoots, the fruit can be inconsistent in shape and size, sometimes the creamy-white floss is tinted, sometimes it is white, and some of the pod-like fruit burst open and some do not.

The silky fibres are beaten from nearly ripe, unopened, sun-dried and shelled pods. Oil can be extracted from the seeds. The air and water resistant, silky fibres, once dried after being released from inside the pods, although too fine and slippery to spin, are lightweight and fluffy. This has meant that the drying sheds, although open-sided, have to be covered in a fine wire mesh to prevent the gossamer fibres floating away and the workers in the shed have to wear fine, protective masks.

Pentandra means 'with five stamens'.

The curious name Public Works Department tree, or PWD tree by which it is sometimes known in south-eastern Asia, arose from the local contention that the kapok tree's shape (its

branches generally spread in whorls at right angles to the trunk) was the ideal that would have been designed by a bureaucratic government department.

For both the Mayan civilization, and after them the Aztec people of Middle America, the kapok tree was sacred and also provided both valuable shade and fruit. Their rulers used it as a symbol of their own power and paternity as well. In the Caribbean today, particularly in Dominica, the kapok tree is still held in awe as it is believed to be the home of spirits. This means that here the floss around the seeds is rarely used for fear that the spirits will haunt sleep, and if local legend is to be upheld the tree can only be felled between March and May when the spirits are said to be absent.

Locally the seeds have not only provided an ingredient for soup but their oil has also served as lighting fuel. It has been used to make soap too.

Even today in South America the tree trunks can still be fashioned into dug-out canoes. The wood has also been used to make a range of other items, including furniture, toys, boxes and crates, and matches and drums, as well as to manufacture plywood. Some authorities have suggested it could also be used to make violins.

Seed cake left after oil extraction has been fed to cattle .

The trees have been cultivated on coffee plantations (*Coffea*) for their shade.

The bark yields a reddish-brown dye, and the reddish bark fibre has been used for making rope and paper.

Kapok tree is a national emblem of Guatemala and has been adopted similarly by Puerto Rico, an autonomous commonwealth in association with the United States.

Small quantities of seeds have been eaten in Malaysia and young fruit pods have provided food in Java (now an Indonesian island). In the Philippines cooked young leaves have been eaten as a vegetable.

Before World War II the output of kapok fibre, especially from Indonesia, was overwhelmed by the demand from the international market as stuffing for life-saving waistcoats, boxing gloves, saddles, cushions and pillows. Following the War its use in this way became redundant as synthetic materials superseded it and today its primary value is in thermal and acoustic insulation. The fibre has also been used in making carpets, and because it can be sterilized it has been used to stuff hospital mattresses too. In Malaysia this fibre (mixed with chalk and oil) has been used for caulking boats. Today the main source of kapok for pillow stuffing is the Indonesian island of Java.

There is a significant disadvantage for any villages situated near many of these trees. The floss, when dry, is highly inflammable (it is used in India to make fireworks) and there have been occasions when homes have had to be evacuated.

The tree bark has been prized in the Philippines as an aphrodisiac.

Today commercially the fibre is used for heat or sound insulation and fillings in aircraft, refrigerated trucks, cushions, mattresses, and sleeping bags and outdoor clothing. Seed oil is used in the manufacture of soap, margarine and animal feed – and the wood is used for veneering, manufacturing boards and plywood, and for making light furniture components, packing cases and matches.

Medicinally, in the Caribbean the leaves have been added to bathwater to ease fatigue, and they have also been used as an antidote for some poisons. In the form of a tea they have provided a remedy for inflammation and wind. They have also been used in various forms in Malaysia to treat fever, and have been prescribed there during childbirth. They have been used in cough remedies in Singapore, and in several Asian regions they have been chosen for treating some types of venereal disease. The bark has been used, not least in Cambodia, for easing fever and diarrhoea while in Malaysia it is turned to as a cure for asthma in children and colds.