

*Ceiba speciosa* Silk Floss Tree

***Ceiba speciosa*: Above:** In full bloom at San Diego, California. In both photos, note the central column that is typical of the family Malvaceae. The stigma is projecting above the spherically arranged stamens.

Photo: Martin LaBar, Flickr CC BY-NC 2.0.

**Below: *Ceiba glaziovii*,** from the dry woodlands of NE Brazil, has white flowers.

Photo: Mauro Guanandi, Wikimedia Commons CC BY 2.0

I was blown away when I rounded the corner of the Twentieth Century Garden on 1st May this year. Wonderful pink flowers covering a tree I had previously hardly noticed took me straight back to Africa. On 4th June, 2010, in Tanzania, I was woken at about 6.00 am, just dawn, by a loud humming sound.

It only increased, so I got up to find the source. It was thousands and thousands of bees and other insects mobbing the nearby kapok tree, the sweet-smelling creamy-white flowers of which had come out overnight. The bees mostly departed about an hour later, to be replaced by all the nectar feeding birds, particularly sunbirds and barbets. This spectacle was repeated annually, giving us three weeks of dry-season delight at afternoon-tea-time, watching the passing parade.



It turns out that these two trees are closely related, belonging to the same genus, *Ceiba*, and so in the same family,

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Malvaceae, the hibiscus or mallow family, (containing commercial cotton, *Gossypium hirsutum*) and to which Baobabs (Boabs) and Brachychitons also belong. *Ceiba speciosa* is our gorgeous pink one.

The genus name *Ceiba*, is thought to be derived from Carib (a language from northern South America, or Taino, an extinct Caribbean language.) the word for a dugout boat, or from the indigenous name for a giant tree. *speciosa* is from the Latin, meaning beautiful or showy.

Often called the Silk Floss Tree, the spectacular pink-flowered one is native to the forests of South America, the northeast of Argentina, east of Bolivia, Paraguay, Uruguay and southern Brazil.

Young trees grow quickly, with a green trunk enabling photosynthesis even in the colder months when it is deciduous. It will grow up to a metre per year, and will flower in eight to ten years. It is resistant to drought and moderate cold, but will grow more quickly when it has a good supply of water. It sometimes reaches a height of more than 25 metres. Mature trees gain a bottle-shaped trunk up to two metres in girth. The trunk and branches are usually covered in thick, sharp, horrendous-looking thorns, (botanical term: 'prickles'!) evolved to protect it from tree-climbing animals. Eg, jaguar, ocelot, tamarin, sloth, howler and spider monkeys, and snakes, including boa constrictors.

The GBG has two specimens – one has impressive, fully developed thorns; the one that caught my eye in flower has fewer, much smaller ones. This tree may be the cultivar 'Monza', which has a trunk without prickles and pink flowers in autumn.

The branches tend to be horizontal, giving it a wide canopy. In Bolivia it is called toborochi, meaning 'tree of refuge', or 'sheltering tree'. In many sub-tropical countries, such as Spain, South Africa, northern parts of Australia and New Zealand and southern USA it is used as a street tree, for its beauty and shade, though people and domestic animals need safety buffer zones to protect them from its 'prickles'!

The pinnate leaves are emerald green, with five to seven long leaflets. The canopy of vibrant pink flowers, which emerge in the autumn, are superficially similar to hibiscus flowers, and between 10 and 15 centimetres across. They are creamy-whitish in the centre and the five petals are pink to the tips. The nectar is very attractive to many insects, bats and birds, particularly hummingbirds in their native South America.



***Ceiba speciosa*** is native to the forests of South America, in the northeast of Argentina, east of Bolivia, Paraguay, Uruguay and southern Brazil.

Map: DavoO, Wikimedia Commons CC BY-SA 3.0.

**Below: *Ceiba speciosa*** has prickles on its trunk and branches. Both photos: the C21 garden, GBG, tree close to the southern fence. Lynne Clarke.





Left: *Ceiba* often grow into a low, spreading tree like this *Ceiba chodatii* in Rosario, Argentina. The *Ceiba* tree next to the fence in the GBG may be this species. Photo: Pablo D. Flores, Wikimedia Commons CC BY-SA 2.5

*Ceiba speciosa*: Middle row, from left: Swollen trunk, Roberto Fiadone, Wikimedia Commons CC BY-SA 4.0.

Tall bare tree in Huntington BG, US, Jay Walsh, Wikimedia Commons CC BY-SA 3.0.

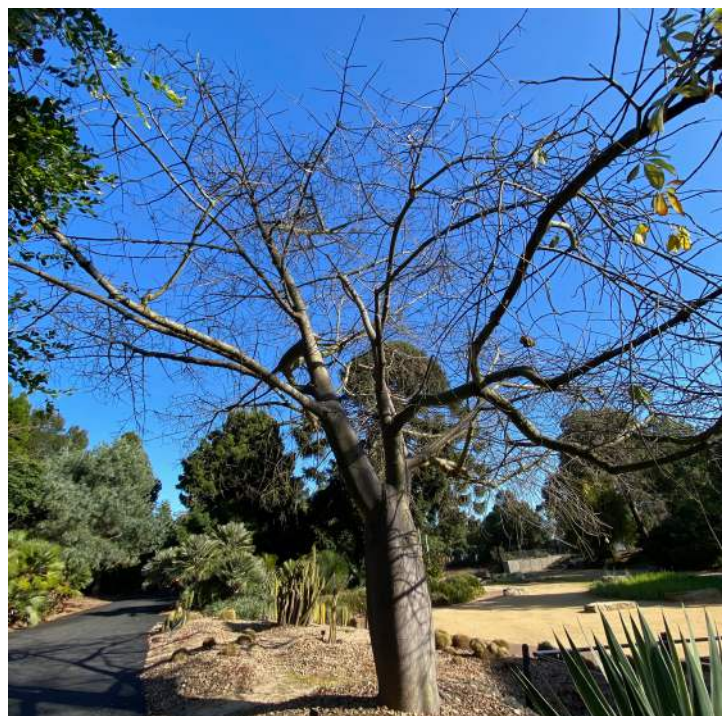
Trunk of the tree with pink flowers in GBG, has few prickles. Lynne Clarke.



*Ceiba speciosa*: Bottom row: Pink flower tree in GBG.



The flowers of the related *C. chodatii* are similar in form and size, but their colour goes from creamy-whitish to yellow tips. I wonder if the other of ours, with the large thorns, is this one, as the few flowers I was able to photograph are definitely not pink.





***Ceiba speciosa*:**

Above left: Flowers (in background), fruit and floss expanding from the fruit capsule.

Above right: Compact floss exposed as fruit capsule splits.

Both photos above: San Diego, California, USA. Martin LaBar, Flickr CC BY-NC 2.0.

Left: A leaf, Fabrício Mil Homens Riella, inaturalist.org CC BY

Large, attractive seed pods are produced: woody, oval-shaped capsules 20 centimetres long, which split to release the bean-sized black seeds embedded in masses of lustrous fibrous, fluffy matter, like cotton or silk. This is a silky kapok, soft and flexible and sometimes used in packaging.

The silk of *C. speciosa* is not of such quality as that of the Kapok, *Ceiba pentandra*, which has been historically much sought-after for stuffing and padding, for pillows, mattresses and upholstery, for buoyancy in water-safety equipment (supporting as much as 30 times its own weight in water), and as a substitute for absorbent cotton in surgery. It is highly flammable, however, and the development of foam rubber, plastics and synthetic fibres have meant that it is now of less importance.

The seeds yield edible and industrially useful vegetable oil, and *C. speciosa* is added to some versions of an hallucinogenic drink, Ayahuaska!

The wood has long been used to carve canoes, and the bark to make ropes, and more recently, wood pulp to make paper.



***Ceiba speciosa*:**

Top: Flower in profile.

Middle: The streaks, on the inner part of each petal, are nectar guides that show a pollinating insect or bird where to go for the sweet treat.

Photos: Peakhora, Wikipedia CC BY-SA 4.0.

***Ceiba glaziovii*:**

Bottom: Many members of the family Malvaceae have this stalk emerging from the centre of each flower. Botanists call this an androgynophore, which bears or carries (-phore) the androecium (male parts, filaments and stamens) surrounding the gynoecium (female parts, style and stigma). Another family that has members with an androgynophore is Passifloraceae (Passion flowers).

Photo: Mauro Guanandi, Wikimedia Commons CC BY 2.0



The Kapok, *C. pentandra*, can become a gigantic tree. In early September 1967 I was enchanted to see one towering above the forest canopy near Yagumbok, a remote village in the Sepik district of Papua New Guinea, letting loose its seeds on little puffs of down to drift lazily over the green forest below. They can grow up to 50 metres and are widely grown across the tropics. (How did this obviously old specimen get to Yagumbok?? Maybe it just blew in?)



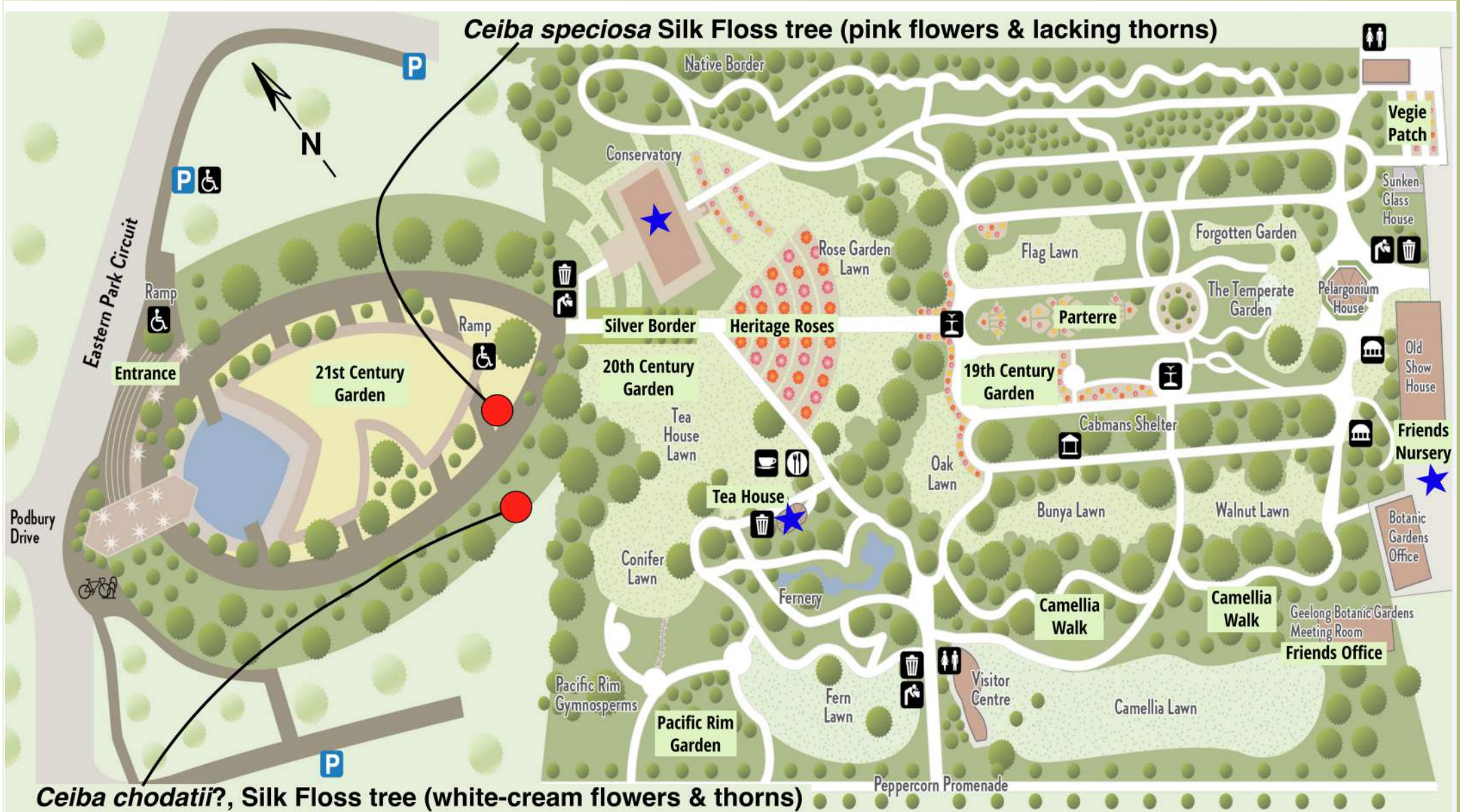
*C. speciosa*, our Silk Floss tree, obviously grows well in Geelong. If you have enough space it very much deserves a place in your garden, in full sun or part shade. It will grow up through your canopy! It is drought and coast tolerant, but enjoys supplementary watering in extended dry periods. It must have plenty of room for the extensive root system, which can lift paths and roads, and for its sheltering canopy to develop.

**References**

1. [https://en.wikipedia.org/wiki/Ceiba\\_speciosa](https://en.wikipedia.org/wiki/Ceiba_speciosa)
2. <https://www.nationalarboretum.act.gov.au/living-collections/forests-and-trees/forest-58>
3. <https://www.britannica.com/browse/Flowering-Plants>
4. <https://edis.ifas.ufl.edu/publication/ST164> (*Chorisia speciosa*: Silk-Floss Tree, ENH323/ST164)
5. <https://animals.sandiegozoo.org/plants/floss-silk-tree>
6. <https://wfoplantlist.org/> World Flora Online (WFO) Plant List
7. <https://www.boliviabella.com/legend-of-the-toborochoi.html> "The Legend of the Toborochoi Tree," Bolivian Myths and Legends".
8. [https://www.researchgate.net/publication/28150456\\_A\\_taxonomic\\_revision\\_of\\_the\\_genus\\_Ceiba\\_Mill\\_Bombacaceae](https://www.researchgate.net/publication/28150456_A_taxonomic_revision_of_the_genus_Ceiba_Mill_Bombacaceae)  
Gibbs, P. E.; Semir, J. Año (2003),  
"A taxonomic revision of the genus *Ceiba* Mill. (Bombacaceae)", *Anales del Jardín Botánico de Madrid*, 60 (2). doi:10.3989/ajbm.2002.v60.i2.92, ISSN 0211-1322
9. [https://web.archive.org/web/20150921220753/http://www.sandiegozoo.org/CF/plants/species\\_detail222.html](https://web.archive.org/web/20150921220753/http://www.sandiegozoo.org/CF/plants/species_detail222.html)  
"Plants: Species". Archived from the original on 2015-09-21. Retrieved 2024-12-07.

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Map of Geelong Botanic Gardens