

Scolopia braunii Flintwood



Each *Scolopia braunii* flower has up to 60 stamens. Photo: Allan Lugg, inaturalist CC BY-NC.

Scolopia braunii in the Geelong Botanic Gardens

Scolopia braunii (common names: Flintwood, Gun-stock Wood, Brown Birch or Mountain Cherry) is a medium sized tree (to 25 m tall and 0.5 m diameter trunk) that is not easy to find in these gardens. Fittingly, it is planted in the rainforest area of the C19 Garden, near the Ginkgo. However, as is typical in a rainforest, only the trunk is visible from ground level near the trunk. It grows between, and close to a Bamboo clump and the Fishtail Palm *Caryota urens*. The distinctive leaves are only visible (using binoculars) from near the path that encircles the old rock fountain. (See photo below.) Its trunk is sloping and the trunk has a flange at ground level, but has not yet developed buttresses.



Scolopia braunii leaves above the canopy of the rainforest area, GBG, May 2023.



***Scolopia braunii* in the GBG.** Left photo: *Scolopia* trunk centre, *Caryota urens* trunk right, May 2023. Right photo: *Scolopia* with sun highlighting its trunk. *Brachychiton discolor* in flower left, February 2007. Photo: Rosemary Turner.

The National Trust recognises this tree as of significance in Victoria because it 'is the only known example in cultivation in Victoria'. In March 2004 they measured it as 14 m tall and 0.94 m girth and estimated its age as 120 years (ie. planted in the 1880s.) Since the original National Trust file was created in 1984, 7 specimens have been planted in the RBG Melbourne, all after 2018.

As shown in the photo from 2007, above right, the place where this tree is growing was more open with no Bamboo growing beside it. At that time, the then green fruit were visible.

Names

Scolopia is from the Greek skolops, skolopis, meaning pointed. Several species have spines at the base of juvenile leaves growing from the trunk when coppiced or otherwise damaged. The species name *braunii* recognises the German Botanist, Alexander Carl Heinrich Braun (1805 – 1877). The species name was given in 1854 to a specimen in the Berlin BG by the German botanist, Klotzch. They had no record of the tree's origin. However, on the 1802 Matthew Flinders expedition in the Investigator, the Scottish naturalist Robert Brown had collected the same plant near the Hunter River, NSW. In 1862, Ferdinand von Mueller, officially described the specimen, naming it *Scolopia brownii*. On comparison of the specimens and descriptions, a later botanist determined that the two names referred to the same species and so the name given first is now the recognised name. By chance both botanists' names are the colour brown.

As usual, there are multiple common names. Flintwood or Gun-stock Wood refer to the hardness of the wood and its close grain, which led its use in making firearm stocks. Its wood has also been used for the heads of golf clubs and for chisel handles. A species of *Scolopia* from Africa was used for cart axles.

Phylogeny

The genus *Scolopia* has 51 accepted species according to World Flora Online. *Scolopia* is placed in the Willow (*Salix*), Poplar (*Populus*), Kei Apple (*Dovyalis*) and Ligiri (*Idesia*) family, Salicaceae. The last 3 genera have representatives in the GBG. The genus has several species whose continued survival are significantly threatened.



Scolopia braunii. Left: GBG tree, showing **scaly bark**. Top right: A **scalloped leaf**. Photo: Ryan Hughes, iNaturalist CC BY-NC. Bottom right: A **rhombus shaped leaf** with an extra point and a thorn at its base. Photo: Erlend Harstad, iNaturalist CC BY-NC.

Description

See the botanical drawing on page 5, and photos of bark, leaves and fruit on this page.

The bark is scaly and leaves a depression after a scale has been shed.

Many of the leaves are shaped like a rhombus (diamond), sometimes with spikes. With binoculars, leaves with that shape are visible above the canopy in the GBG (photo page 1). Some leaves are scalloped and others toothed. Some caterpillars feed on the leaves, despite them being leathery.

Creamy white flowers (photo page 1) appear from September to November in Queensland, so they may



Scolopia braunii fruit looks like a cherry. It ripens through yellow, red and finally black. When ripe, it has pink flesh and a few seed. Left photo: Kerry Coleman, iNaturalist CC BY-NC

be visible later in Geelong. Superficially the flowers look like *Eucalyptus* and other members of the Myrtaceae family, because they have up to 60 stamens. But they retain their small petals. Unlike members of the family Myrtaceae they have 4 sepals and 4 petals. Sepals are 1 - 2.5 mm long. Nectar glands, in a ring around the outside and at the base of the petals, attract insects such as butterflies.

The 12 mm round, cherry-like, fruit change from green, to yellow, to red, to deep red and finally, to black. There are a few seeds embedded in the pink pulp of the fruit. Birds are partial to the fruit.

Habitat and Distribution

Flintwood grows in warmer rainforest areas, river banks, vine thickets, beach scrub and wetlands. So it clearly needs access to water. Being endemic to eastern Australia, it grows along the coast from Jervis Bay, NSW to Cape York Peninsula, in Queensland. (See Map.)

Other members of the genus *Scolopia* grow mainly in tropical Africa, India, Asia and New Guinea.

Growing this tree

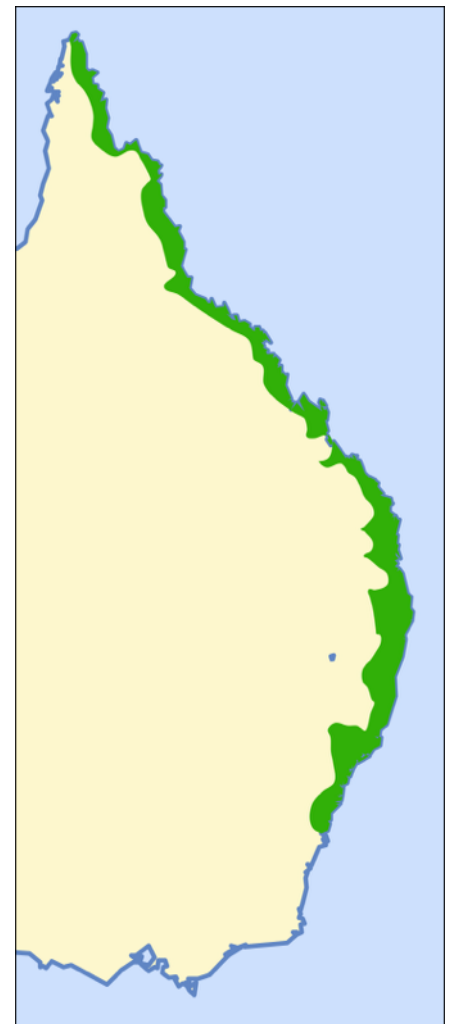
Seed germination is somewhat slow and erratic, but cuttings are more successful. The Queensland Government includes it among trees suitable to resist fires that are not extreme.

J H Maiden wrote that the tree in the RBG Sydney looked unsightly due to sooty mould, although he says this has no adverse effect on the tree. He suggested improving the soil drainage to improve its appearance.

Conservation status

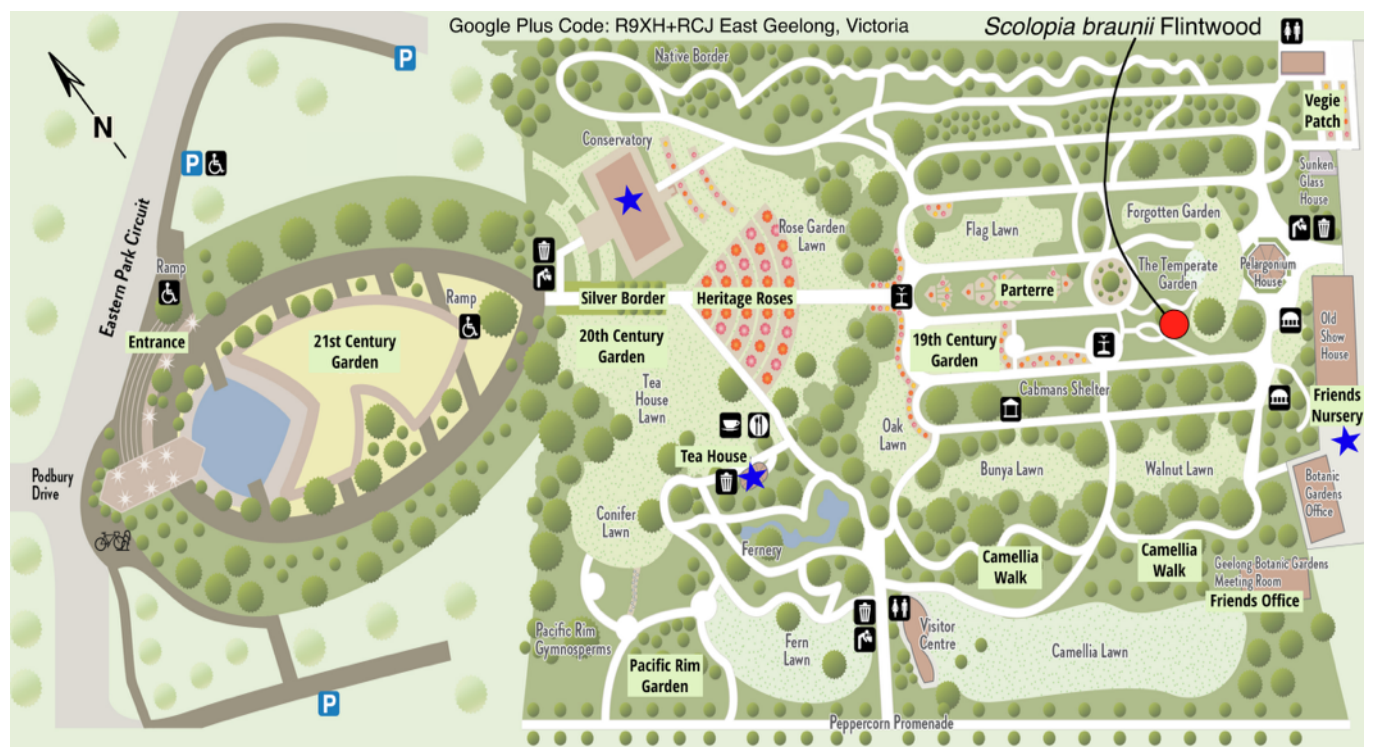
The IUCN Red List shows this tree's conservation status as Least Concern (LC).

Tags: *Scolia braunii*, Flintwood, Gun-stock Wood, Brown Birch, Mountain Cherry, Family Salicaceae, Geelong, Botanic Gardens, Australian plants.



Scolopia braunii grows along the east coast of Australia from Jervis Bay to the Torres Strait Islands. Distribution from map, AVH, The Australasian Virtual Herbarium, avh.ala.org.au CC BY 3.0 AU. Base map of Australia: Papayoung, Wikimedia Commons CC BY-SA 3.0.

Map: Location of *Scolopia braunii* in the Geelong Botanic Gardens





SCOLOPIA BROWNII, F.v.M.

Botanical illustration of *Scolopia brownii*

A: Flowering twig; B: Vertical section through flower (a) Sepal, (b) Petal, (c) Receptacle holding the parts of the flower. The glands, which secrete nectar to attract pollinators, are characteristic of the species, (d) Stamen, (e) Stigma, (f) Ovary; **C: Flower**, with stamens removed (a) Sepal, (b) Petal, (c) Receptacle, (d) Ovary, (e) Stigma; **D: Stamen**, back and front view; **E: Flower**, looked at from above: (a) Sepal, (b) Petal, (c) Receptacle; **F: Fruit-bearing twig; G: Fruit; H. Transverse section through fruit; K.: Seeds.**

Drawing: Lilian Margaret Flockton (1861-1953), Plate 44, Forest Flora of New South Wales, Joseph Henry Maiden (1859-1925). Wikimedia Commons, Public domain.

Sources

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Scolopia braunii fruit showing pink flesh and seeds. Photo: Jason Stewart, iNaturalist CC BY-NC-ND