

Brachychiton populneus

(Schott & Endl.) R. Br.

Sterculiaceae

LOCAL NAMES

English (bottle tree, brachychiton, white-flower Kurrajong)

BOTANIC DESCRIPTION

Brachychiton populneus is a small to medium-sized evergreen tree which may reach 20 m in height and a crown of 9 m with medium to rapid growth rate; although it is often much smaller, pyramidal when young, overall narrow shape growing wider with age and dense foliage.

Leaves simple, often lanceolate, entire or 3-5 lobed up to 10 cm long; glossy green; young foliage pale green tinged pink giving the tree an interesting appearance.

Trunk tapers like bottle, buttressed wider at base when young, losing bottle shape when older; trunk and stems green when young growing stout and grey with age.

Flowers monoecious, small white or cream, bell shape with inner tube streaked pink, red or purple.

Fruit is a distinctive brown hard, woody, boat-shaped 1-7 cm long seed capsule, becoming blackish, with many round, large yellow seeds coated with fine irritant hairs.

Brachychiton - is Greek for 'short', and 'tunic', an allusion to the bristles surrounding the seed in the fruit;
populneus - is Latin for 'poplar-like'; the leaves resemble those of *populus* spp

BIOLOGY

It is monoecious and blooms in early summer (May-July), followed by brown pods containing seeds.



Leaves and flowers - Taken at Weston Park ACT (Hotchkiss, R ANBG Photo No.: a.1816)



Tree (Greig, D. ANBG Photo No.: a.12227)



Taken near Bigga NSW (Fagg, M. ANBG Photo No.: a.19577)

ECOLOGY

Usually in rocky woodlands to scrub, along stream banks to open forests and valley slopes. It requires full to part sun (cannot grow in the shade). It can grow in coastal and sub-coastal areas on a variety of soils but favouring limestone. It requires dry or moist soil.

BIOPHYSICAL LIMITS

Altitude: 200-600 m

Temperature: can tolerate frost to -6°C, minimum temperature of 7 - 10°C

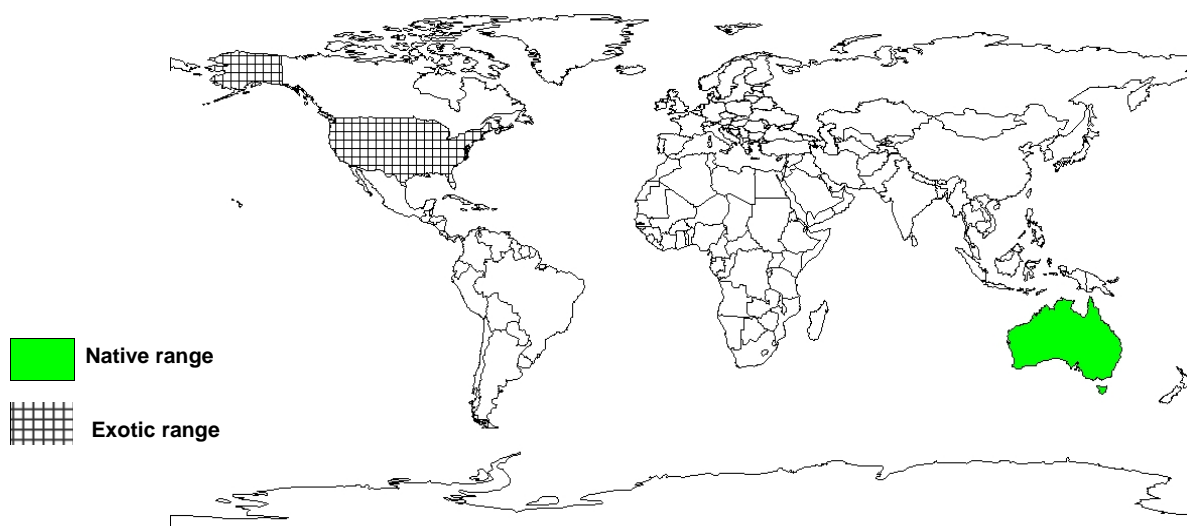
Rainfall: average annual of 550 mm

Soil type: Prefers well-drained soil types, granite or limestone, clay, loamy and sandy soil of even texture, slightly acidic, neutral or basic.

DOCUMENTED SPECIES DISTRIBUTION

Native: Australia

Exotic: US



The map above shows countries where the species has been planted. It does neither suggest that the species can be planted in every ecological zone within that country, nor that the species can not be planted in other countries than those depicted. Since some tree species are invasive, you need to follow biosafety procedures that apply to your planting site.

PRODUCTS

Food: Seeds are eaten raw or roasted. Very nutritious, containing about 18% protein, 25% fat plus high levels of zinc and magnesium. Root - yam-like is a popular and nutritious food item with the Australian Aborigines and the gum exudate is also edible.

Beverage: The roasted ground-up seeds can be used as a coffee substitute or added to bread.

Fodder & forage: Trees are lopped for fodder during dry seasons. Leaves lopped from branches are nutritious and desirable to stock, however consumption of the fruit may cause illness.

Fibre: A fibre obtained from the inner bark can be used for making cordage, fishing nets, ropes, headbands and dilly bags.

SERVICES

Ornamental: Juvenile plants, which display attractive lobed leaves and swollen taproots, make good pot-plants tolerant of dry and pot-bound conditions and respond well to pruning. The typically stout form and glossy-green foliage it is widely used as a street tree in Australia and many parts of the world. The compact and densely foliated habit makes it an attractive specimen plant in a large garden or park.

Shade & shelter: It is often planted as shade trees and windscreen. Native populations on agricultural land are often retained to provide dense shade.

Apiculture: The flowers support honey production.

TREE MANAGEMENT

Transplanting when 2 m is recommended if the swollen taproot is conserved and the branches trimmed to reduce water loss. Planting out should be in late spring or early summer, after the last expected frosts. Sapling growth is often very slow and can possibly be improved through soil cultivation and watering. Regular watering during summer; once per week or once every 2 weeks is required. Lopping for fodder in time of drought can be undertaken.

B. populneus may be a nuisance by its large woody fruit which are notorious for jamming reel lawnmowers, and the deep roots that clog drains. Because of the irritant hairs surrounding seed capsules, they should be collected using cloves.

GERMPLASM MANAGEMENT

Seed behaviour is described as orthodox. Propagation from seed is relatively easy without any pretreatment. Seeds readily germinate but immersion in warm-hot water then soaking for 12 hours enhances success. Seeds should be sown in spring in a greenhouse, pricked out when large enough and let grow in the greenhouse for at least their first winter.

PESTS AND DISEASES

The plant has numerous pests and diseases but shows resilience to defoliation. The foliage is food to caterpillars like *Chasmina pulchra*, *Netrocoryne repanda* (Eastern Flat), *Candalides absimilis* (Pencilled Blue), *Phaedyma shepherdii* (Common Aeroplane), and *Dichocrosis clytusalis* (Kurrajong Bag Moth). It is susceptible to Texas root rot.

Mature trees produce large amounts of viable seed, which are predated on by weevils, beetle larvae and omnivorous vertebrates such as Australian ravens, magpies and black rats.

Internal infections are best avoided by application of anti-fungal treatments to open wounds.

FURTHER READNG

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SUGGESTED CITATION

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