

## NZ Myrtaceae Key - Online edition

# *Eucalyptus leucoxylon* F.Muell.

### Common Names

blue gum, red-flowered yellow gum, white ironbark, yellow gum

### Origin

Australia: south-eastern South Australia, west and central Victoria, and one area in southern New South Wales.

### Cultivation

In New Zealand widely cultivated as a landscape tree of parks and gardens, for its bright pink flowers, and as a food-source for nectar-feeding birds; occasionally naturalised from nearby planted specimens. *Eucalyptus leucoxylon* 'Rosea' is the name used for bright pink-flowered selections.

### Distribution

Cultivated throughout New Zealand.

### Distinguishing Features

- Small to medium-sized tree with smooth bark throughout, or with some incompletely shed rough, fibrous to flaky, grey to yellowish brown bark on basal 0.5–2 m.
- Adult leaves that are alternate, stalked, blade lanceolate to sickle-shaped, to 185 mm long and 30 mm wide, glossy or dull, green to slightly blue-green or grey-green, same colour above and below, not waxy grey-white; juvenile leaves that are opposite and stalkless for about 15 pairs, base stem-clasping to rounded at first, then alternate and stalked.
- Flowers in clusters of three, in leaf axils, erect or hanging downwards, usually bright pink to red on cultivated trees, but may be white. Mature buds on long, slender stalks, club-shaped to diamond-shaped, to 17 mm long and 7 mm wide, green to yellow or creamy; cap conical to rounded or narrowly pointed, sometimes warty.
- Fruit are stalked woody capsules, that are cup-shaped to truncated-globose, or shortly cylindrical to barrel-shaped, to 14 mm long and 14 mm wide, usually smooth but sometimes ribbed; staminal ring (stamens joined in a ring at their bases) broad, remaining around the rim of the capsule, then shedding as capsule matures; disc descending inside the capsule rim, valves 4 to 6, enclosed within the rim.

### Habit

Small to medium-sized tree to 25 m tall.

### Bark and Stem/Trunk

Bark smooth throughout, or with some incompletely shed rough, fibrous to flaky grey to yellowish brown bark on basal 0.5–2 m of trunk; smooth bark yellowish with grey and cream patches; horizontal bark scars sometimes present; ribbons absent. Hairs and adventitious roots absent. Young stems rounded in cross-section, branchlets not waxy grey-white.

### Leaves

Adult leaves alternate, stalked, blade lanceolate to sickle-shaped, 60–185 mm long, 10–30 mm wide, base tapering to stalk, glossy or dull, green to slightly bluish green or grey-green, same colour above and below, hairless, not waxy grey-white; side-vein angle to midrib varies, either acute or wider; vein reticulation dense to very dense, intramarginal vein parallel to and well removed from margin, oil glands present; leaf stalk 9–25 mm long.

Juvenile leaves opposite and stalkless for about 15 pairs, then alternate and stalked, ovate, becoming broadly lanceolate, 45–105 mm long, 20–73 mm wide, base stem-clasping to rounded, margin smooth or scalloped, dull, green to slightly bluish green, not waxy grey-white.

### Flowers

Flowers in clusters of three, in leaf axils, stalk of cluster round in cross-section, erect or hanging downwards, to 11 mm long. Mature buds are free, on long, slender stalks 2–14(–24) mm long, club-shaped to diamond-shaped, 6–17 mm long, 5–7 mm wide, green to yellow or creamy; cap conical to rounded or narrowly pointed, sometimes warty, staminal ring prominent (stamens joined in a ring at their bases), flowers (stamens) white, red or pink; in mature open flowers, petals and sepals absent. Main flowering period: winter and spring, with some flowering from autumn to early summer.

### Fruit

Capsules woody, stalked (stalks 2–16(–24) mm long), cup-shaped to truncated-globose, or shortly cylindrical to barrel-shaped, 6–14 mm long, 6–14 mm wide, usually smooth but sometimes ribbed; staminal ring broad, remaining around the rim of the capsule, then shedding as capsule matures, disc descending inside the capsule rim, valves 4 to 6, enclosed within the rim.

### Similar Species

*Eucalyptus sideroxylon* and *E. leucoxylon* have similar leaves, buds, and capsules, although buds and capsules of *E. sideroxylon* are usually smaller, and foliage of *E. sideroxylon* is typically more bluish, and may be waxy grey-white. Both have prominent staminal rings on flowers and capsules. An important difference is that *E. leucoxylon* has flowers in clusters of 3, whereas *E. sideroxylon* has clusters of 7. The most conspicuous difference is that *E. leucoxylon* has mostly smooth white or grey-white bark with a little rough, greyish bark at the base, but *E. sideroxylon* has thick, dark ironbark throughout.

## Notes

Four to six subspecies of *E. leucoxylon* are currently recognised. In New Zealand, *E. leucoxylon* subsp. *leucoxylon* and *E. leucoxylon* subsp. *megalocarpa*, which has slightly larger leaves, and capsules to 17 mm long, 16 mm wide, are most common. *Eucalyptus leucoxylon* subsp. *stephaniae* has smaller leaves and shorter capsules than *E. leucoxylon* subsp. *leucoxylon*. *Eucalyptus leucoxylon* subsp. *pruinosa* has smaller leaves than *E. leucoxylon* subsp. *leucoxylon*, and waxy grey-white juvenile leaves, buds and capsules, as well as pairs of juvenile leaves often joined across the stem. Two additional subspecies with restricted indigenous distributions are sometimes accepted solely in Victoria, Australia. *E. leucoxylon* subsp. *connata* has juvenile leaf pairs joined across the stem, suggesting a relationship with *E. leucoxylon* subsp. *pruinosa*, while the absence of wax brings it close to *E. leucoxylon* subsp. *leucoxylon*. *Eucalyptus leucoxylon* subsp. *bellarinensis* possesses waxy juvenile leaves with a fruit stalk  $\pm$  14 mm long, longer than its fruit.

*Eucalyptus* is a genus of nearly 800 species, most of which are endemic to Australia, with a few species extending to parts of Malesia and as far north as the Philippines.

## External Links

- [EUCLID](#) (*E. leucoxylon* subsp. *leucoxylon*)
- [Flora of Australia](#) (*E. leucoxylon* subsp. *leucoxylon*)
- [Flora of Australia](#) (*E. leucoxylon* subsp. *megalocarpa*)
- [Flora of New Zealand Online](#) (*E. leucoxylon*)
- [Flora of New Zealand Online](#) (*E. leucoxylon* subsp. *megalocarpa*)
- [GBIF](#)
- [iNaturalist NZ](#)
- [NZPCN](#)
- [PlantNET: New South Wales Flora Online](#)
- [VicFlora: Flora of Victoria](#)

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