

NZ Myrtaceae Key - Online edition

Eucalyptus muelleriana A.W.Howitt

Common Names

yellow stringybark

Origin

Australia: coastal plains and foothills of south-eastern New South Wales and Victoria.

Cultivation

In New Zealand cultivated in tree collections and for timber, and as a landscape tree of parks; occasionally naturalised from nearby planted specimens.

Distribution

Scattered records from the North Island, uncommon in the South Island of New Zealand.

Distinguishing Features

- A medium-sized to tall stringybark tree to 40 m tall with thick, fibrous, brown to grey-brown bark rough to the small branches.
- Adult leaves that are glossy, green, colour different above and below or slightly different, alternate, lanceolate to sickle-shaped, to 200 mm long and 45 mm wide, usually the two sides of the leaf base meet at different points on the midrib (oblique).
- Young stems, leaf stalk, leaf margin and midrib on lower side of juvenile leaves sparsely rough-surfaced (scabrid) for lower 1–10 leaf pairs only. Juvenile leaves opposite and stalkless for about 10 pairs, then alternate, stalked, broad to narrow lanceolate, to 135 mm long and 50 mm wide, glossy, dark green, colour different above and below.
- Flowers in stalked clusters of 7, 9 or 11, in leaf axils, stalk of cluster angular to distinctly flattened, to 20 mm long, buds stalked, mature buds broad-club-shaped, to 7 mm long and 4 mm wide, glossy, pale green, bud cap conical to rounded, flowers white.
- Fruit are stalked woody capsules, stalks to 5 mm long, cup-shaped or truncated-globular, to 10 mm long and 12 mm wide, disc variable, raised to descending, valves usually 4, near rim level or projecting slightly above the rim.

Habit

A medium-sized to tall tree to 40 m tall.

Bark and Stem/Trunk

Bark rough to small branches, thick, fibrous, stringy, brown to grey-brown; ribbons absent. Hairs and adventitious roots absent. Young stem rounded in cross-section, surface sparsely rough (scabrid).

Leaves

Adult leaves alternate, stalked, blade lanceolate to sickle-shaped, 80–200 mm long, 15–45 mm wide, usually the two sides of the leaf base meet at different points on the midrib (oblique), glossy, green, colour different above and below or slightly different, side-veins at an acute or wider angle to midrib, vein reticulation sparse, intramarginal vein parallel to and well removed from margin, oil glands round; leaf stalk 5–20 mm long.

Juvenile leaves opposite and stalkless for about 10 pairs, then alternate, stalked, broad to narrow lanceolate, 55–135 mm long, 10–50 mm wide, base rounded to tapering, glossy, dark green, colour different above and below; stem, leaf stalk, leaf margin and midrib on lower side sparsely rough-surfaced (scabrid) for lower 1–10 leaf pairs only.

Flowers

Flowers in stalked clusters of 7, 9 or 11, in leaf axils, stalk of cluster angular to distinctly flattened, 5–20 mm long, buds stalked, stalks 2–5 mm long. Mature buds free, broad club-shaped, 5–7 mm long, 3–4 mm wide, glossy, pale green, bud cap conical to rounded, flowers (stamens) white; in mature open flowers, petals and sepals absent. Main flowering period: summer to autumn.

Fruit

Capsules woody, stalked (stalks 1–5 mm long), cup-shaped or truncated-globular, 6–10 mm long, 7–12 mm wide, disc raised above the rim or level to slightly descending inside the rim, valves usually 4, near rim level or projecting slightly above the rim.

Similar Species

- Stringybark eucalypts have many similar characteristics. Species in this key are *E. globoidea*, *E. eugenioides* and *E. muelleriana*. Other stringybarks in New Zealand include *E. agglomerata* (blue-leaved stringybark) and *E. laevopinea* (silvertop stringybark). *E. pilularis* and *E. obliqua* also have some characteristics in common with the stringybarks, as do other ash eucalypt species.
- Stringybarks have fibrous rough bark to the small branches (except *E. laevopinea*, that has smooth white bark on the small limbs). *E. obliqua* has mostly rough bark, but smooth bark on the upper branches. *Eucalyptus pilularis* has rough bark on the lower trunk, but smooth white bark on the upper trunk and branches. These two species are included in comparisons because of similar characteristics to some stringybarks.
- All these stringybarks have green (or blue-green for *E. agglomerata*), more or less lanceolate adult leaves. There is variation in whether colour is the same above and below or not. *E. obliqua* and *E. pilularis* (not stringybarks) have leaves the same colour

above and below (*E. agglomerata* and *E. laevopinea* also have leaves the same colour above and below). *Eucalyptus muelleriana* has leaves that are distinctly different coloured above and below. The leaves of *E. globoidea* and *E. eugenioides* are mostly the same above and below but may be slightly different.

- The juvenile leaves of all these stringybarks have leaves that are a different colour above and below, some progressing to leaves the same colour each side as the plant develops. Stringybark juvenile leaves are rough-surfaced on stems, leaf stalks, leaf margins and midribs, because of stellate hairs present. *Eucalyptus obliqua* has warty young stems from numerous raised oil glands. In contrast, *E. pilularis* has young stems 4-sided with flanged edges. The stringybark juvenile leaves have short stalks, whereas *E. obliqua* and *E. pilularis* juvenile leaves are stalkless.
- The number of flowers and seed capsules in a cluster varies. All have 7 or more; *E. muelleriana* (and *E. laevopinea*) have 7–11; *E. eugenioides* and *E. pilularis* have 7–15; *E. globoidea*, *E. obliqua* (and *E. agglomerata*) have 11–15. All these stringybarks and *E. obliqua* have the cluster stalk angular to flattened, some up to 2 cm long; *E. pilularis* has an angular cluster stalk.
- All have rounded to conical bud caps, but the cap of *E. pilularis* (and *E. agglomerata*) may be narrowly pointed.
- The stringybarks have characteristically crowded clusters of seed capsules because of the number of buds. In most species, each capsule has a short stalk; but in *E. globoidea*, with stalkless or very short-stalked capsules, they are crowded (and in *E. agglomerata* the capsules are very crowded with sides flattened). The stringybark species have small, round or cup-shaped to truncated-globular capsules. They are differentiated on capsule size and length of capsule stalk, together with a combination of other characters. *Eucalyptus obliqua* has cup-shaped to barrel-shaped capsules, and *E. pilularis* capsules are round to truncated-globular.

Notes

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](#)
- [Flora of Australia](#)
- [Flora of New Zealand Online](#)
- [GBIF](#)
- [iNaturalist NZ](#)
- [NZPCN](#)
- [PlantNET: New South Wales Flora Online](#)
- [Plants of South Eastern New South Wales](#)
- [VicFlora: Flora of Victoria](#)

Creative Commons Attribution 4.0 International Licence (CC BY 4.0).

