

NZ Myrtaceae Key - Online edition

Eucalyptus pilularis Sm.

Common Names

blackbutt

Origin

Australia: south-eastern New South Wales to south-eastern Queensland.

Cultivation

In New Zealand predominantly found in cultivation, planted for timber or amenity; occasionally naturalised from nearby specimens.

Distribution

Scattered records from the North Island of New Zealand, mainly from coastal and lowland areas.

Distinguishing Features

- A tree to 70 m tall with rough, fibrous, grey or grey-brown bark on lower half of trunk; bark smooth above, cream to white or grey, without ribbons in the crown of the tree.
- Adult leaves glossy, green, same colour above and below or colour slightly different, the two sides of the leaf base usually meeting at different points on the midrib (oblique), alternate, stalked, to 195 mm long and 32 mm wide, side-veins at an angle greater than 45° to midrib.
- Juvenile leaves opposite and stalkless for many pairs (until early sapling stage), lanceolate to 130 mm long and 36 mm wide, bases rounded or almost stem-clasping, dull, green, colour strongly different above and below.
- Flowers in stalked clusters of 7 to 15, in leaf axils, stalk of cluster to 20 mm long; mature buds stalked, bud stalks to 7 mm long. Mature buds ovate to diamond-shaped, to 10 mm long and 5 mm wide, yellow or creamy, bud cap conical to narrowly pointed, flowers white.
- Fruit that are stalked woody capsules, stalks to 7 mm long, rounded to truncated-globular, to 11 mm long and 12 mm wide, disc level to descending inside the rim, valves usually 4, near rim level or enclosed within the capsule.

Habit

Tree to 70 m tall.

Bark and Stem/Trunk

Bark rough on lower half of trunk, finely fibrous, grey or grey-brown; smooth bark cream to white or grey, not powdery or granular; ribbons absent. Hairs and adventitious roots absent. Young stems square in cross-section.

Leaves

Adult leaves alternate, stalked, blade lanceolate to sickle-shaped, 75–170(–195) mm long, 12–32 mm wide, the two sides of the leaf base meet at different points on the midrib (oblique), or may be tapered to the stalk, same colour above and below or colour slightly different, glossy, green, hairless, side-veins at an angle greater than 45° to midrib, vein reticulation moderate to dense, intramarginal vein parallel to and well removed from margin, oil glands present; leaf stalk 8–22 mm long.

Juvenile leaves opposite and stalkless for many pairs (until early sapling stage), lanceolate, 55–130 mm long, 10–36 mm wide, bases rounded or almost stem-clasping, dull, green, colour strongly different above and below.

Flowers

Flowers in stalked clusters of 7 to 15, in leaf axils, stalk of cluster 8–20 mm long; buds stalked, bud stalks 2–7 mm long. Mature buds free, ovate to diamond-shaped, 6–10 mm long, 3–5 mm wide, yellow or creamy, bud cap conical to narrowly pointed, flowers (stamens) white; in mature open flowers, petals and sepals absent. Main flowering period: spring, summer and autumn.

Fruit

Capsules woody, stalked (stalks 1–7 mm long), rounded to truncated-globular, 5–11 mm long, 7–12 mm wide, disc level to descending inside the rim, valves usually 4, near rim level or enclosed within the capsule.

Similar Species

- *Eucalyptus pilularis* has some characteristics in common with the stringybarks, as well as *E. obliqua* and some other ash eucalypt species. Stringybark 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).
- *Eucalyptus pilularis* has rough bark on the lower trunk, but smooth white bark on the upper trunk and branches. *Eucalyptus obliqua* has mostly rough bark, but smooth bark on the upper branches. Stringybarks have fibrous rough bark to the small branches (except *E. laevopinea*, that has smooth white bark on the small limbs).
- *Eucalyptus pilularis* and *E. obliqua* have more or less lanceolate adult leaves that are the same colour above and below. Of the stringybarks, *E. agglomerata* and *E. laevopinea* also have leaves the same colour above and below. Other stringybarks have leaves distinctly different coloured above and below, or mostly the same colour but colour may be slightly different.

- *Eucalyptus pilularis* has young stems 4-sided with flanged edges. *Eucalyptus obliqua* has warty young stems from numerous raised oil glands. Stringybark juvenile stems are rough-surfaced from the presence or star-shaped hairs. Stringybark juvenile leaves have short stalks, whereas *E. obliqua* and *E. pilularis* juvenile leaves are stalkless.
- *Eucalyptus pilularis* and *E. eugenioides* have 7–15 flowers and capsules in a cluster. Other stringybarks and *E. obliqua* also have between 7 and 15: *E. muelleriana* (and *E. laevopinea*) have 7–11. *Eucalyptus pilularis* has an angular cluster stalk, whereas the stringybarks and *E. obliqua* have the cluster stalk angular to flattened.
- The bud cap of *E. pilularis* (and *E. agglomerata*) is conical but may be narrowly pointed. Most stringybarks have rounded to conical bud caps.
- *Eucalyptus pilularis* capsules are round to truncated-globular, as are capsules of many stringybarks. *Eucalyptus muelleriana*, *E. laevopinea* and *E. obliqua* can have capsules similar in size to those of *E. pilularis*, but *E. obliqua* has cup-shaped to barrel-shaped capsules. Capsules of *E. globoidea*, *E. eugenioides* and *E. agglomerata* are usually smaller and more crowded.

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](#)

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

