

Eucalyptus purpurata

Bandalup silver mallet

Name: From the Latin *purpuratus* (clad in purple), referring to its distinctive purple-red new growth, which distinguishes the species from the related wheatbelt species, *E. falcata*.

The common name refers to its occurrence on Bandalup Hill, its silvery bark in spring, and its mallet habit.

Authority: *Eucalyptus purpurata* D.Nicolle, *Nuytsia* 15(1): 81 (2002). Type: near Bandalup Hill, east of Ravensthorpe, WA, 5 Nov 2000, D.Nicolle 3579 & M.E.French (holo: PERTH; iso: AD, CANB, NSW).

Key features: Tree, lignotuber absent, obligate seeder. Bark smooth. Young branchlets, new leaf growth and buds intensely purplish red. Buds and fruits delicate, pendulous on slender stalks. Bud caps conical, narrow. Fruits rounded, smooth.

Distribution & Habitat: Endemic to the south-west region. Known from a single population on Bandalup Hill, east of Ravensthorpe, where it grows on a broad ridge of white, magnesite-influenced powdery loam, mainly in pure stands or associated with *E. brachycalyx*, *E. flocktoniae* subsp. *flocktoniae*, *E. indurata*, *E. phaenophylla* and *E. uncinata* subsp. *uncinata*.

Notes: A very rare but distinctive species in the field, due to its occurrence on hills of white powdery loam, its erect mallet habit, and especially in its intensely purple-red new growth

subg. *Symphyomyrtus*

sect. *Bisectae* ser. *Falcatae* subser. *Rugatae*

that usually forms a conspicuous purple-tinged canopy, and its purple-red young branchlets and buds.

Eucalyptus purpurata is part of the 'silver mallet' group of eucalypts, which includes four other mallet species: *E. falcata*, *E. ornata*, *E. recta* and *E. rugulata*. All five species are geographically separated from one another and are usually conspicuous in the field due to their hilltop habitat, their erect tree habit, their smooth, silvery to grey-white bark, and the delicate stalks of their buds and fruits. *Eucalyptus purpurata* is the only species in the silver mallet group to occur in the south-west region, with the other four species occurring in the wheatbelt and goldfields regions of WA.

Eucalyptus purpurata is most closely related to *E. falcata* (silver mallet, syn. *E. argyphaea*) and has a more widespread distribution to the north, from near Williams eastwards to near Cascade. *Eucalyptus falcata* differs from *E. purpurata* most conspicuously in its yellow-green to orange-green new growth, and its larger, less delicate buds and fruits.

Conservation Status: The single known population occurs on a mining lease and is completely surrounded by mining activity.

World: IUCN Red List: Critically Endangered (2024).

National: EPBC Act 1999: Not listed (2024).

State (WA): BC Act 2016: Vulnerable (2024).



Description: **Tree (mallet)**, to 14 m tall, lignotuber absent, obligate seeder. Erect habit, dense crown. **Bark** smooth, silvery grey to whitish grey. **Branchlets** purple-red when young, not pruinose, without pith glands. **Juvenile leaves** petiolate, becoming elliptical, dull, slightly blue-green. **Adult leaves** petiolate, lanceolate, 45–95 mm × 6–15 mm, glossy, dark olive green, new growth purple-red. **Umbels** 7–11-flowered, pendulous, held on slender, terete peduncles 7–15 mm long. **Buds** reddish, 11–15 mm long × 4–4.5 mm wide, pendulous, pedicels 3–6 mm long. **Hypanthia** slightly ribbed. **Opercula** smooth, long-conical to long-beaked, 2–3 times as long as the hypanthia, acuminate. **Flowers** creamy white, occurring mainly in spring. **Fruits** pedicellate, globose to truncate globose to slightly flattened, 5–6 mm long × 6–7 mm wide, smooth, disc descending, valves 3, around rim level. **Seeds** grey-brown.