Eucalyptus melanophloia subsp. *nana*

Classification

Eucalyptus | Symphyomyrtus | Adnataria | Apicales | Siderophloiae | Jugatae

Nomenclature

Eucalyptus melanophloia subsp. **nana** D. Nicolle & Kleinig, *Austrobaileya* 8(3): 350-354, figs 2,3 (2011).

T: Northern Territory: western slope of Mount Leichhardt, 1 July 2008, *D. Nicolle 5205 & M.E. French*; holotype: AD; isotypes: CANB DNA PERTH. (CANB isotype not received 1 Dec 2019).

Description

Mallee to 6 m tall. Forming a lignotuber
Ironbark to the small branches ca 2 cm diameter, dark grey to black; branchlets usually glaucous. Ironbark less well developed than in the tree form though still furrowed longitudinally and dark grey.
Juvenile growth (coppice or field seedlings to 50 cm): stem rounded or square in cross section, usually glaucous; smooth, juvenile leaves opposite, sessile or petioles only 0.1 cm long, orbicular to ovate or cordate, glaucous.
Crown of juvenile leaves. Crown leaves opposite, sessile, orbicular to ovate to cordate, 3.5–7 cm long, 2.5–5.3 cm wide, flat, base lobed or stem-clasping, margin entire, apex pointed or rounded or weakly emarginate, concolorous, dull, glaucous weathering to grey-green, side-veins greater than 45° to midrib, very densely reticulate, intramarginal vein remote from margin, oil glands obscure.
Inflorescence terminal compound, peduncles 0.4–1.4 cm long, buds 7 per umbel, pedicels 0–0.3 cm long. **Mature buds** ovoid, 0.6–0.7 cm long, 0.3–0.4 cm wide, glaucous, scar present, operculum conical, stamens irregularly flexed, anthers adnate, cuboid, dehiscing by broad lateral pores or short slits, style long, stigma pin-head shaped, locules 4, the placentae each with 4 vertical ovule rows. Flowers white.
Fruit on pedicels to 0.3 cm long, rarely sessile, cup-shaped, truncate-globose or hemispherical, 0.4–0.7 cm long, 0.4–0.7 cm wide, glaucous or weathering to non-glaucous, disc descending vertically, valves 4, near rim level or enclosed.
Seeds brownish grey, 1–1.5 mm long, flattened-ovoid, dorsal surface shallowly reticulate, hilum ventral.

Cultivated seedlings (measured at ca node 10): cotyledons reniform; (not grown).

Notes

A small to medium-sized ironbark tree or a mallee from the eastern half of Queensland to the western side of the Dividing Range in northern New South Wales, widely distributed from the Mareeba area in North Queensland south to near Bourke and Dubbo in northern New South Wales, with three disjunct populations, one in the Dajarra region south of Mt Isa and another west of Musgrave on Cape York Peninsula in North Queensland and a third from north-west of Alice Springs in the Northern Territory.

Eucalyptus melanophloia is one of two ironbark species that are very conspicuous in having a crown of glaucous, round to ovate, opposite, sessile leaves. The other, *E. shirleyi,* is endemic to northern Queensland and has larger leaves, buds and fruit. All other ironbark species have distinctly petiolate adult leaves and should not be confused with *E. melanophloia*. However the reader is directed to a study by Holman *et al* (2011), which suggests that there is a morphological cline most obvious in leaf shape but little genetic difference between *E. melanophloia* and *E. whitei*.

Eucalyptus melanophloia has two subspecies.

E. melanophloia subsp. **melanophloia** is the tree form of the species widespread and common east of a line from Musgrave to Adavale (Qld) to Bourke and Roto (NSW). Occurs on plains and low hills on clay loams and sandy loam soil but also found on gravelly sites in the east of its distribution.

E. melanophloia subsp. **nana** is consistently a mallee occurring sporadically on arid upland sites from Dajarra in Queensland westwards across the Northern Territory, where known from four localities north-west of Alice Springs, at Yaripilangu Range north-east of Newhaven Homestead, and at three sites east of the Lander River namely Ennugon Mountains on Ti-tree Station, Mount Leichhardt and Mount Denison.

In the classification of Brooker (2000) *Eucalyptus melanophloia* is placed in section *Adnataria* series *Siderophloiae*, a group of 22 ironbark species all with terminal inflorescences, buds with 2 opercula initially but losing the outer early in development leaving a scar, stamens all fertile, anthers adnate on the filaments, ovules in 4 vertical rows on the placentae, seeds flattened-ovoid. Two species in this group, *E. melanophloia* and *E. shirleyi*, are further separated from the rest as subseries *Jugatae* by their retaining opposite sessile glaucous juvenile leaves throughout the life of the plant.

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Origin of Name

Eucalyptus melanophloia: Greek *melano-*, black and *phloios,* bark.

subsp. *nana*: Latin meaning dwarf or small.

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