

Eucalyptus xanthonema subsp. *xanthonema*

Classification

Eucalyptus | Symphyomyrtus | Bisectae | Glandulosae | Levispermae | Cubiformes

Nomenclature

Eucalyptus xanthonema Turcz., *Bull. Soc. Imp. Naturalistes Moscou* 20: 163 (1847) subsp. **xanthonema**.

T: Nova Hollandia. *Drummond 3rd collection*, no. 67; iso: BM, CGE, E, FI, G, K, MEL.
E. redunca var. *angustifolia* Benth., *Fl. Austral.* 3: 253 (1867). Types as above and *Drummond 5th collection*, no. 187.

Description

Mallee to 4 m tall. Forming a lignotuber.

Bark smooth throughout, grey-brown and light grey over pinkish, grey ribbons may shed tardily at the base of stems.

Branchlets have oil glands in the pith but sometimes glands scarce and difficult to find.

Juvenile growth (coppice or field seedlings to 50 cm): stems rounded in cross-section; leaves shortly petiolate, alternate, linear to lanceolate, 6–8 cm long, 0.7–1 cm wide, dull blue-green, soft, thin.

Adult leaves alternate, thin, petioles 0.3–1.7 cm long; blade linear, 3.5–7.7 cm long, 0.3–1.1 cm wide, base tapering to petiole, margin entire, apex acute and often hooked, concolorous, dull, grey-green to light green, side-veins greater than 45° to midrib, reticulation usually sparse or obscure, intramarginal vein present, oil glands island, irregularly-shaped.

Inflorescence axillary unbranched, peduncles widen apically, 0.5–1 cm long, buds 9 or 11, pedicellate (pedicels 0.2–0.4 cm long). **Mature buds** fusiform (0.9–1.6 cm long, 0.3–0.4 cm wide), scar present, operculum narrowly conical, to twice the length of the hypanthium and equal to it in width at the join, few outer stamens erect, most stamens variably deflexed, anthers oblong, versatile, dorsifixed, dehiscing by longitudinal slits, style long and straight, stigma blunt to tapered, locules 3, the placentae each with 4 vertical rows of ovules. Flowers white to pale lemon.

Fruit normally pedicellate, rarely sessile (pedicels 0–0.4 cm long), barrel-shaped, 0.5–0.8 cm long, 0.4–0.5 cm wide, disc descending vertically, valves 3, near rim level.

Seeds pale brown to straw-coloured, 0.8–1.3 mm long, usually sub-spherical, surface smooth, hilum ventral/terminal.

Cultivated seedlings (measured at ca node 10): cotyledons Y-shaped (bisected); stems rounded in cross-section; leaves always petiolate, opposite for 2–5 nodes then alternate, narrowly lanceolate, 4–8.5 cm long, 0.4–1 cm wide, lamina grey-green, becoming green by ca node 9 or 10.

Flowering Time

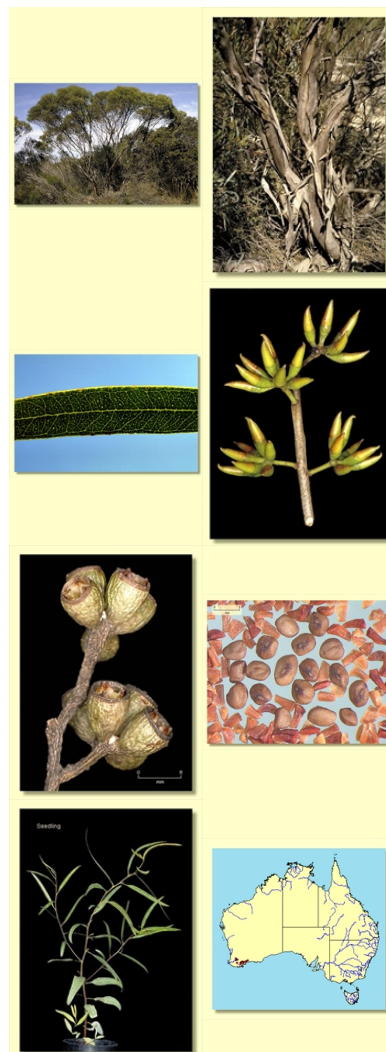
Flowering has been recorded in October, November and December.

Notes

Eucalyptus xanthonema is a species of mallee endemic to the south-west of Western Australia, widespread from Williams to the Stirling Range and Fitzgerald River National Park. The stems are smooth-barked, the adult leaves dull, light green and buds elongated with the operculum drawn out to a fine tip.

Eucalyptus xanthonema belongs to *Eucalyptus* subgenus *Symphyomyrtus* section *Bisectae* subsection *Glandulosae* because the cotyledons are bisected, buds have an operculum scar and the branchlets have oil glands in the pith. Within this subsection *E. xanthonema* is one of a group of 14 species that form series *Levispermae* subseries *Cubiformes*, characterised by having smooth almost cuboid to sub-spherical seed (not almost spherical like species in subseries *Phaenophyllae* and subseries *Levispermae*), flattened peduncles that widen apically and buds that are narrowly fusiform with some stamens erect and others variably deflexed.

Distinguished from related species by the thin-textured light green leaves that usually have a fine tip, narrowly fusiform buds to 1.7 cm long with operculum equal in width to the hypanthium at the join and barrel-shaped fruit. *E. microschemata* has shorter fusiform buds (to 1 cm



long) with operculum narrower at the join and shorter fruit. *E. subangusta* also has shorter more blunt buds (to 1 cm long) and more cupular fruit.

There are two subspecies:

E. xanthonema* subsp. *xanthonema

This subspecies is the more widespread and occurs from Williams to east of Jerramungup. Subsp. *xanthonema* has smaller, narrower, consistently green leaves, to 1 cm wide. Seedling leaves are narrower also.

E. xanthonema* subsp. *apposita

Restricted to the Stirling Ranges, it has broader adult leaves to 1.5 cm wide and also ovate-lanceolate seedling leaves, to 3.5(4) cm wide. *E. medialis*, another related mallee species found in the Stirling Range has persistent rough bark on the base of stems, similar broad dull greenish adult leaves, slightly shorter buds and seedlings with ovate leaves.

Origin of Name

Eucalyptus xanthonema: Greek *xantho-*, yellow and *nema*, thread, referring to the colour of the flowers. They must have been seen by the author as a dried specimen only, in which the colour had turned from the natural white or pale lemon to yellowish.

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