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CAESIA

Eucalyptus caesia Benth. (MYRTACEAE)



Caesia growing in a soil pocket on a massive granite rock. (photo: S. D. Hopper)

Caesia is an outstanding ornamental eucalypt whose distinctive beauty and ability to grow well in cultivation have made it an extremely popular garden plant.

The first known collection of Caesia was made in 1847 by the colonial botanist James Drummond from granite rocks about 170 km east of Perth. In 1867, George Benthham described the species based on Drummond's specimen, deriving its specific name from the Latin word *caesius* meaning bluish-grey. This colour describes the powdery grey appearance of the branchlets, leaves, buds and fruits.

Shortly before the turn of the century, an aboriginal food plant from the Norseman area and known as "Gungurru" was erroneously identified as *Eucalyptus caesia*. The mistake was only recently realized, long after "Gungurru" had become widely used as a vernacular name for the species. Caesia, the simple vernacular name favoured here, has also been used fairly widely.

DESCRIPTION

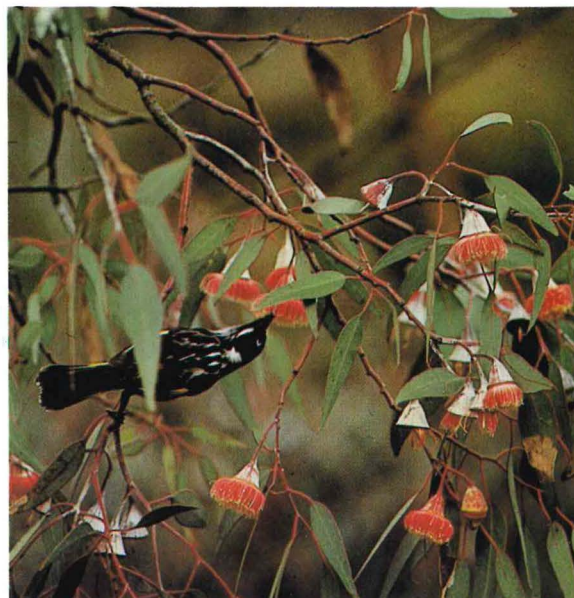
In the wild Caesia is invariably a mallee although it is often a small tree when grown in cultivation. It usually grows to 5-8 m tall, but may reach 15 m. It has a slender weeping habit and a fairly open crown. The red brown bark is shed in longitudinal strips that remain curled, exposing new light brown or green bark. The upper branches are covered by a whitish-grey powder.

A form of the species with large leaves, flowers and fruits and a very weeping habit is presently being described as subspecies *magna* by M. I. H. Brooker and S. D. Hopper. It is known in the nursery trade as "Silver Princess". The smaller form (subspecies *caesia*) tends to be more upright.

The mature leaves are stalked, broad towards the base and tapering to a point, up to 16 cm long and 4 cm wide for subspecies *caesia* and up to 24 cm long and 5 cm wide for subspecies *magna*. Flower buds are

pendent in threes. Flowers are pink or red and up to 4.5 cm (subspecies *caesia*) or 6 cm (subspecies *magna*) in diameter when the stamens are fully expanded. Fruits are urn-shaped, 1.5-3.0 cm long, with broad valves which do not protrude.

The Silver Mallee (*E. crucis*), Ewart's Mallee (*E. ewartiana*) and the Round-leaved Mallee (*E. orbifolia*) are related species which overlap in range with Caesia. They may occupy the same habitat and all have similar bark and silvery branches. However, these species may be distinguished from Caesia by one or more of the following characteristics: smaller or more rounded leaves, protruding valves on the fruits, somewhat raised tops to the fruits.

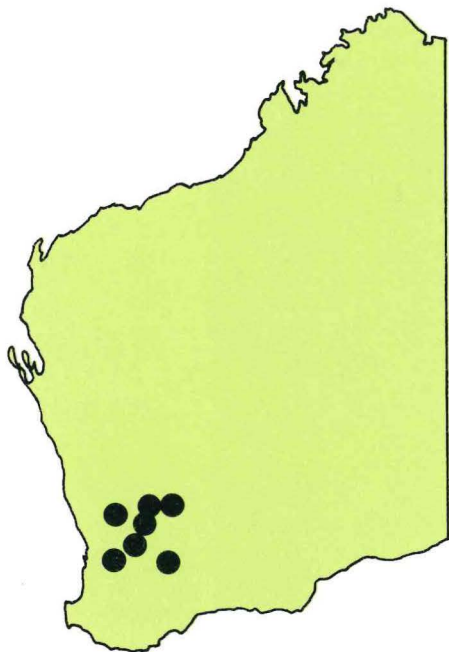


A New Holland Honeyeater feeding on nectar of a flower of *E. caesia* subspecies *caesia*. (photo: S. D. Hopper)

REPRODUCTIVE BIOLOGY

The main flowering period is May to August. *Caesia* is unusual among eucalypts in that it appears to be mainly pollinated by birds and to be fully self-fertile (i.e. does not require cross-pollination for normal seed set). Natural seed set of 36 viable seeds/nut have been recorded for subspecies *caesia* and 103 seeds/nut for subspecies *magna*.

Following fires, mature plants readily regenerate from a lignotuber and there is prolific germination. The seedlings attain a height of 2 m within 18 months of germination and flower in 2-3 years.



DISTRIBUTION AND HABITAT

Caesia has a maximum geographical range of 275 km, occurring in the Western Australian wheatbelt approximately in the region between Wongan Hills, Pingelly, Hyden and Westonia. However, it is restricted to scattered granite outcrops, usually growing in shallow brown sandy loams over sheet granite. It frequently occurs in pure stands of 10-50 plants. Occasional associated eucalypts include Silver Mallee (*E. crucis*), and York Gum (*E. loxophleba*).



Caesia leaves, buds, flowers and fruits contrasting subspecies *caesia* (left) with subspecies *magna*. (photo: M. D. Lucks)



Eucalyptus caesia subspecies *magna*. (photo: S. D. Hopper)

The Sea Urchin (*Hakea petiolaris*) and the One-sided Bottlebrush (*Calothamnus quadrifidus*) sometimes dominate the shrub layer. The annual average rainfall varies from 300 to 500 mm and all areas are subject to occasional frosts in winter.

CONSERVATION

Both subspecies are common in cultivation and are commercially exploited by seed and nursery dealers. *Caesia* has been widely grown in Australia and is also in cultivation in California. It is tolerant to frost and able to grow in a wide range of soils.

Despite its wide natural distribution, *Caesia* is rare in the wild because it occurs in small, widely separated populations. In 1980 there were nine known populations on conservation reserves and four on privately owned land, containing a total of approximately 2 180 mature plants. The survival of populations on the reserves did not appear to be threatened. There were approximately equal numbers of plants of each subspecies but subspecies *caesia* had more populations spread over a wider area than subspecies *magna*.

IUCN Red Data Book Category: RARE
Australian Plants at Risk Code: 3RC

FURTHER READING

- Brooker, M. I. H. & Hopper, S. D. (1982). New subspecies in *Eucalyptus caesia* and in *E. crucis* of Western Australia. *Nuytsia* 3 (in press).
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- Kelly, S. (1977). "Eucalypts". Vol. 1. Thomas Nelson: Melbourne.
- Rye, B. L. & Hopper, S. D. (1982). Misapplication of the Aboriginal name "Gungurru" to *Eucalyptus caesia* Benth. and Notes on the Species' Distribution. *J. Roy. Soc. West. Aust.* (submitted)