# Eucalyptus pauciflora subsp. hedraia

## Snow gum

#### Classification

Eucalyptus | Eucalyptus | Cineraceae | Pauciflorae

#### Nomenclature

Eucalyptus pauciflora Sieb. ex Spreng. subsp. hedraia Rule, Muelleria 8: 227



T: Victoria, Falls Creek Ski Village, 36°51'S, 147°16'E, 14 Jan. 1982, S. Forbes 821 MEL 612462; holo: MEL; iso: CANB.

#### Description

Tree or mallee to 10 m tall. Forming a lignotuber.

Bark smooth, white, grey, pale brown, green and yellow, often with scribbles; branchlets usually

Juvenile growth (coppice or field seedlings to 50 cm): stem rounded in cross-section, glaucous, warty or smooth; juvenile leaves opposite for 7 to 10 nodes then alternate, petiolate, orbicular to ovate or oblong, 4.5-12 cm long, 2.3-6 cm wide, base truncate to rounded or tapering to petiole, tending to oblique, dull, blue-green to glaucous.

Adult leaves alternate, petiole 1-3.2 cm long; blade broadly lanceolate to ovate to elliptical to falcate, 5.5-15.5 cm long, 1.5-4 cm wide, base tapering or petiole, concolorous, glossy, green to blue-green, parallel veined, sparsely to moderately reticulate, intramarginal vein parallel to and well removed from margin, oil glands island.

Inflorescence axillary unbranched, peduncles 0-0.7 cm long, buds 11 to ?15 per umbel, usually sessile (pedicel rarely 0.1 cm long). Mature buds obovoid or clavate, 0.6-1 cm long, 0.5-0.6 cm wide, green and red, often glaucous, warty or smooth, scar absent, operculum conical to rounded, stamens inflexed, anthers reniform to cordate, versatile, dorsifixed, dehiscing by confluent slits, style short, stigma tapered, locules 3 or 4, the placentae each with 4 vertical ovule rows. Flowers white.

Fruit sessile, broadly hemispherical or cup-shaped, 0.8-1.2 cm long, 1-1.5 cm wide, usually glaucous, disc raised-convex or level, valves 3 or 4, near rim level.

Seeds dark brown or black, 1.5-3 mm long, pyramidal or obliquely pyramidal, dorsal surface smooth, hilum terminal,





















Cultivated seedlings (measured at ca node 10): cotyledons reniform; stems rounded in cross-section, glaucous; leaves sessile to shortly petiolate, opposite for 7 to 10 pairs then alternate, oblong to ovate, 4.5-11.5 cm long, 2.3-6.5 cm wide, base slightly lobed to tapering, margin entire, apex rounded and apiculate, dull, blue-grey to grey-green.

## Flowering Time

Flowering has been recorded in December and January.

## Notes

Eucalyptus pauciflora is a species with mallee or small to tall tree habit, widespread from the far south-east of Queensland (represented there by a single population near Stanthorpe), through the tablelands and alps of New South Wales but also subcoastal west of Bega, the highlands and southern Victoria, central and north-eastern Tasmania, and a single population east of Mt Gambier in the south-east of South Australia.

E. pauciflora belongs to the blue-leaved ash group of eucalypts because of the characteristic alternate, broadly ovate, pendulous, petiolate, bluish to glaucous juvenile leaves. It differs from all other ashes by the parallel side-veins of the adult leaves, which are glossy, green to olive green and highly glandular. Buds of E. pauciflora are usually in nines or more and fruits are cupular or obconical or, less commonly, hemispherical, always with a thick rim. Its closest relative is E. lacrimans, a snow-gum of weeping habit and sparse crown, that is found usually in small, pure stands in the Yarrangobilly - Long Plain area of Kosciuszko National Park, New South Wales. A slender mallee form of snow-gum, E. gregsoniana, occurs disjunctly in the Lithgow - Bell - Newnes Junction area and in the south in the Budawang - Nerriga -Morton National Park area, also in New South Wales. Apart from the habit, E. gregsoniana differs from other snow gums by the narrower

juvenile leaves.

There are five subspecies:

#### E. pauciflora subsp. pauciflora

Occurs over the whole geographic range of the species from Queensland, New South Wales, Victoria, Tasmania and South Australia, and almost the whole altitudinal range from coastal lowlands in south Gippsland, Victoria, to all but the highest altitudes in the Australian Alps. It can be a tree or robust mallee, often with waxy branchlets and hemispherical to obconical fruit to 1 cm wide. *E. pauciflora* subsp. *parvifructa* from the Major Mitchell Plateau in the Grampians of Victoria is included here in synonymy. The dimensions of its leaves, buds and fruit overlap almost entirely with those of the very variable subsp. *pauciflora*.

## E. pauciflora subsp. acerina

Occurs only on the Baw Baw plateau of eastern Victoria, e.g. Mt Erica, Mt St Gwinear and Mt Baw Baw and the nearby Mt Useful. Subsp. acerina differs from subsp. pauciflora in the complete lack of glaucescence, and very glossy adult leaves.

### E. pauciflora subsp. debeuzevillei

Occurs on highest peaks south from Mt Franklin and Mt McKeahnie in the Australian Capital Territory to the Jounama Range near Yarrangobilly, and Yaouk Peak area, both in south-eastern New South Wales. Subsp. *debeuzevillei* differs from other subspecies by the strongly angular mature buds. Note that immature buds of the other subspecies may be angular at first but rounded at maturity. The fruits of subsp. *debeuzevillei* may have the traces of these angles on the surface but are usually well-rounded.

#### E. pauciflora subsp. hedraia

Restricted to the Falls Creek and Mount Bogong area of eastern Victoria. Subsp. *hedraia* differs by the larger, glaucous, sessile buds and broadly hemispherical fruit to 1–1.5 cm wide.

#### E. pauciflora subsp. niphophila

Restricted to the highest altitudes suitable for tree growth in the Snowy Mountains of New South Wales, e.g. many places in the Kosciuszko National Park, extending to Bimberi in the Australian Capital Territory, and in Victoria on Mt Hotham, Mt Bogong and the Bogong High Plains, Mt Torbreck and Mt Wellington. It is reduced to a twisted, dense stunted tree, and differs from other subspecies by the more delicate, pedicellate buds and smaller leaves. Branchlets, buds and fruits are usually glaucous.

It is not uncommon to find specimens that do not precisely match one of the above subspecies; for example, plants otherwise like subsp. pauciflora but with minimal glaucescence are common on Mt Skene, Bennison High Pains and Lake Mountain and may approach subsp. acerina. Similarly in the Kiandra area of Kosciuszko National Park plants may have mature buds slightly angled but much less prominently so than does subsp. debeuzevillei. On Mt Wellington in Victoria high altitude plants with the general appearance of subsp. niphophila but with little wax show some traits of subsp. acerina.

Eucalyptus pauciflora belongs in subgenus Eucalyptus section Cineraceae series Pauciflorae having the following characters, cotyledons reniform, juvenile leaves alternate, bluish to glaucous, adult leaves with side-veins parallel to the midrib, single axillary inflorescences with buds in clusters of nine to 15, buds with single operculum, inflexed stamens with reniform anthers, ovules in two rows (very rarely four rows in highest altitude plants in Kosciuszko National Park), and seeds more or less pyramidal. The species in series Pauciflorae are E. pauciflora, E. lacrimans and E. gregsoniana and their differences are discussed above.

On the Mount Buffalo plateau in Victoria another snow gum species occurs, *E. mitchelliana*, which on bark and adult leaf characters is easily confused with *E. pauciflora*. Buds of *E. mitchelliana* are distinctive forming tight "stellate" clusters, and are narrowly fusiform with pointy opercula.

## Origin of Name

Eucalyptus pauciflora: Latin pauci-, few and florus, flowered, of the inflorescences, a misnomer.

subsp. hedraia: Greek hedraios, sessile, referring to the flower buds and fruits.

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