## SARATOGA HORTICULTURAL FOUNDATION, INC.

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## Eucalyptus gunnii, cider gum

The smooth bark of the cider gum <u>Eucalyptus gunnii</u>, places it with the gums, those eucalypts in which the bark is smooth. Injury to the bark causes considerable exudation of a sweet, quickly crystallizing sap, the cider, hence the common name, cider gum. It has also sometimes been called swamp gum because of its occurrence in swampy areas. The species was named in honor of Ronald Campbell Gunn (1808 - 1881) who migrated to Tasmania in 1829 and during his years there travelled widely and studied the plants of the island. He corresponded with William Jackson Hooker who became the first director of the Royal Botanic Gardens at Kew in 1840 and in that same year gave assistance to Hooker's son Joseph Dalton Hooker while he visited and explored Tasmania.

Trees of <u>Eucalyptus</u> <u>gunnii</u> vary in height from small to medium sized and even large, 1000-28m. (40-80 ft.). Bark is persistent and rather rough at the base of old trees, it flakes from the trunk and branches leaving a smooth greenish to whitish surface. Adult leaves are alternate, ovate to broadly lanceolate, 2.5-8 cm. (1 1/2-3 in.) long by 1.2-2.5 cm. (1/2-1 in.), petiolate, nerves and oil glands obscure, coriaceous in texture, juvenile leaves are opposite, sessile or with short petiole, rounded to cordate, 2.5-5 cm. (1-2 in.) in length and width or sometimes larger, slightly paler on lower surface. Leaves intermediate between juvenile and adult are also present. Umbels are 2 flowered and in the leaf axils on peduncles (stalks) 4-6 mm. Umbels are 2-(about 1/4 in.) long. Buds are glaucous, sessile, clavate (clubshaped) to almost cylindrical in shape, 4-6 mm. (about 1/4 in.) long, short bud cap is abruptly narrowed to a small umbo or knob. Open flowers with creamy-white to pale yellow stamens, 5-7 mm. (about 1/4 in.) long. Capsules are glaucous, cylindrical to urn shaped, sessile, 4-6 mm. (about 1/4 in.) long, with wide depressed disk and sunken valves.

The distinctive features of the cider gum are its 3-flowered umbels, glaucous buds and capsules, the more or less cylindrical capsules, cordate to rounded, almost sessile, glaucous juvenile leaves and small (less than 8 cm. or 3 in. long) adult leaves.

Little is known about the properties of the wood which is not used in Tasmania, even for firewood. It is unusual among eucalypts for the obscure development of the oil glands and the faint odor of the leaves. Because it lacks the usually characteristic pungence of eucalypts the foliage is browsed in Australia by cattle.

Eucalyptus gunnii is endemic to Tasmania where it was discovered by Joseph Hooker in 1840 who later named it in honor of Roland Hooker found it growing in central Tasmania mountains at elevations of 1000-1350 m. (3000-4000 ft.) in swampy (BM 7808). It often occurs in small almost pure stands but may be associated at upper elevations with other hardy eucalypts, including Tasmanian snow gum, Eucalyptus coccifera, yellow gum, E. johnstonii, and alpine ash, E. delegatensis, and Tasmanian at lower elevations often on poorly drained flats and in valleys, with swamp peppermint,  $\underline{E}$ .  $\underline{rodwayi}$ , and mountain  $\underline{gum}$ ,  $\underline{E}$ .  $\underline{dalrympleana}$ . It grows on a variety of soils and at the highest elevations is often on more rocky and better drained sites areas of alpine humus soils. It can tolerate poorer soil drainage than most of the associated species, except possibly the Tasmanian yellow gum.

The climatic conditions under which the cider gum grows are among the most severe of all natural habitats for eucalypts. "The mean annual temperature is in the range of 40-50- deg. F., with the mean maxima of the warmest months only 60-65 deg. F. and the mean minima of several of the coldest months are below freezing point. Frosts are severe and numerous, with about 100-150 a year" Annual rainfall is 30-70 in. per year. In the driest areas there are few months which have a mean fall of less than 2 in., while in the wettest areas the lowest mean is about 3 1/2 in. Snow is moderate to heavy.

Because of the severe climatic conditions under which cider gum occurs and its tolerance of poorly drained soils this eucalypt has been successfully grown in areas where few other eucalypts In the British Isles the cider gum of all of the arborescent eucalypts introduced and grown has been the hardiest. Its earliest introduction was to Whittinghame Castle in East Scotland, a few miles from the North Sea. planted in about 1853, measured 96 by 20 feet in 1957 (since then it has blown down). Many cider gums planted in the British grew from seed produced by this tree. Joseph Hooker writing of the cider gum in 1901 reports that a tree of it grew for many years the grounds at Kew "where it was cut almost to the ground by severe cold in several winters, but as often sent up from the trunk one or more branches from ten to twenty feet high." Elsewhere in Europe it has been introduced more recently to northern Italy, on the Black Sea coastal area of the Caucasus and in Greece.

Cider gum has been in California since 1871 when Stephen Nolan had it at his Belleview Nursery in Oakland. It has been planted rarely since then in California as a park or street tree. It is recommended for its upright compact habit and is considered to be fast growing. Cider gum is among the few eucalypts successfully grown in Oregon and Washington.