

## *Myrsine benthamiana* (Mez) Ewart

### Family:

Primulaceae

Ewart, A.J. (1907) *Proceedings of the Royal Society of Victoria New Series* 19: 42.

### Stem

Can grow into a small tree but also flowers and fruits as a shrub.

### Leaves

Oil dots visible with a lens, clear, orbicular and streaky or red, small and orbicular. Leaf blades lanceolate to elliptical to obovate, about 6-15 x 1.7-4.1 cm. Lateral veins about 15-18 on each side of the midrib. Base of the leaf blade usually recurved near its junction with the petiole.

### Flowers

Flowers almost sessile, produced on short, burr-like structures on the twigs below or in the axils of the leaves. Male flowers: Flowers about 5-6 mm diam. Orange glands (both orbicular and elongated) visible on both the calyx and corolla. Calyx lobes about 1 mm long. Petals about 1.2-1.5 mm long. Anthers sessile, each about 1 mm long. Pollen cream. Female flowers: Conspicuous elongated dark (or orange) oil glands visible on both the calyx and corolla. Stigmas large, about 2.5-6 mm long, +/- cylindrical and style-like. Ovules 5.

### Fruit

Fruits depressed globular, about 5-8 mm diam, calyx persistent at the base. Seeds globose, about 4-5 mm diam. Testa double (?) the outer green and shell-like, the inner brown and soft. Peg-like intrusions extend from the testa into the endosperm while a much larger haustorium-like intrusion is visible at one end. Endosperm starchy. Embryo thinly sausage-shaped, about 3 mm long. Cotyledons about 0.3 mm long, much shorter and narrower than the radicle.

### Seedlings

Cotyledons variable, about 10-16 x 5-8 mm, apex obtuse, mucronate, base attenuate, margins crenate to dentate with 1-4 teeth on each side, petioles short. Oil dots a mixture of small clear dots and much larger orange dots. First pair of leaf ovate, apex obtuse, base cuneate to attenuate. Oil dots a mixture of small clear dots and much larger orange dots, more numerous along the margins. At the tenth leaf stage: leaf blade obovate-elliptic, apex acute, base attenuate, midrib depressed on the upper surface. Oil dots red and orbicular or clear and orbicular to slightly elongated, more numerous near the margin and at the apex. Terminal bud densely clothed in very short gland-like hairs. Seed germination time 88 days.

### Distribution and Ecology

Endemic to Australia, occurs in NT and CYP. Altitudinal range small, from near sea level to 100 m. Usually grows in gallery forest associated with springs or permanent water.

### Synonyms

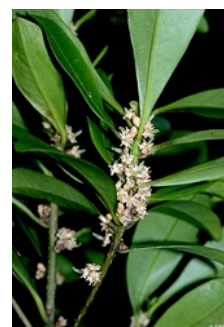
*Rapanea benthamiana* Mez, *Das Pflanzenreich Heft* 9 9: 365(1902), Type: Tropisches Australien: ohne Standortsangabe (F. Schultz. n. 470). Bluht August (Herb. Berlin, Paris, Wien) Lecto: W; Iso: K, MEL.(Jackes 2005).

### RFK Code

1157



Female flowers. © CSIRO



Female flowers and leaves. © CSIRO



Leaves and fruits. © A. Ford & F. Goulter



Leaves and fruit. © CSIRO



Scale bar 10mm. © CSIRO



Cotyledon stage, epigeal germination. © CSIRO



10th leaf stage. © CSIRO

