

Endiandra palmerstonii (F.M.Bailey) C.T.White & W.D.Francis

Family:
Lauraceae

White, C.T. & Francis, W.D. (1920) *Queensland Department of Agriculture and Stock. Botany Bulletin* 22: 26

Common name:

Walnut, Australian; Walnut, Black; Walnut Bean; Bean, Walnut; Black Nut; Black Walnut; Orientalwood; Queensland Walnut; Walnut, Queensland; Australian Walnut

Stem

A thin cream or pale brown layer normally visible under the subrhynchium layer before the first section of the outer blaze. A black, odorous, stained section of bark usually visible on large trees particularly if they have been wounded at some time in the past.

Leaves

Twigs fluted, clothed in tortuous, erect, pale brown hairs. Leaf blades about 7-22 x 2.5-13 cm, green or slightly glaucous on the underside, clothed in short, tortuous, erect, white or pale brown hairs. If the underside is held up to the light and the hairs viewed at a low oblique angle the hairs may appear to be mauve in colour. Midrib +/- flush with the upper surface. Petioles flat or channelled on the upper surface. Oil dots visible with a lens.

Flowers

Flowers opening fairly widely and although the tepals tend to point upwards at anthesis the tips may be recurved. Tepals about 0.9-1.4 mm long. Staminal glands six, free from one another. Staminodes three, not differentiated or differentiated into a head and stalk.

Fruit

Fruits globular, usually showing some longitudinal ribs, about 45-60 x 45-65 mm. Seed about 30-40 x 30-45 mm. Cotyledons cream, pinkish cream or apricot. Rat-eaten remains of the hard seed shells (endocarps) usually present under large trees. Each shell may have one projection on the surface.

Seedlings

First pair of true leaves narrowly elliptic or lanceolate, about 75-140 x 18-38 mm, with a long acute apex, green on the underside. Usually 1-3 narrow leaf-like cataphylls present before the leaves. At the tenth leaf stage: leaves with pale brown hairs on the upper surface, more numerous along the midrib and lateral veins; oil dots small, numerous, visible with a lens. Seed germination time 125 to 543 days.

Distribution and Ecology

Endemic to NEQ, restricted to the area between Cairns and Tully and westwards to the edge of the rain forest zone. Altitudinal range from sea level to 1100 m. Grows in well developed rain forest on a variety of sites but probably reaches its best development on soils derived from basalt.

Natural History & Notes

This species produces a decorative and highly valued cabinet timber suitable for furniture manufacture either as solid timber or as veneer. The timber is good for carving with hand tools but is rather abrasive on machine tools. Has high electrical insulating properties. Makes good knife handles. Swain (1928).

Seeds were used as food by aborigines but only after processing involving leaching in water.

This species produces millable logs and the timber is marketed as Queensland Walnut. Wood specific gravity 0.69-0.81. Hyland (1989).

Synonyms

Cryptocarya palmerstonii F.M.Bailey, *Queensland Department of Agriculture and Stock. Botany Bulletin* 2: 16(1891), Type: Russell River. Leaves and Fruit, Bellenden-Ker Expedition. Fruit and notes on tree, C. Palmerston ...

RFK Code



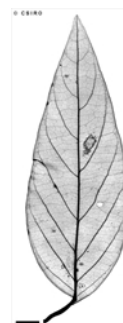
Flowers and buds. © Barry Jago



Leaves and Flowers. © CSIRO



Fruit, side views, cross section and seed. © W. T. Cooper



Scale bar 10mm. © CSIRO





Cotyledon and 1st leaf stage,
hypogeal germination. © CSIRO



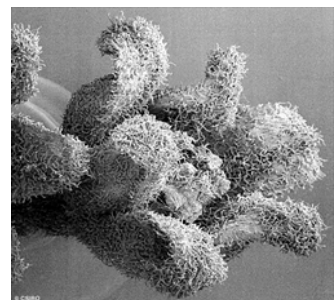
Cotyledon stage, hypogeal
germination. © CSIRO



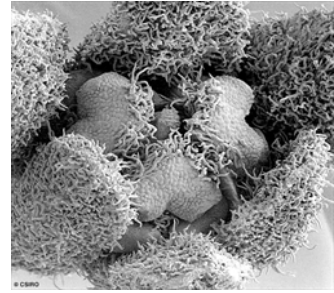
Cotyledon stage, hypogeal
germination. © CSIRO



10th leaf stage. © CSIRO



Flower, oblique view, tepals hairy,
anthers hairy. © CSIRO



Flower, bird's-eye view, tepals hairy, anthers hairy. © CSIRO



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