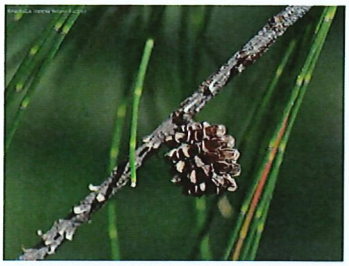
Casuarina cunninghamiana Miq.

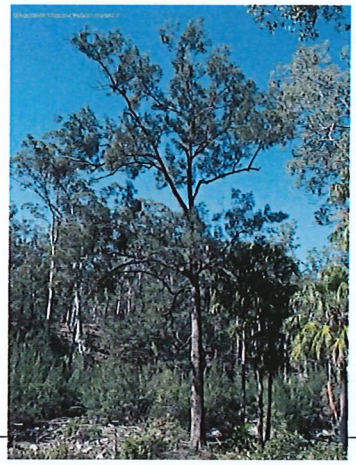
Family: **Casuarinaceae**

Miquel, F.A.W. (1848) *Revisio critica Casuarinarum*: 56, t. XIA. Type: Glendon, N.S.W., L.Leichhardt; lecto: MEL, with cones.



Cone. CC-BY: APII, ANBG.

Female flowers. CC-BY: APII, ANBG.



Habit. CC-BY: APII, ANBG.

Common name

River Sheoak

Stem

Tree to 20 metres with drooping branchlets; trunk slightly furrowed; bark dark grey-brown, fissured; buds hairy; stems and branchlets glabrous, 0.5mm diam., broadly ridged longitudinally, jointed at leaf-whorls into segments ('articles') 4 - 9mm long.

Leaves

Scale-like, erect, in whorls of 8 - 10, 0.3 - 0.5mm long, apparently veinless.

Flowers

Unisexual; plants dioecious; males inflorescences terminal on long branchlets; slender spikes 4 - 40mm long; male flowers with 1 - 2 tepals; stamen 1; female inflorescences terminal on short lateral branches; females flowers with 2 bracteoles; perianth absent; carpels 2, fused; style 2-armed, reddish.

Fruit

Cones 7 - 14mm long, 4 - 6mm wide; peduncle 2 - 9mm; floral bracteoles enlarged, woody, opening at maturity to release the winged samara (the indehiscent fruit) 3 - 4mm long; seed 1 per samara.

Seedlings

Not available.

Distribution and Ecology

Endemic to Australia, found in NT, CYP, NEQ and CEQ, and southwards to southern New South Wales. Altitudinal range from close to sea level to 1000 m. Grows along margins of permanent freshwater streams, occasionally found in riparian rainforest.

RFK Code: 1258

Podocarpus elatus R.Br. ex Endl.

Family: Podocarpaceae

Endlicher, S.L. (1847) *Synopsis Coniferarum* : 213. Type: NSW, Hunter & Paterson Rivers, R. Brown Iter Austral. 3117; syn: BM; iso: K.

Fruit. © G. Sankowsky

Leaves and fruit. © G. Sankowsky

Common name

White Plum; Brown Pine; Goongum; Native Deal; Pencil Cedar; Pine; Pine, Plum; Pine, She; Pine, Yellow; Plum Pine; Plum, White; She Pine; White Pine; Yellow Pine; Pine, Brown

Stem

Blaze finely layered. Seldom exceeding 30 cm dbh in CYP and NEQ.

Leaves

Leaf blades about 3-18 x 0.5-1.2 cm. Midrib raised on the upper surface and petiole ridged on the upper surface. No lateral veins visible on either side of the midrib.

Flowers

Male cones about 15 x 2 mm, peduncle nil or very short. Microsporophylls about 0.5-0.6 mm long.

Fruit

Receptacle large and fleshy, about 20-25 x 20-25 mm, bluish-black when the fruit is ripe. Fruits about 15 x 12 mm. Seeds about 10-11 x 9-10 mm.

Seedlings

Cotyledons linear, about 15 x 2 mm. At the tenth leaf stage: leaf blade linear, apex aristate, base attenuate, glabrous, midrib slightly raised on the upper surface, no lateral veins visible. Cataphylls produced among the true leaves. Seed germination time 34 days.

Distribution and Ecology

Endemic to Australia, occurs in CYP, NEQ, CEQ and southwards as far as south-eastern New South Wales but rare in NEQ. Altitudinal range in CYP from near sea level to 600 m. Grows in well developed rain forest but is more abundant in drier rain forest.

Natural History & Notes

A useful carving timber. The timber of this species is useful and can be used for much the same purposes as Sundacarpus amara. Swain (1928).

A well known tree commonly planted in parks and larger gardens especially through out its southern range.

Synonyms

Nageia elata (Endl.) F.Muell., *Select Plants readily eligible for Industrial Culture or Naturalisation in Victoria* : 138(1876). **Podocarpus ensifolius Carriere**, *Traite Generale des Coniferes* : 456(1855), Type: Tasmania & Cape Grafton, 18 June 1821, A. Cunningham; holo: BM; iso: K.

RFK Code: 602

Syzygium smithii (Poir.) Nied.

Family: Myrtaceae

Niedenzu, F.J. (1893) *Die Naturlichen Pflanzenfamilien 3(7)* : 85.

Common name

White Eungella Gum; Satinash, Lillipilli; Red Eungella Gum; Eungella Gum; Watergum; Scrub Mahogany; Satinash, Coast; Red Apple; Lilly Pilly; Lillipilli; Coast Satinash; Apple, Red; Creek Lilly Pilly; Lilly Pilly, Creek; Narrow Leaved Lilly pilly; Lilly Pilly, Narrow Leaved; Lillipilli Satinash

Stem

Frequently a small, poorly formed tree. Dead bark orange-brown when cut. Coppice shoots frequently present at the base of the stem.

Leaves

Oil dots quite numerous. Leaf blades about 4-7 x 1.5-2.5 cm. Midrib depressed on the upper surface and petiole grooved on the upper surface.

Flowers

Inflorescence exceeding the leaves, bracts deciduous, absent at anthesis. Calyx tube (hypanthium) gradually tapering into the pedicel, calyx tube (hypanthium) + pedicel about 3-6 mm long, calyx tube (hypanthium) about 2-4.5 mm diam., infundibuliform, dilated at the apex at anthesis; calyx lobes small and inconspicuous, rounded or apiculate, about 0.2 mm long. Petals +/- cohering by their inflexed tips, variable and irregular in shape, +/- orbicular, about 1-1.5 mm diam.; oil dots visible but inconspicuous, up to ten per petal. Staminal filaments variable, outer longer, about 0.9-3 mm long, glandular, anthers wider than long, about 0.2 x 0.4 mm, gland terminal, sometimes inconspicuous. Placentas confined to the apex of each locule. Ovules pendulous, about 6-22 per locule. Style about 0.6-2 mm long, slightly exceeding the top of the calyx tube (hypanthium), but not exceeding the anthers.

Fruit

Fruits globular or depressed globular, shallowly excavated at the apex, attaining about 8-20 mm diam.; calyx lobes persistent, small and inconspicuous. Seed attaining about 5-12 mm diam. Cotyledons with a conspicuous, hard, tanniferous inclusion in the centre with branches ramifying through the cotyledons; cotyledonary stipules small and inconspicuous.

Seedlings

Cataphylls about 2-4 pairs before the first pair of true leaves and sometimes between the leaves at later stages. At the tenth leaf stage: seedling completely glabrous, leaf blade elliptic or obovate, apex acuminate, acute or obtuse, base cuneate; oil dots small and numerous, visible with a lens or just visible to the naked eye. Seed germination time 24 to 108 days.

Distribution and Ecology

Endemic to Australia, only the rheophytic race of this species occurs in northern Australia, being found in NEQ, CEQ and southwards to coastal central New South Wales. Altitudinal range in NEQ from 450-1200 m. Grows as a rheophyte, usually along creeks and gullies flowing through wet sclerophyll forest often with Rose Gum (Eucalyptus grandis) forming the upper canopy.

Natural History & Notes

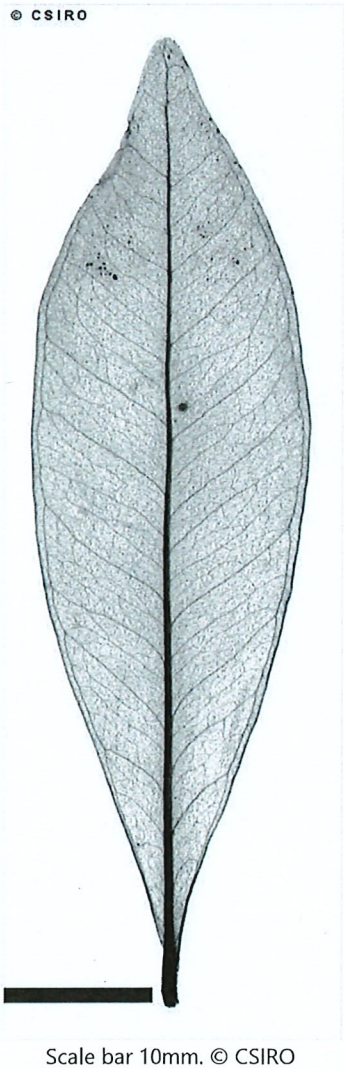
A commonly cultivated species with several forms and cultivars. Used as street trees.

This species occasionally produces millable logs and the timber is marketed as Lillipilli Satinash, a useful structural timber. Wood specific gravity 0.70. Hyland (1983).

Synonyms

Lomastelma smithii (Poir.) J.H.Willis, *Vict. Nat.* 73: 197(1957). **Acmena smithii (Poir.) Merr. & L.M.Perry**, *Journal of the Arnold Arboretum* 19: 16(1938). **Acmena floribunda (Sm.) DC.**, *Prodromus* 3: 262(1828). **Acmena floribunda (Sm.) DC. var. floribunda**, *Prodromus* 3: 262(1828). **Acmena floribunda var. elliptica DC.**, *Prodromus* 3: 262(1828). **Acmena smithii (Poir.) Merr. & L.M.Perry var. smithii**, *Journal of the Arnold Arboretum* 19: 16(1938). **Acmena smithii var. minor (Maiden) Merr. & L.M.Perry**, *Journal of the Arnold Arboretum* 19: 16(1938). **Myrtus smithii Spreng.**, *Syst. Veg.* 2: 487(1825). **Eugenia smithii Poir.**, *Encyclopedie Methodique Suppl.* 3: 126(1813), Type: N. S. W., Port Jackson, White; holo: LINN 883.1. **Eugenia smithii var. coriacea Domin**, *Bibl. Bot.* 89: 477(1928), Type: Qld, Stradbroke Island, K. Domin 7343; holo: PR.

Fruit, three views and cross section. © W. T. Cooper



Scale bar 10mm. © CSIRO

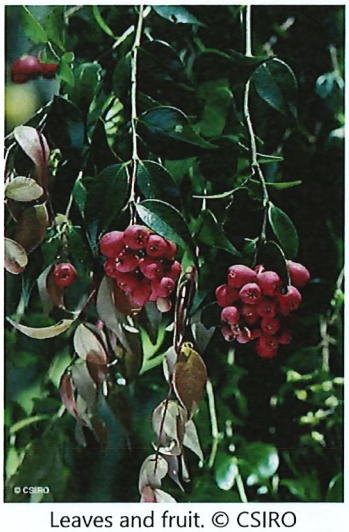
Syzygium luehmannii (F.Muell.) L.A.S.Johnson

Family: Myrtaceae

Johnson, L.A.S. (1962) *Contributions from the New South Wales National Herbarium* 3(3): 99.

Leaves and Flowers. © CSIRO

Fruit, three views and cross section. © W. T. Cooper



Leaves and fruit. © CSIRO

Leaves and fruit. © CSIRO

Common name

Small Leaved Lilly Pilly; Watergum; Small Leaved Watergum; Small Leaved Lillipilli; Scrub Cherry; Satinash, Chery; Riberry; Lilly-Pilly; Creek Cherry; Cherry, Scrub; Small-leaved Lilly Pilly; Cherry, Creek; Cherry Alder; Cherry Satinash; Alder, Cherry; Lillipilli

Stem

Bark generally reddish brown and conspicuously flaky, the flakes often large. A pale cream-pink layer generally visible under the subrhytidome layer before the first section of the outer blaze. Living bark layer rather thin.

Leaves

Young leaves and shoots pink or reddish, the whole crown often similarly coloured. Leaf blades small, about 3-7 x 1-2.5 cm. Lateral veins scarcely visible on the upper surface of the leaf blade but more readily apparent on the underside. Leafy twigs glabrous.

Flowers

Inflorescence terminal and in the upper axils, generally rather compact, hidden by the leaves, bracts deciduous, absent at anthesis. Flowers +/- sessile. Calyx tube (hypanthium) + about pedicel about 3-6 mm long, calyx tube (hypanthium) about 2-3 mm diam., calyx lobes rounded about 1-1.5 mm long. Petals +/- orbicular or oval, concave, about 1.5-2.5 mm diam., oil dots visible with difficulty, about 20-40 per petal. Outer staminal filaments about 4-6 mm long, anthers about 0.3-0.5 x 0.4 mm, gland terminal, on the back on the anther. Ovules about 10-12 per locule, placentas axile or central, ovules transverse +/- horizontal. Style about 5-9 mm long, approximating or exceeding the stamens.

Fruit

Fruits globular, pyriform or turbinate, narrowly excavated at the apex, attaining about 7-11 mm diam., calyx lobes persistent, about 0.5-1 mm long, pericarp succulent. Seed solitary, about 2-5 mm diam., testa adhering slightly to the pericarp, but free from the uniformly textured cotyledons. Radicle basal or lateral. Cotyledons purple when fresh, cotyledonary stipules present.

Seedlings

Cataphylls absent. Cotyledons +/- orbicular, fleshy, venation absent. At the tenth leaf stage: leaf blade ovate to lanceolate, apex acuminate, base cuneate, glabrous; oil dots easily seen with a lens, sometimes occurring only along the midrib. Seed germination time 13 to 48 days.

Distribution and Ecology

Endemic to Australia, occurs in CYP, NEQ and also in south-eastern Queensland and north-eastern New South Wales but apparently absent from coastal central Queensland. Altitudinal range from near sea level to 1500 m. Grows in well developed rain forest on a variety of sites.

Natural History & Notes

A very popular tree in cultivation, it has a dense crown and produces beautiful flushes of new growth and small red fruits.

This species produces millable logs and the timber is marketed as Cherry Satinash, a useful general purpose structural timber. Wood specific gravity 0.70-0.82. Hyland (1983).

Synonyms

Eugenia luehmannii F.Muell., *Victorian Naturalist* 9: 10(1892), Type: S. Johnson, Mount Bartle Frere, holo: MEL; iso: MEL. **Eugenia parvifolia C. Moore**, *Proceedings Royal Society NSW* 27: 85(1893), Type: Richmond River. **Austromyrtus exaltata (F.M.Bailey) Burrett**, *Notizbl. Berl. Dahl.* 15: 501(1941). **Myrtus exaltata F.M.Bailey**, *Queensland Dept. Agricultyre Botany Bulletin* 8: 77(1893), Type: Cowley, Kamerunga, Barron River, BRI.

RFK Code: 17

Lophostemon suaveolens (Sol. ex Gaertn.) Peter G.Wilson & J.T.Waterh.

Family: Myrtaceae

Wilson, Peter G. & Waterhouse, J.T. (1982) *Australian Journal of Botany* 30: 425.

Common name

Swamp Mahogany; Apple; Mahogany, Swamp; Swamp Box; Swamp Turpentine; Mahogany, Paperbark; Box, Swamp; Paperbark Mahogany

Stem

Dead bark often soft and somewhat compressible.

Leaves

Oil dots visible with a lens if not visible to the naked eye. Leaf blades about 5.5-14 x 2.5-4 cm. Young shoots and younger leaf bearing twigs clothed in white, erect hairs. Young leaves, when crushed, emit an odour like that of geraniums (Pelargonium spp.). Old leaves turn orange-red prior to falling.

Flowers

Calyx lobes obtuse, persistent. Staminal fascicles up to 3-5 mm long, opposite the petals. Usually 30-50 stamens per fascicle.

Fruit

Fruit about 6-8 mm diam., included in the calyx tube (hypanthium). Seeds linear, about 1.5-2 mm long.

Seedlings

Cotyledons elliptic to ovate, about 2-4 mm long. A few very small oil dots may sometimes be seen with a lens. At the tenth leaf stage: leaf blade elliptic, apex acute, upper surface glabrous or with a few hairs near the base on the midrib; oil dots very small, visible only with a lens; petiole, terminal bud and stem clothed in long white or pale hairs. Seed germination time 8 to 21 days.

Distribution and Ecology

Occurs in CYP, NEQ, CEQ and southwards as far as north-eastern New South Wales. Altitudinal range from sea level to 900 m. Grows in swampy open forest but also found on the margin of rain forest and gallery forest. Also occurs in New Guinea.

Natural History & Notes

Formerly used as wharf piles particularly with the bark still attached. Swain (1928).

Synonyms

Tristania suaveolens (Solander ex Gaertn.)Sm., *Rees' Cyclopaedia 36* : no. 2(1817). **Tristania suaveolens var. glabrescens F.M.Bailey**, *A Synopsis of the Queensland Flora* : 182(1883), Type: (C. Ext.). **Melaleuca suaveolens Soland. ex Gaertn.**, *de Fruct. et Sem.* 1: 73(1788), Type: Ex hortario Banksiano.

RFK Code: 267

Flowers. © Barry Jago


Flowers. CC-BY R.L. Jago


Flowers. CC-BY R.L. Jago

Leaves and Flowers. © CSIRO

Melicope elleryana (F.Muell.) T.G.Hartley

Family: Rutaceae

Hartley, T.G. (1990) *Telopea* 4(1): 34.

Leaves and Flowers. © B. Gray

Leaves and Flowers. © B. Gray


Fruit [not vouchered]. CC-BY J.L. Dowe

Common name

Corkwood; Pink Doughwood; Pink-flowered Evodia; Evodia; Doughwood, Pink; Pink Evodia; Pink Flowered Doughwood; Pink Euodia; Spermwood

Stem

Bark pale brown and corky, particularly at the butt near the roots. Narrow, pale brown brittle stripes in the blaze.

Leaves

Oil dots visible with a lens if not visible to the naked eye. Leaflet blades about 8-19 x 3.5-7.5 cm. Stalk of the middle leaflet slightly longer than those of the lateral leaflets, all three grooved on the upper surface. Old leaves turn yellow prior to falling. Freshly broken twigs have a somewhat mousy odour.

Flowers

Inflorescences produced on the branches below or back from the leaves. Sepals about 1.5-2 mm long. Petals about 5-6.5 mm long, glabrous on the outer surface, pubescent on the inner surface. Staminal filaments glabrous. Disk yellow-green, pubescent, continuous, surrounding the ovary. Ovary pubescent.

Fruit

Fruiting carpels connate at the base, individual carpels about 5-8 mm long. Seeds about 2-3 mm diam. Aril shiny black on the outer surface, completely enclosing the seed. Testa finely pitted or foveolate.

Seedlings

Cotyledon margin not or infrequently finely crenate. Oil dots small, more frequent about the margins. At the tenth leaf stage: lateral leaflets slightly unequal-sided at the base; oil dots numerous, visible with a lens. Seed germination time 49 to 141 days.

Distribution and Ecology

Occurs in WA, NT, CYP, NEQ, CEQ and southwards to north-eastern New South Wales. Altitudinal range from near sea level to 800 m. Grows in well developed rain forest on a variety of sites. This species is favoured by disturbance. Also occurs in New Guinea.

Natural History & Notes

Seeds eaten by pigeons. Cooper & Cooper (1994).

Food plant for the larval stages of the Ulysses Butterfly. Common & Waterhouse (1981).

A commonly cultivated tree that is fast growing and produces masses of pink flowers which are attractive to birds.

Produces a useful general purpose timber.

Wood specific gravity 0.61. Cause et al. (1989).

Synonyms

Acronychia muelleri (Engl.) W.D.Francis, *Kew Bull.* 1931: 190(1931). **Euodia muelleri Engl.**, *Nat. Pflanzenfam.* 4: 121(1896). **Euodia elleryana F.Muell. var. elleryana**, *Bulletin of Miscellaneous Information, Kew* : 189(1932). **Evodiella muelleri (Engl.) B.L.Linden**, *Nova Guinea (new ser.)* 10: 147(1959). **Euodia elleryana F.Muell.**, *Fragmenta Phytographiae Australiae* 5: 4(1865), Type: Queensland, Port Curtis, Beddome Creek, Thozet; holo: MEL. Fide Hartley (2001).

RFK Code: 226

Peltophorum pterocarpum (DC.) Backer ex K.Heyne

Family: **Fabaceae**

Heyne, K. (1927) *De Nuttige Planten van Nederlandsch Indie ed. 2* 2: 755.

Common name

Yellow Poinciana; Peltophorum; Soga; Yellow Flame Tree

Stem

Blaze odour aromatic.

Leaves

Leaflet blades about 12-20 x 6-9 mm, +/- sessile, unequal-sided, apex usually emarginate. Lateral veins forming loops inside the blade margin. Young shoots densely clothed in brown hairs.

Flowers

Flowers in large panicles about 30-50 cm long. Petals wavy and crumpled, about 15-18 mm long, pubescent towards the base on both inner and outer surfaces. Pollen orange. Stigma bright green.

Fruit

Pods +/- winged or with thin margins, apex apiculate. Seeds 1-5 per pod, seeds very hard, about 9 x 4 mm.

Seedlings

Cotyledons somewhat fleshy, oblong or elliptic, about 16-20 x 7-10 mm, apex obtuse, base auriculate. At the tenth leaf stage: the terminal bud densely clothed in rusty red hairs; stem hairs +/- glandular. Seed germination time 12 to 232 days.

Distribution and Ecology

Occurs naturally in NT at low elevations, and naturalised in WA, CYP, NEQ and CEQ due probably to the direct or indirect consequences of cultivation (Fide Pedley,1998). Altitudinal range from near sea level to 100 m. Usually grows naturally in open forest but also found in monsoon forest and closed forest particularly on heavy soils on river flood plains. Also occurs in Malesia and Asia. Widely cultivated throughout the tropics particularly in areas with a marked dry season.

Synonyms

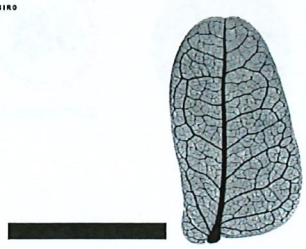
Inga pterocarpa DC., *Prodr.* 2: 441(1825), Type: Timor; holo: P; iso: K. Fide Ding Kou Fl, Males. ser. 1 12: 561 (1966). **Peltophorum ferrugineum (Decne.) Benth.**, *Flora Australiensis* 2: 279(1864). **Peltophorum inerme (Roxb.) Naves**, *Flore de Filipinas* : 69(1880). **Caesalpinia ferruginea Decne.**, *Herb. Tim. Descr.* : 134(1834), Type: Timor, holo: P?. **Caesalpinia inerme Roxb.**, *Hort Bengal* : 90(1814), Type: Timor.

RFK Code: **808**

Leaves and Flowers. © CSIRO


Flowers and buds. © CSIRO


Leaves and fruit. © CSIRO



Scale bar 10mm. © CSIRO

Cupaniopsis anacardioides (A.Rich.) Radlk.

Family: Sapindaceae

Radlkofer, L.A.T. (1879) *Sitzungsberichte der Mathematisch-Physikalischen Classe der k. b. Akademie der Wissenschaften zu Munchen* 4: 512.

Common name

Tamarind, Green Leaved; Beach Tamarind; Tuckeroo; Green Leaved Tamarind; Carrotwood; Tamarind, Beach

Stem

Usually a small tree not exceeding 30 cm dbh but recorded to 40 cm dbh. Lenticels often tend to be arranged in vertical lines. White or cream, granular, longitudinal stripes usually visible in the outer blaze.

Leaves

Small oil dots visible with a lens. Leaflet stalk swollen at its junction with the compound leaf rhachis. A ridge normally present on the upper surface of the rhachis. Leaflet blades abut 4.5-19 x 1.5-7.5 cm. Lateral veins about 10-14 on each side of the midrib and forming loops just inside the leaf blade margin.

Flowers

Flowers pedicellate. Calyx lobes about 2.5-4 mm. Petals smaller than the calyx. Stamens eight.

Fruit

Capsules about 15-30 x 15-28 mm, hairy on the inner surface (densely clothed in white hairs). Capsules appearing almost glabrous externally, the hairs short and visible only with a lens, puberulous. Aril orange-red, nearly or completely enclosing the seed. Seeds dark brown, about 15 x 8-9 mm.

Seedlings

First pair of leaves compound, trifoliolate or pinnate, with toothed lateral leaflets and lobed middle or terminal leaflets, sometimes with two leaflets only. Petiole and rhachis of compound leaf winged. At the tenth leaf stage: leaflet blade margin smooth; midrib raised on the upper surface of the leaflet blade, lateral veins forming definite loops inside the blade margin with a tendency towards a double series of loops. Seed germination time 13 to 25 days.

Distribution and Ecology

Endemic to Australia, occurs in WA, NT, CYP, NEQ, CEQ and southwards as far as coastal central New South Wales. Altitudinal range from sea level to 800 m. Grows in monsoon forest and beach forest.

Natural History & Notes

This fruit is the favorite food of many fruit eating birds. Cooper & Cooper (1994).

Food plant for the larval stages of the Pale Ciliate Blue, Dark Ciliate Blue, Marginata Blue, Hairy Blue, Fiery Jewel, Common Oakblue, Fielder's Lineblue and Glistening Blue Butterflies. Common & Waterhouse (1981).

Widely cultivated in parks and gardens and as a spreading and shady street tree. It is also noted for its adaptability and tolerance of strong and salt laden winds.

This species has become a troublesome weed in Florida.

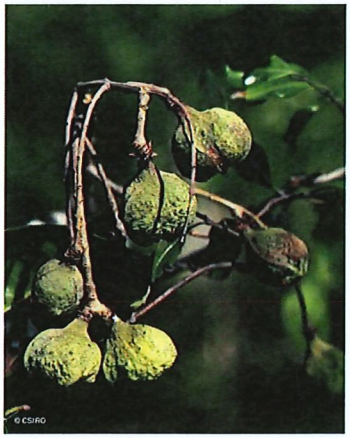
Synonyms

Cupania anacardioides A.Rich. var. anacardioides, *The Queensland Flora* 1: 290(1899). **Cupaniopsis anacardioides (A.Rich.) Radlk. f. anacardioides**, *Engler's Das Pflanzenreich Heft 98* : 1187(1933). **Cupaniopsis anacardioides (A.Rich.) Radlk. var. anacardioides**, *Bibliotheca Botanica* 89(4): 904(1928). **Cupaniopsis anacardioides f. genuina Radlk.**, *Engler's Das Pflanzenreich Heft 98* : 1187(1933). **Cupania anacardioides A.Rich.**, *Voyage de l'Astrolabe 2, Sertum Astrolabianum* : 33(1834), Type: Crescit in Novae-Hollandiae, loco dicto Moreton-Bay, V.s. sp. fructiferum, comm. clar. Fraser. **Alectryon bleeseri O.Schwarz**, *Repertorium Specierum Novarum Regni Vegetabilis 24* : 87(1927), Type: Port Darwin (Bleeser no. 332).

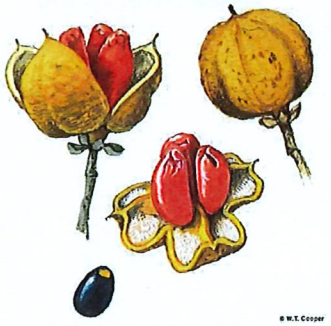
RFK Code: 475

Flower. © Barry Jago

Leaves and Flowers. © CSIRO



Fruit. © CSIRO



Fruit, side view, dehiscing and arillous seed. © W. T. Cooper

Flindersia australis R.Br.

Family: Rutaceae

Brown, R. in Flinders, M. (1814), General remarks, geographical and systematical, on the Botany of Terra Australis. *A Voyage to Terra Australis* 2, Appendix III: 595, t. 1. Type: "observed September 1802, .. near head of Broad Sound, on the East coast of New Holland, in about 23°S lat."

Common name

Teak, Crow's Ash

Stem

Tree to 25 m high. Young stems densely hairy with simple, clustered or stellate hairs, older stems becoming hairless. Bark brown, scaly, shed in oval flakes leaving depressions, which gives the trunk a spotted appearance.

Leaves

Leaves alternate to opposite, compound. Stipules absent. Petioles to 10-15 cm long. Leaves imparipinnate (with terminal leaflet), with 3-13 leaflets per leaf, lateral leaflets opposite. Lateral petiolules sessile to 3 mm long, terminal petiolule sessile to 30 mm long. Leaflet blades ovate to elliptic or obovate, sometimes narrowly so, (2.4-) 3-12 (-15) cm long, (0.8-) 1.5-4.5 cm wide, base cuneate, rounded, or oblique (asymmetric), margins ± entire, leaf apex acuminate, acute or rounded. Both leaf surfaces hairless or densely pubescent with predominantly stellate hairs below and short sparsely hairy on midrib above. Lateral veins about 16-20 pairs. Oil dots visible to naked eye. Compound leaf axis somewhat flattened, margins angular or shortly winged towards the base.

Flowers

Inflorescences terminal, paniculate. Flowers bisexual, 5-merous, white to cream, sometimes with a few male flowers. Sepals 5, ovate-triangular, 2.2-2.5 mm long, pubescent outside, free or connate at base only. Petals 5, elliptic-oblong, 5-7 mm long, appressed hairy on outer surface except for margins, inner surface with a few papillose hairs in throat. Stamens 5, filaments curved inwards from upper third; carpels 5, fused and clothed in simple hairs.

Fruit

Fruit a dry woody capsule, ellipsoid, 4.6-10 cm long. Capsule dehiscent into 5 valves which adhere at base and do not disintegrate following dehiscence. Capsule brown with numerous projections on outer surface. Seeds 2-6 per valve, 3.4-5 cm long, winged at apical end.

Seedlings

Cotyledons obdeltoid to reniform, much wider than long, about 10-13 x 17-22 mm. Oil dots visible with a lens. At the tenth leaf stage: leaflet blades ovate, lanceolate or narrowly elliptic, terminal leaflet attenuate at the base, lateral leaflets ± sessile, midrib raised on the upper surface; oil dots numerous, visible to the naked eye; petiole and rhachis of compound leaf winged.

Distribution and Ecology

Occurs in CEQ, from Mt Dryander near Airlie Beach, west to Carnarvon National Park and southwards to Kempsey in New South Wales. Found in rainforest (subtropical and dry rainforest) near sea level to 860 m altitude.

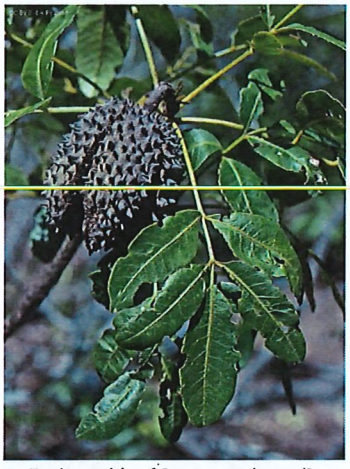
Natural History & Notes

This profile information and associated coding has been adapted from Cooper & Cooper (2004), Harden et al. (2014), and Hartley (1969; 2013).

RFK Code: 1224

Inflorescence. CC-BY: APII, ANBG.

Flower [not vouchered]. CC-BY: S. & A. Pearson.



Fruit and leaf [not vouchered]. CC-BY: S. & A. Pearson.

Capsule [not vouchered]. CC-BY: S. & A. Pearson.

Seed [not vouchered]. CC-BY: S. & A. Pearson.

Syzygium hemilamprum (F.Muell.) Craven & Biffin subsp. *hemilamprum*

Family: Myrtaceae

Craven, L.A., Biffin, E. & Ashton, P.S. (2006) *Blumea* 51(1): 137.

Common name

Cassowary Gum; Watergum; Eungella Gum; Broad Leaved Lilly Pilly; Broad Leaved Lillipilli; Blush Satinash; Satinash, Blush

Stem

A thin layer of orange, brown bark may be visible just outside the subrhytidome layer.

Leaves

Oil dots visible with a lens if not visible to the naked eye. Leaf blades about 3.9-13.1 x 1.8-5.9 cm. Blade margin frequently recurved and midrib usually depressed on the upper surface.

Flowers

Inflorescence exceeding the leaves, bracts deciduous, absent at anthesis. Calyx tube (hypanthium) gradually tapering into the pedicel, calyx tube (hypanthium) + pedicel about 2.5-5 mm long, calyx tube (hypanthium) about 1.5-4 mm diam., infundibuliform, dilated at the apex at anthesis; calyx lobes small and inconspicuous, rounded or apiculate, about 0.2 mm long. Petals variable and irregular in shape, +/- cohering, +/- orbicular, about 1-1.5 mm diam.; oil dots comparatively large, but often difficult to discern, up to six per petal. Staminal filaments variable, outer longer, about 0.5-2.5 mm long, glandular, anthers wider than long, about 0.2 x 0.4 mm, gland terminal, sometimes absent or inconspicuous. Placentas confined to the apex of each locule. Ovules pendulous, about 5-12 per locule. Style about 0.6-1.5 mm long, approximating the top of the calyx tube but substantially below the anthers.

Fruit

Fruits globular or depressed globular, shallowly excavated at the apex, attaining about 11-17 mm diam.; calyx lobes scarcely discernible on mature fruit. Seed attaining about 7-13 mm diam. Cotyledons with a conspicuous, hard, tanniferous inclusion in the centre and branches ramifying through the cotyledons; cotyledonary stipules small and inconspicuous.

Seedlings

Cataphylls about 2-4 pairs, opposite or alternate. At the tenth leaf stage: seedling completely glabrous, leaf blade elliptic, apex acute, base attenuate; oil dots small, visible only with a lens. Seed germination time 79 days.

Distribution and Ecology

Occurs in NT, CYP, NEQ, CEQ and southwards as far as north-eastern New South Wales. Altitudinal range from sea level to 600 m. Grows in well developed lowland and upland rain forest in northern Australia. Also occurs in New Guinea.

Natural History & Notes

This species becomes a large tree with a dense crown and contrasting white fruit are produced in profusion. Suitable for tropical plantings.

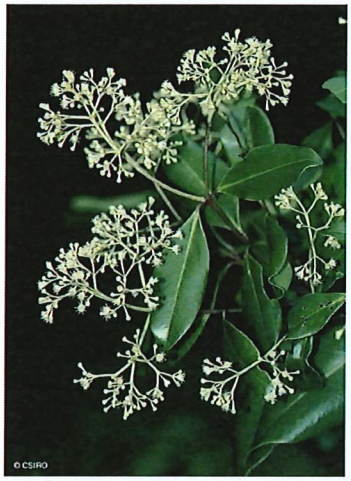
This subspecies produces millable logs and the timber is marketed as Blush Satinash, a useful structural timber. Wood specific gravity 0.72-0.83. Hyland (1983).

Synonyms

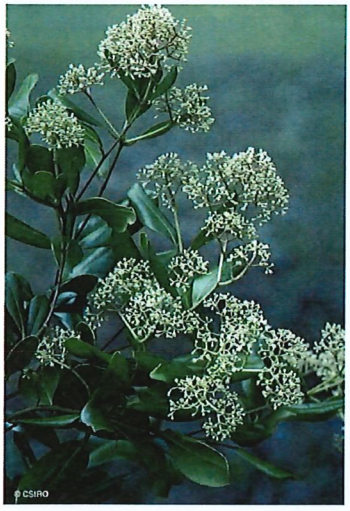
Acmena hemilampra (F.Muell.) Merr. & L.M.Perry subsp. hemilampra, *Australian Journal of Botany Supplementary Series* 9: 12(1983). **Acmena hemilampra (F.Muell.) Merr. & L.M.Perry**, *Journal of the Arnold Arboretum* 19: 15(1938). **Eugenia hemilampra F.Muell.**, *Fragmenta Phytographiae Australiae* 9(78): 145 (1875), Type: Lectotype: J. Dallachy, Saltwater Creek (MEL 60977).

RFK Code: 415

Flowers. © Barry Jago



Leaves and Flowers. © CSIRO



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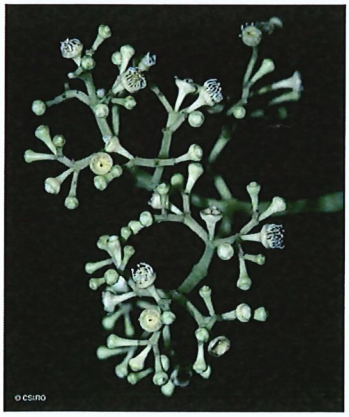

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