















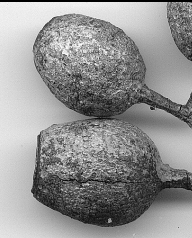


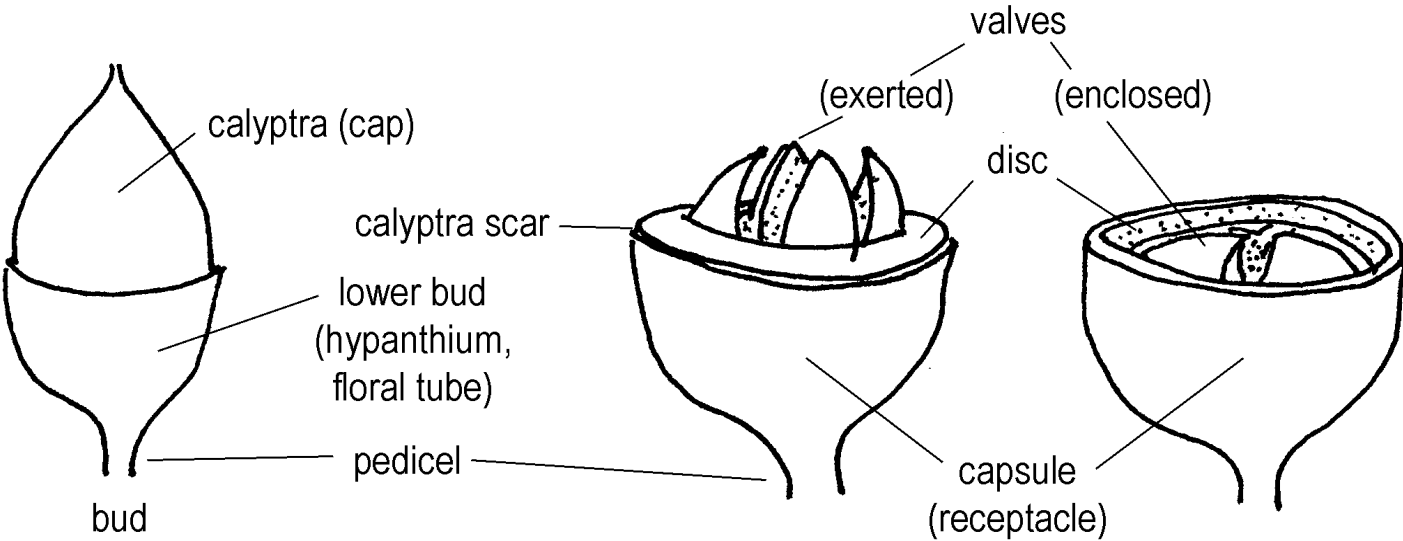
COMMON EUCALYPTS AND RELATED SPECIES OF COFFS HARBOUR & HINTERLAND:
TABLE OF RECOGNITION FEATURES

		SPECIES	BARK	FRUIT	BUDS	LEAVES	HABITAT*	CONFUSING SPECIES	PHOTO
EUCALYPTS	SMOOTH-BARKED	Flooded Gum <i>Eucalyptus grandis</i>	Smooth white or grey, shed in long ribbons. Grey fibrous flaky bark usually persistent on lower trunk.	Pear shaped to conical. Valves in-curved.	Cap conical to beaked mostly glaucous.	Alternate, green glossy, bluish beneath.	Widespread. WSF or Rf margins on fertile soils along relatively frost free gully floors and footslopes.	Other smooth barked Eucalypts esp. Blue Gum, but fruits with incurved valves.	
		Blue Gum <i>Eucalyptus saligna</i>	Smooth pale blue-grey , shed in short ribbons or flakes . Persists in short skirt on lower trunk.	Bell shaped to pear shaped. Valves almost erect or outcurved.	Cap conical to beaked.	Alternate green, glossy, paler beneath.	WSF (including escarpment) rather frost tolerant.	Other smooth barked eucalypts, especially Flooded Gum, but fruits with erect or out-curved valves.	
		Forest Red Gum <i>Eucalyptus tereticornis</i>	Smooth white with orange to grey – blue streaks.	Whole fruit almost globular with 2-3mmwide ascending disc.	Cap very long straight conical or bent near apex (pixie cap).	Alternate dull green colour on both surfaces.	Mostly coastal at low altitude on heavier soils. Also on alluvial flats. Usually in grassy forests or woodlands	Other smooth barked Eucalypts especially Blue Gum and Flooded Gum but raised disc on fruit, long cap on buds and concolourous leaves.	
		Small-fruited Grey Gum <i>Eucalyptus propinqua</i>	Granular matt, mainly pale grey , shed in large, irregular patches exposing yellow or orange colours.	Very small, hemispherical to conical fruit with flat to slightly raised disc.	Cap shortly conical to hemispherical sometimes beaked.	Alternate, dark green, glossy, paler beneath.	Prefers clay-loam soils on lower slopes extends to ridges where soil moderately fertile.	May confuse with Blue Gum, but granular matt bark distinctive. Bark often shows claw marks from climbing goannas and animals.	
		Northern Scribbly Gum <i>Eucalyptus signata</i>	Smooth, grey to white with <i>Ogmograptis</i> moth scribbles (see picture)	Hemispherical, disc quite thick and woody.	Buds small, cap shorter than receptacle rounded	Leaves concolorous, glossy olive green	On sandy, often swampy soils in the Northern Orara valley. Also along Coffs coast	Forest red gum is usually on heavier soils. Angophora has opposite leaves. Blackbut is only other species with scribbles.	
	HALF-ROUGH	Blackbutt <i>Eucalyptus pilularis</i>	Rough bark on lower half of trunk. Smooth above white to grey, often scribbly, shed in ribbons.	Hemispherical to subglobular. Disc depressed or flat.	Cap conical or beaked.	Glossy green on both surfaces.	Widespread in WSF or grassy coastal forest on lighter soils of medium fertility.	Brush Box has half rough-half smooth bark but smooth bark pink and leaves whorled	
		IRONBARKS (HARD, DEEPLY FISSURED & GREY-BLACK)							
	ROUGH-BARKED	Northern Grey Ironbark <i>Eucalyptus siderophloia</i>	Grey black thick, tough, very hard , deeply fissured. Rough bark persistent to main branches, smooth above.	Conical, descending disc, valves flush with rim or slightly exerted.	Cap conical or beaked slightly narrower than lower bud.	Dull grey green both surfaces.	DSF on clayey soils in undulating coastal areas and foothills.	A number of other ironbarks occur sporadically to the north of the area.	
		OTHER ROUGH-BARKED (STRINGY or MATTED, & BROWN)							
		Tallowwood <i>Eucalyptus microcorys</i>	Orange brown, stringy, with thin inset wafers separated by horizontal breaks . Persistent to small branches.	Conical to pear shaped. Disc descending. Valves 3.	Cap hemispherical with fine ribs.	Glossy green, paler beneath. Open looped venation.	Widespread in DSF, WSF & Rf margins, tolerant of poor soils but prefers moist rich forest loam.	Other rough barked species. Fruit paler & less woody and usually prolific. Horizontal breaks in bark are distinctive.	
		White Mahogany <i>Eucalyptus acmenoides</i>	Grey brown, finely sub-stringy.	Hemispherical to globular truncate. Disc usually narrow, flush with rim or enclosed.	Cap conical beaked.	Thin, green, paler below.	DSF or WSF on soils of fair to moderate fertility, typically on slopes & ridges on undulating to hilly country.	Thick-leaved White Mahogany has less discolourous leaves. Tallowwood bark is less stringy and lacks horizontal breaks in bark.	
		Red Mahogany <i>Eucalyptus resinifera</i>	Grey brown, finely sub-stringy.	Hemispherical to ovoid. Disc flat to raised. Valves exerted.	Buds up to 16mm. Cap longer than lower bud, up to 12mm , horn shaped.	Green, glossy, paler beneath.	DSF & WSF on gentle topography. Common on light podsolic soils.	Other rough barked eucalypts, particularly white mahogany. Strongly exerted buds and long cap on bud are distinctive.	
		Swamp Mahogany <i>Eucalyptus robusta</i>	Fibrous or sub stringy, red brown in longitudinal spongy slabs. Persistent to smallest branches.	Prominently cylindrical. Valves joined across opening forming + sign.	Buds up to 25mm long. Cap conical up to 12mm long.	Broad, dark green, glossy, paler beneath.	SSF or WSF on light to heavy soils where drainage impeded. Rarely far from sea board.	Swamp Turpentine.. Long fruits are distinctive. Leaved not whorled. Can withstand and usually found in wetter sites	
		Pink Bloodwood	See NON EUCALYPTS (BLOODWOODS, ANGOPHORAS, ETC.) over-leaf. Bloodwoods were formerly classified as <i>Eucalyptus</i> species but, although closely related, they are now classified as <i>Corymbia</i> species.						

* Habitat and distribution details are primarily for the Coffs Harbour & Orara Valley Some species may have distributions across slightly different landscapes in other catchments.

		SPECIES	BARK	FRUIT	BUDS	LEAVES	HABITAT	CONFUSING SPECIES	
NON-EUCALYPTS (BLOODWOODS, ANGOPHORAS, ETC)	SMOOTH BARK	Smooth-barked Angophora <i>Angophora costata</i>	Smooth, dimpled, pink grey to reddish, shed annually.	Capsule with conspicuous longitudinal ribs sometimes terminating in teeth above the rim.	On branch ends. Buds bristly without caps.	Opposite , green, paler beneath. Veins parallel 50-80° angle with mid vein.	Widespread on sandstones, old dunes, and shale ridges.	Smooth barked Eucalypts, especially Spotted Gum, but with opposite leaves, dimpled bark, no cap on buds, ribs on fruit and dimpled bark,.	
		Northern Spotted Gum <i>Corymbia variegata</i> (a smooth-barked bloodwood)	Smooth, dimpled, pale grey with shades of pale pink and blue, shed annually in spots and patches	Capsule smooth, barrel-shaped, like a small version of pink bloodwood	Buds with rounded cap, slightly peaked. conspicuous on outer branches	Alternate semi-glossy green on both sides, tapering to leaf stalk	On shale ridges usually in slightly drier country (DSF) than most of the wet forest species in this table (e.g more northern parts of Orara valley)	Angophora (above) has opposite leaves. <i>C. variegata</i> , lemon-scented gum (<i>C. citriodora</i>) in Qld and southern spotted gum (<i>C. maculata</i>) south of Coffs are very similar	
	HALF-ROUGH	Brush Box <i>Lophostemon confertus</i>	Rough, finely fibrous brown bark on lower trunk, smooth green to pinkish brown on upper trunk.	Hemispherical	Buds without caps.	Broad, alternate on mature branchlets. Crowded in pseudo whorls on branchlet ends.	Rf or WSF often as emergent in or near the edge of Rf margins.	Blackbutt is similarly half barked but Brush Box has broader leaves and the upper smooth trunk is pinkish to greenish not greyish white.	
	ROUGH-BARKED	Swamp Turpentine <i>Lophostemon suaveolens</i>	Red brown, fibrous-papery, persistent.	Hemispherical, sepals persistent in fruits.	Buds without caps.	Leaves in pseudo whorls of 3-4.	Coastal sclerophyll forests often on swampy & poorly drained ground or alluvial flats.	Swamp Mahogany. Swamp Turpentine is less tolerant of prolonged inundation and has leaves in pseudo whorls..	
		Turpentine <i>Syncarpia glomulifera</i>	Fibrous-stringy, deeply furrowed persistent bark.	A number of fruit fused into a multiple fruit forming a distinctive “space ship” capsule shape.	Buds fused, no caps.	Opposite along branchlets, in pseudo whorls on branchlet ends. Upper surface dark green; lower whitish, hairy.	Often emergent near margins of Rf or in WSF. Often on heavier soils. Coastal and lower ranges.	Other rough barked species esp. Tallowwood but differs in leaf arrangement and colour and fused multi-receptacle fruit.	
		Pink Bloodwood <i>Corymbia intermedia</i>	Rough, short fibres forming tessellated pattern. Persistent to smallest branches	Distinctive ovoid to urn shaped, characteristic of Bloodwoods (<i>Corymbias</i>)	Conspicuous on outer branches. Buds with a cap.	Alternate, dark green, paler beneath. Lateral veins parallel at 60-70° angle with mid rib.	Widespread on undulating to hilly terrain. WSF and Rf margins in sheltered valleys on coastal ranges.	Red Bloodwood occurs on drier, less fertile ridge. Rough barked eucalypts don't have tessellated bark or large, urn-shaped fruits.	

GLOSSARY	
Alternate	Of leaves – arising singly from different points on the stem (cf. opposite). Also called disjunct.
Calyptra/cap	Cap-like covering of the flower, formed from fused petals and/or sepals, and shed when the flower opens
Concolourous	Of leaves – similar in colour and texture on both sides.
Disc	Ring around the opening of the capsule (receptacle) inside the calyptra scar; may be flat, domed, ascending, or descending.
Discolorous	Of leaves – different in colour on either side, having a distinct upper and lower surface.
DSF	Dry Sclerophyll Forest. Open forest of medium (<30m, usually <20m) height, dominant trees usually branching at less than half their height
Glaucous	Dull blue-green to pale grey colour
Gum	In the broad sense all eucalypts, bloodwoods and angophoras; in the narrow sense only smooth-barked eucalypts
Opposite	Of leaves – arising from the same level, on opposing sides of the stem (cf. alternate)
Rf	Forests dominated by soft-leaved trees with a foliage canopy cover > 70%
Sclerophyll forest	Forest dominated by hard-leaved trees such as eucalypts with a foliage canopy cover of 30%- 70%
SSF	Swamp Sclerophyll Forest. Open sclerophyll forest growing on swampy ground, usually dominated by paperbarks, Swamp Mahoganies or Swamp Oaks.
Tessellated	Of bark – dividing into squarish, blockish segments. Common in bloodwoods.
Valve	Segment of the top of the fruit that opens to release seed.
WSF	Wet Sclerophyll Forest. Tall (>30m) moist forest in which dominant trees are usually unbranched for most of the length of their trunks. Shrubby or ferny understoreys



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