## **KEY TO GROUP 8**

Shrubs or trees usually more than 1.5 m tall.

		S S	Sall		
A. flower	B. phyllode and	C. leaf	D. leaf	E. leaf margins	F. leaf margins
spike	pod	lobed	dissected	crenate	serrate

**NOTE:** The following trees and shrubs, which are deciduous when flowering, will not come out in this key unless you can find a leaf. There are usually some old ones on the ground or even a few hanging on the tree.

These plants are: *Brachychiton* (Group 8.G), *Cochlospermum* (Group 8.G), *Cordia* (Group 8.K), *Gyrocarpos* (Group 8.G), *Sterculia* (Group 8.O), *Terminalia* (Group 8.M), *Turraea* (Group 8.R), and the mangrove, *Xylocarpus* (Group 1.H).

1	Leaves with oil glands, readily visible with a hand lens if not to the naked eye, aromatic when crushed, eucalypt or citrus smell.		
1*	(Chiefly eucalypts, paperbarks, bottlebrushes and similar) Leaves lacking easily seen oil glands, if aromatic when crushed	go to 2	
1	smell not of an eucalypt; citrus or even an apple smell	go to 5	
	Oil glands/dots as seen with a good hand lens	ı	
2	Trees; petals fused to form an operculum or cap, stamens numerous and free (eucalpyts)	go to 3	
2*	Shrubs or trees, petals not fused to form an operculum or cap, stamens if numerous then usually united into bundles or stamens are fewer than 10 (Myrtaceae-Rutaceae)	go to 4	
3	Bark smooth throughout but occasionally some rough		
3*	fibrous or persistent bark at base Persistent, fibrous bark for at least 2-3 m or usually more	go to Group 8.A	
	from the base	go to Group 8.B	
4	Flowers clustered into spikes (see sketch A), old capsules usually remain on the old wood for months; bark usually		
4*	papery Flowers not in spikes and capsules are not persistent on old	go to Group 8.C	
7	wood	go to Group 8.D	
5	Leaves (phyllodes) with longitudinal veins, <b>and</b> stamens numer <b>and</b> fruit is a pod or legume (wattles) (see sketch B)	ous; go to <b>Group 8.E</b>	
5*	Leaves without parallel veins, leaves may be minute		
	so as to appear absent, or be short and thick to 1 cm long; fruit various but not a pod or bean-like	go to 6	
6 6*	Leaves with margins variously lobed (C) or deeply dissected (D Leaves with smooth or toothed margins <b>but not</b> as above	) go to 7 go to 8	

7 7*		at maturity, sometimes scrambling t maturity, deciduous when flowering			go to <b>Group 8.F</b> go to <b>Group 8.G</b>
8 8*	rigid and le	aves minute so that plant appears leafless, <b>or</b> thick and id and less than 1 cm long, veins obscure aves not so reduced, veins visible			go to <b>Group 8.H</b> go to 9
9 9*		aves strap-like, narrow with prominent longitudinal vein aves not strap-like, veins obviously branching			
10 10*	Fruits inde Fruits dry	fleshy go to 11 go to 16			
ΝΟΤ	E: If you de	on't have fruits,	you may need to	o flip pages!!	
11 11*		e at maturity or e oured at maturity	ven semi-transluo	cent	go to <b>Group 8.J</b> go to 12
12 12*	and/or ma TREE HEI	Ilmately (see sket argins crenate/ser RE) th pinnate venatio	rate (E/F) (CAU	<b>FION</b> – STINĠIŃ	G go to <b>Group 8.K</b> go to 13
13 13*	Leaves densely pubescent on lower surface Leaves only sparsely pubescent or hairless (glabrous)			go to <b>Group 8.L</b> go to 14	
14 14*	flowers in lateral ridg	oovate i.e., broade spikes (see sketo jes (may be smal of the leaves, flow	:h A), fruit compre I <i>–Terminalia</i> )	essed with two	, go to <b>Group 8.M</b> go to 15
15 15*	leaves rarely less than 7 cm long			go to <b>Group 8.N</b>	
15	7 cm long			go to Group 8.O	
16 16*	Leaves palmately (sketch G) or 3-veined at the base (H) Leaves with pinnate venation (sketches D-F)			go to <b>Group 8. P</b> go to 17	
17					
17*	<ul> <li>branch, thus leaves often appearing as a compound leaf</li> <li>* Leaves spirally arranged (K), not in one plane</li> </ul>			go to <b>Group 8.Q</b> go to 18	
18 18*	white about 3 cm long, stamens fused to form a staminal tube			go to <b>Group 8.R</b> go to <b>Group 8.S</b>	
				DE	N

G. leaf veins	H. leaf 3-veined	I. leaf	J. leaves	K. leaves spirally
palmate	at base	obovate	distichous	arranged

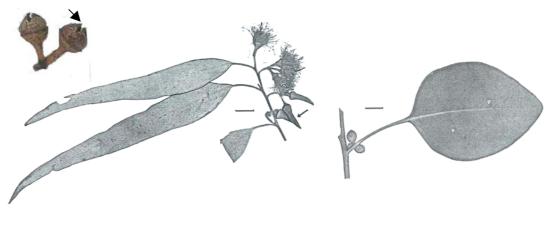
# GROUP 8.A Bark normally smooth throughout but sometimes rough persistent bark at the base.

*Eucalyptus tereticornis* (Forest Red Gum, Blue Gum – Myrtaceae)

*Eucalyptus*, from the Greek *eu* – well, and *calyptos* – covered, referring to the operculum or cap.

Tall tree, trunk often has a silvery and white mottled appearance, some rough persistent bark at the base. Juvenile leaves are usually much wider than adult leaves and bluish-green. The operculum ( $\uparrow$ ) is long to 2 cm and horn-shaped. Capsular valves strongly exserted ( $\uparrow$ )above the rim. The River Red Gum, *Eucalyptus camaldulensis* may be found as a cultivated specimen, recognized by the bluish-green foliage, shorter trunk, and shorter operculum usually less than 1 cm long.

*Eucalyptus platyphylla* (Poplar Gum, Cabbage Gum, White Gum – Myrtaceae) Bark smooth throughout white to grey, shed in broad strips annually; leaves broad, hence 'platyphylla' which means flat or plate-like leaf. Operculum or cap is rounded capsule about 7-5 mm, with 3-4 valves exserted.



E. tereticornis

E. platyphylla

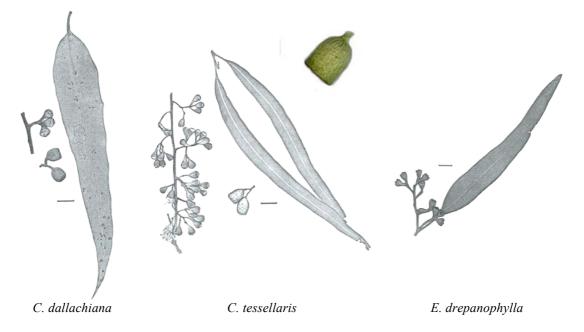
*Corymbia dallachiana* (Dallachy's Gum, formerly *Eucalyptus* – Myrtaceae) *Corymbia* from the Greek *korymbos* – cluster, referring to the inflorescence. Bark smooth, white, scattered brownish flakes often present near the base of the trunk. Leaves are wavy on the margins with numerous fine, relatively parallel lateral veins. Capsule is urn-shaped, papery and easily crushed 9-13 mm long, 7-10 mm wide.

# **GROUP 8.B Persistent fibrous bark for a minimum of 2-3 m at base usually more.** (Look on ground for old fruits, if necessary)

*Corymbia tessellaris* (Moreton Bay Ash, Carbeen, formerley *Eucalyptus* – Myrtaceae) This tree has a distinctive black stocking of tessellated bark at the base, bark above is smooth and white. Leaves same shade on both sides, lateral veins relatively parallel to one another. oil glands few and difficult to see. Capsule urnshaped to 12 mm long, papery, easily crushed.

*Eucalyptus drepanophylla* (Narrow-leafed Ironbark – Myrtaceae)

Bark dark, deeply furrowed, persistent to the branchlets. Capsule 4-6 x 4.5-7.5 mm, valves level with the rim or exserted. This species is sometimes include in *Eucalyptus crebra* with which it intergrades on margins,



*Corymbia erythrophloia* (Variable-barked Bloodwood, Red-barked Bloodwood, formerly as *Eucalyptus* – Myrtaceae)

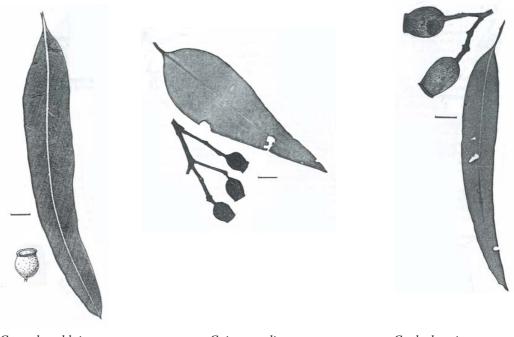
Bark persistent, flaky, upper branches may be smooth. Outer flakes when shed reveal rusty-red inner bark giving a mottled appearance to the trunk. Leaves with lateral veins relatively parallel to one another. Capsule firm, urn-shaped. Tree often poorly formed.

*Corymbia intermedia* (Pink Bloodwood, formerly *Eucalyptus* – Myrtaceae)

Bark persistent to the branchlets, irregularly tessellated. Tall tree in wetter areas. Petiole often pinkish, lateral veins in leaves relatively parallel to one another. Capsules ovoid to urceolate only slightly longer than wide, outside covered with small spots or 'warts', rim often flares, valves enclosed.

*Corymbia clarksoniana* (Clarkson's Bloodwood, part of the former range of *Corymbia* (*E.*) *polycarpa* – Myrtaceae )

Bark brownish-grey, tessellated, flaky persistent to the branchlets, leaf venation similar to the others. Capsule at least 1.5 times as long as wide to 2.2 cm long, valves deeply enclosed within the urn.



C. erythrophloia

C. intermedia

C. clarksoniana

*Eucalyptus portuensis* (White Mahogany, part of the former range of *Eucalyptus acmenoides* – Myrtaceae)

Bark persistent to smaller branches, fibrous and stringy, longitudinally fissured, grey; leaves discolourous i.e., both surfaces are not the same colour. Capsule 5-7 x 5-7 mm, valves level with the rim.

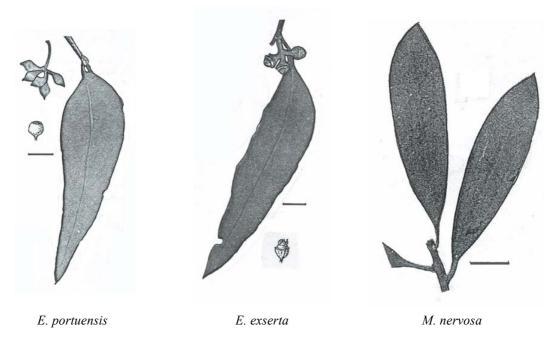
*Eucalyptus exserta* (Queensland Peppermint, Yellow Messmate – Myrtaceae) Bark fibrous, rough and persistent on the main branches, smooth on upper branches. Capsules to 8 mm long, valves 4, strongly exserted above the rim, tips often slightly recurved.

#### GROUP 8.C Bark frequently papery, Bottlebrush and Paperbarks.

Melaleuca nervosa (Paperbark, Woodland Paperbark - Myrtaceae)

*Melaleuca*, from the Greek *melas* – black and *leukos* – white, referring to the contrasting colours of the bark in some species.

A small tree to 10 m tall, with papery bark, the lanceolate leaves to 9 cm long, are greyish pubescent when young, veins longitudinal. Flowers in spikes, usually several clustered together, **white or creamy**, occasionally red, staminal filaments 10-23 mm long.

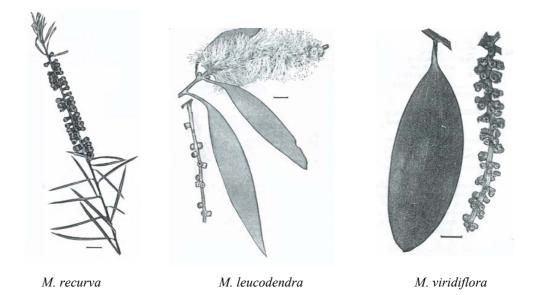


*Melaleuca dealbata* (Cloudy Teatree, Silver-leafed Paperbark – Myrtaceae) A tall tree often found near brackish water, may be distinguished by stamens to 7.5 mm long and the silky and/or crisped hairs on the leaves and the calyx lobes. Flowers **creamy-white**, good source of nectar. Settlers used Melaleucas as a tea substitute, hence the common name of 'tea-tree'. Aboriginal uses are numerous.

*Melaleuca recurva* (Tinaroo Bottlebrush, formerly *Callistemon recurvus*, Bottlebrush – Myrtaceae)

A shrub with linear leaves found near Mt Cook. Flowers **red** in spikes. *Melaleuca viminalis* (Weeping Bottlebrush, *Callistemon viminalis*) and various cultivars are often found in gardens.

*Melaleuca leucadendra* (Weeping Paperbark, Weeping Teatree. – Myrtaceae) Tall tree usually associated with streams and fresh water; bark papery, leaves pendulous, with longitudinal veins, glabrous. Flowers **white to cream** in loose spikes, staminal filaments 7-10 mm long, calyx lobes glabrous, i.e., lack hairs.



*Melaleuca viridiflora* (Broad-leafed Teatree or Paperbark – Myrtaceae) Small tree with thick, broadly lanceolate leaves to 22 cm long, veins longitudinal; bark fibrous or somewhat papery. Flowers in dense creamy-green spikes to 10 cm long, occasionally red flowering forms may be encountered.

#### GROUP 8.D Flowers not in spikes, capsules not persistent.

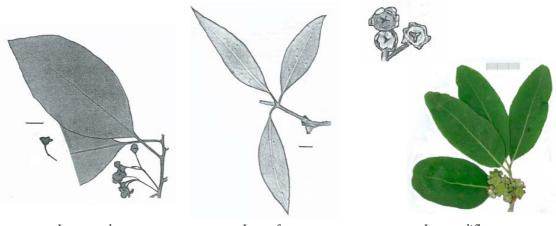
Lophostemon suaveolens (Swamp Mahogany, Swamp Box – Myrtaceae)
 Lophostemon, from the Greek lophos – crest, and stemon – stamens.
 Tall tree with reddish/grey flaky bark, often found along watercourses. Flowers
 white, sepals broad to 1.5 mm long, stamens grouped into 5 bundles. Capsule 5-8 mm diameter surrounded by calyx. Some old red leaves usually present.

#### *Lophostemon confertus* (Brush Box – Myrtaceae)

Tree with persistent scaly bark on the trunk, upper branches may be smooth. Leaves crowded at the ends of branchlets. Flowers **white**, stamens grouped into 5 bundles. Capsules to 1-1.5 cm diameter, woody, surrounded by calyx. Usually found in the higher areas of the Island along walking tracks.

*Lophostemon grandiflorus* (Northern Swamp Mahogany, Northern Swamp Box – Myrtaceae)

Tree with persistent, grey, fibrous bark usually found along seasonal watercourses. Flowers **whitish** in groups of 3, sepals to 3 mm long. Stamens fused to form 5 bundles. Capsule thin-walled 5 -8 mm diameter, surrounded by calyx



L. suaveolens

L. confertus

L. grandiflorus

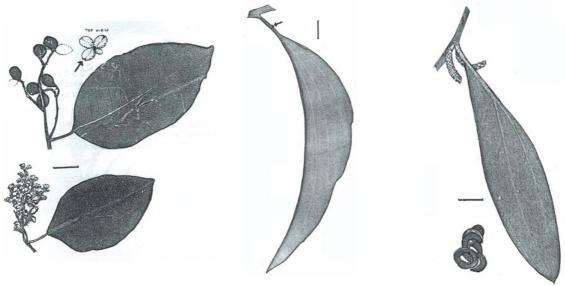
*Geijera salicifolia* (Scrub Wilga, Green Satinheart – Rutaceae)

*Geijera*, J. Geijer was a Swedish botanist who lived in the  $17^{\text{th}}$  Century. A hardy tree with broad leaves, obvious oil dots with a lemon or citrus smell when crushed. Flowers with 5 **white** petals, arranged in panicles; fruit forms dry, pale cocci ( $\uparrow$ ) lobe-like, with black seeds.

# GROUP 8.E Wattles, leaves with longitudinal veins, fruit a pod, stamens numerous.

*Acacia flavescens* (Red or Yellow Wattle – Mimosaceae/Fabaceae) *Acacia* from a name used by Dioscorides Small tree with furrowed shaggy bark, branchlets angular, yellowish, hence the name; phyllodes 9-24 cm long, 1.5-5 cm wide, 2 or the 3 longitudinal veins form an indentation where they meet at the margin. Extra-floral nectaries or glands (↑) also present at these points. Flowers in heads, **pale yellow/cream**; pod flat 6-12 cm long, 1.5-2 cm wide. Flowering autumn.

Acacia holosericea (Silver Leaf Wattle, Silky Wattle – Mimosaceae/Fabaceae)
 Shrub with angular branchlets, rarely glabrous. Phyllodes to 25 x 1.5-9.5 cm, grey-green, covered by fine silky hairs, i.e., *sericeus*; three longitudinal veins more prominent than the rest. Flowers in spikes, 2-6 cm long, bright **yellow**; pods coiled 2.5-5 mm wide, aril often bright yellow. Occurs in Horseshoe Bay



G. salicifolia

A. flavescens

A. holosericea

Acacia jackesiana (Mimosaceae/Fabaceae)

Small shrub to 1 m, often sprawling amongst the grass, particularly on the ridges near Horseshoe bay; phyllodes linear to 22 cm long, prominently ribbed. Flowers in spikes to 2.5 cm long, bright **yellow**; pods flat 6-8 cm long, 8 mm wide. Flowering January, February.

Acacia simsii (Sim's Wattle, Heathland Wattle – Mimosaceae/Fabaceae)

Shrub, phyllodes 5-14 cm long, 2-7 mm wide, flowers in heads  $(\uparrow)$  bright **yellow**; pod flat 5-8 cm long, 4-7 mm wide, raised over the seeds, alternating on each side  $(\uparrow)$ .





A. jackesiana



*Acacia aulacocarpa* (Golden-flowered Salwood, Brown Salwood, Hickory Wattle – Mimosaceae/Fabaceae)

This species has a similar, but smaller pod than in the next species. It prefers to be associated with moister areas and along water courses. Spikes 1-2 per axil, golden **yellow**; pods to 8 cm long and 2 cm wide, aril pale. Closely related species are *Acacia celsa* and *Acacia disparrima*, but neither of these species occur on the Island. These two species were once part of what was referred to as a 'complex' because the specimens hadn't been studied in detail to fully understand was it just one very variable species or a number of species, so until they were studied they were lumped in together under *A. aulacocarpa*.

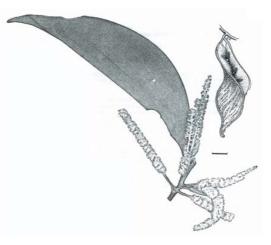
Acacia crassicarpa (Thick-podded Salwood, Lancewood, Northern Wattle -

Mimosaceae/Fabaceae)

This shrub or small tree has thick (*crassi*) woody pods which are prominently veined, 4-12 cm long, 2.5-4.5 cm wide, aril pale and folded under the seed. Leaves 11-20 cm long, 1.5-3.5 cm wide, veins yellowish. Flowers in spikes, 3-7 cm long, 2-6 spikes per axil, **pale yellow**. This species tends to found on older dune systems.



A. aulacocarpa



A. crassicarpa

*Acacia leptostachya* (Townsville Wattle – Mimosaceae/Fabaceae)

Shrub with angular branchlets. Phyllodes usually slightly curved, 3.5-8 x 0.5-1 cm; numerous very fine longitudinal veins present; silvery sheen to the leaves because of fine, silky appressed hairs. Flowering spikes usually paired, bright **yellow**; pod flat to 6 cm long, 0.3 mm wide.

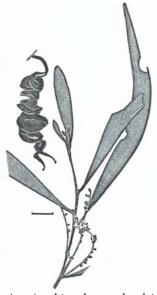
Acacia spirorbis subsp. solandri (Mimosaceae/Fabaceae)

Bushy tree; phyllodes falcate to 20 cm long and up to 2 cm wide, major veins (usually 2) rarely fuse with lower margin, minor veins numerous, 3-5 per mm. Flowers not densely packed in spikes, 3-7 cm long, **yellow;** pods linear, coiled, flat to 12 cm long and 3-5 mm wide, aril bright yellow, folded below the seed.

### Acacia polystachya (Not illustrated) (Mimosaceae/Fabaceae)

Tree found between Picnic and Cockle Bays, major veins of the phyllodes (to  $25 \times 3.2 \text{ cm}$ ) run together on the lower surface near the base (2-3 occasionally 4), minor veins 5-9 per mm. Flowers in spikes not densely packed, about 4 cm long. Pod linear and twisted to 13 cm long, 6-10 mm wide, aril bright yellow and encircles the seed, and not folded below it as in *Acacia spirorbis*.





A. spirorbis subsp. solandri

#### GROUP 8.F Shrubs with lobed leaves, sometimes scrambling.

Hibiscus meraukensis (Merauke Hibiscus – Malvaceae)

Hibiscus, a Greek name for mallow.

The stems of this shrub may be prickly. Leaves usually variously lobed; margins serrate, prominent nectary or gland (<sup>↑</sup>) near base of midrib on the lower surface. Calyx lobes lack stellate or star-shaped hairs but have prickles on the rib. Petals **white** with pink, or mainly **pink** to 10 cm diameter. Fruit a spiky capsule splitting into 5. Flowering late summer. See also *Hibiscus divaricatus* (**Group 8.S**).

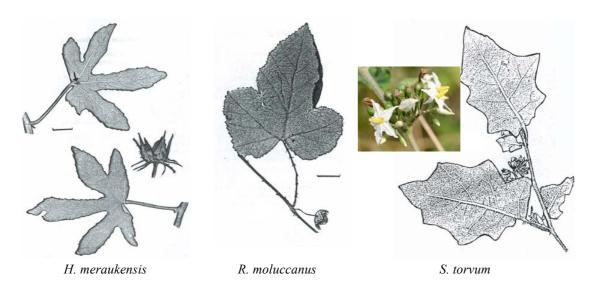
#### Rubus moluccanus (Molucca Raspberry – Rosaceae)\*

*Rubus,* this is the Latin name for a plant of this genus.

A straggling shrub with prickly stems by which it scrambles. Leaves lobed, hairy on the lower surface. Flowers **pinkish-red**; fruits red and fleshy, edible, but should be washed well before eating!

#### Solanum torvum (Devil's Fig, Thornapple – Solanaceae)\*

A spreading shrub to about 3 m, recurved prickles are scattered on the stems and on the lobed leaves, stellate or star-shaped hairs present. Inflorescence branched with up to 100 **white** flowers; fruit a berry, drab yellow in colour, drying black. Weed.



*Solanum sporadotrichum* (Not illustrated) (Solanaceae)

This rare species may have smooth or lobed margins, numerous prickles are present on the branches but rare on the leaves, inflorescence with few flowers.

*Tithonia diversifolia* (Tithonia, Mexican or Japanese Sunflower – Asteraceae)\*

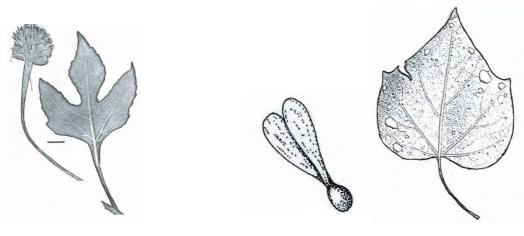
*Tithonia*, was named for Tithonus, the companion of Aurora, the goddess of the dawn. A spreading plant to about 3 m, often growing in clumps. Leaves deeply lobed. Inflorescence up to 10 cm across, flowers **yellow**, pappus of scales. A garden escapee.

Jatropha gossypiifolia in Group 4.A will key to here if the milky latex is not obvious.

#### GROUP 8.G Trees with lobed leaves, all deciduous when flowering.

*Gyrocarpus americanus* (Helicopter Tree, Twirly Whirly Tree, Stinkwood – Hernandiaceae) *Gyrocarpus*, from the Greek *gyros* – round and *karpos* – fruit, referring to the winged fruits which twist or gyrate, as they fall from the tree.

A tall deciduous tree, growing around the West Point area, it has smooth bark and warty lenticels; the twigs have a peppery smell. Leaves tend to be crowded towards the ends of the branches. Flowers **cream to yellow**, small with unpleasant smell; fruit has two wings, 4-6 cm long.



T. diversifolia

G. americanus

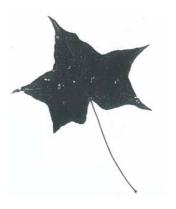
#### *Brachychiton australis* (Broad-leafed Bottle Tree – Sterculiaceae)

*Brachychiton,* from the Greek *brachys* – short, and *chiton* – outer garment, alluding to the loose outer covering of the seed.

Tall tree, deciduous when flowering, bark smooth, lenticels in vertical lines; trunk eventually enlarges to form the characteristic bottle. Leaves usually palmately lobed, glabrous i.e., lacks hairs; petioles dark-coloured. Flowers **pink to red**; fruit a follicle, pod-like, broad, 7-11 cm long, seeds bright yellow, surrounded by irritant hairs.

#### Brachychiton bidwillii (Little Kurrajong – Sterculiaceae)

Small tree 2-5 m tall, often multi-stemmed. Leaves deeply 3-5 lobed, softly pubescent i.e., hairs present, on both sides. Flowers **pink to red**; fruit a follicle, pod-like, 8-12 cm long, covered with rusty stellate hairs. Brown seeds are surrounded by irritant hairs. Uncommon, West Point area.



B. australis

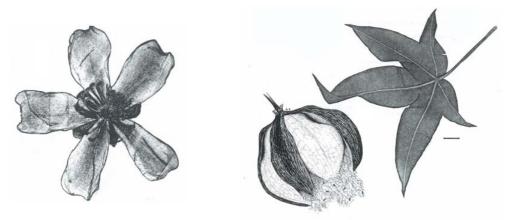


B. bidwillii

*Cochlospermum gillivraei* (Kapok Tree – Cochlospermaceae)

*Cochlospermum*, from the Greek *kochlos* – to twist or turn, and *sperma* – seed, the seeds are coiled.

Tree, deciduous in spring; leaves palmately or deeply lobed. Flowers with 5 **yellow** petals to 4 cm long, numerous red stamens in the centre. Fruit a capsule 6-9.5 cm long, the valves open to expose an inner papery membrane, so that the mature capsule appears two-toned. The numerous seeds are covered with cottony hairs.



C. gillivraei

**NOTE:** See also *Sterculia quadrifida* **Group 8.P**.

### GROUP 8.H Leaves minute or thick, rigid <1 cm long.

*Opuntia* sp. (Not illustrated, Prickly Pear – Cactaceae)\*

*Opuntia*, the name of this spiny plant is associated with the ancient Greek town of Opus or the surrounding region.

Introduced weed. Plant is succulent, stems flattened into obovate sections about 30 x 15 cm; bristles and spines present, representing leaves. Flowers **yellow**. Fruit edible, pear-shaped, 4-6 cm long, reddish.

*Casuarina equisetifolia* subsp. *incana* (Coast She-oak, Beach She-oak, Whistling Pine – Casuarinaceae)

*Casuarina*, the long drooping branchlets are thought to resemble the feathers of the Cassowary, from the Malay word *casuari*.

A tree found along the foreshores, with pendulous drooping branchlets; leaves greatly reduced, leaf-teeth 6-8 per node/joint. Male flowering spikes brown, female reddish. Fruits are crowded into cones 1-1.7 cm long, 1-1.7 cm wide.

#### *Allocasuarina torulosa* (Forest She-oak, Baker's Oak – Casuarinaceae)

*Allocasuarina*, from the Greek *allos* – other; it is distinct from the genus *Casuarina*. This erect tree found on the slopes of the Island has jointed branchlets similar to the previous species but there are only 4 leaf-teeth ( $\uparrow$ ) per node. Male spikes rusty-coloured. Cones 2-3 cm long, 1.5-2 cm wide.

#### *Araucaria cunninghamii* (Hoop Pine – Araucariaceae)

*Araucaria*, the first specimen was collected in the province of Arauco in southern Chile. This large tree is prominent on rocky outcrops. It has a characteristic crown shape, often a bit battered! Leaves are rigid, pointed and curved, no obvious veins visible. Seeds borne in cones to 10 cm long.







C. equisetifolia

A. torulosa

A. cunningamii

### GROUP 8.1 Leaves strap-like with prominent longitudinal veins.

#### *Grevillea parallela* (Beefwood, Silver Oak – Proteaceae)

*Grevillea*, named after Charles F. Greville, the founder of the Royal Horticultural Society, who liked to grow rare plants.

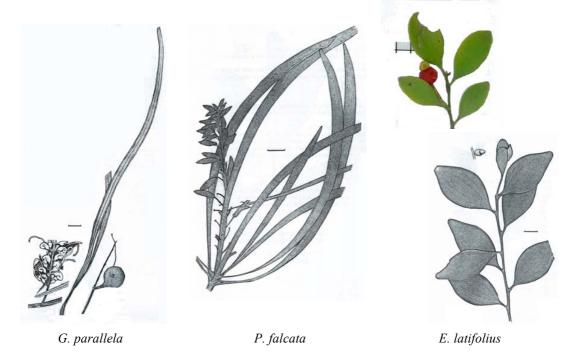
Tree with long strap-like leaves, undersurface white with 1-5 longitudinal veins. Leaves sometimes very deeply dissected, both forms may be on the one plant. Flowers **white to cream**, in racemes to 10 cm long, style hooked in bud, fruit a rounded 2-2.5 cm diameter follicle, which splits to release 1-2 winged seeds. *Grevillea striata* also known as 'Beefwood' has 7-13 longitudinal veins.

#### Persoonia falcata (Geebung – Proteaceae)

*Persoonia*, after Christian Hendrik Persoon (1755-1857), a mycologist who lived in France. This small tree has long, curved falcate leaves. The **yellow** flowers are borne in racemes to 6 cm long; indehiscent fruit, greenish-yellow when ripe to 2 cm long. Aborigines had many uses for this plant.

*Exocarpos latifolius* (Broad-leafed Native Cherry, Mistletoe Tree – Santalaceae) *Exocarpos,* from the Greek *exo* – outside, and *karpos* – fruit, the latter is outside because it is borne on a large, fleshy stalk.

This semi-parasitic shrub has striate branchlets, leaves are thick, to 8 x 5 cm, with widely spaced longitudinal veins. Flowers inconspicuous on a spike to 5 cm long; vary in colour from **green through to purple**. Fruit globular, yellowish-orange, borne on an enlarged, fleshy red pedicel.



# GROUP 8.J Fruits white at maturity or embedded in more or less translucent flesh, which is not coloured.

*Pipturus argenteus* (Native Mulberry, White Nettle – Urticaceae)

*Pipturus*, from the Greek *pipto* – to fall, and *oura* – tail, possibly refers to the long petiole. Tall shrub, black dots may be present on the upper surface of the green leaves, on the lower surface the dark veins contrast with the whitish hairs between the veins; margins serrate. Flowers inconspicuous on long spikes, separate male and female flowers, **green to cream**. Fruits small and brown embedded in a fleshy semi-translucent/white mass with a diameter of about 6 mm. Edible.

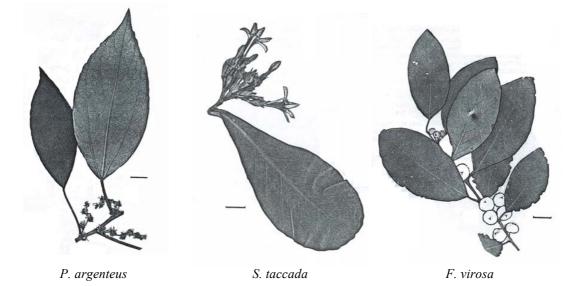
#### *Scaevola taccada* (Fan Flower, Sea Lettuce Tree – Goodeniaceae)

*Scaevola*, from the Latin *scaevola* – little hand, alluding to the one-sided fan-shaped corolla. Mucius Scaevola in 507 BC, burned off his right hand in a foiled assassination attempt!! A bushy shrub, growing along the sandy beachfront. Leaves obovate, to 23 cm long and 11 cm wide, crowded towards the ends of the branches. Flowers **white**, corolla-tube split along one side so that the petals open out to form a fan. Mature fruit white, succulent from 7-18 mm diameter, usually about 10 cm.

*Flueggea virosa* subsp. *melanthesoides* (White Currant, Snowball Bush – Phyllanthaceae formerly part of Euphorbiaceae)

*Flueggea*, named after Johann Flugge (1775-1816), a German botanist who developed a botanical garden in Hamburg.

Straggling shrub to 3 m tall, deciduous, typically found in vine thickets. Leaves are up to 10 cm long, veins are prominent on the lower surface. Flowers small in clusters along the branch. Separate male and female plants. Mature fruit are fleshy, white berries 5-8 mm diameter. Edible.



# GROUP 8.K Leaves palmately or 3-nerved at the base and/or margins crenate/serrate. CAUTION

*Aphananthe philippinensis* (Grey Handlewood, Native Elm, Rough-leaved Hickory – Ulmaceae)

*Aphananthe*, from the Greek *aphanes* – inconspicuous, and *anthos* – flower. Tree, leaves arranged in two rows, harsh when touch, margins serrate. Flowers inconspicuous, separate male and female. ruit a drupe about 1 cm long, black when ripe, style persistent and forked; 1 seed.

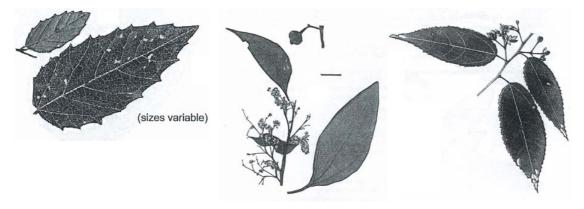
### Celtis paniculata (Silky Celtis – Ulmaceae)

*Celtis*, a Latin name for an African tree.

Small tree with leaves 3-veined at the base to 9 cm long, lateral veins sometimes close to the margin, base may be slightly oblique. Flowers **greenish**, inconspicuous. Fruit globular to 9 mm diameter, black and succulent.

### Trema tomentosa var. viridis (Poison Peach – Ulmaceae)

*Trema*, from the Greek *trema* – a hole or aperture, referring to the pitted seed. Shrub, leaves soft, usually pubescent, with 3 veins usually extending for at least half the length of the leaf, if not more, margins serrate. Flowers **greenish to yellowish**, small. Fruit small, ovoid and black at maturity. Leaves much eaten by insects, poisonous to stock.



A. philippinensis

C. paniculata

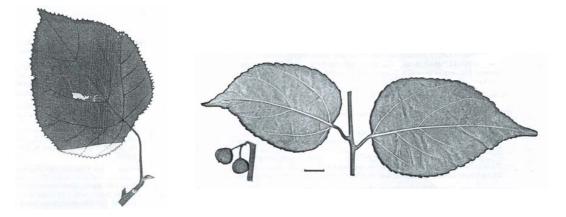
T. tomentosa

Dendrocnide moroides (Gympie Gympie, Stinging Tree – Urticaceae)
 Dendrocnide, from the Greek dendron – tree, and cnid – a nettle.
 Shrub; leaves broad, peltate, i.e., petiole is not right on the edge of the leaf, margin serrated, numerous irritant hairs present. Flowers pale green, inconspicuous. Fruits small and embedded in a fleshy mauve semi-translucent body. Edible but DO NOT TOUCH.

*Colubrina asiatica* (Beach Berry Bush, Latherleaf – Rhamnaceae)

*Colubrina,* from the Latin *colubrinus,* for snake-like, apparently referring to the nature of some of the branches.

A shrub often growing in sand near beaches, stems flexible often somewhat weeping; leaves shiny, margins crenate-serrate, leaves foam in water if crushed. Flowers small, **yellowish**; fruit a greenish berry, which hangs in clusters from the leaf axils.



D. moroides

C. asiatica

*Zizyphus mauritiana* (Chinee Apple\* - Rhamnaceae)

*Zizyphus* from the name used by Pliny based on an Arabic name for a species in this genus.

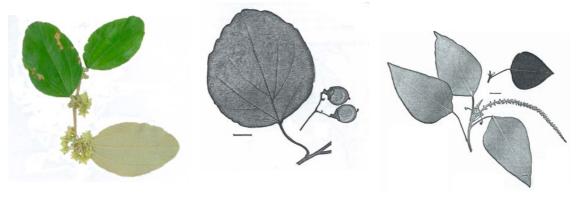
This weed was introduced in the Gold Rush days. Distinguished by the 3-veined leaf which is whitish on lower surface, the hooked spines in the axils, the cream flowers with lots of nectar, and the orange fruit which is edible. Offers protection to small birds.

*Cordia dichotoma* (Cordia, Glue Berry Tree, Snotty-gobble – Boraginaceae) *Cordia*, after Euricius Cordus (1486-1535) and his son, German botanists and pharmacists.

This shrub, which is deciduous prior to commencing flowering has ovate leaves on long petioles; margins are irregularly serrate. Flowers **white** small. Fruit is succulent 10-15 mm long, pale apricot colour at maturity, edible but pulp is very sticky. Flowers late spring and summer.

*Homalanthus nutans* (Native Bleeding Heart, Native Poplar – Euphorbiaceae) *Homalanthus*, from the Greek *homalos* – smooth, and *anthos* – flower, as the flowers are smooth.

Shrub or small tree; leaves ovate-triangular, with long petioles; a large nectary or gland is present at the junction of petiole and blade and two more occur on the lower surface nearby. Usually some old red leaves are present. Flowers **green**, inconspicuous arranged in spikes, separate male and female. Fruit a 2-lobed capsule, 8-10 mm diameter, greyish-green is the most common colour. Fruits eaten by birds. Plant also known by the former name *Omalanthus*.



Z. mauritiana

C. dichotoma

#### Scolopia braunii (Scolopia, Brown Birch – Flacourtiaceae)

*Scolopia*, from *skolops* – a paling with a sharp point, since some species have thorns. This shrub to small tree has leaves with entire or undulating margins often with some irregular lobes, 3-5-12 cm long, usually 3-veined at base. Flowers are **greenish-cream** in racemes, petals to 3 mm long; fruit a dark red to black berry about 1 cm diameter.

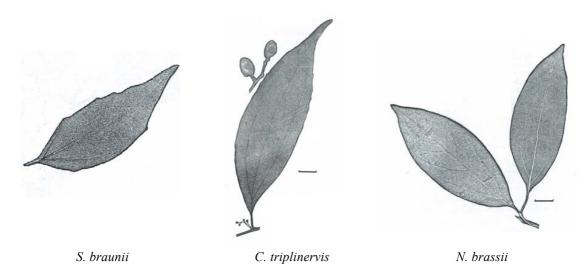
Cryptocarya triplinervis (Native Laurel, Brown Laurel – Lauraceae)

*Cryptocarya,* from the Greek *kryptos* – concealed, and *karyon* – nut, the seed is hidden in the perianth tube.

Leaves elliptical to ovate, 3-veined at base, have an aromatic smell when crushed, very fine oil glands present. Flowers small **green to cream**, in panicles; fruit fleshy, black, ellipsoidal to 13 mm long. This species plus *Cryptocarya hypospodia* and *Cryptocarya vulgaris* all occur in closed forest, but these are not 3-veined at base.

#### Neolitsea brassii (Bollywood – Lauraceae)

*Neolitsea*, from *neo* – new and *Litsea* a Chinese name for the first species described. Tree with leaves often crowded towards the ends of branches, glossy above, whitish below mainly because of wax (glaucous), veins drying yellowish, margins smooth. Faint aromatic smell when leaves are crushed, very fine oil glands present. Flowers in sessile, axillary clusters, **pale**-coloured; fruit fleshy, red, drying blackish to 12 mm long.



**NOTE:** Several *Grewia* species will key to here, refer to **Group 7.C** for comments. See also *Pipturus argenteus*, **Group 8.J**.

#### GROUP 8.L Leaves densely pubescent on lower surface.

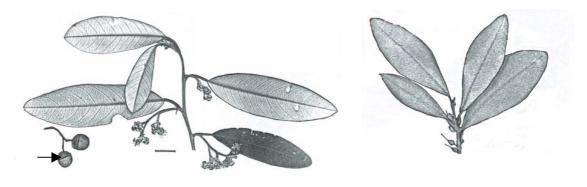
Alphitonia excelsa (Red Ash, Soap Tree – Rhamnaceae)

*Alphitonia,* from the Greek *alphiton* – baked barley, referring to the reddish, mealy material around the seed.

Tree, usually in woodland or on margins of wetter areas, leaves whitish on the lower surface with prominent veins; freshly broken or scraped twigs produce a faint liniment odour. Flowers **cream**, heavily scented; fruit black, drupe more or less globular to 1 cm long, with a ring like calyx scar ( $\uparrow$ ). Birds attracted to the fruits. Saponins present used as a fish poison.

*Sersalisia sericea* (Wild Prune, Mongo, formerly *Pouteria sericea* – Sapotaceae) See also **Group 4A**. *Seralisia*, named after a Neopolitan priest, J.B. Sersalis, who was also a zoologist.

A small, bushy tree, latex present but usually very sparse; leaves firm with densely matted golden-brown to silvery hairs on the lower surface. Flowers **greenish-white**, borne in clusters along the stem. Fruit succulent, dark purple to 2 cm long, edible when ripe. Often found on rocky headlands. A tree with similar young leaves, found in closed forest is *Niemeyera antiloga* (Brown Pearwood), but it has copious latex.



A. excelsa

P. sericea

NOTE: Refer to Group 8.F for comments re Solanum sporadotrichum.

# GROUP 8.M Leaves obovate, flowers in spikes; fruit may be flattened (*Terminalia* spp.).

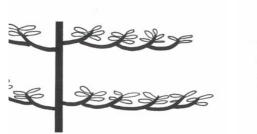
*Terminalia* spp. (Damson Trees – Combretaceae)

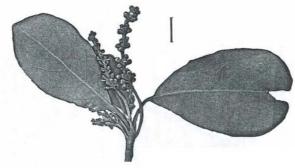
*Terminalia*, from the Latin *terminus*, referring to the leaves that are often terminally clustered, or bunched on the branchlets.

A number of species have been recorded on the Island. These are readily identified by a combination of features; the characteristic branching, which initially is at a broad angle to the main stem; the obovate leaves, i.e. they are wider above the middle; often some old red-coloured leaves present; fruit is usually somewhat flattened and laterally compressed and the flowers are arranged in spikes. The latter are **white** and heavily scented, male flowers borne near the top of the spike and bisexual flowers closer to the stem. All species tend to be deciduous. Seed is nutritious and valued by many birds and rodents (and humans). All species have a typical branching pattern, best seen in some of the more open branching trees like the sea almond, if the new buds have been affected by very dry conditions or serious insect attack then the pattern is often not obvious immediately.

#### Terminalia melanocarpa (Black Damson – Combretaceae)

Tree, leaves glabrous to  $12 \times 7.5$  cm, domatia are rare or absent. Flowers **white**, 6 mm wide on spikes 4-12 cm long. Mature fruits are green, lack a beak, and are about 2-3 cm long and 1.5-2 cm wide. The immature fruit has a continuous wing around it. Typically found associated rocks close to the sea.





Typical Terminalia branching pattern

T. melanocarpa

#### *Terminalia muelleri* (Mueller's Damson – Combretaceae)

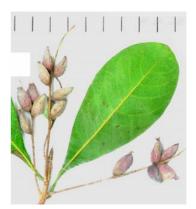
Tree, similar to the preceding species but leaves are larger up to  $15 \times 8$  cm and domatia are present and conspicuous on the lower surface, look for hair tufts in the axil formed by the midrib and some lateral veins. There are two glands present near junction of petiole and leaf base on the lower surface. Flowers **white**, 6 mm wide borne on spikes to 15 cm long. Fruit, purple to lack at maturity, shortly beaked to  $2 \times 1.5$  cm., wing absent on immature fruit. Usually growing in sandy areas, close to the beach.

*Terminalia sericocarpa* (Damson Plum, Native Plum, alternate name *Terminalia microcarpa* – Combretaceae)

This species has a shiny upper leaf surface, small domatia present, lack tufts in the cavities but there may be a few hairs on the margins of the slit. Flowers **white**, 5 mm diameter on spikes to 10 cm long. Fruit to  $1.8 \times 1$  cm, obscurely winged, fine, small sliky hairs present on lower surface.



T. muelleri



T. sericocarpa

#### *Terminalia catappa* (Indian Almond, Sea Almond – Combretaceae)

A tree with large leaves to 36 cm long and about 17 cm wide, domatia present present on the lower surface, visible as hair tufts in the axils of the midvein and lateral veins, common. Flowers **white**, 6 mm wide on spikes shorter than the leaves. Fruit at maturity is dark purple, and somewhat compressed to 8 cm long and 5 cm wide. Immature fruit have distinct wings. This tree, which is cyclone and salt spray resistant is often planted along foreshores. The kernel of the fruit is edible and highly nutritious.

*Terminalia arenicola* (Not illustrated but see sketch of fruit "A": Brown Damson – Combretaceae)

This tree grows in similar habitats to the previous two species. Flowers **white**, 6-7 mm wide, on spikes 10-20 cm long. Mature fruit are dark red to black, slightly beaked and somewhat compressed, 2.5-4 cm long 1.7-2.5 cm wide, with a distinct ridge on immature fruits. Leaves are similar but smaller 10-20 cm long, 6-14.5 cm wide, domatia usually present. This is a more attractive tree for gardens than *Terminalia catappa*.

*Terminalia porphyrocarpa* (Not illustrated but see sketch of fruit "P"– Combretaceae) Tree often growing on rock or dry rainforest communities as at West Point and other areas on the Island. Leaves are from 4-10 cm long and 2-5 cm wide, rarely more; domatia are absent. Flowers **white** about 5 mm wide on spikes to 10 cm long. Fruit are 1-2 cm long and up to 1.5 cm diameter, globular to ovoid, not beaked. Immature fruits have a prominent wing which is absent at maturity.



T. catappa



*T. arenicola* (A), *T. porphyrocarpa* (P)

# GROUP 8.N Flowers usually more than 1 cm diameter, AND mature leaves rarely <7 cm long.

*Melodorum leichhardtii* (Zig-Zag Vine, Wild Banana – Annonaceae)

*Melodorum*, from the Latin *mel* – honey, and *odor* – smell, because of the heavily scented leaves.

Shrub or scrambling vine with zig-zag branchlets, stellate or star-shaped hairs present. Flowers **dull yellow**, fleshy about 2.5 cm diameter, scent unpleasant. Fruits clustered, yellow, usually irregularly constricted between the seeds.

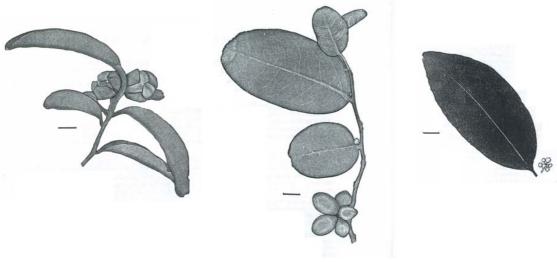
#### *Fitzalania heteropetala* (Orange Annona – Annonaceae)

*Fitzalania*, named after Eugene Fitzalan (1830-1911) who collected in the Burdekin area. Tall shrub, branchlets often form a zig-zag; leaves to 13 x 5.5 cm, hairs may be associated with the veins on the lower surface. Flowers solitary, **dark purple** to 3.2 cm long; fruit dry but indehiscent, orange but covered with rusty hairs, a cluster of 1-12 individual fruits produced per flower.

*Polyalthia nitidissima* (Canary Beech, Shiny Leaf Tree – Annonaceae)

*Polyalthia*, from Greek *polys* – many, and *altheas* – healing, the bark is said to cure many ailments.

Small tree with shiny leaves 6-12 cm long, 2.5-5 cm wide, hair tufts sometimes present in axils on lower surface. Flowers **yellow-green**, 6 petals 15-22 mm long; fruit a berry, bright red at maturity about 1 cm long, arranged in umbels, single seed.



M. leichhardtii

F. heteropetala

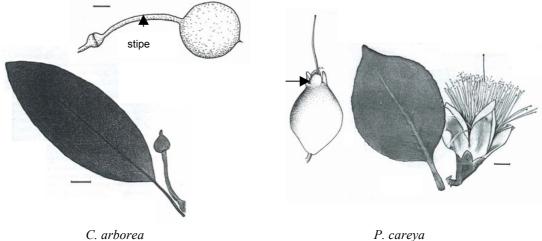
P. nitidissima

*Capparis arborea* (Native Pomegranate, Caper – Capparaceae)

*Capparis*, from *kapparis*, a name used by Dioscorides, an Arabic name is *kapar*. A shrub with firm leaves and spines, which are common on young plants. Flowers solitary, outer sepals fused in bud, petals **white to cream** 4-5 to 3 cm long, stamens numerous, prominent. Globose fruit borne on a long stalk or stipe ( $\uparrow$ ), green, sometimes black, to 3 cm diameter, edible. *Capparis sepiara* (Wild Orange) has the outer sepals free in bud, petals 1.5-6 cm long, stamens more than 50.. *Capparis nummularia* (Caper Bush, Flinders Rose) is distinguished from *C. sepiara* by petals less than 1 cm long, and stamens less than 50. The buds of *Capparis spinosa* are the capers of commerce and the fruits are the caperberries.

#### *Planchonia careya* (Cocky Apple – Lecythidaceae)

Planchonia, named after Jules Emile Planchon (1823-1888) a French botanist. Small trees; the large leaves have flattened petioles. Petals white, the filaments of the numerous pink and white stamens are fused to form a short tube. Fruit large, to 9 cm long, green, style and calyx lobes persistent ( $\uparrow$ ). Edible. Flowers open late in the evening and stamens and petals fall off early in the morning and carpet the ground.



P. careya

### Mangifera indica (Mango – Anacardiaceae)\*

Mangifera, from mangas – fruit in Hindi and the Latin ferre – to bear. Trees with dense foliage, mangoes have simple alternate leaves with a copious clear sap, which may cause blisters in susceptible people. Flowers green to cream. The fruit is a large fleshy drupe, colours vary with cultivar. Feral and cultivated specimens are common.

# GROUP 8.0 Flowers small to insignificant, mature leaves usually <6 cm long.

#### Diospyros geminata (Queensland Ebony, Native Ebony – Ebenaceae)

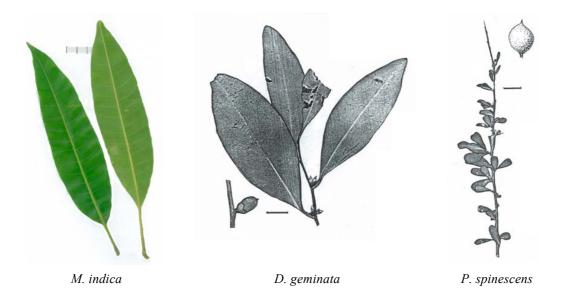
*Diospyros*, from the Greek *dios* – of Zeus/divine, and *pyros* – grain, fruit of the gods! Shrub with glossy leaves, separate male and female plants. Flowers small, **white to creamy green**; fruit a fleshy berry, yellow often with a reddish blush, it is seated on the persistent calyx (↑) which looks rather like a cupule. Ripe fruits are edible.

Pittosporum spinescens (Wallaby Apple, Orange Thorn, formerly Citriobatus -

#### Pittosporaceae)

*Pittosporum,* from the Greek *pitta* – pitch, and *spora* – seed, in reference to the sticky coating around the seeds.

Shrub with small leaves and numerous short spiny branchlets. Flowers to 8 mm long with 5 **white** petals; fruit changes from green to orange eventually becoming blackish, globular to 2.5 cm diameter.



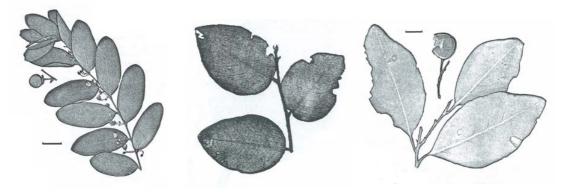
Breynia oblongifolia (Coffee Bush – Phyllanthaceae formerly part of Euphorbiaceae)
 Breynia, named after J.P. Breyn a 17<sup>th</sup> Century German botanist and physician.
 A glabrous shrub, leaves more or less in the one plane, whitish (glaucous) on the lower surface, apex rounded. Flowers small, greenish arising in the leaf axils, male and female flowers are separate; staminal filaments united into a column.
 Fruit berry-like, red, turning black on drying.

*Bridelia leichhardtii* (Small-leaved Brush Ironbark – Phyllanthaceae formerly part of Euphorbiaceae)

*Bridelia*, named after a Swiss expert on mosses, S. de Bridel (1761-1828). A shrub with broadly ovate leaves to about 10 cm long, veins prominent, some hairs often present on the lower surface. Flowers small **greenish**. Fruit to 7 x 6 mm, green to reddish and then black at maturity, fleshy.

Drypetes deplanchei (Yellow Tulipwood – Putranjivaceae formerly part of Euphorbiaceae)
 Drypetes, from the Greek dryppa – an olive like fruit.
 A very variable species, frequently growing in dry rainforest or vine thicket areas.
 The leathery leaves usually have an irregular margin at maturity, juvenile specimens have toothed margins. Flowers yellowish-green with 4-5 sepals.

Fruit a 2-locular, reddish-orange drupe 1-2 cm long.



B. oblongifolia

*B. leichhardtii* x 1/4

D. deplanchei

*Antidesma ghaesembilla* (Black Currant Tree – Phyllanthaceae formerly part of Euphorbiaceae)

*Antidesma*, from the Greek *anti* – for, and *desmos* – band, referring the bark of *A. bunius* being used for making rope or as a fastening.

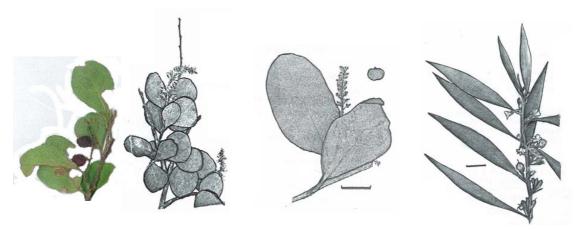
This shrub has broadly elliptical leaves more than 2.5 cm long, separate male and female plants. Flowers **white to cream** borne on a spike. Ripe fruits range from pink to black, about 6 mm long, edible.

*Antidesma parvifolium* (Currant Bush – Phyllanthaceae formerly part of Euphorbiaceae) Leaves obovate less than 2.5 cm long, young leaves usually have some domatia present; flowers are **pale yellow** and the fruit is red to black to 6 mm long.

#### *Myoporum acuminatum* (Boobialla, Water Bush – Myoporaceae)

Myoporum, from the Greek myo – to close, and porum – a pore, referring to the densely glandular-punctate leaves.

This shrub has small, slightly irregular flowers, petals 5 with obvious large oil dots, **white**, stamens 4. Leaf size varies from 3 to 10 cm long and up to 2 cm wide. Fruit is fleshy, pink to dark purple.



A. ghaesembilla

A. parvifolium

M. acuminatum

### GROUP 8.P Leaves palmately-veined, i.e. coming from one point, or 3veined at the base. Fruit dry and dehiscent (Euphorbiaceae, Malvaceae).

Mallotus nesophilus (Yellow Ball Flower – Euphorbiaceae)

*Mallotus*, from the Greek *mallotos*, lined with wool, referring to the hairs on some of the leaves and fruits.

This species is distinguished by the small yellow glands or 'granules' on the leaves, some stellate or star-shaped hairs may be present. A good hand lens is needed to see the glands. Two flat glands on upper surface near base of leaf blade and junction with the petiole. Flowers **white to yellowish-green**, separate male and female flowers. Fruit a capsule to 7 mm diameter, yellow.

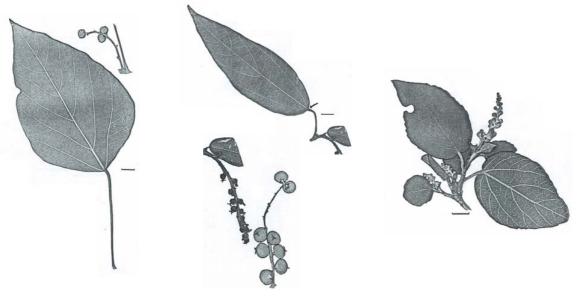
#### *Mallotus philippensis* (Red Kamala, Kamala – Euphorbiaceae)

A shrub or small tree with leaves to 20 cm long; branchlets and lower surface of the leaves covered with rusty stellate hairs. Small glands usually present ( $\uparrow$ ) near the junction of the petiole and blade. Lower surface of the 3-veined leaves and the 3-lobed capsules also bear red glandular granules. Flowers in small clusters along the spike, **yellowish-brown**, separate male and female.

#### Croton arnhemicus (Croton, Hard Cascarilla – Euphorbiaceae)

*Croton,* from the Greek word *croton* – a tick, the seeds are supposed to resemble a sheep-tick!

Like most of the crotons this shrub has silvery, stellate or star-shaped hairs present on the lower surface of the leaf. Flowers **greenish** on separate racemes to 7.5 cm long. The 3-locular capsule to 8 mm diameter is densely covered by reddish stellate hairs.



M. nesophilus

M. philippensis

C. arnhemicus

*Croton magneticus* (Not illustrated – Euphorbiaceae)

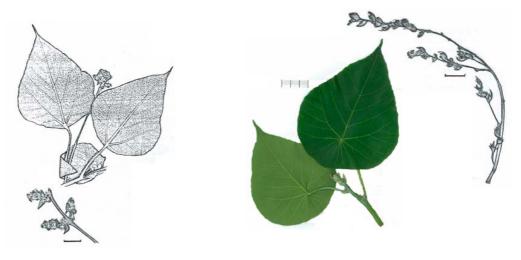
This plant is rare, it was initially found only on Magnetic Island hence the name. It has lanceolate to elliptical leaves, and occurs along some of the rocky foreshores. The commercial 'croton' grown in gardens for its attractive coloured foliage is actually a member of the genus *Codiaeum*.

*Macaranga involucrata* var. *mallotoides* (Brown Macaranga, Macaranga – Euphorbiaceae) *Macaranga*, a Madagascan name for the first one to be described.

Tall shrub, leaves broadly ovate to rhomboid up to 14 cm long, small yellow dots or glands present on the lower surface; 2-4 flat glands present on the upper surface near junction with petiole. Separate male and female flowers, creamy green, male borne in spikes and females in panicles. Capsule to 2 mm diameter, usually brownish at maturity, splitting into 3.

*Macaranga tanarius* (Blush Macaranga, Macaranga – Euphorbiaceae)

Shrub or small tree with peltate leaves, up to 30 cm diameter, veins radiate out from the centre; numerous small scales present on lower surface. Inflorescence formed of a cluster of flowers arranged in a panicle, each cluster subtended by an attractive yellowish fringed bract, flowers **yellowish**, flowers unisexual. Capsule yellow splitting into 3, outside bears numerous rubbery protuberances like soft blunt prickles or spines.



M. involucrata x 1/3

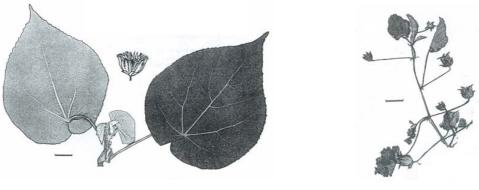
M. tanarius

Abutilon auritum (Chinese Lantern – Malvaceae)

*Abutilon*, an Arabic name used by Avicennia for a species of mallow. A large shrub, leaves broad to 17 x 15 cm, base deeply cordate, lower surface densely pubescent i.e., with numerous soft hairs resulting in a velvety feel; margins irregularly toothed, stipules 1-2 cm long. The **yellow** hibiscus-type flowers often have a yellowish tinge. The fruit is a blackish hairy capsule with reflexed points, it breaks up into 10 segments.

- **NOTE:** A similar species but with narrow stipules and more than 12 segments in the fruits has been collected on Bay Rock, *Abutilon indicum* var. *australiense* also known as *Abutilon guineense*.
- *Abutilon oxycarpum* (Lantern Bush Malvaceae)

Shrub, leaves usually narrowly ovate, to 7.5 x 4 cm, pubescent, stipules narrow, flowers **yellow**. Fruit a capsule, 7-8 mm diameter, 7-8 mm high, composed of 8-12 mericarps which have spreading tips.



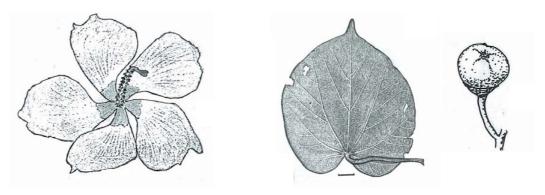
A. auritum

A. oxycarpum

Hibiscus tiliaceus (Coast Cottonwood, Beach Hibiscus – Malvaceae)
 Tree associated with seashores and saline estuaries. The large heart-shaped leaves have a fine covering of star-shaped (stellate) hairs on the lower surface, resulting in a greyish appearance to the leaves. A number of small glands are always present near the point of insertion of the petiole. Flowers **yellow** with a maroon centre, petals to 7 cm long; fruit a 5-valved capsule to 2.5 cm long. Young shoots and flowers may be eaten; twigs will burn even when damp.

*Thespesia populnea* (Pacific Rosewood, Portia Tree, Indian Tulip Tree – Malvaceae) *Thespesia,* from the Greek *thespesios* – divine.

This tree, which is similar to *Hibiscus tiliaceus*, and occupies a similar habitat. It may be distinguished by: the depressed globular capsule which opens irregularly; the presence of scales rather than stellate hairs on the leaves; glands at junction with petiole are rare, and the **yellow** flowers have maroon spots at the base rather than a continuous band. This species may be distinguished from *Thespesia populneoides* by the deeply cordate leaf base v. shallowly cordate to truncate, the pedicels are 1-5 cm v. 5-12 cm long and the indehiscent v. dehiscent fruit.



H. tiliaceus x  $\frac{1}{2}$ 

*T. populnea,* fruit x  $\frac{1}{2}$ 

#### *Sterculia quadrifida* (Red-fruited Kurrajong, Peanut Tree – Sterculiaceae)

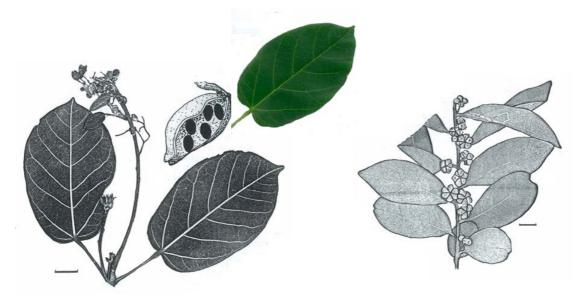
*Sterculia,* from the Latin *stercus* – dung, hence *Sterculius*, who was the Roman god of dungheaps and out houses, referring to the smell of the flowers.

A tree associated with beach scrubs, it is deciduous when flowering. The small **greenish** flowers are followed by a cluster of 3-4 bright red follicles to 7 cm long. These contain oval, black velvety coated seeds attached to the open edge. Seeds are edible once the outer coat is peeled off.

### GROUP 8.Q Leaves arranged in the one plane, distichous thus often appearing as a compound leaf, but there is a bud present in the axil of each leaf (Euphorbiaceae).

*Glochidion lobocarpum* (Cheese Tree, Buttonwood – Phyllanthaceae formerly part of Euphorbiaceae)

*Glochidion*, from the Latin *glochidium* – referring to the barbs on the stigmas of some species. Also based on the Greek *glochin* meaning any projecting part. Shrub or small tree, leaves often oblique at the base, 2-10 cm long, glaucous, i.e., greyish usually due to wax on lower surface. Flowers are born on pedicels or stalks, not sessile as in many of the other species, **yellowish-green**. Depressed capsules are deeply divided into 6 or fewer lobes to 8 mm diameter.



S. quadrifida

G. lobocarpum

- *Glochidion apodogynum* (Not illustrated Phyllanthaceae formerly part of Euphorbiaceae) Shrub, leaves broadly rounded at the base, pubescent on both sides; flowers sessile, **greenish**; capsule densely hairy/pubescent, not deeply lobed, resembles a small pumpkin. Uncommon.
- *Phyllanthus novae-hollandiae* (Phyllanthus Phyllanthaceae formerly part of Euphorbiaceae)

A spreading shrub, leaves 1-2 cm long, distichously arranged so that at first glance they resemble compound or pinnate leaves. Flowers unisexual, **greenish**; capsules to 5 mm long.

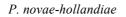
NOTE: see also *Breynia* (Group 8.O)

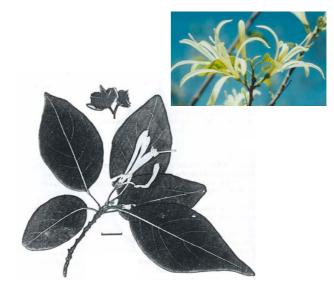
#### **GROUP 8.R** Plant deciduous when flowering commences.

*Turraea pubescens* (Turraea, Native Witch-hazel – Meliaceae)

*Turraea*, named after Giorgio della Turra (1607-1688), Professor of Botany at Padua. Tall shrub; leaves more or less pubescent on lower surface, domatia as hair tufts often present in the axils between the midrib and lower lateral veins. Plants deciduous, flowers occur as the new leaves are appearing. Flowers strongly scented, with 5 **white** petals 2-4 cm long with 5 free petals; fruit a woody capsule splitting into 5-7 valves at maturity, these valves are orange on the inside when they first open.







T. pubescens

#### GROUP 8.S Plants not deciduous at time of flowering.

*Bursaria incana, Bursaria spinosa* and *Bursaria tenuifolia* (Pittosporaceae) *Bursaria,* from the Latin *bursa* – pouch, because the shape of the fruit resembles the fruit of the plant known as 'Shepherd's Purse'.

The common names applied generally to these three species are Sweet Bursaria, Box Thorn, Prickly Pine, Mock Orange. The first two species are usually rigid shrubs, much branched, but the latter may form a tree and it will be found in the wetter areas along creeks or margins of closed forest. All have **white** flowers in terminal panicles, petals and stamens 5 respectively. The fruit is a flattened 2-valved brownish capsule ( $\uparrow$ ).

- *Bursaria incana* appears very similar when young but the leaves are whitish on the lower surface and become much longer as the plant grows, to the extent that young plants and mature plants at first do not appear to be related.
- *Bursaria spinosa* has small leaves, rarely up to 4.5 cm long, paler green on lower surfaces, the branchlets often end in spines.
- *Bursaria tenuifolia*, has spines present only on young plants, leaves paler green on lower surface, up to 8 cm long.



B. incana

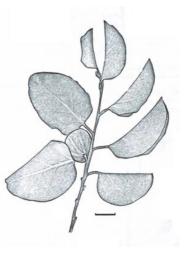
B. incana-inflorescence

B. tenuifolia

- *Pittosporum ferrugineum* subsp. *linifolium* (Rusty Pittosporum Pittosporaceae) Shrub to small tree, leaves tend to be clustered towards the ends of branchlets, reddish hairs present on the lower surface. Flowers **white to cream**, petals reflexed; fruit a smooth yellow, 2-valved capsule, seeds embedded in sticky material. Has been collected on the Nelly Bay to Arcadia track
- *Petalostigma pubescens* (Quinine Picrodendraceae formerly part of Euphorbiaceae) *Petalostigma*, from the Greek *petalon* – petal, and *stigma* – stigma, referring to the petal-like branches of the stigma.

Shrub or small tree to 10 m tall, the leaves and the fruit are pubescent. Flowers greenish. The fruit is a 3-4-valved capsule, orange when mature, 1.5-2 cm diameter. Galls often present on the leaves. Although not collected on the Island, a similar plant on the nearby mainland is *Petalostigma banksii*. This species has relatively smaller leaves which are glabrous or hairless, likewise the fruit is glabrous i.e., lacks hairs. The fruits of both species are explosively dehiscent, and seeds can be distributed over quite a distance from the parent tree. Bitter to eat.





P. pubescens

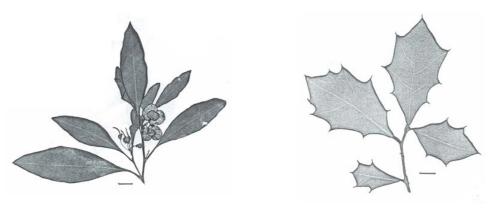
### Dodonaea lanceolata (Hop Bush – Sapindaceae)

*Dodonaea*, named after Rembert Dodoens (1516-1585), a Dutch physician and herbalist. The leaves on this shrub are usually narrow to broadly elliptical to 8 cm long and 2(-3) cm wide. The flowers are small, separate male and female, in terminal or subterminal clusters of 6-10, inconspicuous. Fruit is a 3-winged brownish capsule 2cm x 2 cm. The leaves of *Dodonaea viscosa*, (Sticky Hop Bush) are highly variable but are readily identified by being sticky or viscid to touch.

### Alchornea ilicifolia (Native Holly – Euphorbiaceae)

*Alchornea*, S. Alchorne was a British collector in the 18<sup>th</sup> Century.

This shrub is readily identified by its holly-like leaves, it is usually found in vine thickets. Separate male and female plants, males borne in racemes or panicles, females are solitary, **greenish**. The 3-lobed, brown capsule 5-7 mm diameter, lacks hairs.



D. lanceolata

A. ilicifolia

#### Hibiscus divaricatus (Malvaceae)

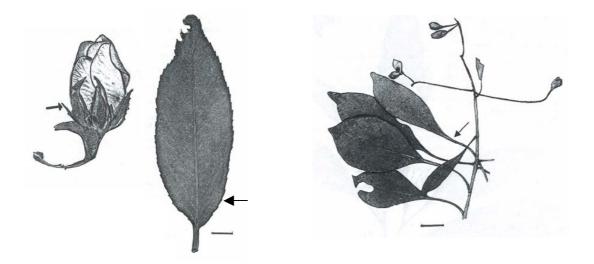
This shrub has prickly stems and the leaves may be entire or lobed, prickly along the midrib, margin serrate. Arrow ( $\uparrow$ ) on leaf indicates a narrow gland/extra-floral nectary. Along the calyx and epicalyx ( $\uparrow$ ) both coarse and simple stellate hairs (i.e., star-shaped or branched) are found. Flowers usually **white** with margins and base pink, rarely **yellow**.

**NOTE:** *Hibiscus meraukensis* (**Group 8.F**) may key out here. However it does not have any stellate hairs on the calyx or epicalyx.

### Maytenus disperma (Celastraceae)

Maytenus, a vernacular name from Chile.

Shrub or small tree, leaves tend to be broadest above the middle, base is attenuated ( $\uparrow$ ). Flowers small with 4 **white** petals, 4 stamens; capsule with 2 valves, the black seeds are surrounded by a yellow aril at the base.



H. divaricatus

M. disperma