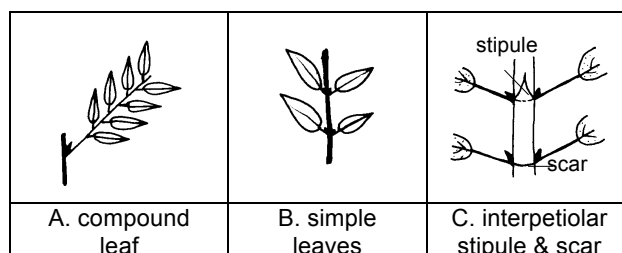
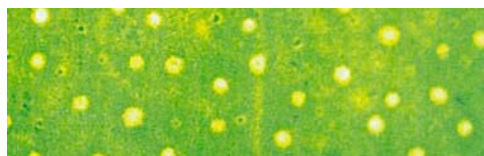


## KEY TO GROUP 5

Leaves opposite, includes both simple and compound leaves.



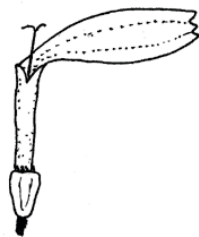
- 1 Leaves compound (see sketch A), i.e., divided into leaflets go to **Group 5.A**
- 1\* Leaves simple (B) i.e., undivided, each leaf has a bud in the axil go to 2
- 2 Herbs and subshrubs **usually less** than 1 m tall go to 3
- 2\* Shrubs and trees, sometimes sprawling and scrambling, **rarely less** than 1 m high go to 4
- 3 Flowers usually coloured, rarely purely white go to **Group 5.B**
- 3\* Flowers white, or white with a yellow centre go to **Group 5.C**
- 4 Stems with an interpetiolar scar or persistent stipule extending between the bases of the petioles (see sketch C) (Mainly Gardenia family-Rubiaceae) go to 5
- 4\* Stems without an interpetiolar stipular scar go to 6
- 5 Leaves hairy, and/or flowers in globular heads go to **Group 5.D**
- 5\* Leaves without hairs, flowers not in globular heads go to **Group 5.E**
- 5 Petals fused to form a short tube, 4-5-lobed, more or less irregular in shape; stems often squarish (Mainly Mint family – Lamiaceae) go to **Group 5.F**
- 6\* Petals free from one another, not fused to form a tube; stems rounded go to 7
- 7 Leaves with oil dots, aromatic smell when crushed, smell of eucalyptus oil or citrus (Eucalypt and Citrus families – Myrtaceae and Rutaceae) go to **Group 5.G**



Large oil dots as seen through a good hand lens

- 7\* Leaves lacking oil dots, leaves lack a distinctive smell when crushed (crush leaf in a cupped hand to smell it) go to **Group 5.H**

*Sphagneticola trilobata* Singapore Daisy



Ray floret (female)



Disc floret (hermaphrodite)

## GROUP 5.A Leaves opposite and compound.

### *Tecoma stans* (Tecoma, Yellow Bells – Bignoniaceae)\*

*Tecoma* is from the Mexican name, *tecomaxochitl*, said to be an earthenware vessel with a distinctive shape.

A garden escapee, this spreading shrub grows to 3-4 m tall, leaves opposite with 3-13 leaflets per leaf, usually about 5-7. The trumpet-shaped corolla, 4-5 cm long, is **yellow** with reddish lines in the throat. Fruit are long bean-like pods to 20 cm long with numerous seeds.



*T. stans*

### *Tribulus cistoides* (Caltrop, Puncture Vine, Goat's Head Burr – Zygophyllaceae)

*Tribulus*, from *tribolus* – three-pointed, referring to the spiny fruit.

A prostrate herb with opposite leaves, each pair has one larger than the other, 5-8 pairs of leaflets per leaf. Flower > 2 cm diameter, petals 5, **yellow**; fruit a capsule 1-1.8 cm diameter with 5 ridges, 2 large spines near the top of each segment, smaller spines sometimes present.

### *Tribulus terrestris* (Caltrop, Cat-head – Zygophyllaceae)

Similar in appearance but the flowers are only up to 1.5 cm diameter and the capsule is up to 1 cm diameter.

### *Vitex trifolia* var. *trifolia* (Common Blue Vitex – Lamiaceae)

*Vitex*, from the Latin name used by Pliny for a tree known as Abraham's balm or the chaste tree.

This shrub or small tree, has opposite compound leaves usually with 3 leaflets per leaf, but occasionally only single i.e., simple leaves are present. The lower surface is white because of the hairs. Corolla is tubular, bilobed, **mauve to pale blue** to 1.5 cm long; fruits black, fleshy drupes, 4-6 mm diameter, seeds 4. Flowering summer.



*T. cistoides*



*T. terrestris*



*V. trifolia* var. *trifolia*

**GROUP 5.B**      **Flowers usually coloured rarely pure white. Leaves opposite and simple**

**NOTE:** Those marked with an asterisk (#) before the name, sometimes have a white form.

*Anisomeles malabarica* (Lamiaceae)

*Anisomeles*, from the Greek *anisos* – unequal, and *melos* – limb, referring to the shape of the flower.

An erect herb to 1 m tall, leaves pubescent, margins crenate/serrate, size can be quite variable. Corolla 2-lipped, varies in colour from **pink, to blue to pale purple**, 2 fertile stamens. Flowers are sometimes less clustered than those shown in the illustration.

*Hyptis suaveolens* (Hyptis, Horehound, Mintweed – Lamiaceae)\*

*Hyptis*, from the Greek *huptios*, referring to the lower lip of the flower being turned back.

A strong smelling herb or subshrub, leaf margins crenate or serrate, glandular hairs present; Leaves strongly aromatic when crushed. Corolla 2-lipped, **blue to mauve**. Fruit dry separating into 4 nutlets, surrounded by the hairy calyx.

*Stachytarpheta jamaicensis* (Light Blue Snakeweed – Verbenaceae)

*Stachytarpheta*, from *stachys* – spike, and *tarphys* – thick, referring to the thickened spike.

Herb to 1.2 m tall, flower embedded in the rachis of the long thick, terminal spike; the cylindrical corolla is bent and has **blue** spreading lobes. Fruit dry, a nut separating into 2 sections. *Stachytarpheta cayennensis* has **dark blue** flowers, not recorded for the island. *Stachytarpheta mutabilis* is a garden escapee with red to pink flowers.



*A. malabarica*

*H. suaveolens*

*S. jamaicensis*

#*Spermacoce brachystema* (Rubiaceae)

*Spermacoce*, from the Greek *sperma* – seed, and *acoce* – point, the fruit has 2 points.

Herb to 60 cm tall, stems bluish-mauve, leaves more or less sessile. Flowers in dense clusters, corolla **blue or whitish**. Fruit a capsule breaking into 2 valves.

#*Rostellularia adscendens* (Rubiaceae)

*Rostellularia*, Latin *rostellum* – beak, the name refers to either the hooks associated with the seeds or the appendage on the lower anthers.

Herb often up to 40 cm tall, flowers in terminal spikes, corolla 2-lipped, mostly **mauve**. This species is highly variable particularly with respect to leaves and to a lesser extent flower colour. There are numerous subspecies.



*S. brachystema*



*R. adscendens* note variation in leaf size



***Ageratum houstonianum*** (Blue Billygoat Weed – Asteraceae)\*

*Ageratum*, from the Greek *a* – without, and *geras* – age, referring to the fact that the petals retain their colour for a long time.

Herb to 1 m tall, stems and leaves are softly hairy, glandular hairs on lower leaf surface. Flowers in dense heads, **blue**, eventually fading with age. Two confusing species not yet recorded on the Island are: *Ageratum conyzoides* – in this species the involucral bracts lack hairs; *Praxelis clematidea*, this species has the margins of the leaves toothed rather than scalloped or crenate and there is a pungent smell.

***Acmella grandiflora*** (Asteraceae)

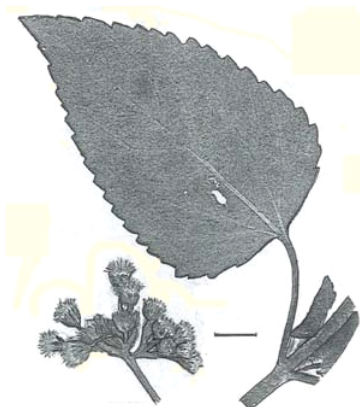
*Acmella*, from the Singhalese name for a similar plant.

Herb with opposite simple leaves, stems smooth, lacking rigid hairs, leaf margins sometimes shallowly toothed. Inflorescence solitary, daisy-like, ray florets **yellow** and radiating out from the centre. The yellow disc florets are borne in the centre of the inflorescence on the cone-like receptacle. In a species with a similar appearance *Wedelia spilanthoides*, the stems have rigid hairs and the receptacle is more or less flat. Pappus absent in both species or reduced to 1-3 short bristles.

***Sphagneticola trilobata*** (Singapore Daisy, formerly *Wedelia trilobata* – Asteraceae)\*

*Sphagneticola*, probably referring to its habit of forming a mat.

A creeping plant, rooting at nodes, leaves opposite and simple 8-9 cm long, glossy green above, margins with several teeth, veins prominent. Flowers are daisy-like up to 3 cm diameter, both ray and disk florets **yellow**. Prefers moist situations, classed as a 'plant of concern'.



*A. houstonianum*



*A. grandiflora*



*S. trilobata*



#*Pseuderanthemum variable* (Love Flower, Pastel Flower – Acanthaceae)

*Pseuderanthemum*, this name means that it is not the closely related genus *Eranthemum*. An erect herb to about 30 cm tall, the stems arise from a rhizome; leaves opposite and simple to 7 cm long and 4 cm wide, lanceolate. Flowers in a raceme, **pink, mauve** or if **white** then usually with coloured markings. Sticky hairs may be present on the flowers. Fruit a capsule to 1.8 cm long.

*Hypoestes floribunda* (Acanthaceae)

*Hypoestes*, from *hypos* – under, and *estia* – house, the bracts enclose the calyx. Erect herb to 1 m; leaves opposite and simple, lanceolate to broadly lanceolate to 9 cm long. Corolla 2-lipped, 1.5-2 cm long, **mauve to purple**, large petal is 3-lobed. Fruit an elongated capsule 9-12 mm long.



*P. variable*



*H. floribunda*

*Hypericum gramineum* (Small St. John's Wort – Clusiaceae)

*Hypericum*, from the Greco-Latin word for St. John's Wort, *hypericon*. Slender herb to about 40 cm tall, leaves opposite, sessile; flowers bright **orange-yellow**, 5 free petals, many stamens. Fruit a 3-valved capsule to 7 mm long, surrounded by the reddish bracts.

*Trichodesma zeylanicum* (Camel Bush, Cattle Bush – Boraginaceae)

*Trichodesma*, from the Greek *thrix* – hair, and *diadema* – crown, referring to the spiny hair clusters at the tips of the leaves.

Coarse herb to 1 m, all parts covered with stiff hairs (HANDLE WITH CARE). Lower leaves opposite, upper ones alternate. Flowers **blue to mauve**. Petals 5 fused, lobes spreading to 8 mm wide. Fruit dry of 4 mericarps, brown to black, enclosed in the calyx.



*H. gramineum*



*T. zeylanicum*

***Boerhavia burbridgeana*** (Tar Vine – Nyctaginaceae)

*Boerhavia*, named for Boerhaave (1668-1738), Dutch Professor of medicine and botany. Prostrate viscid herb with small pale **pinkish** flowers, peduncle filiform to 1.5 cm long bearing only 1 to a few flowers.

Another species recorded is *Boerhavia dominii* with a rigid peduncle to 3 cm long, rather than filiform and the flowers are more numerous and **dark pink**. Several other species have been collected but all have the same type of flower and the elongated fruit has glandular hairs.

**NOTE:** See also *Striga curviflora* (Group 7.D) and *Vitex rotundifolia* (Group 5.F).

**GROUP 5.C      Flowers white, or white with a yellow centre.**

*Scoparia dulcis* (Scoparia – Scrophulariaceae)\*

*Scoparia*, from the Latin *scoparius* – a form of broom.

A native of tropical America, this weed has leaves either opposite or in whorls of 3. leaves lanceolate with serrated margins. The flowers have a **white**, deeply 4-lobed corolla, stamens 4. Fruit a globular capsule.



*B. burbidgeana* left and *B. dominii* right

*S. dulcis*

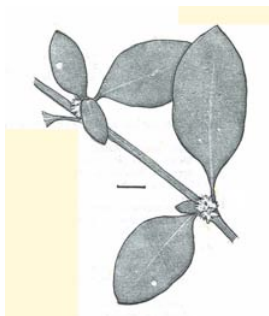
*Alternanthera ficoidea* (Joyweed, formerly *Alternanthera. bettzeckiana* – Amaranthaceae)\*

*Alternanthera*, from the Latin *alternus* – alternate, and *anthera* – anther, most species have sterile anthers alternating with fertile ones.

This sprawling to semi-erect herb is a native of Brazil, common in gardens and disturbed areas. Leaves are opposite oblong to lanceolate and sparsely hairy.

Flowers clustered in leaf axils, white bracts and bracteoles papery, perianth **whitish**, stamens 4-5.

*Alternanthera pungens* (Khaki Weed)\*, plant prostrate, spreading to about 60 cm, stems softly hairy, often rooting at the nodes. Bracts and bracteoles with sharp pungent points; perianth **whitish**. Plant spreads by these sharp points getting caught in shoes, tyres etc.



*A. ficoidea*



*A. pungens*



***Gomphrena celosioides*** (Gomphrena Weed – Amaranthaceae)\*

*Gomphrena*, a version of the name used by Pliny for a kind of Amaranth.

A herb whose leaves and stems bear whitish hairs, leaves 2-5 cm long. Flowers in a subglobose spike, 1-4 cm long, bracteoles papery, perianth **white** and woolly on the outer surface. Native of South America.

***Tridax procumbens*** (Tridax Daisy – Asteraceae)\*

*Tridax*, name used by Theophrastus for lettuce.

A decumbent herb often rooting at the nodes. Flower heads on long peduncles, outer ray flowers **white** to pale cream, central flowers yellow. Pappus of long plumose bristles. Introduced.



*G. celosioides*



*T. procumbens*

***Richardia brasiliensis*** (White Eye – Rubiaceae)\*

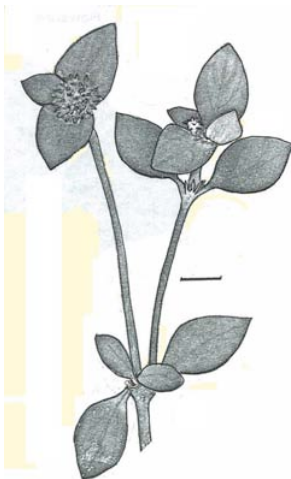
*Richardia*, named by Linnaeus for Richard Richardson (1663-1711).

This semi-prostrate herb has small white flowers clustered in the axils of the leaves. The 6 **white** petals are fused to form a tube with lobes spreading at the top. Capsule splits vertically, in *Mitracarpus hirtus*\* the capsule splits horizontally around the middle.

***Oldenlandia corymbosa*** (Oldenlandia – Rubiaceae)

*Oldenlandia*, named after Henrik Oldenland (d.1761) a Danish naturalist in South Africa.

Small herb to 30 cm tall, much branched, leaves opposite and decussate, narrow; flowers small, 1-7 per axil, **white**, petals and stamens 4. A common garden weed.



*R. brasiliensis*



*O. corymbosa*

***Thecanthes cornucopiae*** (Northern Riceflower – Thymelaeaceae)

*Thecanthes*, from the Greek *theca* – envelope, and *anthos* – flower, presumably a reference to the bracts surrounding the flowers.

Erect herb to 40 cm tall, flowers are grouped into a terminal cluster surrounded by 4 involucral bracts (↑), perianth is **white**, the 2 stamens are orange. Related to the genus *Pimelea*.

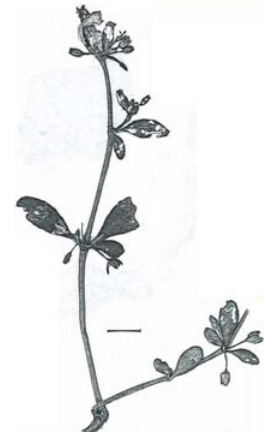
***Glinus oppositifolius*** (Molluginaceae)

*Glinus*, from the Greek word *glinos* meaning 'sweet juice'.

A semi-prostrate herb with opposite or whorled leaves, occasionally some are alternate; the flowers are **white** with a pink tinge; they are clustered in the leaf axils. Fruit a capsule, seeds numerous.



*T. cornucopiae*



*G. oppositifolius*

**GROUP 5.D Leaves hairy, or flowers in globular heads (all Rubiaceae).**

***Larsenaikia ochreata*** (Native Gardenia – Rubiaceae)

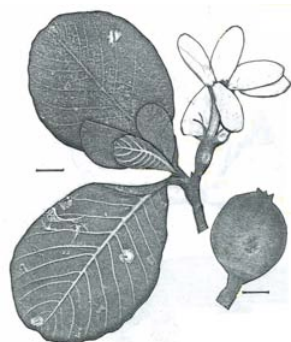
*Larsenaikia*, named for Professor Kai Larsen, a botanical collector in Thailand.

Shrub usually 3-8 m tall, however, plants on the island are rarely taller than 5 m; leaves softly hairy, broad, veins prominent, small domatia may be present on the underside of the leaf. Flowers with 5-6 petals, **white to yellowish**, fragrant, ovary inferior. Fruit ovoid, yellowish-green, large to 5 x 3 cm.

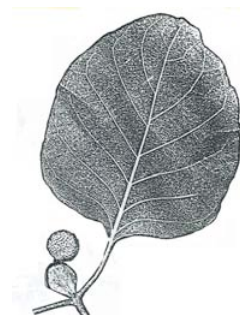
***Nauclea orientalis*** (Leichhardt Tree – Rubiaceae)

*Nauclea*, from the Greek *naus* – ship, and *kleio* – close, the fruit cells resemble a ship's hull!

Tall tree, large stipules at the base of leaf stalks (↑) to 3-4 cm long, some red glands on inside of each stipule near the base; leaves to 30 cm long. Flowers, grouped into a globular head about 3 cm wide, petals **yellow** with white stamens, ovary inferior. Fruit soft, yellowish-brown, globular, 3-4 cm diameter. Flowering spring and early summer.



*L. ochreata*



*N. orientalis*

***Morinda citrifolia*** (Great Morinda, Cheese Fruit, Noni – Rubiaceae)

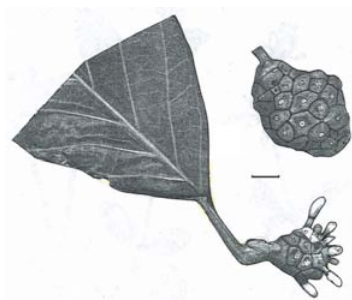
*Morinda*, from the Greek *moron* – mulberry, and *inda* – Indian.

Small tree often growing on dune systems, leaves usually 10-30 cm long; veins and midrib prominent. Flowers with a tubular 5-lobed corolla, **white to cream** with their bases fused together. The fruit is an irregularly shaped aggregate fruit, 4-7 cm long, 3-4 cm wide, fleshy, creamy-yellow; powerful smell when ripe, edible, high vitamin C content.

***Timonius timon*** (Tim Tam Tree – Rubiaceae)

*Timonius timon* is an Ambonese name for a plant with black bark.

Shrub or small tree, leaves pubescent, often silky when young. Domatia (small pouches) (↑) present. Corolla **white**, 4-10 lobes, silky pubescent, ovary inferior. Fruit greenish, globular hairy to 13 mm diameter, occasionally larger. Flowering May to November.



*M. citrifolia*



*T. timon*

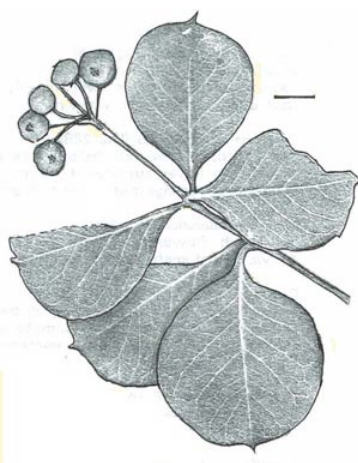
**GROUP 5.E Leaves without hairs, flowers not in globular heads (mostly Rubiaceae). Ovary inferior.**

***Pogonolobus reticulatus*** (Medicine Bush – Rubiaceae)

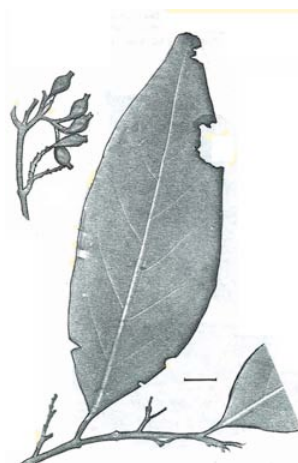
*Pogonolobus*, from the Greek *pogon* – beard, and *lobus* – lobed, referring to the petals. A shrub sometimes scrambling, leaves harsh when touched, yellowish-green, veins prominent, particularly when dry. Flowers with a tubular corolla, **white**, clustered, fragrant, ovary inferior; fruit fleshy, black when ripe, less than 1 cm diameter.

***Aidia racemosa*** (Archer River Cherry – Rubiaceae)

*Aidia*, from Greek words meaning it is separated from another similar genus *Randia*. Shrubs or small tree 4-15 m tall, leaves opposite occasional one leaf of the pair is missing, to 19 cm long, 7 cm wide, often with wavy margins. Flowers **white to cream**, fragrant. Borne in clusters on one side of the branch. Ovary inferior; fruit fleshy to 1 cm diameter, red to reddish-brown at maturity. Flowering November.



*P. reticulatus*



*A. racemosa*

***Ixora timorensis*** (*Ixora*, formerly *Ixora klanderana* – Rubiaceae)

*Ixora*, named for a Malabar deity to whom flowers were offered.

Shrub or small tree, leaves opposite, simple, to 21 cm long, and 3-5 sometimes to 9 cm wide. Flowers in loose heads, perfumed, petals 4, **white to cream**, ovary inferior; fruit fleshy, globular, black to 1 cm diameter, edible.

***Pavetta australiensis*** (*Pavetta* – Rubiaceae)

*Pavetta*, a Sinhalese name for a species of this genus.

A shrub or small tree, leaves opposite, simple, the hairy stipules completely encircle the twig between the pair of leaves. Flowers weakly perfumed, petals 4, fused to form a tube up to about 1.5 cm long with spreading lobes, **white**, ovary inferior; fruit fleshy globular, 5-6 mm diameter, black when ripe. Flowering in November.



*I. timorensis*, habit x 1/2



*P. australiensis*

***Psydrax attenuata*** (formerly *Canthium attenuatum* – Rubiaceae)

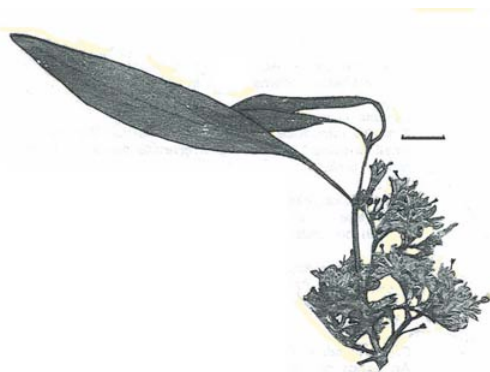
*Psydrax* from the Greek *pseudein* – to lie; *Canthium*, from a Malay word *canti*. First described from Malacca.

Shrub with leaves to 12 cm long, veins prominent when dry, laterals forming an acute angle with the midrib. Flowers with a **white** corolla, lobes 4-5, ovary inferior; fruit compressed about 5 mm long, black when ripe.

***Cyclophyllum coprosmoides* var. *spathulatum*** (Supplejack – Rubiaceae)

*Cyclophyllum*, from the Greek *cyclo* – circular, and *phyllus* – leaved.

Tall shrub, leaves pale on lower surface to 10 cm long, firm, domatia sometimes present. Flowers several per axil, corolla **white to cream**, lobes 5; fruit globular to compressed, orange-red at maturity, often bilobed.



*P. attenuata*



*C. coprosmoides* var. *spathulatum*

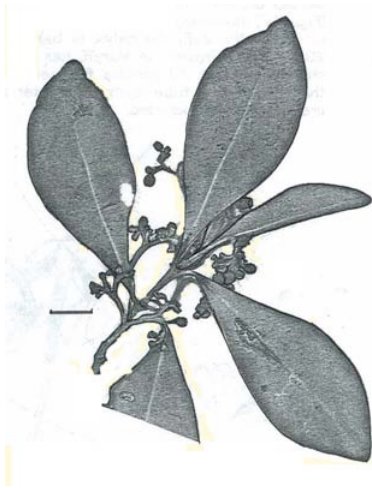
***Psydrax odorata* forma *australiana*** (Sweet Susie, Stiff Canthium, formerly *Canthium odoratum* – Rubiaceae)

Tall shrub to about 5 m, occasionally taller, leaves opposite, ovate to obovate to 8 x 4 cm, the upper surface of the leaves shiny and dark green, 1-2 domatia as small pits sometimes present. Stipules may be resinous. Flowers small, corolla **white**, petals 4; fruit black at maturity, 5-6 mm diameter.

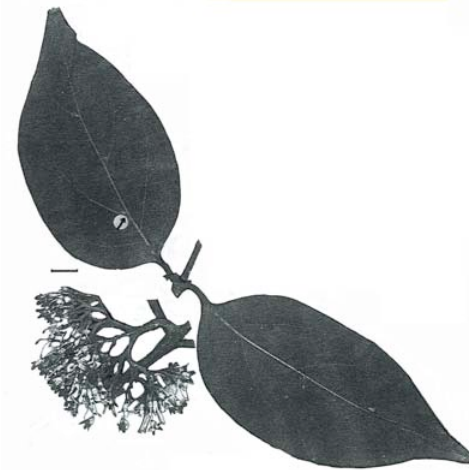


*Psydrax odorata* forma *foveolata*. (Rubiaceae)

This tall shrub or small tree occurs in the scrub behind Nelly Bay. Leaves to 17 cm long, 2-3 large domatia present, these are usually seen as large raised bumps on the upper surface (↑). Flowers **white**, fragrant, flowering in July.



*P. odorata* forma *australiana*



*P. odorata* forma *foveolata*

*Psychotria dallachiana*, *Psychotria polioSTEMMA*, and *Psychotria fitzalanii* (Rubiaceae)

*Psychotria*, from *psyche* – life, many species have medicinal properties.

Shrubs or small trees, leaves opposite to 12 cm long, stipules bifid at apex.

Flowers with a **white to cream** corolla, tube short, 2-3 mm long. The fruit is pale-coloured, fleshy, often ribbed, usually with 2 seeds per fruit. Lateral veins visible in fresh leaves of *Psychotria polioSTEMMA*, obscure in *Psychotria dallachiana* and *Psychotria fitzalanii*. In *P. dallachiana* the petiole is channeled on the upper surface and the fruit is 8-13 mm diameter; in *P. fitzalanii*, the petiole is flat on upper surface and the fruit is 5-7 mm diameter.

*Carallia brachiata* (Freshwater Mangrove, Corkwood – Rhizophoraceae)

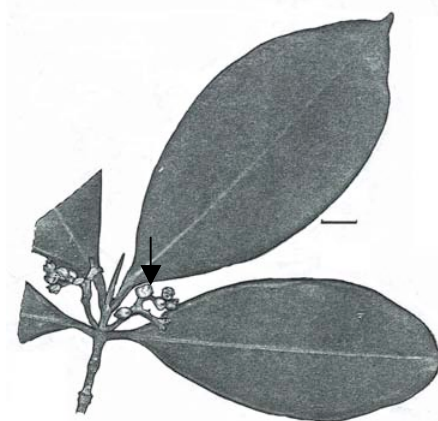
*Carallia*, from an Indian name, *karalli*.

Tree with leathery leaves usually found along creeks but not in mangroves.

Leaves opposite to 12 x 7 cm, stipules (↑) sheath the terminal bud. Flowers clustered small, to 4 mm long, petals 6-7, **greenish**, stamens twice as many as petals. Fruit a berry with persistent calyx lobes at apex, turning red then black when ripe, 8-9 mm diameter.



*P. polioSTEMMA*



*C. brachiata*



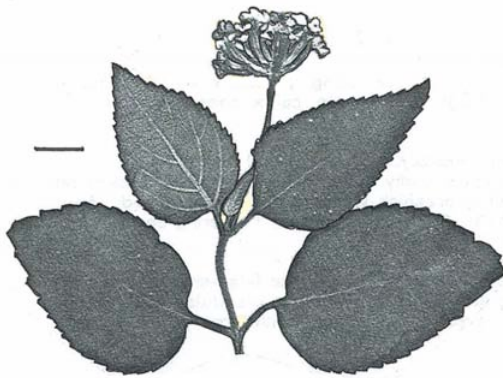
**GROUP 5.F      Flowers irregular in shape, petals fused to form a corolla tube, lobes 4-5, stems often squarish in cross section (mostly Lamiaceae old family name is Labiatae). Ovary superior.**

*Lantana camara* (Lantana – Verbenaceae)\*

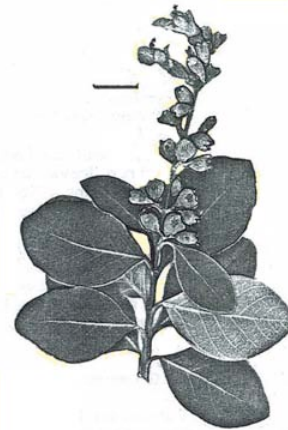
*Lantana*, because it has a superficial resemblance to another plant, *Viburnum*. A garden escape, this scrambling shrub has prickles on the arching canes, and the leaf margins are crenate-serrate. Flowers with one petal slightly larger than the others, colours various, from **pink, orange to red**. Fruit black at maturity. A small leaved species grown as ground cover in gardens has occasionally escaped!

*Vitex rotundifolia* (Lamiaceae)

*Vitex*, from a Latin name used by Pliny. A prostrate to erect shrub to 50 cm tall, often found near beaches. Leaves simple to about 3 cm long, whitish on the lower surface because of hairs. Flowers **mauve** to 1.5 cm long bilobed; fruit black, berry to 6 mm diameter, seeds 4.



*L. camara*



*V. rotundifolia*

*Clerodendrum* spp. (Lamiaceae)

*Clerodendrum*, from the Greek *kleros* – chance or turn, and *dendron* – tree, referring to the variable medicinal properties of some species.

Shrubs. Inflorescence terminal or sometimes axillary, corolla often has a long tube, the 4 stamens are exserted and the calyx expands after flowering and is usually larger than the fruit which is fleshy and is often a contrasting colour to the calyx. All species frequently have distorted flowers, so that the corolla tube is much shorter and broader than normal, and the stamens are not always exserted. Many have an interesting pollination mechanism. The style hangs to one side while the stamens are upright in the centre, when they have shed their pollen then the style and its stigma take centre place, thus preventing self-pollination..

*Clerodendrum heterophyllum* forma *baueri* is a low much branched shrub which flowers in March. It has small **white** flowers less than 1 cm long, calyx shortly toothed. Corolla white to 7 mm long, stamens purple to 2 cm long. Fruit about 7 mm diameter, black when dry, slightly lobed.

*Clerodendrum floribundum* (Lollybush) Flowers about April. Leaves to 17 cm long. Corolla-tube to 3 cm long, **white**, stamens to 3.5 cm long often shorter. Fruit is purple to black, 5-10 mm diameter sitting on the enlarged (to 2 cm diameter) red calyx looking like waxy petals.

*Clerodendrum inerme* (Snakewood, Mangrove Clerodendrum) shrub to 5 m tall, sometimes scrambling, leaves usually 4-10 cm long. Flowers with calyx barely toothed, corolla **white**, tube to 4 cm long stamens purplish to 4 cm long. Fruit distinctly 4-lobed up to 2 cm long, dark brown at maturity long. Often found in dune vegetation. This species has recently (2010) had a name change to *Volkameria inerme*.

*Clerodendrum longiflorum* var. *glabrum* is similar to *Clerodendrum floribundum* but the flowers are much larger, corolla-tube to 6 cm long, stamens to 5 cm long, **white**. Fruit purple to black when fresh, calyx bright red to 2.5 cm diameter. Flowers in May.



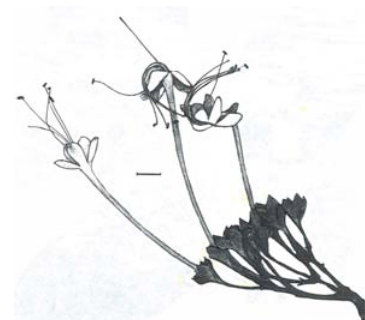
*C. heterophyllum* f. *baueri*



*C. floribundum* note distorted flower on left



*C. inerme/Volkameria inerme*, fruit on illustration to the left



*C. longiflorum* var. *glabrum*

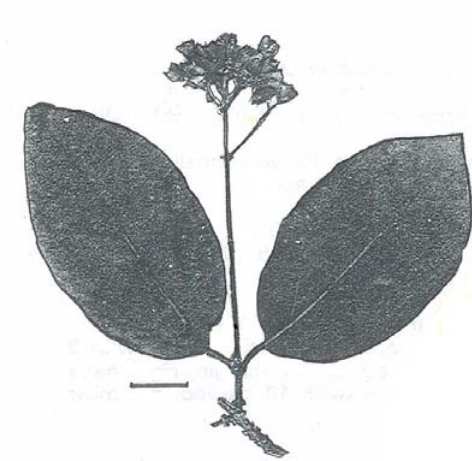
***Glossocarya hemiderma*** (Lamiaceae)

*Glossocarya*, from the Greek *glossa* – tongue, and *karyon* – nut, referring to the tongue-like margin of the mericarps (surrounding the seed).

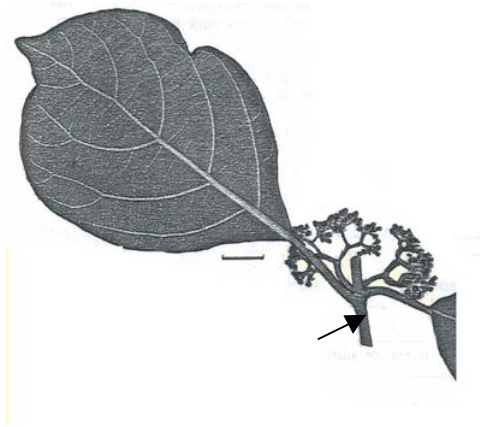
An erect or scrambling shrub usually < 4 m tall. Flowers **white**, in dense corymbose heads. Fruits oblong, brown, calyx does not enlarge after fruiting. Flowering May.

*Callicarpa candicans* (Callicarpa – Lamiaceae).

*Callicarpa*, from the Greek *kallos* – beauty, and *karpos* – fruit, meaning beautiful fruit. This shrub is easily recognized by the stellate (↑) or star-shaped hairs on the stems and leaves, as well there are resinous glandular dots on the lower surface of the leaves. Corolla **purple**, stamens prominent. Fruit are purple drupes about 2 mm diameter. Flowering April.



*G. hemiderma*



*C. candicans*

*Premna serratifolia* (Creek Premna, Coastal Premna – Lamiaceae)

*Premna*, from the Greek *premnon* – a tree-stump, referring to some species being short. Tall shrub, leaves usually broadly ovate to 20 cm long, 16 cm wide, hairs sometimes present on the main veins. Flowers **greenish-white**, somewhat 2-lipped; fruit globose, black at maturity to 8 mm diameter. Flowering September.

**GROUP 5.G Leaves with oil glands/oil dots, aromatic when crushed (Myrtaceae, Rutaceae).**

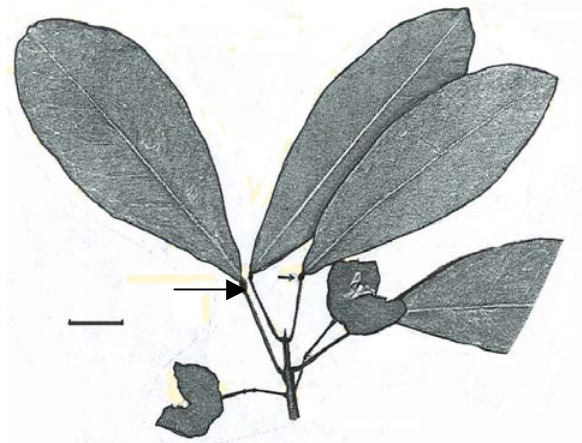
*Acronychia laevis* (Glossy Acronychia – Rutaceae)

*Acronychia*, from the Greek *akros* – point and *onyx* – claw, referring to petals having curved tips.

A tree, the leaves of which, have a small joint at the junction of the petiole and blade (↑) and also a lemon-like smell when crushed. Petals 4, **creamy-white**, fruit irregularly shaped, white to purple at maturity to 12 mm diameter.



*P. serratifolia*



*A. laevis*

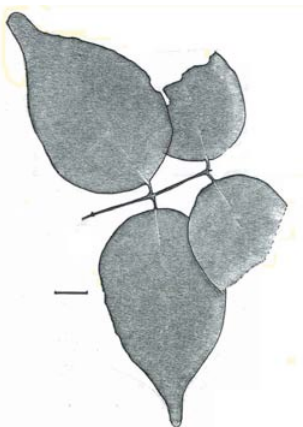
*Gossia bidwillii* (Python Tree, Smooth-barked Ironwood, formerly *Austromyrtus bidwillii* – Myrtaceae)

*Gossia*, after Wayne Goss, former premier of Queensland.

Shrub or small tree, often somewhat twisted, with smooth, blotchy bark. Leaves with obvious oil glands/dots when held to the light. Flowers **white** with numerous stamens, the fruit is globular to 6 mm diameter, fleshy, black when ripe.

*Eugenia reinwardtiana* (Beach Cherry, Cedar Bay Cherry – Myrtaceae)

*Eugenia*, Linnaeus named this genus for Prince Eugene of Savoy, a patron of botany. Usually found as a small shrub growing amongst rocks. Leaves lanceolate to obovate, lateral veins distinct, oil dots obvious. Flowers **white to cream**, solitary or a few together; petals 4, stamens numerous fruit red, fleshy, globular to elliptical, to 2.3 cm long.



*G. bidwillii*



*E. reinwardtiana*



**GROUP 5.H Leaves lacking aromatic oil glands, no smell when crushed.**

*Memecylon pauciflorum* (Poor Flower Tree, Memecylaceae formerly part of Melastomataceae) *Memecylon*, from the Greek *memekylon*, a name used for the edible fruit of the strawberry tree.

This plant is superficially very similar to *Eugenia reinwardtiana* but it lacks oil glands in the leaves, lateral veins are obscure; flowers are arranged in umbels, i.e., they all appear to arise from the same point and on stalks (pedicels) of equal length. Both tend to grow in similar habitats along shores amongst rocks. Shrub to 5 m tall, leaves usually less than 7 cm long. Flowers **white to blue**, petals 4, stamens 8. Fruit fleshy, purple-black to 8 mm long.

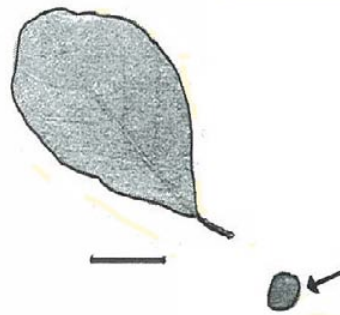
*Emmenosperma alphitonioides* (Yellow Ash, Bonewood – Rhamnaceae)

*Emmenosperma*, from the Greek *emmenes* – enduring, and *spermum* – seed.

Tree with opposite to subopposite leaves, which have smooth margins. Flowers small, 5 hooded petals, white enclosing the 5 stamens. Fruits are yellowish capsules to 4 mm diameter, splitting in to 2 to reveal the erect reddish to dark brown seeds (↑).



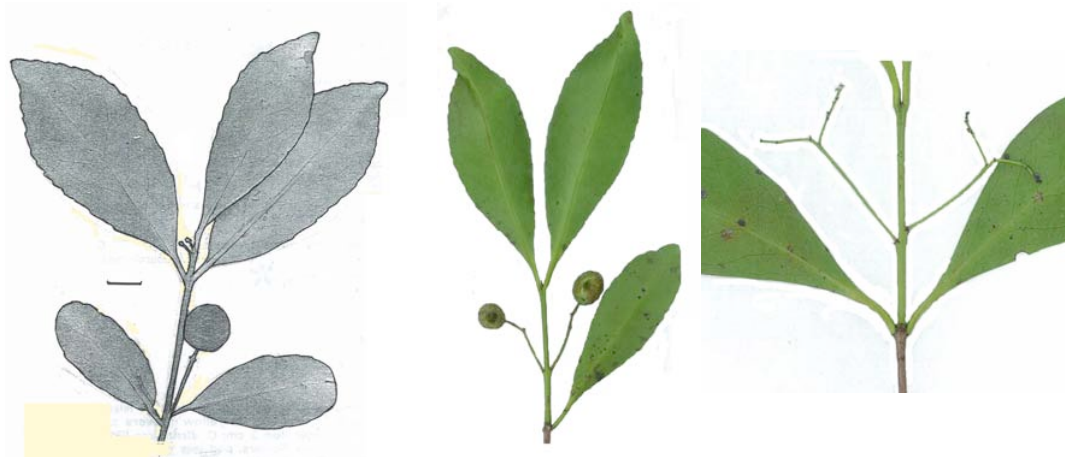
*M. pauciflorum*



*E. alphitonioides*

*Elaeodendron melanocarpum* (Olive Plum, formerly *Cassine melanocarpa* – Celastraceae). *Elaeodendron*, from Greek *elaia* – olive, and *dendron* – tree, referring to the appearance of the fruit.

A scrambling shrub or small tree; leaves opposite, 6-13 cm long, 3-7 cm wide, leaf margins are crenate. Flowers small, greenish, petals 3-4, separate male and female plants. Fruit a shiny black drupe when ripe, resembling an olive. Flowering April.



*E. melanocarpum*

***Chionanthus ramiflora*** (Northern Olive, Native Olive – Oleaceae)

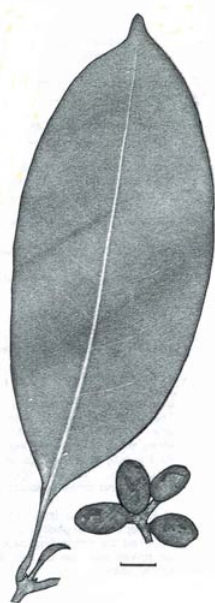
*Chionanthus*, from the Greek *chion* – snow, and *anthos* – flower.

A tall tree, twigs pale, leaves to 17 cm long and 7 cm wide, petioles and lower midrib often reddish. Flowers white to cream, with 4 petals and 2 stamens. Fruit a firm blue drupe to 15 mm long with 1 seed. This plant is an important food source for many birds and animals.

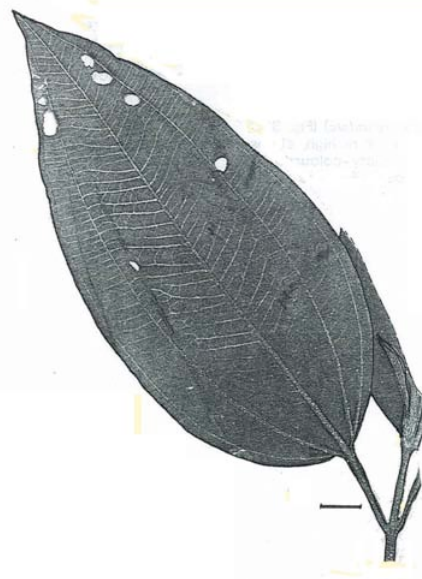
***Melastoma malabathricum*** (Blue Tongue, Native Lasiandra, also known as *Melastoma affine* – Melastomataceae)

*Melastoma*, from the Greek *melas* – black, and *stoma* – mouth, since the fruit stains the mouth blackish.

Shrub to 3 m tall, the leaves have 3 prominent longitudinal veins, with 2 finer ones near the margins. There are numerous rigid hairs appressed to the surface. Flowers mauve, large to 5 cm diameter, 10 stamens, filaments curved and dissimilar. Fruit a blue-black berry.



*C. ramiflora*



*M. malabathricum*