KEY TO THE RAINFOREST TREES AND SHRUBS IN THE SHOALHAVEN DISTRICT

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This work is dedicated to the late Anders Bofeldt

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INTRODUCTION

The identification of plants is mostly based on the characteristics of flowers. Using characteristics such as leaf morphology is made difficult as they vary in size and shape depending on a range of factors such as the quality of the soil climate and genetic variation. We persist with using leaves to identify plants because they are usually the most readily available piece of the plant that we have.

The wide variation in leaf morphology allows us to separate species using various steps in a taxonomic key. However, since leaves do vary in their shape a single species may fall out at several stages in this key.

This key is for most trees and shrubs in the region. Ferns, small groundcover plants and vines are not included. Several species are only found in the extreme north of the local government area or at high altitude. These species have been included. Other species have been found north and south of the Shoalhaven but not within the boundaries of the government area. These species have been excluded.

To use this key you need to be familiar with some terms used by botanists.

Definition of terms

Within this key the following terms are defined as:

- ***Alternate*** means when the leaves erupt from the stem at different levels
- ***Apical tip*** means the very end of the leaf
- ***Axillary buds*** means the bud or buds located in the angle between the stem and the petiole of a leaf
- ***Bipinnate*** means a compound leaf with the leaf divided twice.
- ***Domatia*** means small depressions under the leaves, usually located beside the main vein and secondary veins.
- ***Entire*** means when the leave edges are regular, that is not serrated, lobed or toothed
- ***Monocotyledons*** means the leaves arise from one growing tip e.g. Palms, grasses and lilies
- ***Opposite*** means when the leaves erupt from the stem at the same level
- ***Petiole*** means the stalk of the leaf
- ***Pinnate*** means a compound leaf with the leaf divided once.
- ***Rachis tip*** means the tip projecting beyond the last leaflet on a compound leaf
- ***Serrated*** means when the leave edges are not regular, that is not entire
- ***Stipule*** means one or two appendages at the leaf joins the stem
- ***Whorls*** means when leaves emerge in a ring at the same level on the stem.

INTRODUCTION

Based on leaf characteristics the following broad groups are:

Group	Go to Section
Tree Ferns	1
Cycad - pinnate leaf with sharp ends one growing tip	2
Palms - monocotyledons with one growing tip fan shaped leaf or pinnate leaf	3
Conifers and Ballarat Cherry - leaves simple entire stiff with many very fine veins except for midrib	4
Shrub to 2 m with thin strap like leaves from ground	5
Trees with compound leaves	6
Leaves simple	7
Simple leaves in whorls	7.1
Simple leaves, plants with spines	7.2
Simple leaves that are alternate	7.3
Simple leaves that are opposite	7.4

1 TREE FERNS

There are four species of tree fern that occur in the Shoalhaven. The most common is the Rough Tree Fern *Cyathea australis*. The Coopers Tree Fern *C. cooperi* was restricted to a few locations in littoral rainforest and low altitude forest but since this species has now been used widely in gardens it has become abundant in creeks near urban areas. The Prickly Tree Fern *C. leichhardtiana* is uncommon to rare in the region being associated with high rainfall rainforest at high altitudes. The Soft Tree Fern *Dicksonia antarctica* is also uncommon in our area also being restricted to cooler high altitude forests. The King Fern *Todea barbara* may also occur in rainforest in our region and grows to only about one metre and has fronds clustered at the apex.

Tree Ferns with single stem and soft red hairs at the base of the fronds…..…….Dicksonia antarctica
Tree Ferns with single stem and scales at the base of the fronds
Base of frond with rough projections and brown scales…….……..…Cyathea australis
Base of frond with small projections and long white and red scales……Cyathea cooperi
Base of frond with sharp prickles……..……Cyathea leichhardtiana
Fern with trunk to 1.1 metre and leaves clustered at head…….……Todea barbara

Dicksonia antarctica - Soft Tree Fern

Cyathea australis - Rough Tree Fern

Cyathea cooperi - Coopers Tree Fern

Cyathea leichhardtiana - Prickly Tree Fern

Todea barbara - King Fern

Macrozamia communis - Burrawang

2 CYCAD

One species of cycad the Burrawang *Macrozamia communis* occurs on the edge of rainforests in the area. This species is usually found on sandy soils (Seven Mile Beach NP) or Spotted Gum forest on clay soils (Murramarang NP). Up to 80 leaves arise from a centre, not twisted to 2m long, circa 200 leaflets on each leaf each with a sharp spine at the tip.

3 PALMS

Two species are indigenous to the Illawarra and Shoalhaven. The Bangalow *Archontophoenix cunninghamiana* and Cabbage Tree Palm *Livistona australis* have single stems to 25m and grow in rainforest and on swampy ground. Cabbage Tree Palms have fan shaped leaves and Bangalow Palms have pinnate leaves. Alexander Palms from Queensland have been widely planted and may cross pollinate with Bangalows resulting in many seedlings (in the northern Illawarra) being intergrades.

Archontophoenix cunninghamiana - Bangalow Palm

Livistona australis - Cabbage Tree Palm

4 CONIFER AND CHERRY BALLART

These are trees or shrubs with scale leaves, linear with stiff apical tip. The leaves do not have veins, except for the midrib.

Leaves broad (10mm) with stiff apical tip……..…….Podocarpus elatus
Leaves long, thin (3mm) and scale like……Exocarpos cupressiformis

Podocarpus elatus - Plum pine

Exocarpos cupressiformis –Cherry Ballarat

5 LEAVES LONG THIN STRAP-LIKE FROM A BASE AT GROUND

Monocotyledon with leaves up to 1.5 m Gymnostachys anceps – for image see plates under 6.2

6 LEAVES COMPOUND SEARCH BELOW

If leaves not compound then they are simple and go to section **7**

Leaves bipinnate or tripinnate go to **6.1**
Leaves pinnate go to **6.2**
Leaflets 3 go to **6.3**
Leaves not bipinnate or tripinnate then they are called simple go to **7**

6.1 Bipinnate or tripinnate leaves

Leaflets mainly alternate…….……Pararchidendron pruinosum
Leaflets entire, opposite, terminal leaflet present…….……...Polyscias elegans
Leaflets entire, and less than 1cm wide……..…Acacia elata
Leaflets serrated…….Melia azedarach

Pararchidendron pruinosum – Snowwood

Polyscias elegans - Celerywood

Acacia elata – Cedar Wattle

Melia azedarach – White Cedar

6.2 Pinnate leaves

Leaves opposite

Leaves hairless, toothed…….. Sambucus australasica
Leaves hairless, not toothed…….Cupaniopsis anacardioides
Leaves hairy, not toothed……..... Eucryphia moorei

Sambucus australasica – Native Elderberry

Cupaniopsis anacardioides – Tuckeroo

Eucryphia moorei - Pinkwood

Gymnostachys anceps – Settlers Flax

Leaves alternate

Leaflets with domatia go to **6.2.1**

6.2.1 Leaflets with domatia

Leaflets 12-18, curved, few domatia……..Toona ciliata
Leaflets 4-10, many domatia, glossy leaves, odd number of leaflets……. Synoum glandulosum
Leaflets 4-10, even number of leaflets……..…...Euroschinus falcata

Toona ciliata – Red Cedar

Synoum glandulosum – Bastard Rosewood

Euroschinus falcata – Ribbonwood

Leaflets without domatia go to **6.2.2**

6.2.2 Leaflets without domatia

>20 leaflets, stipules present – leaf large (1m or more)……..……..Polyscias murrayi
Leaflets 2-6 toothed, green below, leaflets alternate……...Alectryon subcinereus
Leaflets 2-6 entire, grey-green below, leaflets mostly alternate…….……Guioa semiglauca
Leaflets >15 cm, rachis tip projecting beyond last leaflet……..Diploglottis australis

Polyscias murrayi – Pencil Cedar

Alectryon subcinereus – Native Quince

Guioa semiglauca – Guioa

Diploglottis australis – Native Tamarind

6.3 Leaflets three

Leaflets with oil dots

Strongly aromatic broad leaflets, shrub to three metres……..……Zieria arborescens
Strongly aromatic very thin leaflets, shrub to three metre, Broughton-Berry…….……Zieria granulata
Strongly aromatic thin leaflets, shrub to three metre, Cambewarra Mt……..…….Zieria turburculata
Strongly aromatic, shrub to 1.5m…….……...Zieria smithii
Leaves not strongly aromatic…….……...Melicope micrococca

Zieria arborescens – Tall Zieria

Zieria granulata – Illawarra Zieria

Zieria smithii – Sandfly Zieria

Zieria turberculata – Warty Zieria

Melicope micrococca – White Euodia

Leaflets three without oil dots

Serrated leaflets…… Sambucus australasica
White coloured under leaflets…….…….. Eucryphia moorei
Many domatia along mid-veins ……..…….. Synoum glandulosum
Few domatia leaflets asymmetric alternate……..……..Euroschinus falcata
Less than 30mm, thin, soft, rounded at apex with minute point……..…..Goodia lotifolia

Leaflets with toothed margins
Leaflets 2-7…… Alectron subcinereus
Leaflets 13-50 large and soft ……..…….. Polyscias murrayi
Terminal leaf present, leaf stipule at leaf base……...… Polyscias sambucifolia
Terminal leaf present, many domatia…….……..Synoum glandulosum

Goodia lotifolia - Golden-tip

Polyscias sambucifolia – Elderberry Panax

7 LEAVES NOT BIPINNATE OR PINNATE LEAVES, THAT IS SIMPLE

Leaves in whorls (in circles) then search **7.1**
Leaves simple, plants with spines then go to **7.2**

7.1 Leaves in whorls

White under leaf, not three veined but oil dots present……Syncarpia glomulifera

Not prickly leaved, leaves soft with a short petiole……..……..Tasmannia insipida
Not prickly leaved, but hairy below……Pittosporum revolutum
Leaves undulating……..…. Pittosporum undulatum
Leaves large, soft and glossy…….……...Pisonia umbellifera
Leaves toothed……..……Clerodendrum tomentosum

Syncarpia glomulifera – Turpentine

Tasmannia insipida – Native Pepper

Pittosporum revolutum – Rough-fruited Pittosporum

Pittosporum undulatum – Sweet Pittosporum

Pisonia umbellifera – Bird Lime Tree

Clerodendrum tomentosum – Hairy Clerodendrum

7.2 Leaves simple, plants with spines

Leaves simple, plants with spines

Leaves spiny……Solanum celatum, S. prinophyllum or S. stelligerum
Leaves opposite and tip drawn to a point……..Coprosma quadrifida
Leaves glossy with margins toothed towards apex of leaf……..Pittosporum multiflorum
Leaves with margins toothed evenly along leaf……..…Hymenanthera dentata
Leaves with blunt or notched tips, alternate or clustered…….. Bursaria spinosa

Solanum celatum – Illawarra Apple

Solanum prinophyllum – Forest Nightshade

Coprosma quadrifida – Prickly Coprosma

Pittosporum multiflorum – Orange Thorn

Hymenanthera dentata – Tree Violet

Bursaria spinosa – Black Thorn

Leaves simple alternate then search **7.3**
Leaves simple opposite then go to **7.4**

7.3 Leaves simple alternate

Leaves with lobed margins go to **7.3.1**
Leaves round, broad and ovate go to **7.3.2**
Leaves exuding watery (F. coronata) to milky latex (figs) go to **7.3.3**
Leaves toothed and rough to touch go to **7.3.4**
Leaves toothed but not rough to touch go to **7.3.5**
Leaves with terminal buds, scaly or rusty-hairy go to **7.3.6**
Leaves entire (no serrations) with short red petioles…….Tasmannia insipida
Leaves entire with oil dots go to **7.3.7**
Leaves entire with zigzag stems go to **7.3.8**
Leaves entire with three or more veins at base go to **7.3.9**
Leaves entire with numerous small oil dots and white below .....Cryptocarya glaucescens
Leaves entire with small oil dots, hairless and not white below go to **7.3.10**
Leaves entire without oil dots go to **7.3.11**
Leaves entire with two or more longitudinal veins go to **7.3.12**
Leaves rhomboid in shape……..……Scolopia braunii
Leaves with one basal gland and white below…….Homalanthus populifolius
Leaves with numerous surface glands below – reddish petioles…….……Quintinia sieberi
Leaves entire with white hairs below go to **7.3.13**
Leaves with domatia go to **7.3.14**
Leaves pseudo-pinnate or strongly two ranked go to **7.3.15**
Leaves entire with terminal buds not scaly go to **7.3.16**
Leaves with prominent basal glands go to **7.3.17**

Cryptocarya glaucescens – Jackwood

Scolopia braunii – Flintwood

Homalanthus populifolius – Bleeding Heart

Quintinia sieberi – Possumwood

7.3.1 Leaves with lobed margins

Leaves very hairy……Commersonia fraseri
Leaves hairless with deep lobes……...Solanum aviculare
Leaves hairless with pointed tips……Brachychiton populneus
Leaves hairless with round tips……Brachychiton acerifolius

Commersonia fraseri – Brown Kurrajong

Solanum aviculare – Kangaroo Apple

Brachychiton populneus – Kurrajong

Brachychiton acerifolius – Flame Tree

7.3.2 Leaves round, broad and ovate

Leaves hairy with serrated edge and sting……Dendrocnide excelsa
Leaves hairy with serrated edge and stingless……Commersonia fraseri
Leaves hairless, white below and basal gland……Homalanthus populifolius

Dendrocnide excelsa – Stinging Tree

Commersonia fraseri – Brown Kurrajong

7.3.3 Leaves exuding watery or milky latex (figs)

Leaves may be toothed with watery to milky sap rough to touch like sandpaper……..….Ficus coronata
Leaves with watery to milk sap, not rough, apex bluntly pointed……..……...Pouteria australis
Leaves with milky sap, entire, brown and hairy below leaves to 100mm……..…….…Ficus rubiginosa
Leaves with milky sap, entire, brown and hairy below leaves to 300mm……..……Ficus macrophylla
Leaves with milky sap, entire not brown below leaves to 300mm……..……...….Ficus macrophylla
Leaves with milky sap, entire not brown below and to 75 mm……..…...……Ficus obliqua
Leaves with milky sap, entire not brown below and to 100mm……..…..Ficus superba

Ficus coronata – Sandpaper Fig

Pouteria australis – Black Apple

Ficus rubiginosa – Port Jackson Fig

Ficus macrophylla – Morton Bay Fig

Ficus obliqua – Small-leaved Fig

Ficus superba – Superb Fig

7.3.4 Leaves with toothed margins rough to touch

Leaves may very in shape from long thin to short (50mm)……..……Streblus brunonianus
Leaves thin and soft, serrated with many teeth……..……Trema aspera
Leaves furry to feel with white hairs rusty on veins……..……..…… Pomaderris aspera

Streblus brunonianus – Whalebone Tree

Trema aspera – Poison Peach

Pomaderris aspera – Hazel Pomaderris

7.3.5 Leaves toothed but not rough to touch

Leaves without domatia with few spinose teeth, stiff and leathery……..….Alchornea ilicifolia
Leaves without domatia with fine regular teeth to 80mm and paler below……..... Elaeocarpus holopetalus
Leaves without domatia broad with blunt teeth…….……Sloanea australis
Leaves with domatia long (200mm), thin and with many fine teeth…….……Elaeocarpus kirtonii
Leaves sometimes with domatia to 125 mm with reddish petiole and regular teeth….Elaeocarpus reticulatus
Leaf three veined at base…….……..Goodenia ovata
Leaves not-3-veined at base but tip drawn out to a fine point……..…....Abrophyllum ornans
Leaves not-3-veined at base but base tapered to rounded……..……Ehretia acuminata
Shrub, fine-toothed leaves not-3-veined at base, hairless red stems……..…Deeringia amaranthoides
Leaves with 2-5 stalked glands at apex of the petiole……..…..…Claoxylon australe
Leaves narrow, strong smelling yellow flowered shrub……....…….Senecio linearifolius
Leaves densely hairy above and below, domatia absent……..…..Acalypha nemorum
Leases densely hairy above and below, domatia absent, rounded at base……..….Abutilon oxycarpum
Leaves densely hairy silvery white below……..……..Olearia argophylla

Alchornea ilicifolia – Native Holly

Elaeocarpus holopetalus – Black Oliveberry

Sloanea australis – Maidens Blush

Elaeocarpus kirtonii – Pigeonberry Ash

Elaeocarpus reticulatus – Blue-berry Ash

Goodenia ovata – Hop Goodenia

Abrophyllum ornans – Native Hydrangea

Ehretia acuminata – Koda

Deeringia amaranthoides – Deeringia

Claoxylon australe – Brittlewood

Senecio linearifolius – Fireweed Groundsel

Acalypha nemorum – Southern Acalypha

Olearia argophylla – Musk Dairy Bush

Abutilon oxycarpum – Flannel Weed

7.3.6 Leaves with terminal buds, scaly or rusty-hairy

Terminal buds of branches hairy and undulating, purple stem……..……..……Myrsine howittiana
Terminal buds of branches hairy, leaves with few prominent teeth……..….. Myrsine variabilis
Terminal buds of branches scaly with abrupt pointed apex……..……Symplocos thwaitesii
Terminal buds of branches scaly with gradual pointed leaf apex……Denhamia celastroides

Myrsine howittiana – Brush Muttonwood

Myrsine variabilis – Muttonwood

Symplocos thwaitesii – Buff Hazelwood

Denhamia celastroides – Pigeonberry Ash

7.3.7 Leaves entire with oil dots

Bump at the base of the leaf, lavender smelling when crushed……..……Geijera salicifolia
Leaves with pale green to whitish underside……..Tristaniopsis laurina
Leaves with pale green underside…….. Tristaniopsis collina
Leaves with upper and lower surfaces green, smooth and soft……Myoporum acuminatum
Leaves short with numerous oil dots, recurved edges, petiole +/- absent…… Leptospermum polygalifolium
Leaves with numerous minute translucent dots, whitish below..... .Cryptocarya glaucescens

Geijera salicifolia – Green Satinheart

Tristaniopsis laurina – Water Gum

Tristaniopsis collina – Mountain Water Gum

Myoporum acuminatum – Mangrove Boobialla

7.3.8 Leaves entire with zigzag stems

Underside of leaves with whitish tinge and distinct veins……..……..Diospyros pentamera
Underside of leaves with lime coloured tinge and indistinct veins..... Diospyros australis
Leaf surfaces green and glossy, stem strongly zig-zagged, domatia present mainly in forks of lateral veins.....Pennantia cunninghamiana
As above, but domatia mainly along mid-rib veins..... Citronella moorei
Leaf surfaces green and glossy, stems weakly zigzagged, domatia absent……..……Eupomatia laurina

Leptospermum polygalifolium – Lemon-scented Tea-tree

Diosporus pentamera – Myrtle Ebony

Pennantia cunninghamiana – Brown Beech

Eupomatia laurina – Bolwarra

7.3.9 Leaves entire with three or more veins at base

Leaves ovoid in shape, stipules present……..……...Celtis paniculata
Leaves not white below, red new growth, stipules absent…….……..Stenocarpus salignus
Leaves with several longitudinal veins, petiole < 1mm less than 7cm long…….. Leucopogon lanceolatus
Leaves with three longitudinal veins & more than 7cm long, strong smell when crushed…. Cassinia trinerva

Celtis paniculata – Native Celtis

Stenocarpus salignus – Scrub Beefwood

Leucopogon lanceolatus – Lace Beard-heath

Cassinia trinerva – Three-veined Cassinia

7.3.10 Leaves entire, hairless with small oil dots and not white below

Leaves very aromatic when crushed……..….Cinnamomum oliveri
Midrib of leaf pale, petiole often red……..…….Endiandra sieberi
Undersurface of leaf pale green to glaucous with apex drawn to point……..…..Cryptocarya microneura
Undersurface not pale or glaucous apex may be blunt…….……Litsea reticulata

Cinnamomum oliveri – Oliver's Sassafras

Endiandra sieberi – Corkwood

Cryptocarya microneura – Murrogun

Litsea reticulata – Bolly Gum

7.3.11 Leaves entire without oil dots

Leaves linear, veins invisible, except for prominent mid-rib...……Podocarpus elatus
Leaves short, linear, margins revolute……..……..…..Ozothamnus diosmifolium
Leaves pseudo-pinnate, base tapered dries black…….Breynia oblongifolia
Leaves 2 ranked, base and tip rounded……....Phyllanthus gasstroemii
Leaves very narrow, leaf buds hairy may have a few teeth towards the end of the leaf…..Lomatia myricoides

Podocarpus elatus – Plum Pine

Ozothamnus diosmifolium – Rice Flower

Breynia oblongifolia – Coffee Bush

Phyllanthus gasstroemii – Blunt Spurge

7.3.12 Leaves entire with two or more longitudinal veins

Leaves more than 7 mm with 2-3 prominent longitudinal veins……..…..Acacia binervata
Leaves more than 7 mm with 3-7 prominent longitudinal veins……..……..Acacia melanoxylon
Leaves more than 7 mm with 1-5 prominent longitudinal veins……..……..Acacia maidenii

Lomatia myricoides – River Lomatia

Acacia binervata – Two-veined Hickory

Acacia melanoxylon – Blackwood

Acacia maidenii – Maidens Wattle

7.3.13 Leaves entire with white hairs below

Leaf less than 100 mm and very white below…….Alphitonia excelsa
Leaf more than 100mm and pale below……..……Diploglottis australis

Alphitonia excelsa – Red Ash

Diploglottis australis – Native Tamarind

7.3.14 Leaves entire with domatia

Branchlets strongly zig-zagged, domatia mainly in forks of lateral veins……....Pennantia cunninghamii
Branchlets zig-zagged and with small domatia along midrib. …….....Citronella moorei

Pennantia cunninghami – Brown Beech

Citronella moorei – Churnwood

7.3.15 Leaves pseudo-pinnate or strongly two ranked

Shrub to 3 m with stipules and pseudo-pinnate leaves less than 3 cm long ……..……Breynia oblongifolia

Tree to 10 m with pseudo-pinnate leaves and stipules……..…..... Glochidion ferdinandi
Shrub to tree with yellow–green colour on leaf undersurface and indistinct veins…..……. Diospyros australis
Shrub to tree with whitish leaf undersurface and distinct veins.....Diospyros pentamera

Breynia oblongifolia – Coffee Bush

Glochidion ferdinandi – Cheese Tree

Diospyros australis – Black Plum

Glochidion ferdinandi – Cheese Tree – small form found near Mahogany Ck

7.3.16 Leaves entire with terminal buds not scaly

Leaves with red or orange dots, undulating, faint veins……..….. Myrsine howittiana
Leaves with red or orange dots +/- few prominent prickly teeth, strongly veined……..….. Myrsine variabilis
Leaves soft, dull, shrub to small trees with corky bark……..…….Duboisia myoporoides
Leaves hairless, long and soft with deep lobes and prominent veins raised below.....Solanum aviculare
Leaves with numerous surface glands below – reddish petioles……..……Quintinia sieberi

Myrsine howittiana – Brush Muttonwood

Myrsine variabilis – Muttonwood

Duboisia myoporoides – Corkwood

Solanum aviculare – Kangaroo Apple

Quintinia sieberi – Possumwood

7.3.17 Leaves with prominent basal glands

Leaves soft broadly triangular with a raised gland at base of upper surface……. Homalanthus populifolius

7.4 Leaves simple opposite

Leaves lobed or with a few irregular teeth go to **7.4.1**
Leaves toothed and stipules are present go to **7.4.2**
Leaves toothed and stipules absent go to **7.4.3**
Leaves entire go to **7.4.4**
Leaves entire with intramarginal vein and blunt point go to **7.4.5**
Leaves entire with stipules go to **7.4.6**
Leaves entire without stipules but with domatia and extra longitudinal vein to **7.4.7**
Leaves aromatic when crushed go to **7.4.8**

7.4.1 Leaves lobed or with a few irregular teeth

Leaves 2-ranked, branchlets, petioles and underside of leaves hairy…..Gmelina leichhardtii
Leaves with unpleasant smell when crushed, petioles reddish…..Clerodendrum tomentosum

Gmelina leichhardtii – White Beech

Clerodendrum tomentosum – Hairy Clerodendrum

7.4.2 Leaves toothed and stipules are present

Swelling at juncture of petiole and leaf…… . …..……... Ceratopetalum apetalum
Leaves white below……..……...Callicoma serratifolia
Stipules interpetiolar, bark on older trees fissured……..…Schizomeria ovata
Stipules not interpetiolar, leaf margins bluntly pointed, red seeds ……..……..…Elaeodendron australe

Ceratopetalum apetalum – Coachwood

Callicoma serratifolia – Black Wattle

Schizomeria ovata – Crab Apple

Elaeodendron australe – Red-fruited Olive Plum

7.4.3 Leaves toothed and stipules absent

Leaves with numerous surface glands and minty scent when crushed……. Prostanthera lasianthos
Leaves stiff and hard..……..…..Wilkiea huegeliana
Petioles usually more than 8mm long…….……...Hedycarya angustifolia
Petioles less than 8mm long, base of leaf gradually tapered…….. Polyosma cunninghamii
Leaves with nutmeg smell when crushed……..…….... Doryphora sassafras
Leaves ovate and coarsely toothed except for lower third…….……..Daphnandra johnsonii

Prostanthera lasianthos – Mint Bush

Wilkiea huegeliana – Wilkiea

Hedycarya angustifolia – Native Mulberry

Polyosma cunninghami – Featherwood

Doryphora sassafras – Sassafras

Daphnandra johnsonii – Illawarra Socketwood

7.4.4 Leaves entire

Leaves with lemon smell when crushed, leaf blade and petiole with bump……. Acronychia oblongifolia
Leaves not aromatic, strongly 3-veined from near base ……...Rhodamnia rubescens
Leaves with white petiole and bump at leaf base……...Sarcomelicope simplicifolia
Leaves tough, hairless with 2 glands on margins above base……... Baloghia inophylla

Acronychia oblongifolia – Common Acronychia

Rhodamnia rubescens – Scrub Stringybark

Sarcomelicope simplicifolia – Yellow Aspen

Baloghia inophylla – Brush Bloodwood

7.4.5 Leaves entire with intermarginal vein

Leaves sweet smelling when crushed, young stems hairy……...Backhousia myrtifolia
Leaves with blunt point, oil dots obscure, lateral veins faint on fresh leaves……..…..….Syzygium australe
Oil dots distinct, leaves elliptic to ovate…..……..…..…… Syzygium smithii
Oil dots distinct, leaves mostly narrow elliptic.....……..…. Syzygium paniculatum

Backhousia myrtifolia – Grey Myrtle

Syzygium australe – Brush Cherry

Syzygium smithii – Lilly Pilly

Syzygium paniculatum – Magenta Lilly Pilly

7.4.6 Leaves entire with stipules

Domatia often present, leaves hairy……..…….…Psychotria loniceroides
Leaves soft, ovate and stipules small……..……..…Emmenosperma alphitonioides
Leaves with distinct domatia, stipules inter petiolar……..…….…Cyclophyllum longipetalum

Psychotria loniceroides – Hairy Psychotria

Emmenosperma alphitonioides – Yellow Ash

Cyclophyllum longipetalum – Brush Canthium

7.4.7 Leaves entire without stipules not aromatic

Leaves 2-ranked, branches, petioles and underside of leaves hairy…..……...Gmelina leichhardtii
Leaves hairy on top and underside, may be lobed…….……...Clerodendron tomentosum
Leaves hairless, soft, paler underneath bark pulls off in long strips…….……..….Pimelia ligustrina
Leaves hairless, soft, paler underneath bark does not pull off in long strips…..……..Santalum obtusifolium
Leaves stiff, often pubescent, axillary buds 1 or 2……..……...….Notelaea longifolia
Leaves stiff, hairless with distinct main lateral veins, axillary buds 3 or 4……..…Notelaea venosa

Gmelina leichhardtii – White Beech

Clerodendron tomentosum – Hairy Clerodendrum

Pimelia ligustrina – Tall Rice Flower

Santalum obtusifolium – Sandalwood

Notelaea longifolia var. longifolia – Large Mock-olive

Notelaea venosa – Smooth Mock-olive

7.4.8 Leaves aromatic when crushed

Leaves sweet smelling when crushed not white below, entire……... Backhousia myrtifolia
Leaf margin wavy with many oil dots……Cinnamomum oliveri
Leaf with distinct yellow-white midrib……Endiandra sieberi
Small serrated leaves (less then 30 mm) strong smell……....Prostanthera spp.
Petioles less than 8mm long, nutmeg smell when crushed…….. Doryphora sassafras

Backhousia myrtifolia – Grey Myrtle

Cinnamomum oliveri – Oliver's Sassafras

Endiandra sieberi – Corkwood

Prostanthera spp. – Mint Bushes

Doryphora sassafras – Sassafras

Please note that species additional to those covered in this key may occur in the region. Species such as Tree Heath *Trochocarpa laurina* and Southern Sassafras *Atherosperma moschatum* have been located north and south of the study area and may occur in the Shoalhaven. Some species that are rare and have highly restricted distributions, such as Quinine Bush *Alstonia constricta* and Narrow-leaved Orangebark *Maytenus silvestris,* are unlikely to be encountered by bush regenerators and have been omitted in this key but are listed in the Appendix. A form of Cheese Tree *Glochidion ferdinandi* has been located in north Nowra that has reduced leaves that may cause difficulties in identification. An image of this form is provided on page 27.

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Appendix 2 Rainforest trees and shrubs in the Shoalhaven District

Note: this list includes some species that grow just outside the study area, which may occur in the region and species that have a highly restricted distribution, namely the Shoalhaven George. These species are not considered in the key and hence have no page reference. KV = Kangaroo Valley.

Page	Species	Common Name	Comment
19	*Abrophyllum ornans*	Native Hydrangea	Uncommon species
19	*Abutilon oxycarpum*	Flannel Weed	Margins of RF
25	*Acacia binervata*	Two-veined Hickory	Margins of RF
9	*Acacia elata*	Cedar Wattle	Morton NP - 12 Mile Rd
25	*Acacia maidenii*	Maidens Wattle	Margins of RF
25	*Acacia melanoxylon*	Blackwood	Margins of RF
19	*Acalypha nemorum*	Southern Acalypha	North from Nowra
30	*Acronychia oblongifolia*	Common Acronychia	Margins of RF
	Actephila lindleyi	Actephila	North from Kiama
19	*Alchornea ilicifolia*	Native Holly	Dry RF north from Kiama
11,13	*Alectryon subcinereus*	Native Quince	Common in regenerating RF
25	*Alphitonia excelsa*	Red Ash	Common in dry RF
	Alstonia constricta	Quinine Bush	Shoalhaven Gorge
8	*Archontophoenix cunninghamiana*	Bangalow Palm	Rare escarpment species
	Atherosperma moschatum	Southern Sassafras	May occur at high altitude
30,33	*Backhousia myrtifolia*	Grey Myrtle	Common in dry RF
30	*Baloghia inophylla*	Brush Bloodwood	Low altitude riparian species
17	*Brachychiton acerifolius*	Flame Tree	South to Tapitallee
17	*Brachychiton populneus* subsp *populneus*	Kurrajong	Uncommon in dry RF
24,16	*Breynia oblongifolia*	Coffee Bush	Common in dry RF
15	*Bursaria spinosa* var *spinosa*	Black Thorn	Common in dry RF
28	*Callicoma serratifolia*	Black Wattle	Riparian on coastal sands
27	*Cassinia trinerva*	Common Cassinia	RF edge species
23	*Celtis paniculata*	Native Celtis	South to Kiama
28	*Ceratopelatum apetalum*	Coachwood	Common at higher altitudes
24,33	*Cinnamomum oliveri*	Oliver's Sassafras	North from Gerroa/Broughton
22,26	*Citronella moorei*	Churnwood	Climax RF species
19	*Claoxylon australe*	Brittlewood	Common in regenerating RF
13,18	*Clerodendrum tomentosum*	Hairy Clerodendrum	Common in regenerating RF
17	*Commersonia fraseri*	Brown Kurrajong	Common in regenerating RF
15	*Coprosma quadrifida*	Prickly Coprosma	Common in dry RF
16,22	*Cryptocarya glaucescens*	Jackwood	Common in regenerating RF
24	*Cryptocarya microneura*	Murrogun	Uncommon species
10	*Cupaniopsis anacardioides*	Tuckeroo	Coolangatta Mountain?
6	*Cyathea australis*	Rough Tree Fern	Abundant on RF edge
6	*Cyathea cooperi*	Coopers Tree Fern	Coastal RF
6	*Cyathea leichhardtiana*	Prickly Tree Fern	Higher altitude RF
31	*Cyclophyllum longipetalum*	Brush Canthium	North from Lake Conjola
29	*Daphnandra johnsonii*	Illawarra Socketwood	North of Berry
19	*Deeringia amaranthoides*	Deeringia	Uncommon on RF edge
17	*Dendrocnide excelsa*	Giant Stinging Tree	Common regrowth species
21	*Denhamia celastroides*	Denhamia	North from Macquarie Pass
6	*Dicksonia antarctica*	Soft Tree Fern	Higher altitude RF
22,26	*Diospyros australis*	Black Plum	Common in regenerating RF
22,26	*Diospyros pentamera*	Myrtle Ebony	Rare in region

11,25	*Diploglottis australis*	Native Tamarind	Uncommon in region
29	*Doryphora sassafras*	Sassafras	Common at higher altitudes
27	*Duboisia myoporoides*	Corkwood	RF edge
19	*Ehretia acuminata*	Koda	Common in dry RF
19	*Elaeocarpus holopetalus*	Black Oliveberry	Morton NP at high altitude
19	*Elaeocarpus kirtonii*	Pigeonberry Ash	Climax RF species
19	*Elaeocarpus reticulatus*	Blue-berry Ash	Common in dry RF
28	*Elaeodendron australe*	Red-fruited Olive Plum	Common in dry RF
31	*Emmenosperma alphitonioides*	Yellow Ash	Rare in area
24,33	*Endiandra sieberi*	Corkwood	Coastal RF to Jervis Bay
10,12	*Eucryphia moorei*	Plumwood	Montane areas c. above 400m
22	*Eupomatia laurina*	Bolwarra	Common in dry RF
10,12	*Euroschinus falcata*	Ribbonwood	Coastal RF to Jervis Bay
8	*Exocarpos cupressiformis*	Cherry Ballart	Edge of RF
18	*Ficus coronata*	Sandpaper Fig	Common beside creeks
18	*Ficus macrophylla*	Morton Bay Fig	South to Tapitallee
18	*Ficus obliqua*	Small-leaved Fig	Climax RF species
18	*Ficus rubiginosa*	Port Jackson Fig	Dry RF beside creeks, ridges
18	*Ficus superba var. henneana*	Deciduous Fig	Climax RF species
22	*Geijera salicifolia var latifolia*	Green Satinheart	North from Jamberoo
26	*Glochidion ferdinandi* var *ferdinandi*	Cheese Tree	Common regrowth species
28,32	*Gmelina leichhardtii*	White Beech	South to Broughton Vale
19	*Goodenia ovata*	Hop Goodenia	Edge of RF
12	*Goodia lotifolia*	Golden-tip	Edge of RF
11	*Guioa semiglauca*	Guioa	Common regrowth species
10	*Gymnostachys anceps*	Settlers Flax	Common climax RF species
29	*Hedycarya angustifolia*	Native Mulberry	Edge of RF
	Helicia glabrifolia	Smooth Helicia	North from Jamberoo
16,28	*Homalanthus populifolius*	Bleeding Heart	Common regrowth species
15	*Hymenanthera dentata*	Tree Violet	Common dry RF species
22	*Leptospermum polygalifolium*	Lemon-scented Tea-tree	Edge of RF
23	*Leucopogon lanceolatus* var. *lanceolatus*	Lace Beard-heath	Edge of RF
24	*Litsea reticulata*	Bolly Gum	Climax RF species
8	*Livistona australis*	Cabbage Tree Palm	Widespread in many RF types
24	*Lomatia myricoides*	River Lomatia	Riparian on sandy soils
8	*Macrozamia communis*	Burrawang	Edge of RF
	Maytenus silvestris	Narrow-leaved Orangebark	Shoalhaven Gorge
9	*Melia azedarach*	White Cedar	Dry RF
11	*Melicope micrococca*	White Euodia	Dry RF North from Parma Ck
22	*Myoporum acuminatum*	Mangrove Boobialla	Edge of littoral RF
21,27	*Myrsine howittiana*	Brush Muttonwood	Edge of low altitude RF
21,27	*Myrsine variabilis*	Muttonwood	Common dry RF species
32	*Notelaea longifolia var. longifolia*	Large Mock-olive	Dry RF
32	*Notelaea venosa var. venosa*	Smooth Mock-olive	Dry RF
19	*Olearia argophylla*	Musk Dairy Bush	High altitudes – Cambewarra Mt
24	*Ozothamnus diosmifolium*	Rice Flower	Edge of RF
9	*Pararchidendron pruinosum*	Snowwood	Rare - north from Bamarang
22,26	*Pennantia cunninghamii*	Brown Beech	Riparian on escarpment
24	*Phyllanthus gasstroemii*	Blunt Spurge	Edge of RF
32	*Pimelea ligustrina*	Tall Rice Flower	Edge of RF

13	*Pisonia umbellifera*	Bird Lime Tree	Rare south to Jervis Bay
15	*Pittosporum multiflorum*	Orange Thorn	Common regrowth species
13	*Pittosporum revolutum*	Rough-fruited Pittosporum	Common regrowth species
13	*Pittosporum undulatum*	Sweet Pittosporum	Common regrowth species
8,24	*Podocarpus elatus*	Plum Pine	Dry & littoral RF south to Jervis Bay
29	*Polyosma cunninghamii*	Featherwood	Higher altitude RF
9	*Polyscias elegans*	Celery Wood	Dry RF south to Jervis Bay
11,13	*Polyscias murrayi*	Pencil Cedar	Dry RF pioneer
13	*Polyscias sambucifolia*	Elderberry Panax	Two forms in area
18	*Pomaderris aspera*	Hazel Pomaderris	Edge of RF
18	*Pouteria australis*	Black Apple	South to Shoalhaven River
30	*Prostanthera lasianthos*	Mint Bush	Edge of RF at high altitude
31	*Psychotria loniceroides*	Hairy Psychotria	Higher altitude RF
16,27	*Quintinia sieberi*	Possumwood	Higher altitude RF
30	*Rhodamnia rubescens*	Scrub Stringybark	Edge of low altitude RF
28	*Sambucus australasica*	Native Elderberry	Margins of RF
32	*Santalum obtusifolium*	Sandalwood	Shrub on edge of RF
30	*Sarcomelicope simplicifolia*	Yellow Aspen	Edge of low altitude RF
28	*Schizomeria ovata*	Crab Apple	Higher altitude RF
16	*Scolopia braunii*	Flintwood	Coastal RF
19	*Senecio linearifolius*	Fireweed Groundsel	Common shrub on RF edge
18	*Sloanea australis*	Maiden's Blush	Uncommon but in some STR
17,27	*Solanum aviculare*	Kangaroo Apple	Common pioneer species
15	*Solanum prinophyllum*	Forest Nightshade	Edge of RF
15	*Solanum celatum*	Illawarra Apple	Rare on RF edge-Tapitallee
15	*Solanum stelligerum*	Devil's Needles	Locally common on RF edge
23	*Stenocarpus salignus*	Scrub Beefwood	Common pioneer species
18	*Streblus brunonianus*	Whalebone Tree	Dry RF
21	*Symplocos thwaitesii*	Buff Hazelwood	Dry RF – Gerringong Ck, KV
13	*Syncarpia glomulifera*	Turpentine	RF edge
10,13	*Synoum glandulosum*	Bastard Rosewood	Common on sandy soils
30	*Syzygium australe*	Brush Cherry	Riparian species
30	*Syzygium paniculatum*	Magenta Lilly Pilly	Coastal RF north from Lake Conjola
30	*Syzygium smithii*	Lilly Pilly	Common species
13,15	*Tasmannia insipida*	Native Pepper	Higher altitude RF
6	*Todea barbara*	King Fern	Riparian species, RF edge
10	*Toona ciliata*	Red Cedar	Common regrowth species
18	*Trema tomentosa var. aspera*	Native Peach	Common regrowth species
22	*Tristaniopsis collina*	Mountain Water Gum	Riparian areas
22	*Tristaniopsis laurina*	Water Gum	Riparian areas
29	*Wilkiea huegeliana*	Wilkiea	North from Beecroft Peninsula
12	*Zieria arborescens*	Tall Zieria	Uncommon in north of area
12	*Zieria granulata*	Illawarra Zieria	North of Berry
12	*Zieria smithii*	Sandfly Zieria	Abundant on RF edge
12	*Zieria tuberculata*	Warty Zieria	Dry RF, Cambewarra Mt