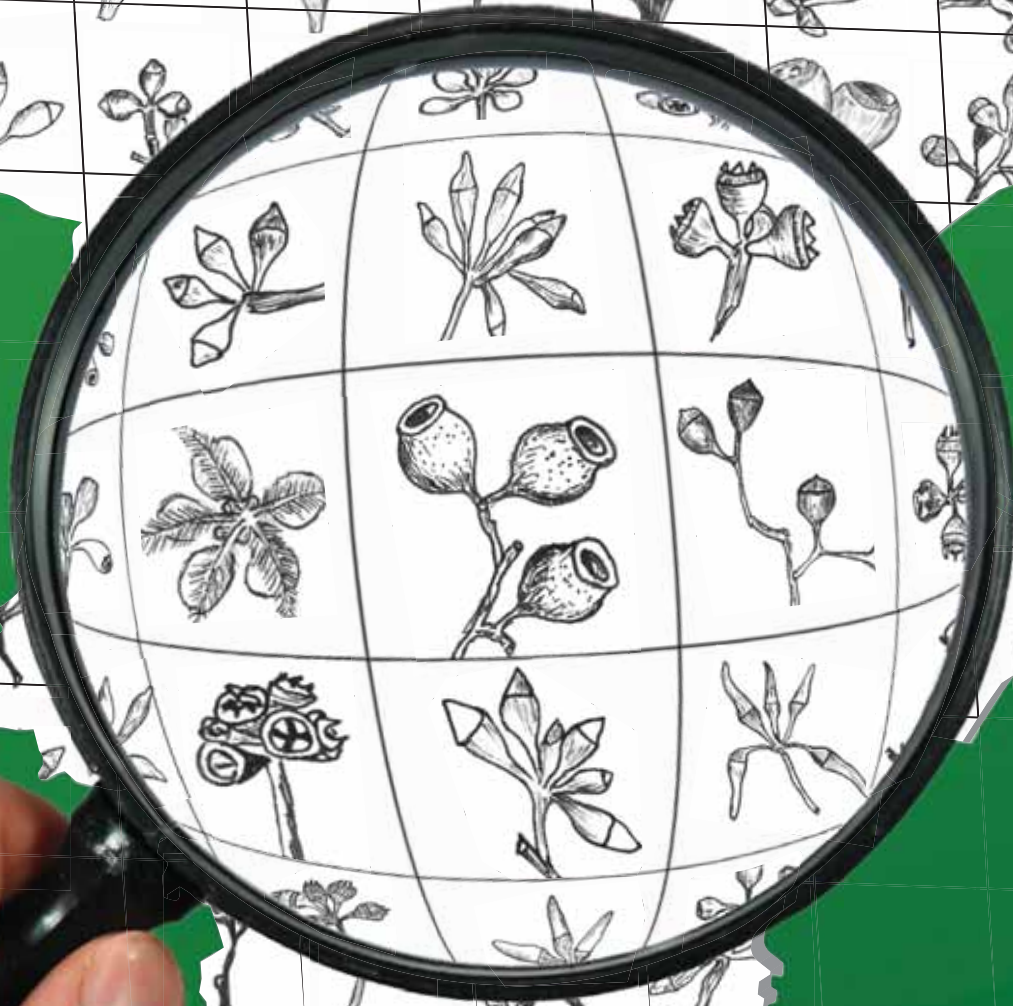


A key to identifying local gum trees



All illustrations of flowers, buds and gumnuts of species are drawn life-sized.
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Recommended further reading:
Eucalypts of the Brisbane Region; H. T. Clifford
Eucalyptus Buds and Fruit; G.M. Chippendale
Mangroves to Mountains; Logan Branch, SGAP
Wild Plants of Greater Brisbane; Qld Museum
Flora of SEQ; Stanley and Ross
Noosa's Native Plants; Stephanie Haslam
Field Guide to Eucalypts, Vol 3; Broeker & Kleinig

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Gum trees are an important part of Australia's forests, and identify our country as unique.

Gum trees, as they are commonly known, are divided by botanists into many different plant groups. This has created a lot of confusion as the Eucalyptus group has been split over the years to Corymbia, Angophora and others. This will probably continue to happen as more investigations into genetics occur.

To those of us without a botanical background, trees that look like gum trees will always remain as gum trees (whether they are Eucalyptus or not).

This key is for identifying 'gum trees', and so covers all the different local groups that we might think of as gums.

Gum trees are relatively easy to identify into groups – 'that's an ironbark' – however, the species level is usually much more difficult.

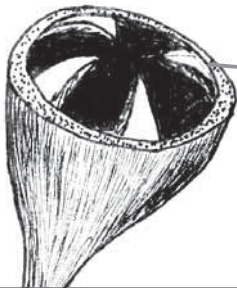
We have tried to use bark and leaves as a way to separate the species but this is not always possible – sometimes we have to look at the flowers or fruit (gumnuts). This can involve scratching around on the ground for gumnuts, and hoping that what we find are from the tree that we wish to identify.

As with most things, practice makes perfect, and after a while a good 'gum-spotter' can tell the species by the way it looks (bark colour, leaf colour and the way it grows).

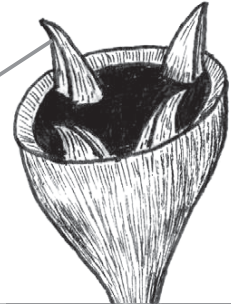
Happy gum-spotting!

Some terms used in this key

Gumnuts



Valves exerted, and incurved



Valves exerted, and curved outwards

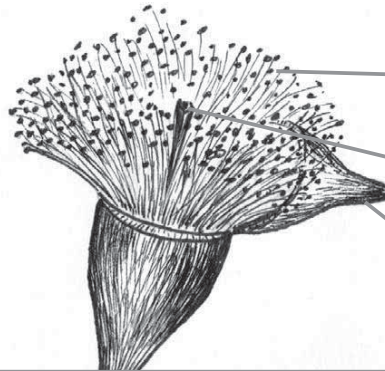
Flowers



Bud cap

Scar

Stem / base of bud (pedicel)



Stamens

Pistil

Bud cap

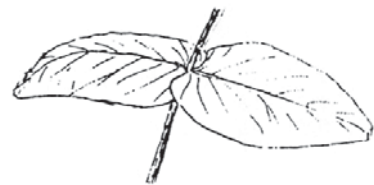
Leaves



Symmetrical leaf base



Oblique leaf base



Stem-clasping leaves with no leaf-stalk (petiole / leaf-stem)



Opposite leaves



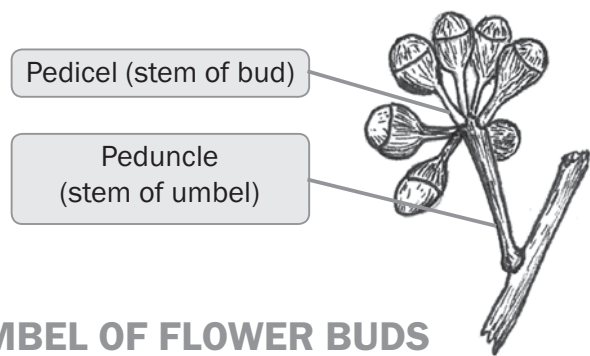
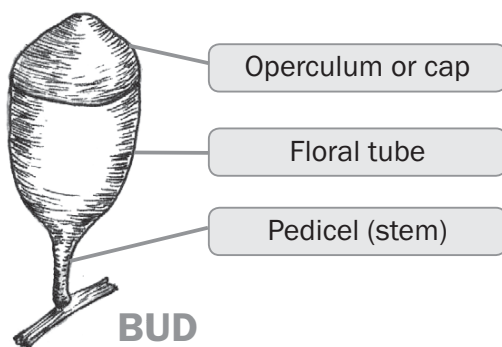
Alternate leaves

Mature leaves and juvenile leaves, for some species, differ. Regrowth and juvenile leaves are usually similar, and are useful for identification. Juvenile leaves are found on seedling plants and small saplings. Regrowth leaves occur on twigs that grow from older trunks and branches.

Terms relating to gum trees

Flower buds

Flower buds may consist of two parts – floral tube (lower) and cap (operculum). The cap encloses stamens before the flower opens, and falls off when it does open. With some gums, such as *Angophoras* (Apple gums) and *Lophostemons* (Brush Box and Swamp Box), there is no cap. Flower bud features include – shape of the cap and its length, and the length of the floral tube relative to the length of the pedicel. Flower buds usually occur in groups (umbels) attached to a peduncle.



Fruits ('gumnuts')

Fruits are used to key out species. Note the following features:

1. Shape – eg globular (spherical), hemispherical (half-sphere).
2. Size – pedicel (stem) size is not included in measurements of buds.
3. Valves – these open to release seeds. They may be exerted (protruded) above the top of the fruit, level with the top of the fruit, or enclosed in the fruit.
4. Disc – this may be obvious and wide, narrow, or obscured. Its surface may be concave (curved inwards), convex (curved outwards) or flat, sloping inwards, outwards or horizontal.



Disc – convex



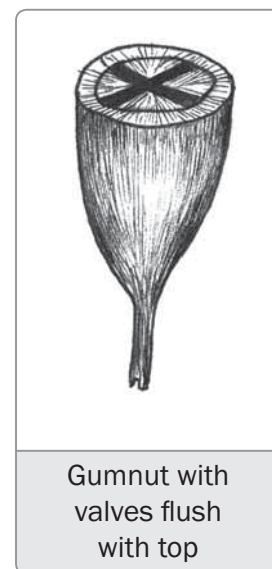
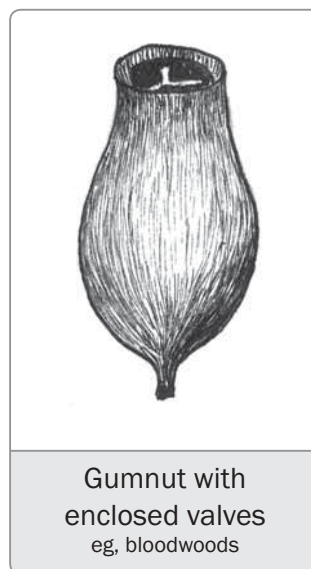
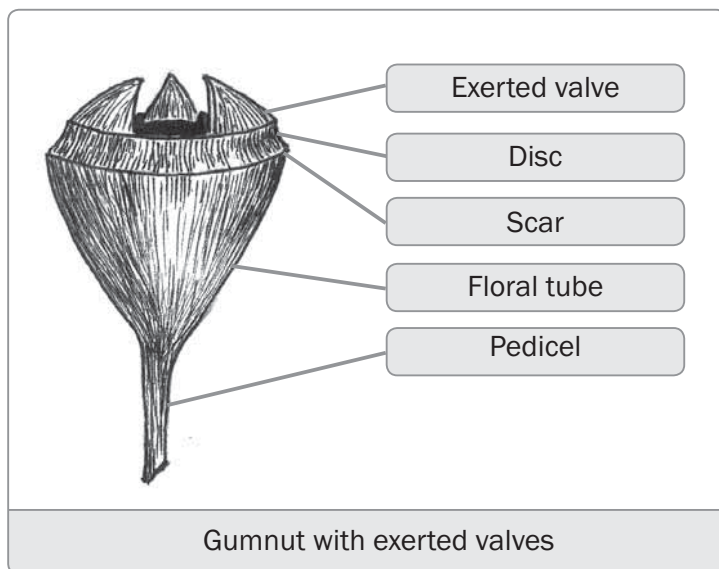
Disc – concave



Disc – sloping inwards



Disc – sloping outwards



How to use this key

This is a dichotomous key – it divides continually into two.

For each new plant being identified, start again at the beginning of the key.

At each step we have to make a decision as to which direction to go (eg 2a or 2b; or, 4a or 4b, etc) depending on the feature of the plant described, until we find the correct name.

For each species (except for *Corymbia ptychocarpa*), diagrams illustrate the flower buds, the fruit (gumnuts), the silhouette of a flower bud and the silhouette of a fruit, all life-sized. Flowers of a few species are also illustrated.

Remember, all species vary depending on their genetic makeup and the environmental conditions in which they have lived. There is also variation within each feature of an individual plant depending on environmental factors.

All illustrations of flowers, buds and gumnuts are drawn life-size.

Start of the key

Step 1 – What sort of bark does it have?

(All descriptions refer to mature trees)

Description

Trunks smooth with dimples, mottled, pink / bluish / green-grey

A

**SPOTTED GUMS AND
SMOOTH-BARKED
APPLES**

Page **8**



Description

Upper trunk smooth; lower half of trunk with rough bark

B

HALF-BARKS

Page **9**



Description

Trunk mostly smooth (except for a small amount of rough bark on lower butt)

C

GUM-BARKS

Page **13**



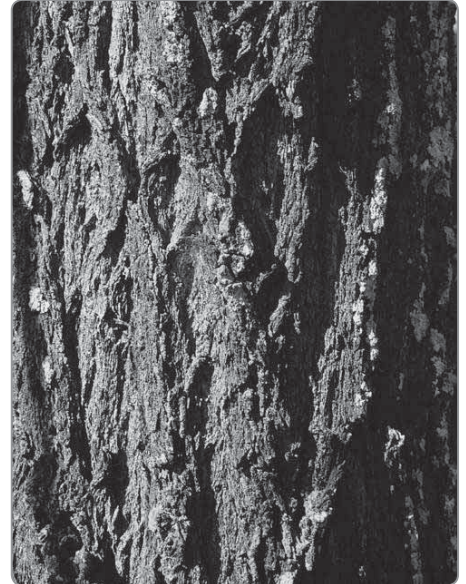
Description

Bark deeply and vertically furrowed, rough, hard, persistent on trunk and branches

D

IRONBARKS

Page **18**



Description

Flaky, fibrous bark broken into plates or scales over trunks and branches. Rub between the palms – **bark breaks down to a powder**

E

BLOODWOODS AND ROUGH-BARKED APPLES

Page **20**



Description

Stringy and fibrous bark over trunk and branches. Can be pulled away in strips. Rub between the palms – **bark breaks down to a powder and fibres**

F

STRINGYBARKS AND FALSE STRINGYBARKS

Page **23**



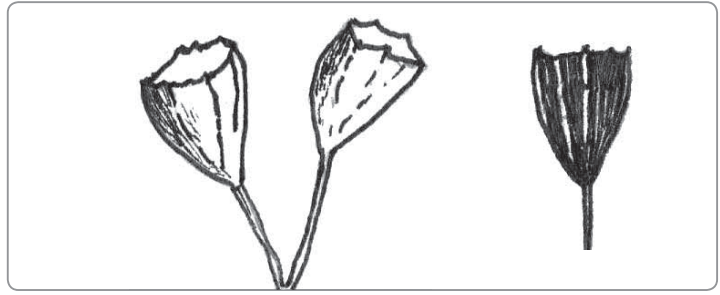
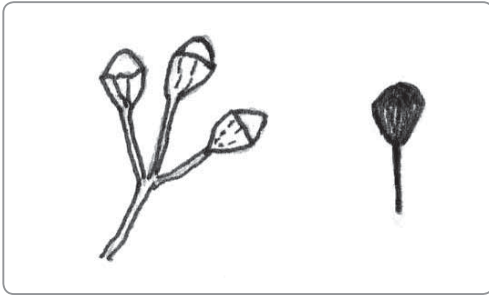
A

SPOTTED GUMS AND SMOOTH-BARKED APPLES

Trunk smooth with dimples

1a. Adult leaves opposite. Buds without caps. Gumnuts with small teeth, and slightly ribbed (12mm x 9mm). Trunk and branches often twisted.

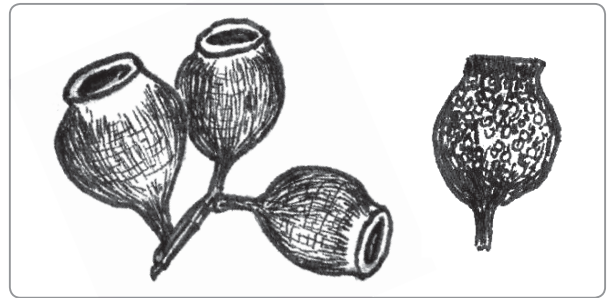
Rusty Gum / Smooth-barked Apple (*Angophora leiocarpa* – prev. *A. costata*)



1b. Adult leaves alternate. Buds with caps 2

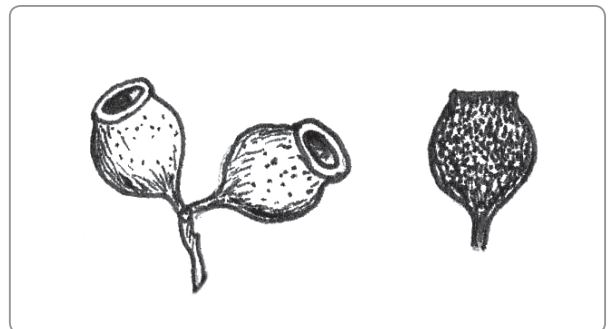
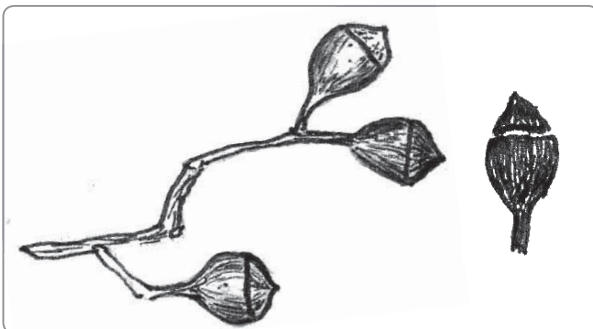
2a. Large / wide adult leaves to 28cm x 4.5cm. Gumnuts 1.2cm x 1.5cm

Large-leafed Spotted Gum (*Corymbia henryi*)



2b. Adult leaves to 18cm x 2.5cm. Gumnuts 8mm x 13mm

Spotted Gum (*Corymbia citriodora* – prev. *C. maculata*)



B

HALF-BARKS

Upper trunk smooth. Lower half (approx.) with rough bark

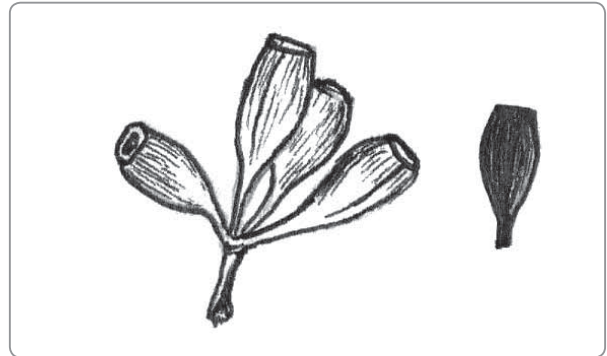
Lower bark 'box-barked' dark grey with narrow vertical grooves 1 to 2cm apart and less-obvious horizontal grooves 1



Lower bark not 'box bark' 2

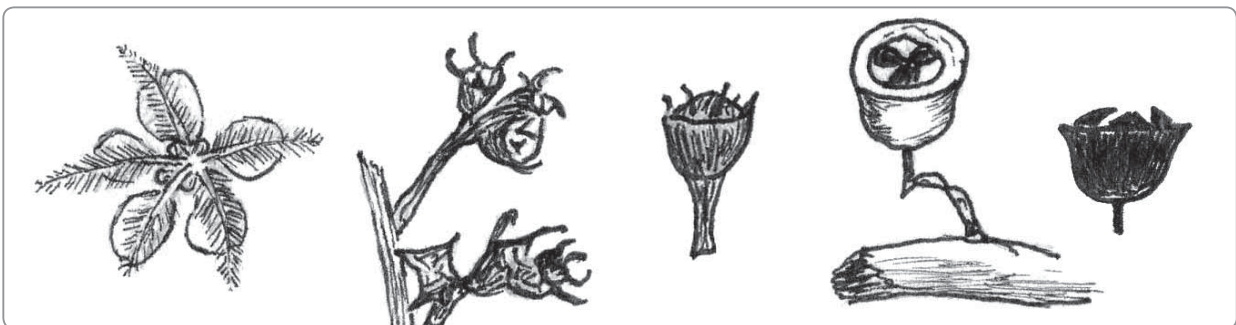
1a. Upper bark shed in long strips to show whitish to light grey smooth bark. Leaves 2 – 8cm wide, same colour both sides. Gumnuts 5 – 6mm wide.

Gum-topped Box (*Eucalyptus mollucana*)



1b. Upper bark smooth and often brownish / pink or salmon-coloured. Leaves glossy dark green above and crowded at end of branchlets. No bud caps; flowers with 5 petals. Gumnuts bell-shaped and 3-celled.

Brush Box (*Lophostemon confertus*)



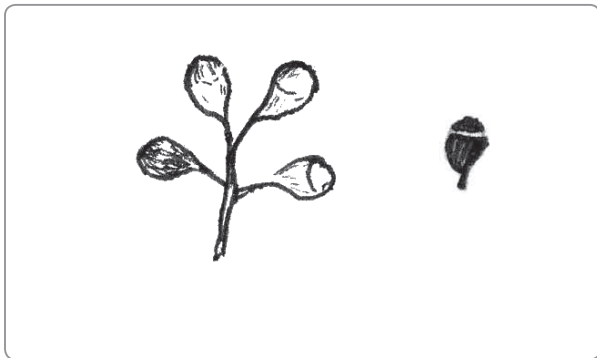
B

HALF-BARKS (cont.)

Upper trunk smooth. Lower half (approx.) with rough bark

2a. Lower bark dark with small tile-like pieces; upper bark smooth; deciduous – yellowish new bark but maturing to grey. Leaves weeping, long, thin and light green. Gumnuts thin and easily crushed.

Moreton Bay Ash / Carbeen (*Corymbia tessellaris*)

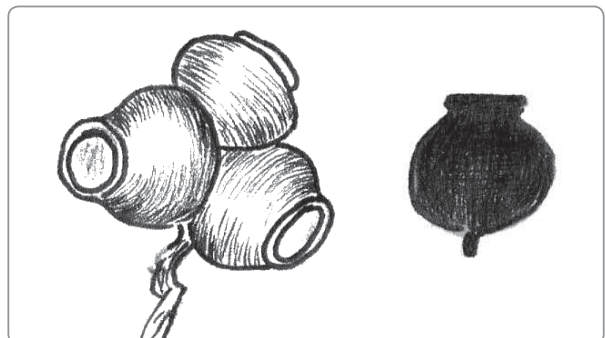
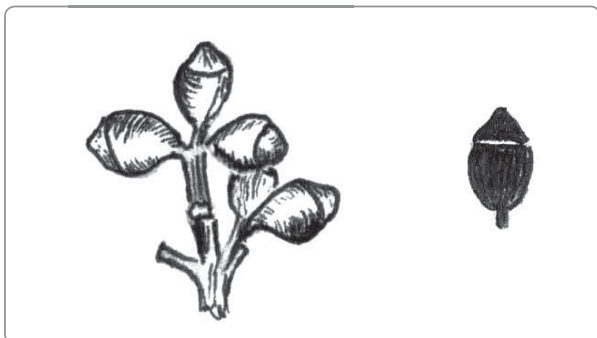


2b. Lower bark not dark and tile-like 3

3a. Upper bark smooth and grey-green. Lower bark (often not extending far up trunk) rough, fibrous, scaly, persistent. Young tips reddish with white hairs. Leaves often rounded and sooty. Gumnuts globular and urn-like, 9 – 14mm long.

Cadaghi (*Corymbia torelliana*)

Not local to the area, but cultivated and feral



3b. Smooth bark not greenish 4

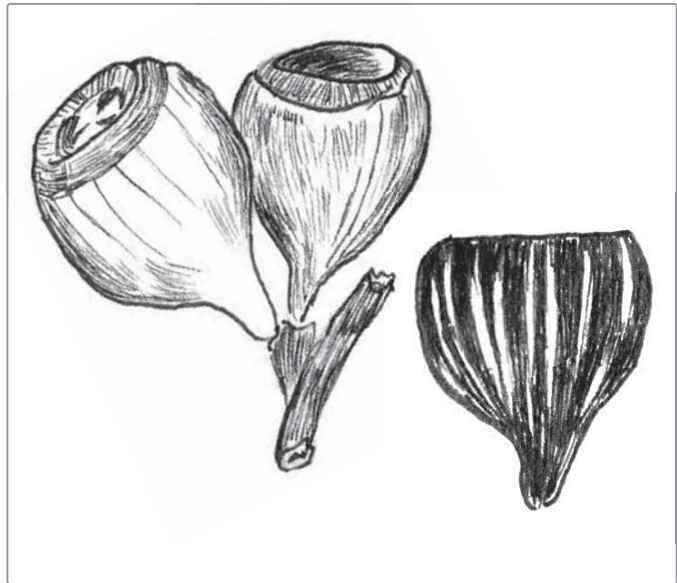
B

HALF-BARKS (cont.)

Upper trunk smooth. Lower half (approx.) with rough bark

4a. (Careful) Fibres splintery and hard if rubbed. Bark rough, fibrous, over most or all of trunk and branches. Buds and gumnuts large (to 2.5cm x 2.5cm) and ridged.

Needle-barked Stringybark (*Eucalyptus planchoniana*)

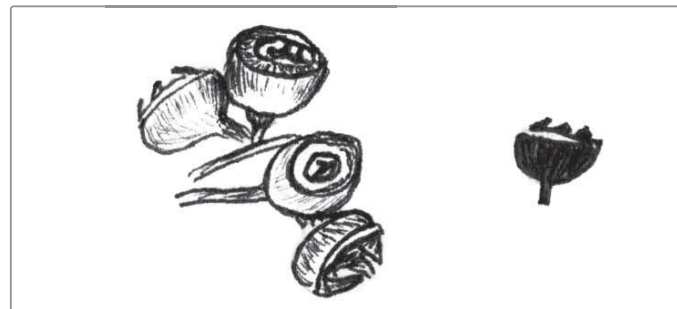
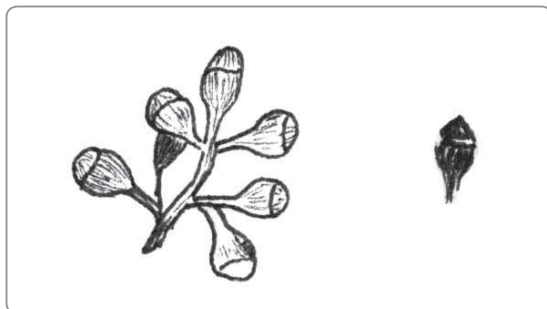


4b. Fibres not splintery and hard when rubbed.....5

5a. Rough bark persists high into trunk and branches. Large bunches of buds and gumnuts. Lower bark, rough and fissured, yellow-brown to dark brown. Upper branches smooth.

Gympie Messmate (*Eucalyptus cloeziana*)

Not local to the area, but cultivated



B

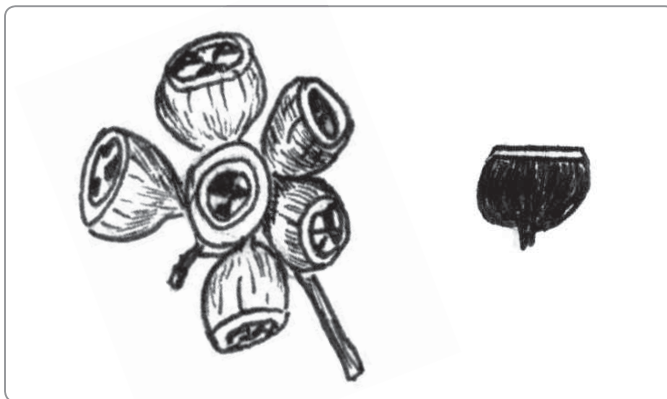
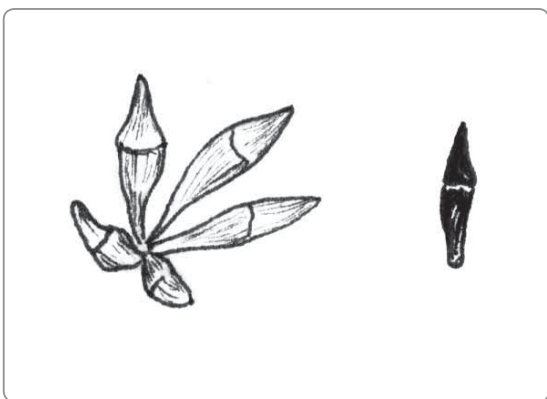
HALF-BARKS (cont.)

Upper trunk smooth. Lower half (approx.) with rough bark

5b. Persistent rough bark usually less than half the trunk and branches.

Lower bark finely fibrous, thick and spongy, brown to grey. Upper bark whitish, often with scribbles and shed in strips left hanging in branch angles. Gumnuts 8 – 11mm wide. Leaves 1 – 4cm wide.

Blackbutt (*Eucalyptus pilularis*)



C

GUM-BARKS

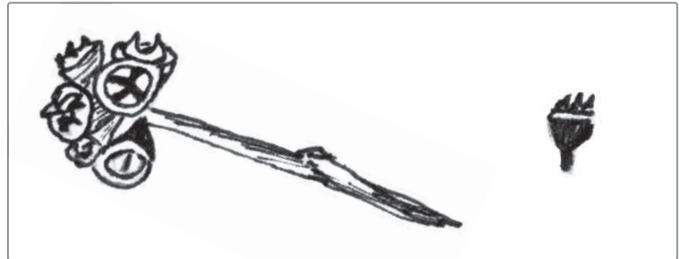
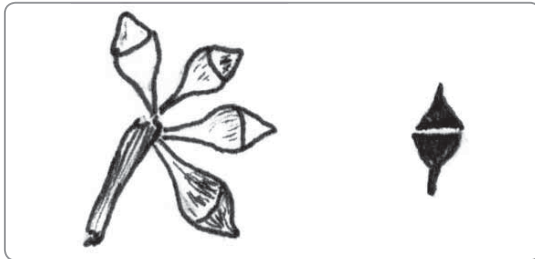
Trunk mostly smooth

1a. Scratch the bark lightly and horizontally with a fingernail – bark is spongy and becomes indented but with no juicy green tissue. New bark orange, weathering to yellowish, creamy grey2

1b. Scratch the bark lightly and horizontally with a fingernail – the bark is hard, and cuts to reveal moist green tissue. Most of the trunk and branches white or grey-white3

2a. Flower buds small, in groups of 8 to 15, not ridged, and with low-pointed caps and short stems. Gumnuts 3 – 4mm long. Valves 3 or 4.

Small-fruited Grey Gum (*Eucalyptus propinqua*)



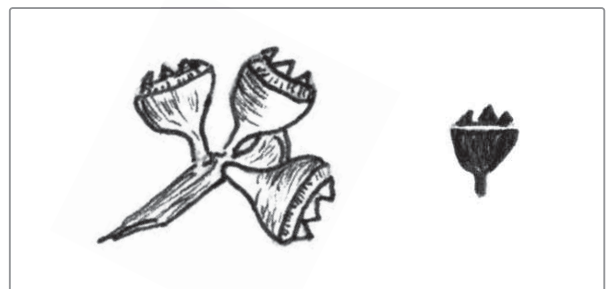
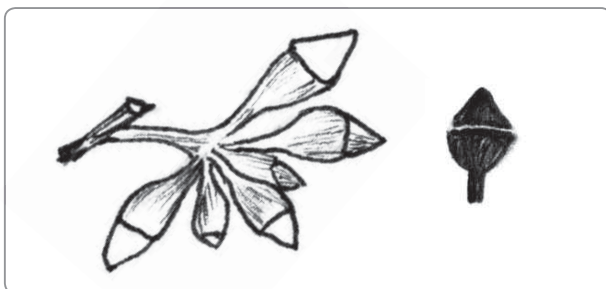
2b. Flower buds in groups of 74

3a. Adult leaves different hue above and below5

3b. Adult leaves same hue above and below7

4a. Flower buds, with long stems and pointed caps.

Large-fruited Grey Gum (*Eucalyptus biturbinata* – prev. *E. punctata*)



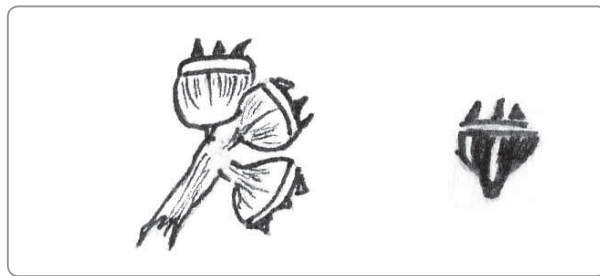
C

GUM-BARKS (cont.)

Trunk mostly smooth

4b. Flower buds ridged. Bud caps pointed or beaked (pointed and bent). Gumnuts 4 – 5mm long.

Mountain Grey Gum (*Eucalyptus major*)



5a. Small tree or mallee (small and multi-stemmed tree). Trunk smooth greenish, light grey or white. Bark shed in long ribbons. Gumnuts often ribbed or wrinkled when dry. Gumnuts with valves below rim.

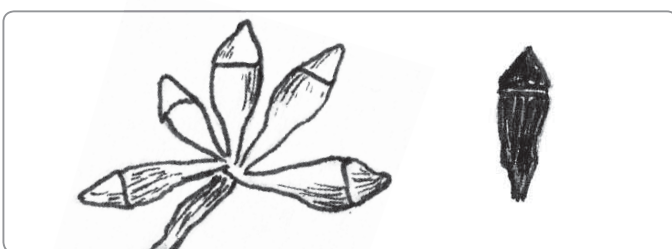
Plunket Mallee (*Eucalyptus curtisii*)



5b. Trunk usually straight and tall, smooth shiny white or grey-white. Bark shed in long strips. Gumnuts with protruding valves.....6

6a. Gumnuts with 4 or 5 broad valves protruding and incurved.

Flooded / Rose Gum (*Eucalyptus grandis*)



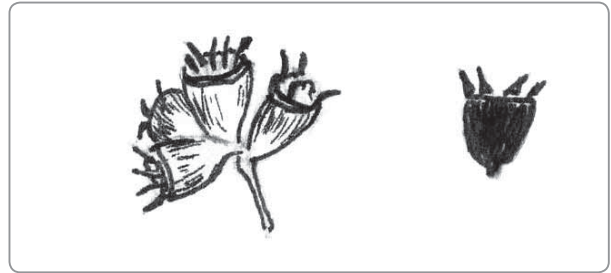
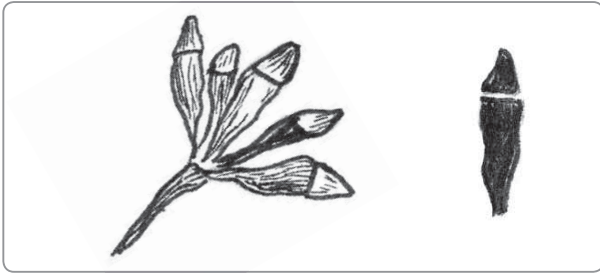
C

GUM-BARKS (cont.)

Trunk mostly smooth

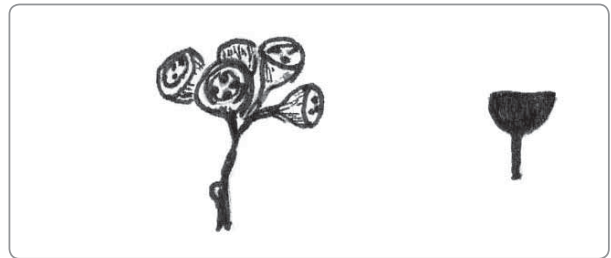
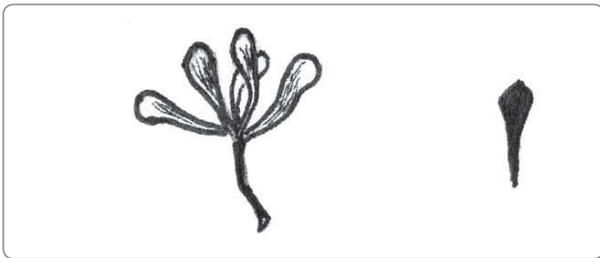
6b. Gumnuts with 3 or 4 valves with thin pointed tips protruding and erect and out-curved.

Sydney Blue Gum (*Eucalyptus saligna*)



7a. Most of trunk and branches with thin, dark zigzag scribbles. Bark pale yellow when fresh; white when older. Gumnuts with valves at or below rim. Adult leaves slightly glossy green.

Scribbly Gum (*Eucalyptus racemosa*)



7b. Grey-white or whitish trunk without scribbles. Buds long and pointed. Gumnuts with valves protruding8

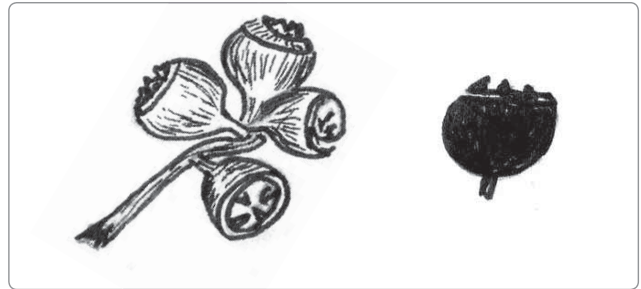
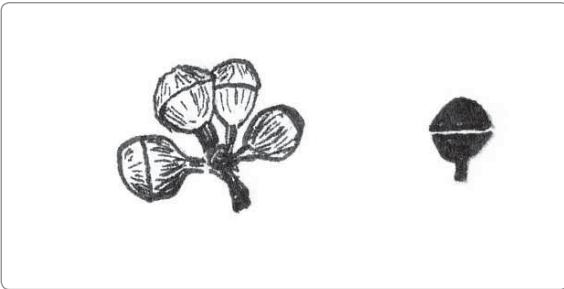
C

GUM-BARKS (cont.)

Trunk mostly smooth

8a. Bark white and powdery, becoming pink or reddish before peeling. Adult leaves often oval, dull light green. Bud caps hemispherical.

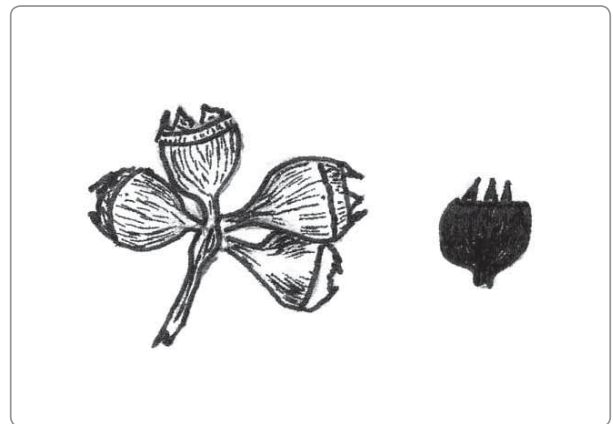
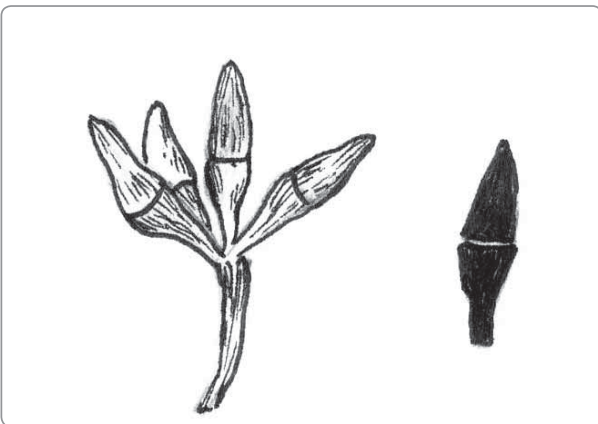
White Gum (*Eucalyptus platyphylla* – prev. *E. alba*)
Not local to the area, but cultivated.



8b. Most of trunk and branches white, grey, dark-grey or blue-grey. Bud caps long. Leaves grey-green / blue-green 9

9a. Coastal. Bark grey or dark-grey to grey-brown, peeling in large patches or flakes – new bark bright orange. Gumnuts often angular or ribbed, valves very protruding. Leaves thick.

Orange Gum / Bancroft's Red Gum (*Eucalyptus bancroftii*)



9b. Bark grey, white or bluish white, or cream, new bark never bright orange..... 10

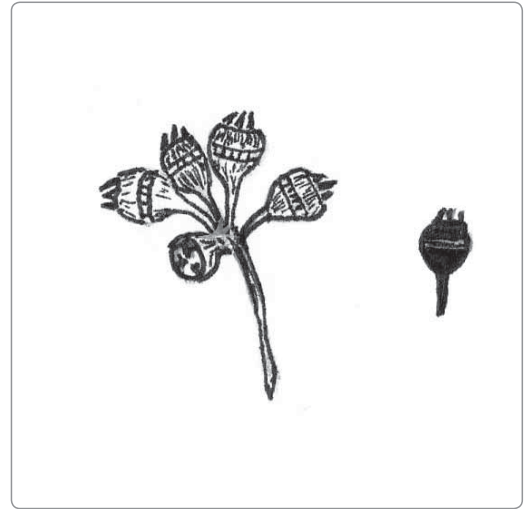
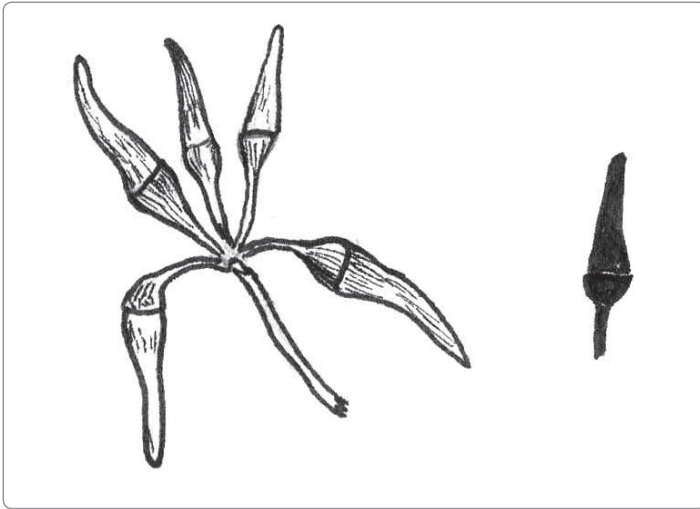
C

GUM-BARKS (cont.)

Trunk mostly smooth

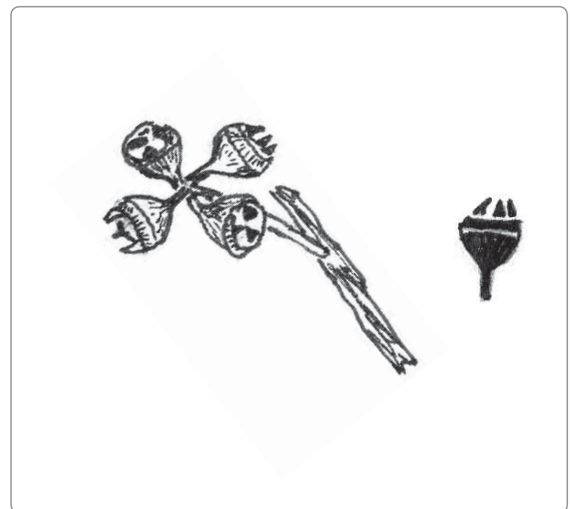
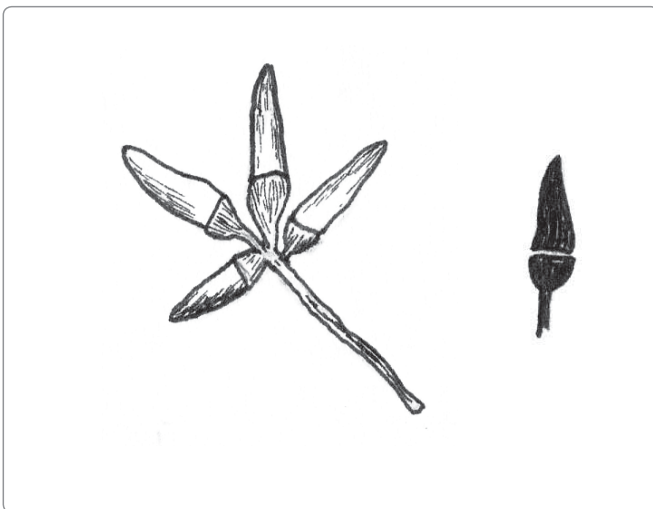
10a. Glossy / shiny smooth bark, white or bluish-white with darker grey patches. Often scaly and rough at base. Drooping leaves, mostly curved. Juvenile and regrowth leaves mostly broad. Large tree. Widespread and variable.

Queensland Blue Gum (*Eucalyptus tereticornis*)



10b. New bark mottled, white to yellowish, becoming dull grey. Often with narrow weeping foliage. Juvenile and regrowth leaves narrow.

Narrow-leaved Red Gum (*Eucalyptus seeana*)



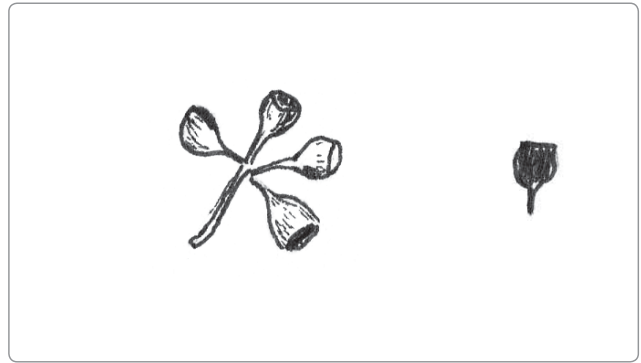
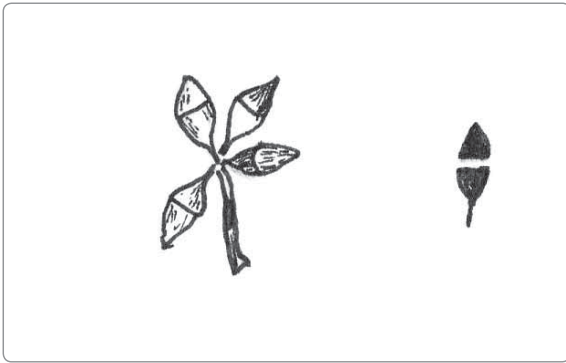
D

IRONBARKS

Bark deeply and vertically furrowed

1a. Leaves opposite, stem-clasping and without stalks (stems or petioles), silver. Bark persistent, dark brown-black, hard and furrowed.

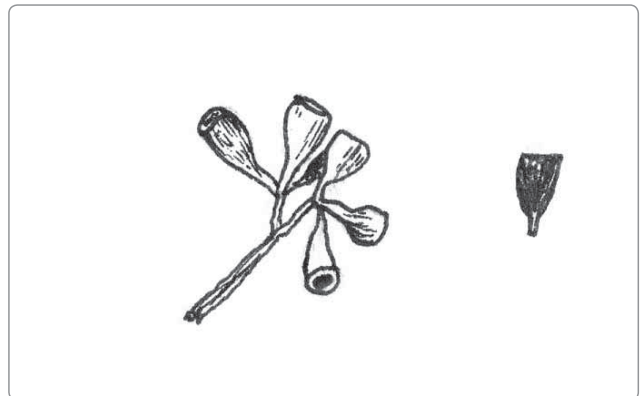
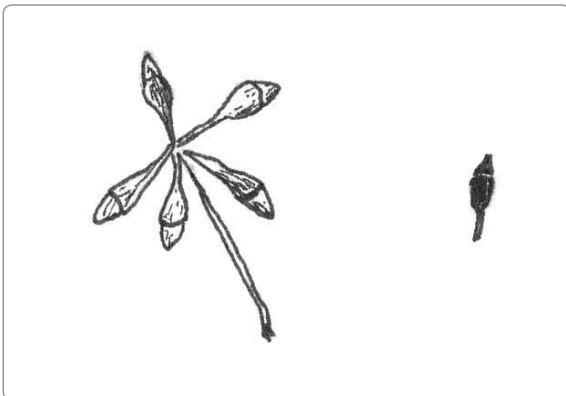
Silver-leaved Ironbark (*Eucalyptus melanophloia*)



1b. Leaves alternate, with distinct stalk (stem).....2

2a. Juvenile and regrowth leaves less than 1.5cm wide. Adult leaves narrow (to 2cm) dull green or bluish grey-green. Buds rounded or pointed. Bud cap shorter than bud base (floral tube). Gumnuts 3 – 5mm long.

Narrow-leaved Ironbark (*Eucalyptus crebra*)



2b. Juvenile and regrowth leaves more than 1.5cm wide3

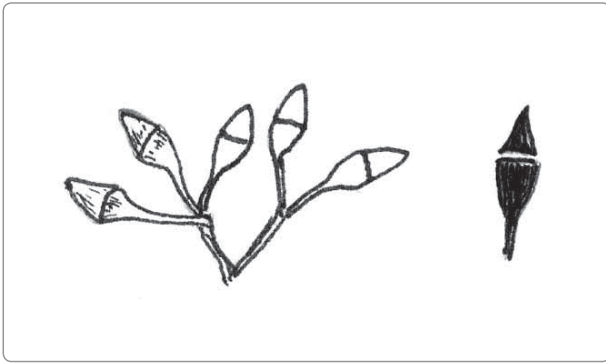
D

IRONBARKS (cont.)

Bark deeply and vertically furrowed

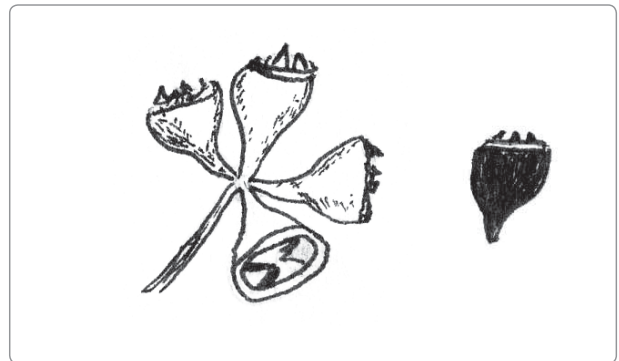
3a. Adult leaves dull green or grey-green to about 2cm wide. Juvenile and regrowing leaves similar to adult leaves. Buds with distinct point, cap same length as base. Gumnuts 5 – 8mm long.

Grey Ironbark (*Eucalyptus siderophloia* – prev. *E. drepanophylla*)



3b. Adult leaves 3 – 5cm wide, stiff, dull dirty green. Juvenile and regrowth leaves greener, larger and more circular. Buds long (8 – 15mm). Gumnuts 8 – 15mm. Bark flaky, fibrous and rough.

Broad-leaved Ironbark (*Eucalyptus fibrosa*)



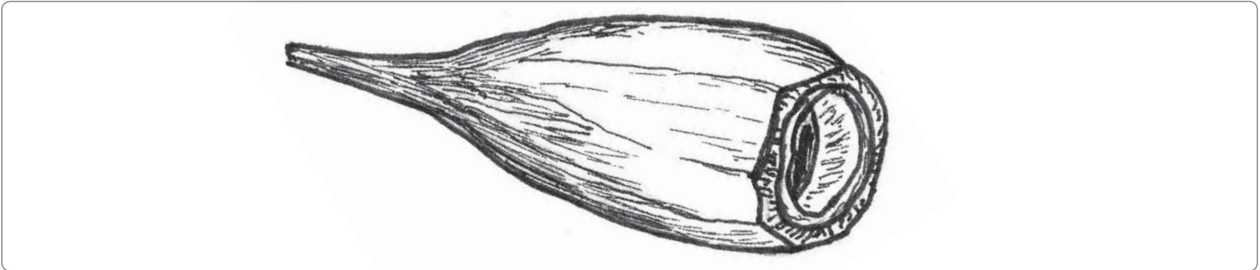
E

BLOODWOODS AND ROUGH-BARKED APPLES

Flaky, fibrous bark

1a. Gumnuts very large (more than 3cm long) and ribbed. Leaves very large (3.5 – 7cm wide).

Swamp Bloodwood (*Corymbia ptychocarpa*)
Not local to the area, but cultivated



1b. Gumnuts less than 2cm long.....2

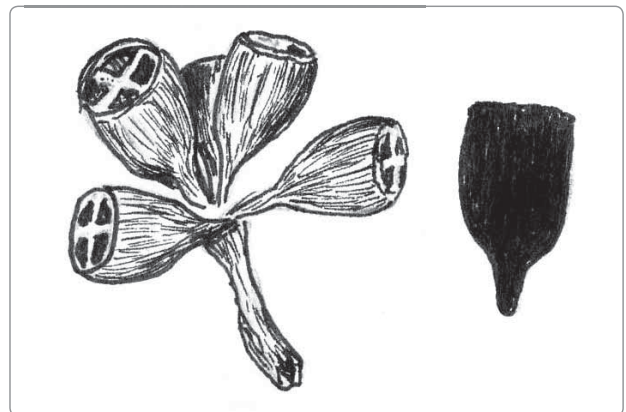
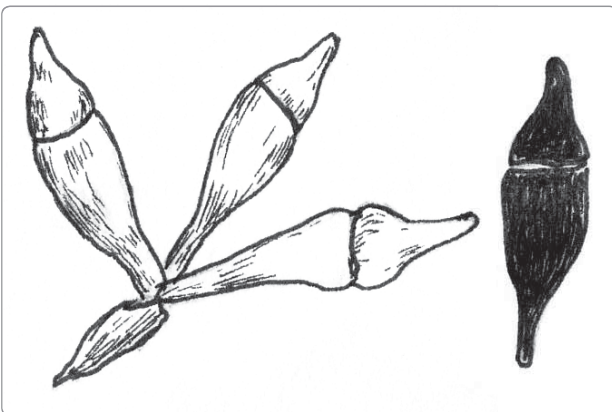
2a. Mature leaves alternate. Buds with caps3

2b. Mature leaves in opposite pairs. Buds without caps4

3a. Bark in chunky flakes. Bud caps short5

3b. Bark in coarse, soft spongy long slabs with deep, vertical furrows. Leaves 3 – 8cm wide, often pointed each end. Bud caps long and beaked. Gumnuts cylindrical. Valves usually joined across the opening.

Swamp Mahogany (*Eucalyptus robusta*)



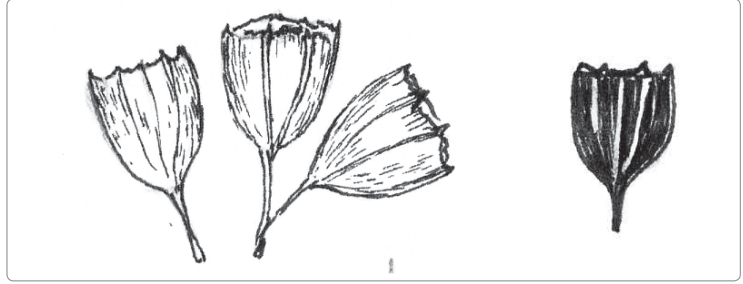
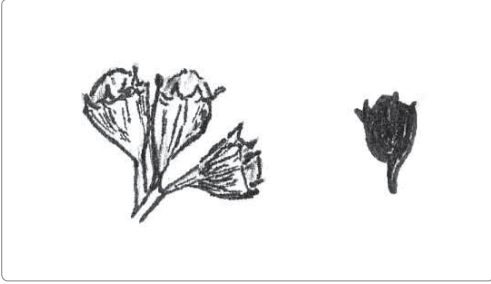
E

BLOODWOODS AND ROUGH-BARKED APPLES (cont.)

Flaky, fibrous bark

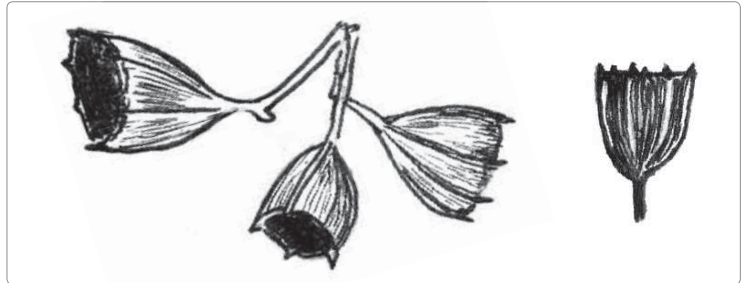
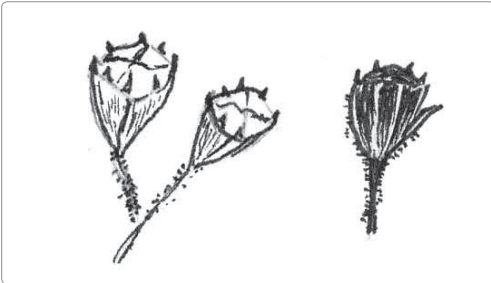
4a. Leaves (2 – 6cm wide) without stems and appearing to clasp the branchlets. Bark rough, flaky and brittle. Branches often hang down. Gumnuts distinctly ribbed.

Broad-leafed Apple (*Angophora subvelutina*)



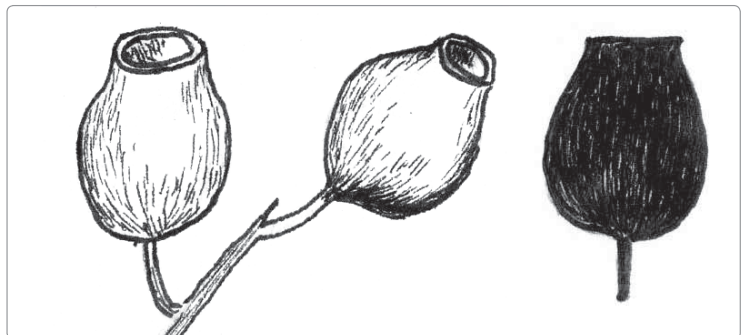
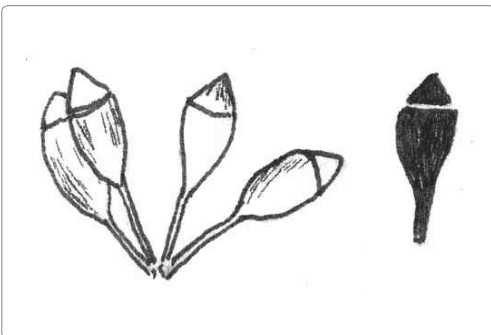
4b. Leaves (1 – 4cm wide) with stems and not stem-clasping. Bark rough and furrowed. Branches often hang down. Gumnuts distinctly ribbed.

Smudgee (*Angophora woodsiana*)



5a. Gumnut opening not flared, gumnuts large (to 2cm long). Bark grey to light brown and persistent to smallest branches, chunky flakes with irregular vertical and transverse cracks.

Pink Bloodwood (*Corymbia intermedia*)



E

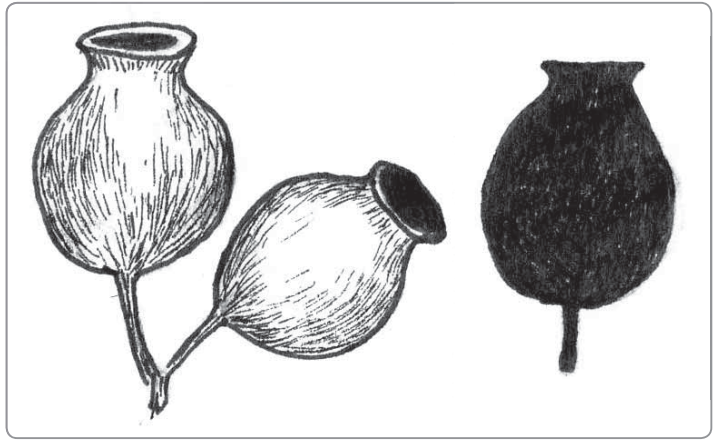
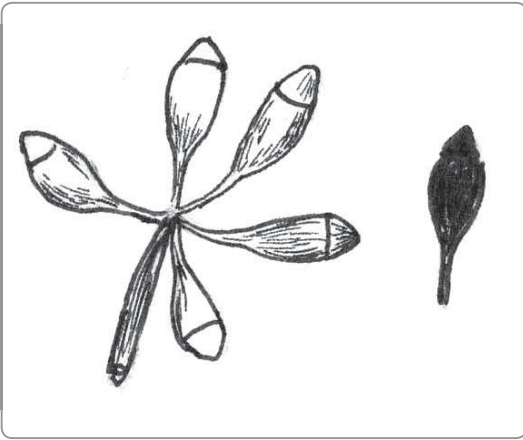
BLOODWOODS AND ROUGH-BARKED APPLES (cont.)

Flaky, fibrous bark

5b. Gumnuts with flared openings.....6

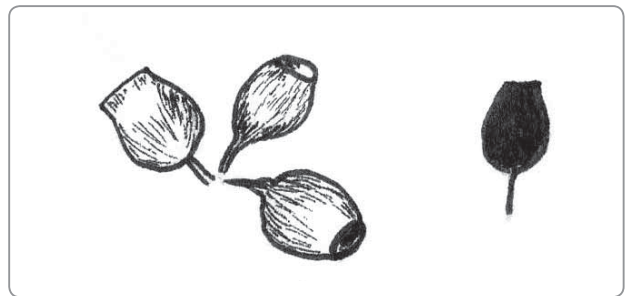
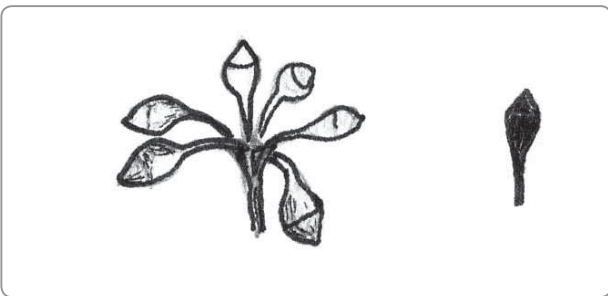
6a. Gumnuts large (to 1.8cm long). Bark rough with chunky flakes except on small branches where it is deciduous, smooth and white. Gumnuts often dull and scaly.

Red Bloodwood (*Corymbia gummifera*)



6b. Gumnuts small (to 7 – 10mm). Bark persistent, yellowish brown, rough and shortly fibrous.

Brown Bloodwood (*Corymbia trachyphloia*)



F

STRINGYBARKS AND FALSE STRINGYBARKS

Stringy and fibrous bark

1a. "Fruit" composed of about 7 gumnuts fused together9

1b. Gumnuts not fused together2

2a. Bark brown or grey, fissured and flaky brittle and almost papery – can be pulled away in long strips. Buds without caps. Flowers with 5 distinct petals. Gumnuts small and bell-shaped (to 6mm x 8mm). Leaves crowded at end of branches.

Swamp Box (*Lophostemon suaveolens*)



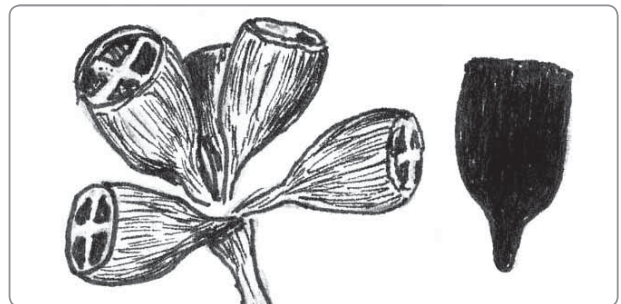
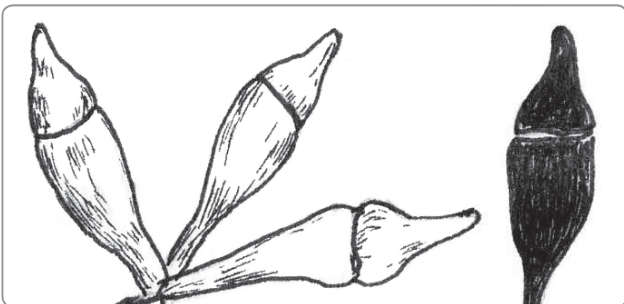
2b. Bark persistent, rough, fibrous, stringy or spongy – can be pulled away in long strips. Flakes not papery. Buds with caps. Flowers typical of eucalypts (ie, without petals).....3

3a. Leaves darker green above, paler below.....4

3b. Leaves with both sides the same colour5

4a. Bark in coarse, soft spongy long slabs and deep, vertical furrows; rubs away to dust with no fibres. Leaves 3 – 8cm wide, often pointed each end. Bud caps long and beaked. Gumnuts cylindrical or vase-like and valves usually joined across the opening. Prefers swampy habitats.

Swamp Mahogany (*Eucalyptus robusta*)



F

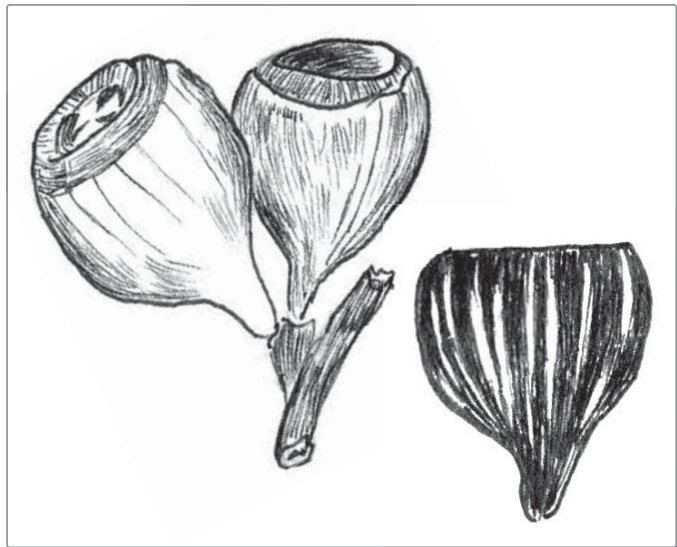
STRINGYBARKS AND FALSE STRINGYBARKS (cont.)

Stringy and fibrous bark

4b. Adult leaves 0.8 – 4cm wide. Gumnuts with valves not joined6

5a. Buds large (2 – 3cm long). Bark rough, hard fibrous and splintery (careful), over most or all of trunk and branches. Gumnuts ridged and large (1.5 – 2.5cm long).

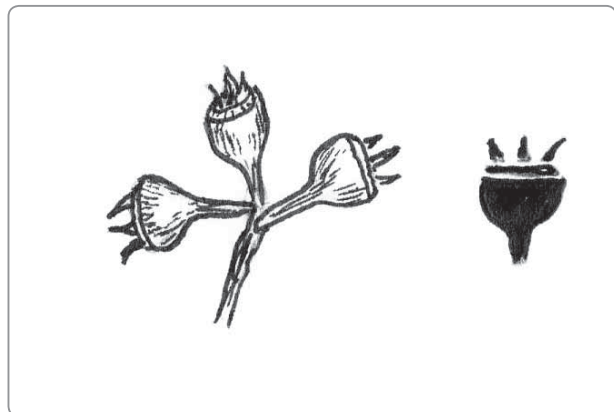
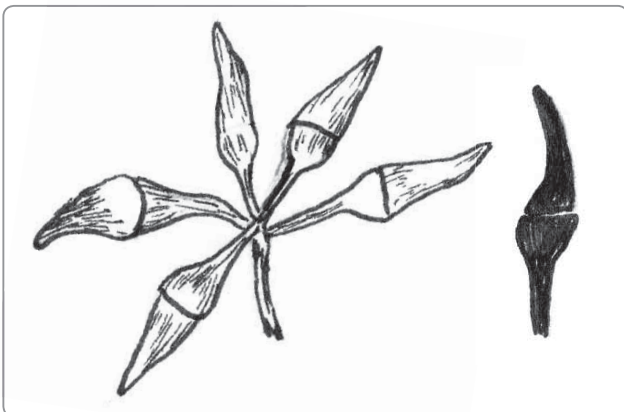
Needle-barked Stringybark (*Eucalyptus planchoniana*)



5b. Buds and gumnuts less than 1.5cm long and not ridged 7

6a. Buds long (about 2cm) and pointed. Gumnuts with valves much protruding. Seeds brown. Bark grey and slightly furrowed; under-bark reddish. Leaves dark green above.

Red Stringybark (*Eucalyptus resinifera*)



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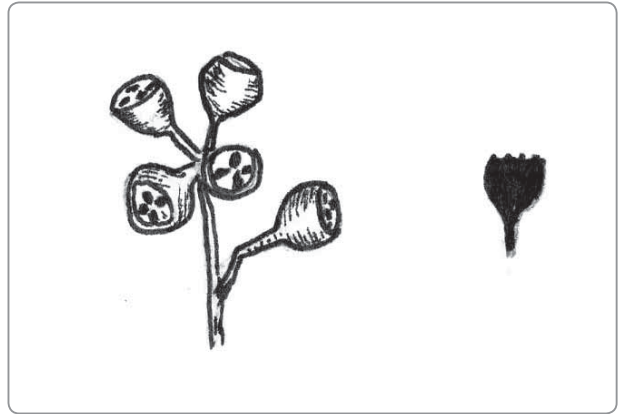
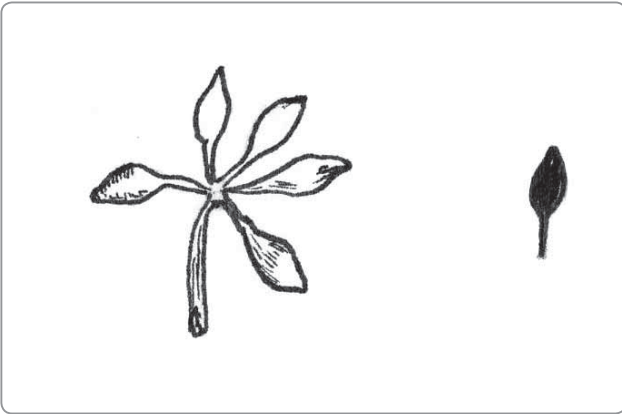
STRINGYBARKS AND FALSE STRINGYBARKS (cont.)

Stringy and fibrous bark

6b. Buds less than 1cm long, bluntly pointed or rounded. Gumnuts with valves at or below rim level.....8

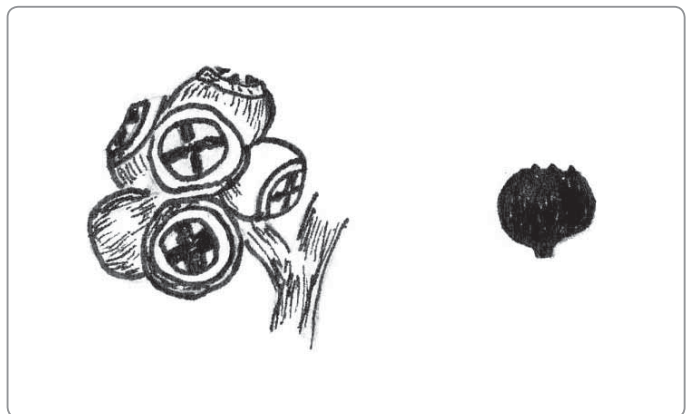
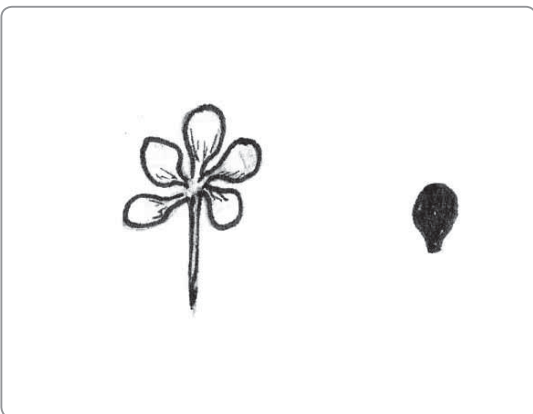
7a. Buds to 7 – 11mm long. Gumnuts with stalk; narrow rim. Leaf bases mostly symmetrical. Leaves bluish. Juvenile and regrowth leaves to 10cm broad. Bark rough, fibrous but not coarse; in flattish strips.

Broad-leaved Mahogany (*Eucalyptus carnea*)



7b. Buds 6 – 7mm long. Gumnuts without stalks (or very short stalks); wide rim; rim bright red when fresh. Leaf bases not symmetrical. Adult leaves silver grey-green. Regrowth shoots hairy. Bark fibrous and stringy; shallow fissures; grey over red-brown.

White Stringybark / Tindale's Stringybark (*Eucalyptus tindaliae*)



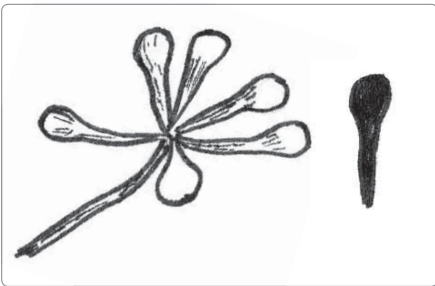
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STRINGYBARKS AND FALSE STRINGYBARKS (cont.)

Stringy and fibrous bark

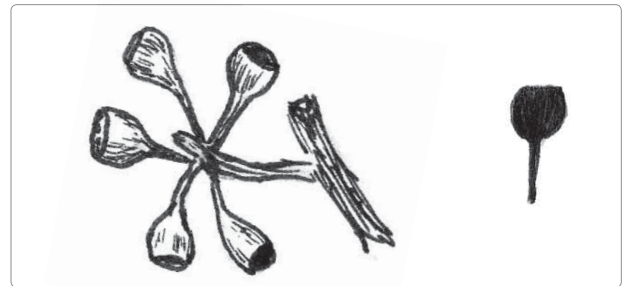
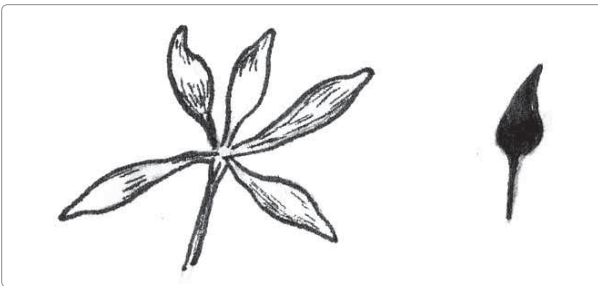
8a. Bark reddish-brown and yellow-brown under. Outer bark with small circular swellings with small central holes. Buds rounded with long slender stalks. Gumnuts tapered at base. Seed yellow-brown.

Tallowwood (*Eucalyptus microcorys*)



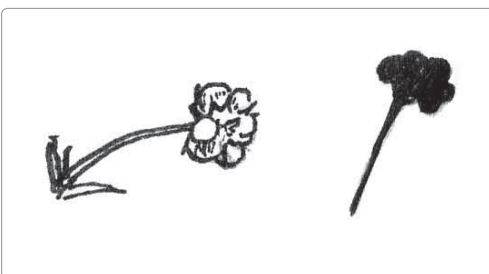
8b. Outer bark grey or yellowish. Inner-bark brown. Buds oval and beaked or pointed 5 – 7mm long. Gumnuts about 6mm wide, hemispherical. Seed red-brown.

White Mahogany / Yellow Stringybark (*Eucalyptus acmenoides*)



9a. Gumnuts fused to form a compound fruit, 1.2 – 1.5cm across. Bark fibrous and furrowed. Leaves greyish underneath. Flowers in a head of 6 – 10 fused together, hairy.

Turpentine (*Syncarpia glomulifera*)



NOTES



NOTES

NOTES



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