# A field key to Tasmanian species of eucalypts

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# Abstract

A field key is provided for the identification of Tasmania's 29 native eucalypt species. It takes account of the considerable variation found within species, and also indicates those species which hybridise or have clinal forms. A short glossary of terms is included.

# Introduction

This key should allow field users to identify the 29 species of eucalypts which are native to Tasmania. *Eucalyptus nitens*, a mainland species which has been widely planted in Tasmania, has also been included in the key.

There are already several good keys to Tasmanian eucalypts, and these have been utilised in the preparation of this key. They include keys in Curtis and Morris (1975), Woolhouse (1979, 1981, 1995) and Kirkpatrick and Backhouse (1981, 1985), as well as the unpublished keys of H.N. Barber/W.D. Jackson and A. Gray. The Flora of Australia, Volume 19, (Chippendale 1988) provides keys and descriptions of over 500 species of eucalypts, and can be consulted for species not native to Tasmania. There are also many books and other material (e.g. Forestry Tasmania's Tree Leaflet Series) which contain photographs, illustrations or descriptions of Tasmanian species of eucalypts, as well as nonindigenous species which have been planted in this State.

The key provided here differs from the previous ones in that it takes account of the considerable variation that occurs in some species, and it also includes unusual forms. For example, trees of *Eucalyptus viminalis* and *E. ovata* occasionally have rough bark extending over half-way up their trunk, so both species are included in that part of the key dealing with rough-barked species.

The key is fairly long compared to other keys because of its inclusion of these variable forms, and also because it recognises that some of the most useful diagnostic material (e.g. capsules, juvenile shoots) cannot always be obtained (or in mixed-species stands their origin may be doubtful). Even if limited material or information is available, many species can still be identified because they are keyed out in more than one place, using different characters (e.g. floral, vegetative, habitat).

# Intermediates between species

The ability of eucalypts to hybridise and form clines can cause difficulties in identifying specimens. Many hybrid combinations have been recorded within the two eucalypt subgenera (*Monocalyptus* and *Symphyomyrtus*) in Tasmania (see Williams and Potts 1996). The key does not cater specifically for hybrids, although in many cases their affinities might be determined from the key.

Clinal variation has been recognised for many closely related species. Several recognised 'species' could be better described as nodal points (or handles) along a continuum of gradually changing plant characteristics (e.g. leaf shape, capsule size) which are associated with environmental gradients (e.g. altitude) or geographical gradients (e.g. longitude). Well-documented clines include altitudinal clines in the yellow gum group (*E. johnstonii* – *E. subcrenulata* – *E. vernicosa*) and the white gum group (*E. viminalis* – *E. dalrympleana*); and geographical clines in peppermints (e.g. *E. amygdalina* – *E. pulchella; E. amygdalina* – *E. nitida; E. risdonii* – *E. tenuiramis*) and gums (e.g. *E. gunnii* – *E. archeri*). The key should allow specimens which correspond to 'nodal points' along the cline to be identified, and the affinities of intermediate forms to be determined.

# Collecting material or information for identification

Careful collection of material and information will facilitate identification. The following points may help:

- 1. Record the location and habitat of the species.
- 2. Note the bark characteristics of mature plants. Information on form (tree, shrub, mallee-form shrub) may also be useful.
- 3. Record the colour and shape of adult leaves. Note that the key does not use characteristics of intermediate leaves (i.e. those leaves, generally found on saplings or older juvenile shoots, which are intermediate in shape and size between juvenile and adult leaves).
- 4. Search for juvenile shoots (either established seedlings or coppice from lignotubers, stumps or mature plants). Note the shape and colour of juvenile leaves and stems. However, juvenile material should only be used to identify adult plants if there is no doubt about their relationship. (Note: The term 'juvenile' does not refer to young *adult* stems or leaves).
- 5. Test for the presence of cineole by crushing some juvenile or young adult leaves between your fingers. Cineole is the characteristic sharp smell of 'eucalyptus oil'—it will also leave fingers sticky or gummy. *Eucalyptus globulus, E. nitens* and the three-fruited gums have relatively high concentrations of cineole in their leaves.

- 6. Collect (or note the characteristics of) buds and capsules—preferably from the tree but, if this is not possible, from the ground under the tree. It is important that the number of buds or capsules per umbel (i.e. the number of buds or capsules in an individual group) is determined as being either:
  - ↑ greater than three on some umbels at least; or
  - $\hat{1}$  *always* three or less.

If the number of buds or capsules in your specimen always appears to be three or less:

- ↑ Check several umbels.
- ↑ Check the top of the umbel for scars to determine if some buds or capsules have fallen off. The likelihood of such abscission increases with age, so the best indication of the number of buds or capsules per umbel is from fresh buds or flowers. The least reliable indication is from old umbels collected from the ground.

Plant specimens can be sent to the Tasmanian Herbarium (Hobart) or Queen Victoria Museum and Art Gallery (Launceston) for identification or lodgement in herbarium collections. Good material has great value, whether it is typical of a species and well within the known range of the species, or whether it is from outlying populations or of unusual form or hybrid origin. If possible, material for herbaria should include adult and juvenile leaves, and buds and fruit. Accurate location details should be supplied and notes on other characteristics (see above) should also be provided.

# Explanatory notes for using the key

# Nomenclature

Species nomenclature follows Williams and Potts (1996). Species authorities and common names are given in an appendix. For detailed descriptions or illustrations of the species, users are referred to Curtis and Morris (1975), Chippendale (1988), Kirkpatrick and Backhouse (1981, 1985) and field guides published by Forest Resources/Boral (see Woolhouse 1979, 1981, 1995). These references, and Williams and Potts (1996), also provide information on distribution and ecology.

# How to use the key

Some features of the key are described below. Users should work first through some species known to them, to become familiar with the structure and idiosyncrasies of the key.

- ↑ If an impasse is reached (e.g. at point 1 if trees have rough bark about half-way up their trunks), work through both alternatives. Subsequent points should confirm or eliminate one of the alternatives, or the species may key out on both lines of enquiry.
- ↑ Unusual forms of species (e.g. the examples of *Eucalyptus viminalis* and *E. ovata* given on p. 27) are marked with an asterisk.
- € Additional information is given in square brackets at several points in the key. This information may be useful in confirming decisions but should not be relied on unequivocally. For example, at point 21 of the key, the statement 'long strips of ribbon-bark usually conspicuous' is included because this feature is typical of mature and regrowth E. regnans. However, it also occurs. to a much lesser extent. in mature *E. delegatensis* (the species separated from *E. regnans* at point 21). The presence of ribbon-bark is therefore a confirmatory feature for *E. regnans*, rather than a diagnostic one.
- Habitat and distribution information is given for some species because it can be

useful in confirming identifications, or eliminating species from contention. However, caution should be exercised in using this information because many species have had their range unnaturally extended (e.g. by horticultural plantings), and because natural populations of some species occur outside their typical range or habitats (e.g. relict populations of *E. coccifera* and *E. gunnii* in eastern Tasmania).

↑ Species which form clines, or often hybridise, are indicated in the key by connecting lines. It may not be possible to allocate a specimen with intermediate characteristics to either of the connected species, but the affinities of the specimen can at least be recognised. Species known to hybridise are given in Williams and Potts (1996).

It is inevitable that some technical terms have been used in the key, although their use has been minimised. A glossary and illustrations are given at the end of the key.

Comments on the usefulness of the key, and on any inaccuracies it may contain, are welcome because it is recognised that only widespread use will show where refinements are needed.

# Acknowledgements

Several people made useful comments on the key and/or tested it in the field. The assistance of Humphrey Elliott, Mick Brown, Sarah Freeman, Andrew North, Karen Johnson, Kristen Williams and Jean Jarman is particularly appreciated.

# References

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*Figure 1.* Eucalyptus globulus (*x* 0.5). As with many eucalypts, the juvenile foliage (right) is very different in shape and size from the adult foliage (top, with buds, flowers and fruit).

# Field key to Tasmanian species of eucalypts

1.	Trunk of tree (or adult plant) with rough bark (flaky or fibrous) for more than half its length	2
	Trunk of tree (or adult plant) with smooth bark (gum barked) for more than half its length	13
2.	Adult leaves markedly asymmetrical and oblique [rough bark furrowed and stringy]	2
	Adult leaves more or less symmetrical (though sickle-shaped in many species, and slightly oblique in <i>E. sieberi</i> )	5
3.	Rough bark extending to top branches [juvenile leaves green, oblique; tree mainly found at altitudes < 400 ml	F obligua
	Gum bark conspicuous on top branches and often upper part of trunk	<i>1. obliquu</i> 4
4.	Juvenile leaves grey or glaucous, ovate or elliptic [young stems often glaucous; tree mainly found at altitudes > 300 m] Juvenile leaves green, oblique and similar in shape to adult leaves [young stems rarely glaucous; tree mainly found at altitudes < 400 m]	E. delegatensis F. obligua*
5.	Adult leaves grey-green with a varnished appearance; rough bark dark and strongly furrowed and contrasting with the shining gum bark of the upper trunk and branches [tree found in the north-east and	
	central east coast] Adult leaves green or grey-green but without a varnished appearance; rough bark not strongly furrowed	E. sieberi 6
6.	Juvenile leaves ovate or circular [adult leaves ovate or lanceolate; rough bark breaking off in large flakes]	7
	rough bark mainly fibrous (except for <i>E. viminalis</i> )]	8
7.	<ul> <li>Buds/capsules - 3 per umbel; juvenile leaves glaucous; crushed leaves having a strong cineole smell</li> <li>Buds/capsules &gt; 3 per umbel; juvenile leaves green or grey-green; crushed leaves not having a strong cineole smell</li> </ul>	E. gunnii* E. ovata*
8.	Crushed leaves having a strong cineole smell; adult leaves widest in basal third; buds/capsules - 3 per umbel; valves of capsules distinctly protruding [rough bark breaking off in large flakes] Crushed leaves not having a strong cineole smell; adult leaves mainly	E. viminalis*
	widest in the middle third; buds/capsules > 3 per umbel; valves of capsules not distinctly protruding (or if protruding in <i>E. rodwayi</i> , capsules - 5 mm diameter) [rough bark fibrous]	9
9.	Buds diamond-shaped; valves of capsules often protruding [juvenile leaves green; adult leaves without a distinct hook at the tip] Buds mainly club-shaped; valves of capsules not protruding [juvenile leaves often grey-green; adult leaves often with a distinct hook at	E. rodwayi
	the tip]	10

10.	Juvenile leaves alternate, linear to narrow-lanceolate and mainly < 10 mm wide	11
	Juvenile leaves opposite or subopposite, lanceolate to broad-lanceolate and mainly > 10 mm wide	12
11.	<ul> <li>Adult and juvenile leaves &lt; 6 (-8) mm wide [form confined to dolerite on the east coast]</li> <li>Adult or juvenile leaves (6-) 8-10 mm wide [tree or shrub widespread in the north, north-east, east and south-east]</li> </ul>	E. pulchella* E. amygdalina
12.	Juvenile leaves broadest near the middle; rough bark not usually persistent on secondary branches [tree or shrub widespread in the north-west, west, south-west and Furneaux Group] Juvenile leaves broadest near the base; rough bark persistent on secondary branches [tree mainly found in the valleys of the Forth and Mersey Rivers]	E. nitida* E. aff. radiata
13.	<ul> <li>Juvenile leaves glaucous <i>and</i> juvenile stems square in cross-section below the first three leaves or leaf pairs</li> <li>Juvenile leaves not glaucous <i>or</i> juvenile stems round in cross-section below the first three leaves or leaf pairs</li> <li>Juvenile stem shape not considered</li> </ul>	14 16 16
14.	Opposite or juvenile leaves persisting on main branches of adult plants [buds/capsules 3 per umbel <i>and</i> capsules 10–15 mm diameter] Opposite or juvenile leaves not persisting on main branches of adult plants	<i>E. cordata</i> (go to 49) 15
15.	<ul> <li>Buds/capsules 1(-3) per umbel; buds warty; capsules &gt; 15 mm diameter [species native to Tasmania]</li> <li>Buds/capsules &gt; 3 per umbel; buds not warty; capsules &lt; 8 mm diameter [species not native to Tasmania but widely grown in plantations]</li> </ul>	E. globulus E. nitens
16.	Opposite or juvenile leaves conspicuous on main branches of adult plants [buds/capsules often borne in axils of juvenile leaves] Opposite or juvenile leaves rarely persisting on main branches of adult plants [buds/capsules not borne in axils of juvenile leaves]	17 20
17.	Juvenile and adult leaves green, with a varnished appearance [shrub of alpine environments] Juvenile leaves glaucous; adult leaves glaucous or grey-green [tree or shrub of non-alpine environments]	E. vernicosa 18
18.	Crushed leaves having a strong cineole smell; buds/capsules - 3 per umbel Crushed leaves not having a strong cineole smell; buds/capsules > 3 per umbel [juvenile leaves mainly fused across bases; capsules 7– 10 mm diameter; low tree or shrub confined to Meehan Range and	19
	South Arm]	E. risdonii

19.	Capsules - 6 mm diameter; juvenile leaves fused across bases [older juvenile leaves breaking away from stems to form loose spinning discs; low tree or shrub localised on poorly drained sites in the south-	
	east and on the lower Central Plateau] Capsules 8–15 mm diameter: iuvenile leaves not fused across bases	E. perriniana
	[tree or shrub confined to the south-east]	E. cordata (go to 49)
20.	Adult leaves markedly asymmetrical and oblique Adult leaves more or less symmetrical (though sickle-shaped in many	21
	species, and slightly oblique in <i>E. sieberi</i> )	22
21.	Rough bark flaky and confined to a basal stocking; juvenile leaves green [long strips of ribbon-bark usually conspicuous]	E. regnans
	Rough bark fibrous and extending almost half way up the trunk; juvenile leaves grey or glaucous [ribbon-bark not usually hanging	
	in long strips]	E. delegatensis
22.	Adult leaves grey-green with a varnished appearance <i>and</i> distinctive raised or parallel-tending veins	23
	Adult and juvenile leaves grey-green, green or glaucous, but without a varnished appearance <i>and</i> raised or parallel-tending veins	24
23.	Rough bark confined to a basal stocking [adult leaves with raised and parallel-tending veins]	E. pauciflora
	Rough bark dark and fissured, extending almost half way up the trunk [adult leaves with raised and somewhat parallel-tending veins; tree	
	found in the north-east and central east coast]	E. sieberi*
24.	Number of buds/capsules not apparent	25
	Buds/capsules > 3 per umbel	26
	Buds/ capsules - 3 per umbel	38
25.	Crushed leaves not having a strong cineole smell	27
	Crushed leaves having a strong cineole smell	37
26.	Crushed leaves having a strong cineole smell; juvenile stems square and winged in cross-section [juvenile leaves very glaucous and ovate: species not native to Tasmania but widely grown in	
	plantations] Crushed leaves not having a strong cineole smell; juvenile stems not	E. nitens
	winged and mainly round in cross-section (often square in <i>E. brookeriana</i> ) [juvenile leaves various; species native to Tasmania	
	and rarely grown in plantations]	27
27.	Adult leaves not distinctly hooked at the tip	28
	Adult leaves distinctly hooked at the tip	31
28.	Adult leaves ovate or lanceolate	29
	Adult leaves linear or narrow-lanceolate	31

29.	Buds diamond-shaped and not glaucous; valves of capsules often protruding [juvenile leaves ovate, alternate, not fused across the base and not highly glaucous]	30
	Buds mainly club-shaped or glaucous; valves of capsules not protruding [juvenile leaves various, but opposite if ovate]	34
30.	Tree to 50 m; bark often with olive or bronze shading; capsules barrel- shaped; juvenile stems often square in cross-section; juvenile leaves green with prominent oil dots and margins distinctly crenate Tree or tall shrub; bark usually grey or whitish; capsules trumpet- shaped; juvenile stems round in cross-section; juvenile leaves green or grey-green without prominent oil dots and with margin not	E. brookeriana
	strongly crenate Mallee-form shrub or small tree; bark usually grey or whitish; capsules barrel-shaped; juvenile stems not square in cross-section; juvenile leaves green or grey-green without prominent oil dots and with margin not strongly crenate [species confined to dolerite on the east	E. ovata
	coast]	E. barberi /
31.	Adult and juvenile leaves < 6 (-8) mm wide [trunk with gum bark to the base; tree widespread on dolerite in the south-east and central east coast]	E. pulchella
	Adult or juvenile leaves > 8 mm wide	32
32.	Bark fibrous or flaky for more than one-third the length of the trunk Bark fibrous or flaky for less than one-third the length of the trunk	33 34
33.	Juvenile leaves opposite or subopposite, broad-lanceolate and mainly > 10 mm wide [tree or shrub widespread in the north-west, west, south-west and Furneaux Group] Juvenile leaves alternate, linear to narrow-lanceolate and mainly	E. nitida
	< 10 mm wide [tree or shrub widespread in the north, north-east,	
	east and south-east]	E. amygdalina
34.	Juvenile leaves glaucous and fused across the base [species found in the south-east and east at altitudes < 600 m] Juvenile leaves not fused across the base and not usually glaucous	35
	(sometimes glaucous in <i>E. coccifera</i> )	36
35.	Buds/capsules mainly borne in axils of juvenile leaves which are always obvious on adult plants [low tree or shrub confined to the Meehan Dange and South Arm]	
	Buds/capsules not borne in axils of juvenile leaves, which are absent or scarce on adult plants [tree widespread in the east and south-	E. risdonii
	east including the Meehan Range and South Arm]	E. tenuiramis
36.	Capsules > 8 mm diameter; buds conspicuously glaucous and warty at the tip; young stems often rough with stiff reddish hairs [tree or shrub mainly found on dolerite at altitudes > 600 m]	E. coccifera
	Capsules < 8 mm diameter; buds not conspicuously glaucous or warty at the tip; young stems mainly smooth [tree or shrub widespread in the north-west west south-west and Furneaux Group]	) F. nitida
	ale nertit west, west, south west and runneaux croupj	

37.	<ul> <li>Buds/capsules &gt; 3 per umbel [juvenile leaves very glaucous and ovate; species not native to Tasmania but widely grown in plantations]</li> <li>Buds/capsules - 3 per umbel [juvenile leaves various; species native to Tasmania and rarely grown in plantations]</li> </ul>	E. nitens 38
38.	Orientation of valves of capsules not apparent Valves of capsules protruding or pointed Valves of capsules not protruding or pointed	39 40 45
39.	Adult leaves narrow-lanceolate or sickle-shaped; generally more than six times as long as wide Adult leaves broad-lanceolate and not usually sickle-shaped; generally less than six times as long as wide	40 43
40.	<ul> <li>Buds/young capsules warty and glaucous; capsules &gt; 15 mm diameter; juvenile stem square and winged in cross-section</li> <li>Buds/young capsules not warty or glaucous; capsules &lt; 10 mm diameter; juvenile stem usually round in cross-section</li> </ul>	<i>E. globulus</i> 41
41.	Juvenile leaves glaucous and broadly ovate or circular, with margins crenate [adult leaves often grey-green; bark often with reddish shades] Juvenile leaves green or grey-green and ovate or lanceolate, with margins rarely crenate [adult leaves green; bark usually without reddish shades]	E. rubida 42
42.	Juvenile leaves lanceolate [tree or shrub mainly found at altitudes < 500 m] Juvenile leaves ovate [tree mainly found at altitudes > 500 m]	E. viminalis E. dalrympleana )
43.	<ul> <li>Adult and juvenile leaves green with a varnished appearance; valves of capsules protruding or pointed [gum bark with striking olive or bronze shading]</li> <li>Adult and juvenile leaves grey-green or glaucous (except for <i>E. archeri</i>) and without a varnished appearance; valves of capsules not pointed or protruding</li> </ul>	44 45
44.	<ul> <li>Buds/capsules mainly 3 per umbel; capsules &gt; 9 mm diameter; adult leaves 8–12 cm long [tree of lowland and upland environments]</li> <li>Buds/capsules mainly 3 per umbel; capsules 6–9 mm diameter; adult leaves 3–10 cm long [tree or tall shrub of subalpine environments]</li> <li>Buds/capsules 1–3 per umbel; capsules &lt; 7 mm diameter; adult leaves 1–4 cm long [shrub of alpine environments]</li> </ul>	E. johnstonii E. subcrenulata E. vernicosa
45.	Juvenile leaves fused across the base and always present on adult plants [older juvenile leaves breaking away from stems to form loose spinning discs]	E. perriniana
46.	Adult leaves with a distinct hook at the tip; crushed leaves without a strong cineole smell	40 E. coccifera* 47

47.	<ul> <li>Stalk of capsules longer than 10 mm; buds and capsules distinctly urn-shaped</li> <li>Stalk of capsules shorter than 10 mm; buds and capsules not distinctly urn-shaped (can be slightly urn-shaped in <i>E. gunnii, E. archeri</i> and <i>E. morrisbyi</i>)</li> </ul>	E. urnigera 48
48.	Buds/capsules mainly in axils of opposite or subopposite juvenile leaves [capsules 8–15 mm diameter; tree or shrub confined to the south-east and mainly found at altitudes < 600 m] Buds/capsules not in axils of opposite or subopposite juvenile leaves [capsules < 10 mm diameter]	49 50
49.	<ul> <li>Juvenile stems square in cross-section below the first three leaf pairs; capsules 10–15 mm diameter [shrub or tree mainly found west of the Derwent River]</li> <li>Juvenile stems round in cross-section below first three leaf pairs; capsules 8–12 mm diameter [shrub or low tree mainly found east of the Derwent River]</li> </ul>	<i>E. cordata</i> (western form) <i>E. cordata</i> (eastern form)
50.	<ul> <li>Buds and capsules with warty protruberances [tree with glaucous foliage confined to the Meehan Range and South Arm]</li> <li>Buds and capsules without warty protruberances [tree or shrub with glaucous or green foliage found at altitudes &gt; 500 m]</li> </ul>	E. morrisbyi
51.	Juvenile foliage glaucous [adult foliage, buds and capsules often glaucous; tree or shrub widespread in highland areas] Juvenile foliage green [adult foliage, buds and capsules green; tree or shrub mainly found on the northern part of the Central Plateau and in the north-eastern highlands]	E. gunnii ) E. archeri

\* Unusual form(s) of a species

Square brackets in the text of the key are used to indicate characters which are useful in confirming the identity of a species but which are not diagnostic (see p. 29).

Lines at the right side of the key link species which form clines or often hybridise (see p. 29).

# Glossary

Leaf shape (see Figure 2)

elliptic: oval in outline, widest towards the middle, with the ends rounded.

**linear:** long and narrow with parallel margins.

**lanceolate:** lance-shaped; usually at least three times as long as broad; tapering at each end and widest below the middle.

**ovate:** egg-shaped, with the broadest part below the middle.

**oblique:** sides of the leaf joining the petiole (leaf stalk) at different places.

symmetrical: leaves more-or-less similar in width on either side of the midrib.

asymmetrical: leaves dissimilar in width on either side of the midrib.

# Leaf margin

crenate: margins of leaf scalloped or with shallow, rounded teeth.

# Leaf arrangement

**alternate:** leaves arising singly from the stem (i.e. not opposite). **opposite:** two leaves arising at the same level on opposite sides of the stem.

# Buds and fruit

**buds:** diamond-shaped — buds sharply pointed at the tips and widest towards the middle. club-shaped — buds with rounded tips which are often the widest part.

capsules: the fruit of eucalypts (sometimes called gumnuts).

**umbel:** the typical flowering arrangement of eucalypts, with the stalks of buds arising from a common point.

# Other terms

**axil:** the upper angle between a leaf or petiole and the stem that bears it.

**cineole:** The characteristic sharp smell of 'eucalyptus oil'. The oil is strongest in *E. globulus*, *E. nitens* and the three-fruited gums, and is detected most easily by crushing young leaves.

**glaucous:** A bluish-green, bluish-grey or white waxy bloom, which is characteristic of the juvenile leaves of several species, and also occurs on the adult leaves, buds and fruit of some species.



Figure 2. Examples of leaf shapes.

# Appendix: List of *Eucalyptus* species mentioned in text.

Currently valid scientific names and authorities are given, following Williams and Potts (1996). Common names for many species vary throughout the State, and local names for some species may not have been included. Scientific names used in Tasmania in the recent past are also given; these mainly comprise names which have been superseded as a result of taxonomic research. († see Williams and Potts 1996)

## Species native to Tasmania

E. amvgdalina Labill. E. archeri Maiden & Blakely E. barberi L. Johnson & Blaxell E. brookeriana A.M. Gray E. coccifera Hook. f. E. cordata Labill. E. dalrympleana Maiden E. delegatensis R. Baker subsp. tasmaniensis Boland E. globulus Labill. subsp. globulus E. gunnii Hook. f. E. johnstonii Maiden E. morrisbyi Brett E. nitida Hook. f. E. obliqua L'Hérit. E. ovata Labill. E. pauciflora Sieber ex Sprengel E. perriniana F. Muell. ex Rodway E. pulchella Desf. E. aff. radiata Sieber ex DC. E. regnans F. Muell. E. risdonii Hook. f. E. rodwavi R. Baker & H.G. Smith E. rubida Deane & Maiden E. sieberi L. Johnson E. subcrenulata Maiden & Blakely E. tenuiramis Miq. E. urnigera Hook. f. E. vernicosa Hook, f. E. viminalis Labill.

Species not native to Tasmania

E. nitens (Deane & Maiden) Maiden

black peppermint Archer's gum, alpine cider gum Barber's gum Brooker's gum snow peppermint heart-leaved silver gum mountain white gum gum-topped stringybark, white-top blue gum cider gum vellow gum Morrisby's gum Smithton peppermint stringybark, brown-top swamp gum, black gum cabbage ash, weeping ash spinning gum white peppermint giant ash

Risdon peppermint black swamp gum candlebark ironbark alpine yellow gum silver peppermint urn gum varnished gum white gum, manna gum

shining gum

Name used previously

#### Tasmanian species with name changes in the recent past

## Present name

E. amygdalina	E. salicifolia
E. brookeriana	E. brookerana
E. delegatensis subsp. tasmaniensis	E. gigantea
E. globulus subsp. globulus	E. bicostata†
E. nitida	E. simmondsii
E. pulchella	E. linearis
E. aff. radiata	E. robertsonii <sup>+</sup> , E. radiata subsp. robertsonii <sup>+</sup>
E. sieberi	E. sieberana
E. tenuiramis	E. tasmanica