

TREE IDENTIFICATION

Identification of Eucalyptus within the Macedon Ranges Local Area

Prepared For:

Woodend Bee Friendly Society

Prepared By:

Tim Cameron - Consulting Arborist

Qualifications:

-Graduate Certificate Arboriculture

-Diploma Horticulture (Arboriculture)

Axiom Tree Management Pty Ltd

Suite 2/13 Goode St

Gisborne VIC 3437

Ph: 0428 896 951

Email: timcameron@axiomtrees.com



The Genus Eucalyptus

Eucalyptus belongs to the Myrtaceae family which also include Callistemon, Melaleuca, Kunzea and Leptospermum. The genus Eucalyptus includes about 900 species with Victoria having over 100 species indigenous. They can be large forest trees to small shrubs and mallee. As well as being important parts of our natural ecosystems they are widely planted and used for their shade/amenity, timber for construction and fuel, erosion control and as a valuable source of honey. They are widely planted throughout the world, with some becoming significant weed species.

Identifying Eucalyptus Species

Successfully Identifying Eucalyptus species requires a variety of plant parts and characteristics that may include:

- Habit;
- Bark type;
- Leaves; and
- Flower buds and fruit.

Identifying trees can be difficult due a variety of factors including:

- Condition and age of the tree;
- Location and specific climate it is growing in;
- Insect grazing and juvenile growth; and
- No identifiable features being available.

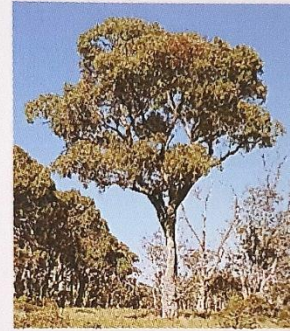
Habit

- Forest Trees
- Woodland trees
- Mallets
- Mallees
- Shrubs

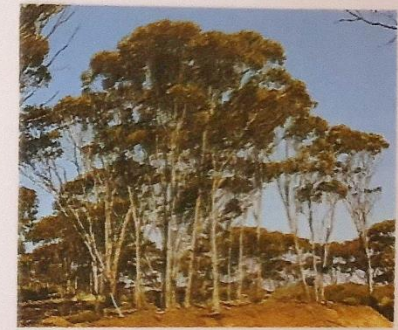
(Brooker and Kleinig 2001)



forest tree



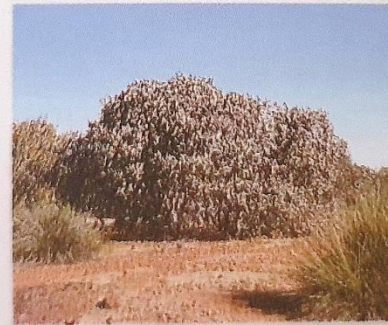
woodland tree



mallet



mallee



shrub

Bark

- Stringy
- Ironbark
- Red Bloodwood
- Yellow Bloodwood
- Fibrous
- Box

(Brooker and Kleinig 2001)



stringy



ironbark



red bloodwood



red bloodwood



yellow bloodwood



fibrous



box

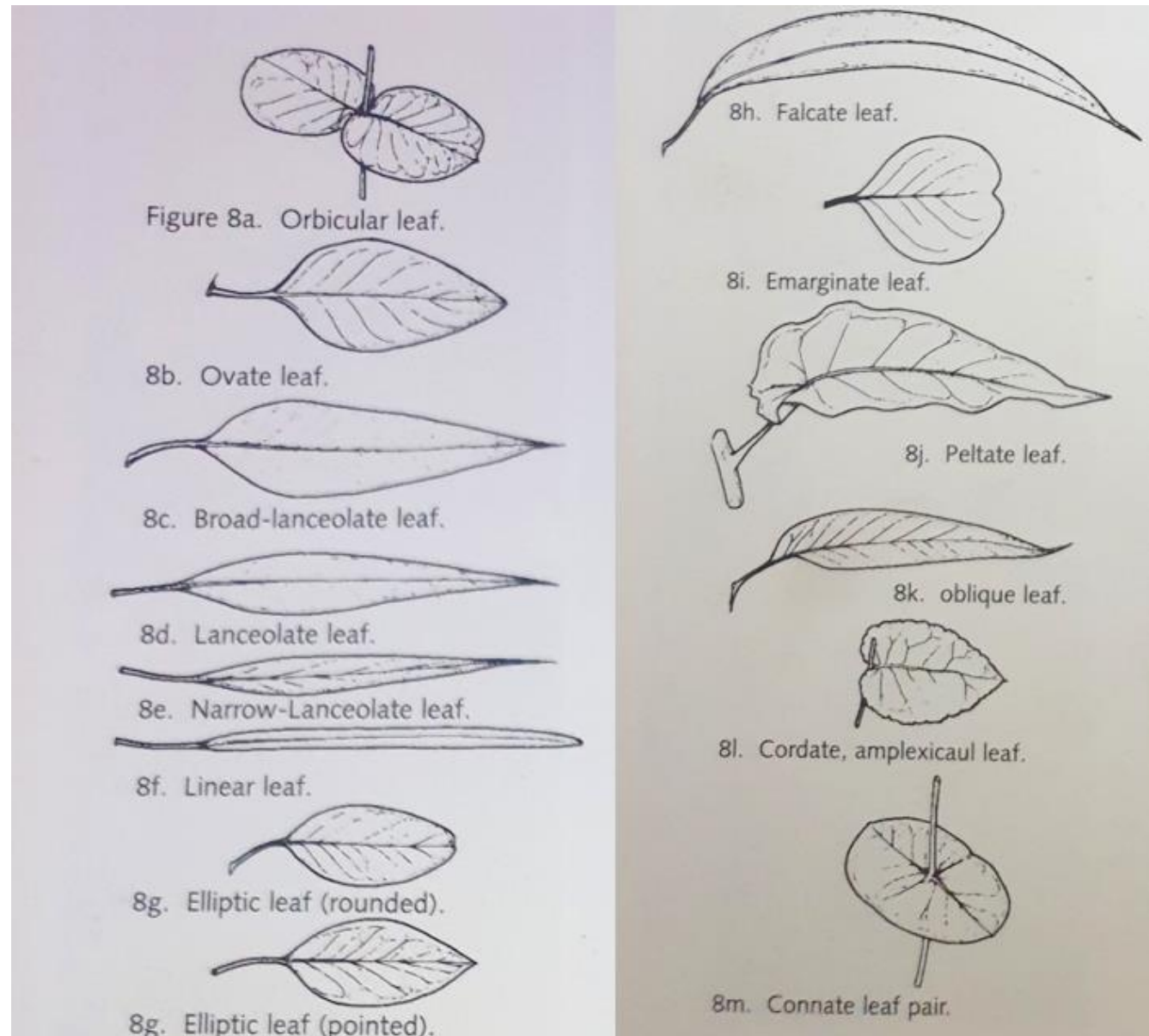


box

Leaves

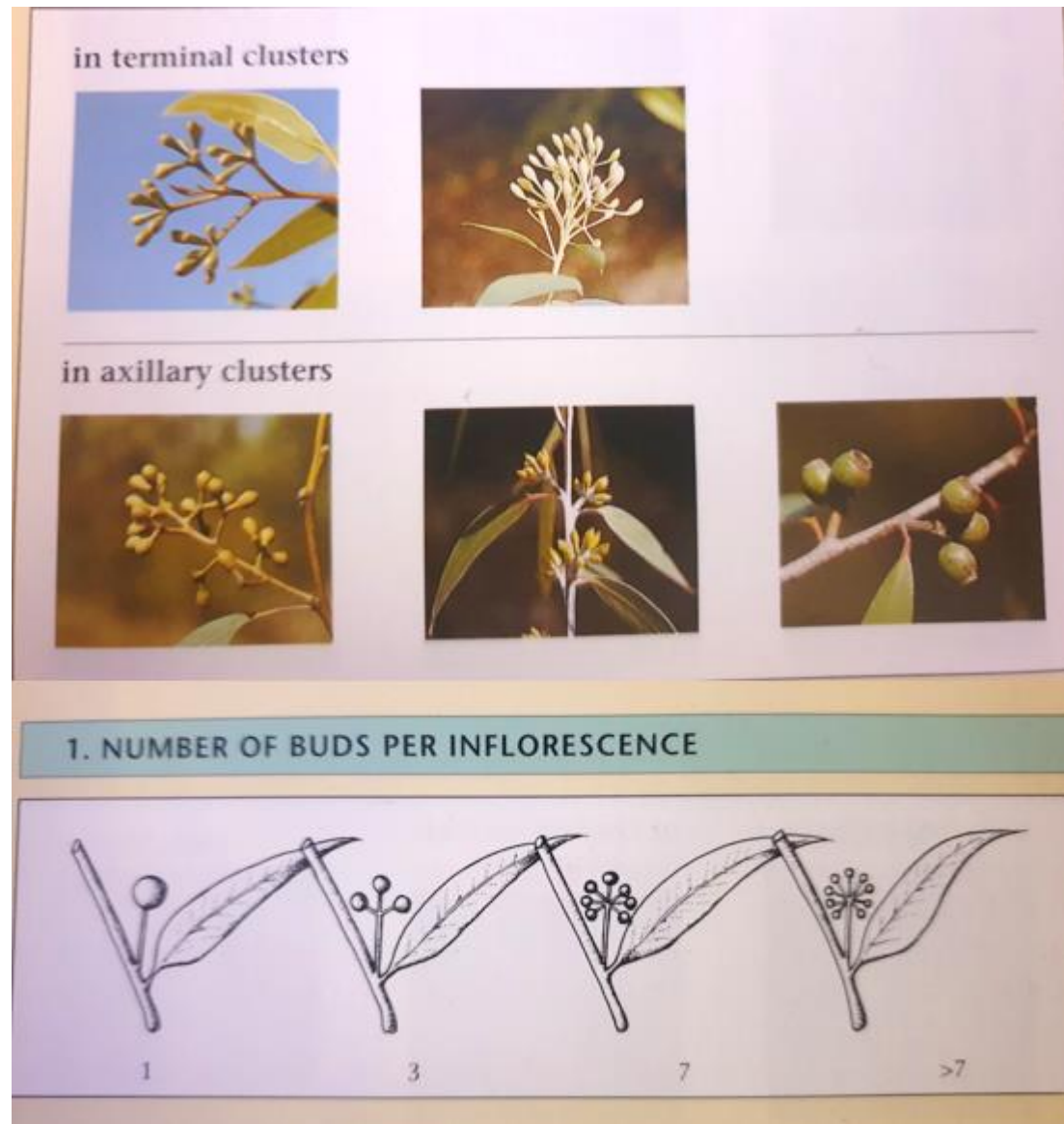
- Orbicular to Ovate
- Broad/narrow lanceolate
- Linear
- Elliptical
- Falcate
- Oblique
- Cordate
- Connate

(Brooker and Kleinig 1993)



Fruit and Buds

- Characteristics of the fruit and buds include
 - Position of buds
 - Number of fruit and buds
- (Brooker and Kleinig 2001)



- Operculum length
- Fruit shape and size

(Brooker and Kleinig 2001, (Brooker and Kleinig 1993)

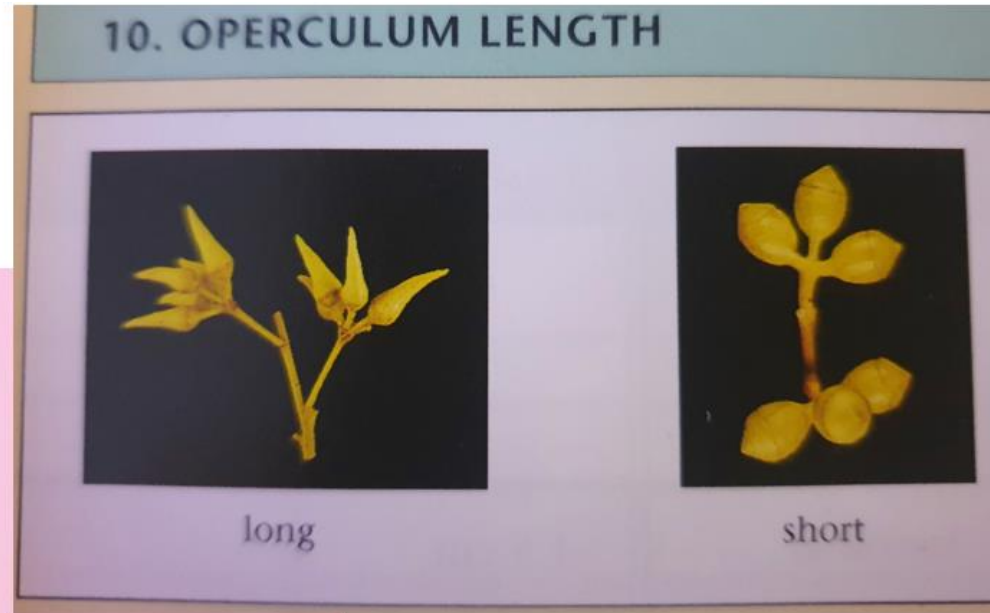
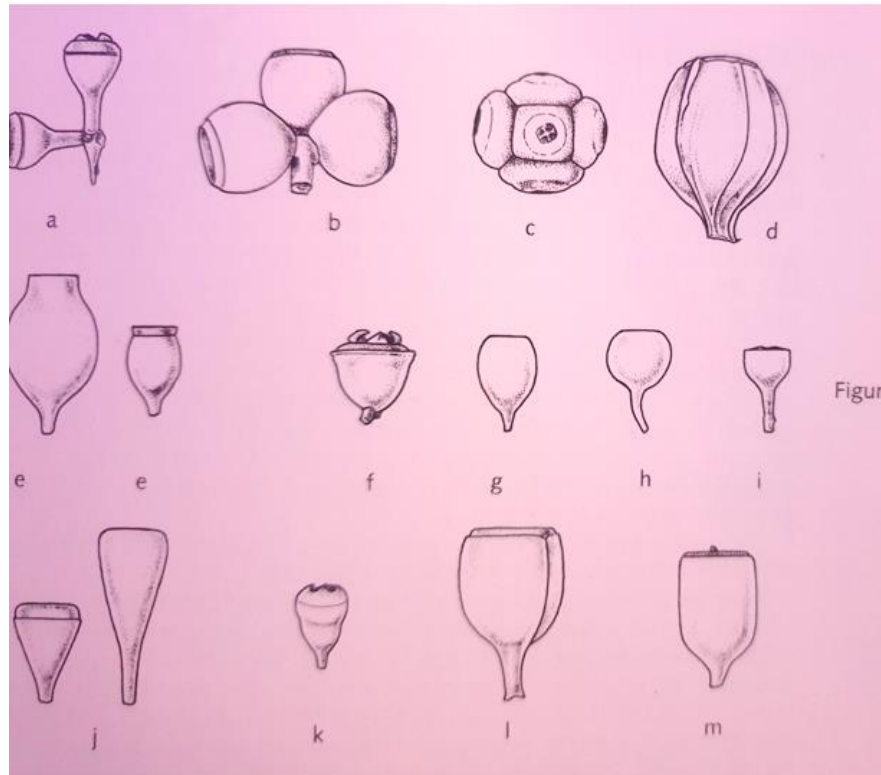


Figure 17a. Pedicellate fruit.
 17b. Sessile fruit.
 17c. Fruit with flattened sides
 17d. Fruit with ribs.
 17e. Urceolate fruit.
 17f. Campanulate fruit.
 17g. Barrel-shaped fruit.
 17h. Truncate-globose fruit.
 17i. Hemispherical fruit.
 17j. Obconical fruit.
 17k. Pyriform fruit.
 17l. Cupular fruit.
 17m. Cylindrical fruit.

Eucalyptus Species found in the Macedon Ranges

- *Eucalyptus viminalis*-Manna Gum
- *Eucalyptus rubida*-Candlebark
- *Eucalyptus ovata*-Swamp Gum
- *Eucalyptus obliqua*-Messmate
- *Eucalyptus radiata*-Narrow Leaved Peppermint
- *Eucalyptus dives*-Broad Leaved Peppermint
- *Eucalyptus aggregata*-Black Gum (Woodend);
- *Eucalyptus gonicalyx*-Long leaved Box (Macedon and Taradale);
- *Eucalyptus melliodora*-Yellow Box (Towards Kyneton and Sunbury).

Useful Authors and publications concerning the Identification of Eucalyptus Include:

There are a number of publications available regarding Eucalyptus Identification. Most people will have a copy of Costermans (Pocket and full edition) and will cover indigenous species throughout SE Australia and be adequate for identification within the Macedon Ranges local area. However, for those who want to go a bit deeper the following list contains some good resources.

- **Ian Brooker and David Kleinig**
 - Boland D.J, Brooker M.I.H, Chippendale G.M, Hall. N, Hyland B.P.M, Johnston R.D, Kleinig D.A and Turner J.D. 1957 *Forest Trees Of Australia*. Fourth edition 1984, reprint 1999. CSIRO Publishing Collingwood Victoria Australia.
 - Brooker M.I.H, Kleinig D.A, 1999 *Field Guide to Eucalypts Volume 1, 2 and 3* Second edition, Bloomings Books Melbourne Australia.
 - Brooker M.I.H, Kleinig D.A, *Eucalyptus: An Illustrated Guide to Identification*, Reed New Holland, Australia.
- **Leon Costermans**
 - Costermans, L., 1981, *Native trees and shrubs of south-eastern Australia*, Reed New Holland, Sydney, N.S.W.
- **Dean Nicolle**
 - Nicolle, D., 2006, *Eucalypts of Victoria and Tasmania*, Bloomings Books, Melbourne.
 - Nicolle, D., 2016, *Native Eucalypts of South Australia*, Dean Nicolle, Adelaide
 - Nicolle, D., 2016, *Taller Eucalypts for Planting in Australia*, Dean Nicolle, Adelaide
 - Nicolle, D., 2016, *Smaller Eucalypts for Planting in Australia*, Dean Nicolle, Adelaide
- **Roger Spencer**
 - Spencer R. 2002, *Horticultural flora of south eastern Australia*; Vol. 3, Flowering Plants Dicotyledons, Part 2, University of New South Wales Press, Sydney, NSW.