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THE
TREE GROWER'S
information kit



DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

THE TREE GROWER'S INFORMATION KIT

A grower's guide to selecting species, purchasing plants,
and obtaining assistance for tree growing in rural
Western Australia.

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INTRODUCTION

This kit is designed so that you, as a tree grower, may have ready access to the Department of Conservation and Land Management's (CALM) Nursery and Advisory Services.

CALM is at the forefront of tree propagation and management for rural Western Australia. It shares with other agencies and community organisations the vision for a sustainable and productive agriculture that incorporates a properly distributed tree cover.

To enable your success in growing trees, whether for amenity, conservation or commercial purposes, CALM offers:-

- planning expertise
- the sale of seeds and seedlings
- growing technology
- commercial resources

We recommend that you use this booklet as a source of information and a place to keep other reference material.

HINTS FOR SUCCESSFUL PLANTING

PLAN

- Work out what you expect from trees to be planted and how they fit into the land you have available for them.

SELECT

- Choose species which suit your requirements - short and long term - and are appropriate for the site and conditions in which they will be grown.

ORDER

- Place orders early - in spring or summer prior to planting, if large numbers, more than say 100 plants, are needed.

EARLY SITE PREPARATION

- Delineate planting area to enable management and preparation of the site. Some work can commence up to five months prior to winter. Consider fencing and pasture/weed reduction strategies.
- ONE PASS OPTION - For extensive planting on certain soil types in moderate and low rainfall areas, an integrated tree planting unit, including ripper and scalper, may negate the need for early site preparations.

SOIL WORKS

- Establish rip lines, mounds and drainage lines where required - before winter. Position in landscape, slope, soil type, areas prone to water logging, salinity, or wind erosion are factors which determine optimum layout and species arrangement. (Seek advice if in doubt).

WEED CONTROL

- Ensure grasses sprayed and other perennial weeds are rigorously controlled (i.e. removed, sprayed), and prevented from regrowing by mechanical or chemical means. Aim for a weed-free zone of at least 80 cm around each seedling spot or either side of the planting line to be effective throughout winter/spring.

SEEDLING CARE

- Take special care of seedlings on delivery. Provide adequate water and protection, and retain a free airflow whilst they are in temporary storage.

PLANTING

- Whatever planting technique is used, seedlings should be set firmly into prepared soil so that:-
 - There are no air pockets around roots.
 - The nursery level of the stem above root zone is at least 2 cm and no more than 8 cm under ground level.
 - The roots are not excessively coiled or upturned.

FERTILISE

- If warranted, fertilise with tablets or pellets containing nitrogen, phosphorous and some trace elements, at least 15 cm away from stem and roots.

PROTECT

- Identify and prepare to offset hazards that may hinder tree survival or growth, e.g. grazing by animals, insect attack, fire or re-invasion by weed species.

LOSS FACTORS

- Some factors that may seem to be beyond your management control - such as excessive waterlogging or wind blast; salt; frost; severe moisture loss in first spring/summer; soil dwelling, plague or airborne insects - could reduce planting success in a given year.

NURSERY AND SEED CENTRE OPERATIONS

MANJIMUP PLANT PROPAGATION CENTRE

LOCATION:

Burnside Road, 11 kilometres west of Manjimup
Phone: (097) 721 377, Fax: (097) 721 211.

NURSERY

The Plant Propagation Centre is an accredited nursery under the hygiene guidelines of the Nursery Industry Association.

CONTAINER STOCK:

Current level of container stock production is more than thirteen million seedlings per year, primarily for:-

- karri site reforestation
- native forest rehabilitation
- catchment afforestation
- timberbelt sharefarming
- large order private sales

PINE SEEDLINGS (*Pinus radiata* and *P. pinaster*):

Production of plants from seed orchard (improved quality) seed and select cuttings is around four million per year - for sharefarming, second rotation in west coast plantations and private sales.

ADVICE TO CLIENTS:

Plant Propagation Centre trading hours 8:00 am - 4:30 pm Monday-Friday

Container stock

- Distribution season: opens 1 June and closes 31 August.
- Ordering before sowing period (October-November) is advisable. Use order form with current Price list.
- Minimum sale: 10 000 seedlings.
- Price will vary according to number (Refer to current price list or contact the nursery).
- A deposit will be required.
- All orders are to be collected from the Plant Propagation Centre.

Bare-rooted pine

- Distribution season: opens 1 June and closes 31 July. Sowing period is August-September. Early ordering for large numbers is advisable.
- Minimum sale: 100 seedlings of one species.
- Price will vary according to number.
- All orders are to be collected from the Plant Propagation Centre.

RESEARCH FACILITIES

Basic and applied research is carried out at the Centre. Areas of activity include:-

- Controlled pollination and seed orchard management in both eucalypt and pine;
- Family provenance testing, phenology (flowering) studies;
- Innovations in nursery propagation.

SEED CENTRE

PHONE: (097) 721 288 FAX: (097) 721 211

This facility, also situated within the Plant Propagation Centre, extracts, stores, tests and supplies seed of over 400 species of native and exotic trees and shrubs. Seed clients include CALM Districts, the Plant Propagation Centre and other commercial nurseries, members of the public, rural revegetation groups and research agencies throughout the world.

Refer to the current Seed Centre Price List for purchasing arrangements.

NARROGIN PLANT NURSERY

LOCATION:

CALM Narrogin District headquarters, between Hough Street and the Williams Road, 3 kilometres west of the town centre.

Postal Address: PO Box 100, NARROGIN, WA 6312.

Phone: (098) 811 113, Fax: (098) 811 645.

The Narrogin Plant Nursery is an accredited nursery under the hygiene guidelines of the Nursery Industry Association.

PRODUCTION:

The nursery has the capacity to provide a wide range of tree and shrub species. Some 200 different types may be grown. Orders for unusual or unlisted varieties may be met if placed early (by October).

Narrogin Plant Nursery raises about 40 000 individually potted seedlings for dry land and small-scale domestic planting, and about 400 000 containerised (in multi-cell trays) seedlings for revegetation projects on farmland, mine sites and public land.

DELIVERY:

An efficient free service is provided by the Narrogin Plant Nursery to designated collection points within a dispatch area which includes the Central Wheatbelt, Great Southern, South Coast and Southern Goldfields.

ADVICE TO CLIENTS:

- Trading Hours: 8:00 am to 4:30 pm weekdays. Phone enquiries are welcome.
- Distribution season opens on 1 May and closes on 31 August.
- Early ordering is recommended. (Refer to current price list).
- If a written order cannot be fulfilled at the time of dispatch, and no follow-up contact has been made, substitute trees may be included.
- For delivery to designated locations within the dispatch area, customer lots may be grouped. Orders from outside the dispatch area must be either collected from the nursery or delivered by Narrogin Plant Nursery to a point within the dispatch area. Alternatively, freight payment arrangements must be made by the client.

ADVISORY SERVICE

Through its Vegetation and Tree Planting Advisory Service (VATPAS) and its District offices in regional parts of WA, CALM offers information and consultation services to rural tree growers. VATPAS has expertise in propagation, the integration of trees into farming, native bush management, land conservation techniques and commercial plantation management.

The Service works closely with the Department of Agriculture and community groups and has advisers at a number of Regional Centres.

Enquiries are welcomed. Ask for the vegetation adviser.

For the Wheatbelt area:

NARROGIN

Ph: (098) 81 1444

Fax: (098) 81 1645

For the Central West and Northern Wheatbelt area:

GERALDTON

Ph: (099) 21 5955

Fax: (099) 21 5713

For the near Metropolitan area:

COMO

Ph: (09) 334 0297

Fax: (09) 334 0327

For South West and Southern agricultural area:

MANJIMUP

Ph: (097) 71 1988

Fax: (097) 71 2855

For the South Coast area:

ALBANY

Ph: (098) 41 7133

Fax: (098) 41 7105

Information may also be obtained from the nearest District or Research office.

Species List

A Description of Plants Grown at CALM's
Manjimup and Narrogin Nurseries

EXPLANATORY NOTES

PLANT NAMES

Common names are not recorded for some species. Botanical names are reliable, usually appropriate, and should be quoted in preference.

SPECIES ORIGIN

Except where indicated otherwise in the text, the species listed are Western Australian native plants.

WEED STATUS

An asterisk (*) against the botanical name of a species indicates it has invasive potential, is exotic to WA and may, through seedling regeneration, occupy areas of natural or disturbed natural bushland after introduction to it.

TREE SIZE

The column headed SIZE shows, in metres, average maximum dimension (height x width) expected of the species grown to maturity in ideal growing conditions. Limiting site/soil characteristics (depth, nutrient, moisture, salinity and waterlogging), growing space, damage from insects or wind, are factors which will restrict plant development and ultimate size.

SOIL TYPES

Soil categories appropriate for growing each species are coded as follows:

sa: sand	sl: sandy loam	cl: clay loam	gr: gravel
sc: sandy clay	lm: loam	cy: clay	

CLIMATIC/GEOGRAPHIC ZONES

As a guide to suitable areas for growing the range of plants listed, one or several of seven climatic zones are shown for each species. The zones reflect, for the agricultural part of South Western Australia (see map and code descriptions), different growing conditions determined by rainfall and other climatic influences. Some plants suitable for the Goldfields and pastoral areas may be selected from zone 4 and zone 7 species. (See map on page 26.)

Zone No.

1. Main forested area of the south west - includes the higher rainfall zone, fertile soil types and strong coastal influence.
2. Moderate rainfall areas of the Wheatbelt.
3. West coastal area with moderate rainfall and strong Indian Ocean influence.
4. Eastern portion of the Wheatbelt under the influence of the Southern Ocean.
5. Northern extension of the Wheatbelt with a milder climate near the coast and some summer moisture.
6. South Coastal zone with moderate to low rainfall but with distinctive summer moisture particularly near the coast.
7. North eastern, lower rainfall part of the Wheatbelt, with consistently low humidity and shorter growing season.

USES

A list of notable attributes for the species is as follows:

- sa: salt tolerant - to varying degrees
- wl: able to withstand temporarily waterlogged conditions
- rv: good for general revegetation on cleared farmland; some useful understorey species
- wb: suitable windbreak species
- sh: good shade trees
- fo: fodder - a degree of palatability
- tb: potential timber trees - product type dependent on species and wood quality
- or: ornamental, suitable for park/garden/street use, as distinct from farmland amenity species
- ho: honey - species known for good nectar or pollen yield

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Acacia acuminata</i> raspberry jam	6x4	sc,sl,lm,cl	2,4,5,6,7	rv,wb,tb, or	Small tree with narrow foliage. Fragrant yellow flowers in July-October
<i>Acacia baileyana</i> * cootamundra wattle	7x6	sc,sl,lm,gr	1,3 Wetter areas of 2,5,6	or,	Widely planted eastern states species with silvery-grey foliage and massed yellow flowers (June-August).
<i>Acacia celastrifolia</i> glowing wattle	2x3	gr	2,4,5	rv,or	Attractive shrub with contrasting blue-grey foliage and bright yellow flowers. Showy ornamental species.
<i>Acacia collectiodes</i> spine wattle	2x3	sc,sl,lm,cl	2,4,5,7	sa,rv,wb	Spreading, prickly shrub with massed yellow flowers (July-September). Widely spread through southern Australia, it offers valuable bird refuge.
<i>Acacia hemiteles</i> tan wattle	2x2	sc,sl,lm,cl, cy,gr	2,4,5,6,7	rv,or	Small shrub with green-grey foliage and massed rounded flowers August-September. Good understorey species.
<i>Acacia melanoxylon</i> * Tasmanian blackwood	20x10	sc,sl,lm,cl	1,3. Wetter sites in 6	sh,wb,tb, or	Tall, long-lasting Acacia species from eastern Australia. Pale yellow flowers and dark green foliage; moist conditions are needed for good growth.
<i>Acacia merrallii</i> merrall's wattle	2x3	lm,cl,cy	2,4,5,7	sa,rv,wb, or	Spreading, mound-like shrub with masses of perfumed flowers and rounded blue-grey foliage. Good understorey species.
<i>Acacia microbotrya</i> manna gum	5x3	sc,sl,lm,cl	2,4,5,6,7	rv,fo,ho, or	Small, fast-growing tree with dense blue-green foliage. Yellow flowers in autumn. Useful revegetation species.
<i>Acacia pendula</i> weeping myall	10x5	sl,lm,cl	2,3. Coastal parts of 6	sh, wb,or	Hardy, eastern states species with silvery blue-green foliage and massed lemon-yellow flowers. Needs good site conditions to perform well.
<i>Acacia podalyrifolia</i> * Queensland silver wattle	6x4	sc,sl,lm,gr	1,2,3,6	or	Potentially invasive Queensland species, most suited to domestic cultivation. Massed yellow flowers and silvery-blue foliage.
<i>Acacia prainii</i> Prain's wattle	2x2	sc,sl,lm,cl, cy	2,4,5,6,7	sa,rv,or	Spreading, wattle species, useful for understorey plantings.
<i>Acacia redolans</i>	1x2	sd,sc,sl,lm,cl	2,4,5,6,7	sa,rv,wb, or	Low, spreading, dense shrub with yellow flowers. Good understorey species for revegetation work.
<i>Acacia saligna</i> golden wreath wattle	5x3	sc,sl,lm,cl,gr	2,3,4,5,6	sa,rv,fo, or	Widespread species. Foliage varies in size and shape. Versatile and quick growing. Yellow flowers in spring.
<i>Allocasuarina fraseriana</i> sheoak	10x6	sd,sl,lm,gr	1,2	rv,sh,wb, tb	Small to medium tree with fine needle-like foliage. Male and female flowers occur on separate trees (July-September).
<i>Allocasuarina huegeliana</i> rock sheoak	10x6	sc,sl,gr	2,3,4,5,6	rv,wb,fo, tb,or	Small tree with fine needle-like foliage, often found growing near granite outcrops. Regenerates readily.
<i>Banksia baxteri</i> Baxter's banksia	3x4	sd,sc	3,5,6	rv,or	Fast growing shrub with attractive lemon-yellow flowers - used in the cut flower industry. Needs a well-drained site.
<i>Banksia prionotes</i> orange banksia	8x6	sd	2,3,4,5,6	rv,sh,or	Reasonably fast-growing species with dull green leaves and conspicuous orange flowers. Needs a well drained site.
<i>Brachychiton gregorii</i> desert kurrajong	8x6	sl,lm,cl	2,4,5,6,7	sh,fo,or	Slow-growing, drought-resistant tree with a dense crown of bright green foliage.
<i>Callistemon citrinus</i> crimson bottlebrush	3x4	cl,cy	1,2,3,4,5,6	or	Spreading bush from the eastern states, with narrow leaves and massed deep red flowers.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Callistemon glaucus</i> Albany bottlebrush	2x2	lm,cl	1.Wet sites	wl,rv,or	Erect shrub with large, bright red bottlebrush flowers September-December. Needs a wet site to grow well. (Former species' name 'speciosus').
<i>Callistemon phoenicius</i> lesser bottlebrush	3x3	sc,sl,lm,cl	2,3,4,5,6. Wetter sites	sa,wl,rv,ho,or	Large bush with bluish-grey foliage. Has abundant bright red flowers in October-November. Needs a moist site to prosper. Good revegetation species.
<i>Callistemon rigidus</i> stiff leaved bottlebrush	2x3	sl,lm,cl	1,2,3,4,5,6	or	Compact bush from New South Wales. Has rigidly held, pointed foliage. Flowers bright red with golden tips.
<i>Callistemon salignus</i> willow bottlebrush	6x5	sc,sl,lm,cl	1,2,3,6	or	Upright, eastern states species with rough, papery bark. Small white flowers and a distinct pink tinge in the new foliage.
<i>Callistemon viminalis</i> weeping bottlebrush	8x5	sl,lm,cl,gr	1,2,3. Wetter sites in 5,6	wl,sh,or	Decorative, small tree from eastern states. Weeping habit. Mid-green foliage and bright red flowers. Popular amenity tree.
<i>Calothamnus quadrifidus</i> crimson-cluster net bush	1x2	sl,gr	2,4,5	rv,or	Fine ornamental with attractive red flowers and dense, dark green foliage.
<i>Calothamnus rupestris</i> mouse ears	1x2	lm,cl	2,3,4,5	rv,or	Spreading shrub with dense foliage and attractive red flowers. Good bird refuge species.
<i>Calothamnus sanguineus</i> bush honeysuckle	1x1	sl,lm	2,4	rv,or	Fine, needle-like foliage on a low bush with bright red feathery flowers. Needs well-drained soil.
<i>Casuarina obesa</i> swamp sheoak	10x5	sc,sl,lm,cl	1,2,3,4,5,6,7. Wet sites	sa,wl,rv,wb,fo,tb	Small tree with blue-grey needle-like foliage. Suited to growing in salty, waterlogged areas.
<i>Ceratonia siliqua</i> carob tree	8x8	sc,sl,gr	1,2,3,5,6. Well drained sites	sh,wb,fo,ho,or	Slow-growing, shade and fodder tree from the Mediterranean. Dense, dark green foliage. Need separate male and female trees for pod production.
<i>Chamaecytisus proliferus</i> * tagasaste or tree lucerne	5x5	sd	2,4,5,6	wb,fo,ho	Fast growing ,short lived fodder species from the Canary Islands. Needs good drainage to perform well.
<i>Eucalyptus accedens</i> paperbark wandoo	20x10	sl,lm,gr	2,3. Drier parts of 1	rv,sh,wb,tb,ho	Small to medium tree with a moderately dense crown and a distinctive white powder on the bark. Vigorous grower with rounded juvenile foliage.
<i>Eucalyptus angulosa</i> ridge-fruited mallee	5x6	sd,sl,lm	6. Wetter areas of 4, drier parts of 2	rv,wb,ho,or	Tree or mallee with shady habit and pale yellow flowers September-November.
<i>Eucalyptus argypphea</i> silver mallet	10x8	lm,cl,gr	2,5,6. Wetter sites in 4	rv,sh,tb,ho,or	Smooth, silver-grey barked mallet with cream flowers December-February (formerly <i>E. falcata</i>). A mallee form of this species also occurs.
<i>Eucalyptus astringens</i> brown mallet	15x8	sl,lm,cl,gr	2,3,4,5,6	rv,sh,wb,tb,ho	Shady, multi-stemmed tree with glossy foliage and creamy yellow flowers. Smooth-barked species with distinctive orange hue in the fresh bark.
<i>Eucalyptus botryoides</i> bangalay	25x20	sc,sl,lm	1,3. Wetter sites in 2,5,6	wl,sh,wb,tb	Large tree with dense crown. Rough bark along trunk and smooth in the upper branches. White flowers December-February.
<i>Eucalyptus brockwayi</i> dundas mahogany	18x8	sc,sl,lm,cl	2,4,5,6,7	rv,sh,wb,tb,ho,or	Attractive, straight-trunked tree with glossy green foliage and smooth bark. Drought and frost resistant. Good street tree for drier areas.
<i>Eucalyptus burdettiana</i> Burdett's gum	4x3	sl	2,3,6. Wetter areas of 4	rv,wb,fo,ho,or	Attractive mallee with glossy green foliage and yellow-green flowers

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus caesia</i> subsp.. <i>caesia</i> gungurru	6x5	sl,lm,cl	1,2,3. Wetter areas in 5, 6	or	Decorative tree with open crown of blue-green foliage, orange curling lower bark, upper pendulous branchlets and silvery white fruit. Flowers in June-September.
<i>Eucalyptus caesia</i> subsp.. <i>magna</i> silver princess	6x5	sl,lm,cl	1,2,3. Wetter areas of 5,6	or	Attractive, pendulous-crowned, small tree with distinctive minnieritchi-type bark at the base. Red or pink flowers May-August.
<i>Eucalyptus calophylla</i> marri	30x20	sd,sl,lm,cl,gr	1,3. Wetter areas of 2,5,6	rv,sh,wb,tb,ho	Large, shady tree with fibrous bark and large, glossy leaves. Masses of white flowers in January-February. Important honey species.
<i>Eucalyptus calophylla</i> var.. <i>rosea</i> pink-flowered marri	20x10	sc,sl,lm,cl,gr	1,3. Wetter areas of 2,5,6	sh,wb,tb,ho,or	Distinguished from marri by pink-coloured flowers. Mainly used as an ornamental and for honey production.
<i>Eucalyptus camaldulensis</i> * var.. <i>camaldulensis</i> river red gum	20x15	sc,sl,lm,cl	1,3. Wetter sites in 2,4,5,6,7	sa,sh,tb,ho	Occurs throughout mainland Australia except the south-west. Grows well in moist sites. Mid-green foliage and smooth white or grey bark. The 'Silverton' variety <i>subcinerea</i> has more glaucous foliage and good salt tolerance.
<i>Eucalyptus camaldulensis</i> * var.. <i>obtusata</i> river red gum	10x8	sc,sl,lm	1,3. Wetter sites in 2,4,5,6,7	sh, ho,or	From inland Australia, including WA. Smooth, white or brown blotched bark, spreading crown and bright green foliage. Creamy white flowers in summer.
<i>Eucalyptus campaspe</i> silver topped gimlet	7x5	sc,sl,lm,cl,cy	4,7. Drier parts of 2	rv,sh,wb,ho,or	Spreading crown, blue-grey foliage and unique coppery brown bark. Creamy white flowers October-January. Good street tree for drier areas.
<i>Eucalyptus capillosa</i> subsp.. <i>capillosa</i> inland wandoo	15x10	sc,sl,cy	2,4,7	rv,sh,tb,ho	Medium tree with smooth white bark and blue-grey foliage. Creamy white flowers February-April.
<i>Eucalyptus cinerea</i> * Argyle apple	15x10	sc,sl,lm,cl,gr	1,3. Wetter areas of 2,5,6	sh,or	Small to medium tree from New South Wales and northern Victoria. Distinctive, rounded, silvery-blue foliage and brown, persistent bark on the trunk.
<i>Eucalyptus citriodora</i> * lemon-scented gum	25x15	sl,lm	1,3. Wetter areas of 2,5,6	tb,ho,or	Tall, smooth-barked Queensland species with very aromatic foliage. A graceful tree, white flowers in June-July.
<i>Eucalyptus cladocalyx</i> * sugar gum	25x15	sl,lm,gr	1,2,3,6. Wetter areas of 4,5	sh,wb,tb,ho	Tall, smooth-barked species from South Australia. Glossy green foliage (which can be toxic to stock in spring). Moderately quick growing.
<i>Eucalyptus cladocalyx</i> * var. <i>nana</i> dwarf sugar gum	8x8	sl, lm,gr	1,2,3. Wetter areas of 4,5,6	sh,wb,ho,or	Small tree from South Australia. Spreading crown of glossy, dark green foliage(can be toxic to stock in spring). Flowers January-February.
<i>Eucalyptus clelandii</i> Cleland's gum	10x6	lm,cl,cy	4,7. Drier parts of 2,5	rv,ho,or	Multi-trunked tree with rough basal bark, smooth above. Blue-grey foliage and light yellow flowers. Good street tree for drier areas.
<i>Eucalyptus clivicola</i> green mallet	12x6	cl,gr	2,4,6	rv,sh,tb,ho,or	Smooth-barked, small tree with glossy green leaves and pale yellow flowers.
<i>Eucalyptus conferruminata</i> Bald Island marlock	10x8	sd,sl,lm	1,3,6. Moist sites in 2,5	rv,sh,wb,ho,or	Spreading, rounded tree with moderately dense light green foliage. Lemon-coloured flowers (August-November) in unusual tight cluster.
<i>Eucalyptus cornuta</i> yate	20x10	sl,lm,cl	1. Wet sites in 6	wl,rv,tb,ho	Usually upright, spreading tree with thick, rough basal bark, smooth above. Bright green leaves and light yellow flowers. Good south coastal species.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus corrugata</i> rough-fruited mallee	10x6	sc,sl,lm,cl	4,7. Drier parts of 2	rv,sh,ho, or.	Small, mainly smooth-barked species with dark green leaves. Yellow flowers October-March. Distinctive, corrugated seed capsules.
<i>Eucalyptus crebra</i> narrow-leafed red ironbark	15x10	sc,sl,lm,cl	1,3. Wetter areas of 2,5,6	sh,tb,ho	Eastern states species with very fibrous, persistent bark. Blue-green foliage, with white flowers May-January
<i>Eucalyptus crucis</i> silver mallee	5x6	sl,lm	4,7. Drier parts of 2,5,6	or	Decorative ornamental with minnieritchie-like bark and rounded silvery-blue foliage. Useful cut-foliage species.
<i>Eucalyptus densa</i> subs <i>densa</i>	8x6	sl,lm,cl,cy	2,4,6	rv,sh,ho, or	Recently described mallee species, very similar to <i>E. gardneri</i> but found growing in lowland sites. Creamy yellow flowers May-August.
<i>Eucalyptus dielsii</i> cap-fruited mallee	7x4	cl,cy	4,7. Drier parts of 6	rv,or	Slender mallee with smooth green-brown bark and glossy green foliage. Creamy white flowers December-January
<i>Eucalyptus diptera</i> two-winged gimlet	8x6	cl,cy	4,7. Drier parts of 6	rv,sh,ho, or	Attractive, small tree with distinctive coppery bark on a twisted trunk. Creamy white flowers April-June
<i>Eucalyptus diversicolor</i> karri	45x25	sl,lm	1	rv,tb,ho	Tallest of the Western Australian trees, karri has a smooth, white bark (flakey when young) and moderately dense crown. White flowers September-February.
<i>Eucalyptus drummondii</i> Drummond's gum	6x6	sc,sl,lm,gr	2,3. Wetter areas of 5,6	rv,wb,ho, or	Attractive mallee with grey-green foliage and white powdery stems and fruits. Flowering period usually September-December, sometimes May-June.
<i>Eucalyptus dundasii</i> Dundas blackbutt	12x8	sl,lm,gr	4,7. Drier parts of 2,5,6	rv,sh,wb, tb,ho,or	Medium tree with persistent, tessellated bark on the lower trunk. Leaves glossy green, flowers creamy white. Good dry area street tree.
<i>Eucalyptus ebbanoensis</i> sandplain mallee	6x5	sd,sl	7. Drier parts of 2,5	rv,or	Mallee or small tree with smooth bark (rough at base). Massed light cream flowers in the latter half of summer.
<i>Eucalyptus eremophila</i> subsp. <i>eremophila</i> tall sand mallee	6x5	sc,sl,lm	2,4,5,6,7	rv,wb,ho, or	Smooth-barked mallee with olive-green foliage. Massed pale yellow flowers August-December. Good street tree for drier areas.
<i>Eucalyptus erythrocorys</i> illyarrie	6x6	sd,sl, limestone	3. Wetter parts of 5	rv,wb,or	Decorative spreading mallee with smooth bark and dark green leaves. Buds have bright red caps which are shed to reveal striking yellow flowers. February-April.
<i>Eucalyptus erythronema</i> var.. <i>erythronema</i> red-flowered mallee	6x6	sc,sl,lm,cl	4,5,6,7. Drier parts of 2	rv,wb,ho, or	Small mallee. Plentiful red flowers and colourful smooth bark make this an ideal ornamental and street tree for drier areas. Flowers October-December.
<i>Eucalyptus ewartiana</i> Ewart's mallee	6x5	sl,lm	4,7. Drier parts of 2,5	ho,or	Distinctive tree with unusual brown-green curling bark. Cream to pale yellow flowers November-March.
<i>Eucalyptus famelica</i>	5x6	sc,cl	6	sa,wl,rv	Spreading mallee with glossy green foliage. White flowers in April-July.
<i>Eucalyptus ficifolia</i> WA red-flowered gum	12x9	sd,sc,sl,lm	3. Coastal areas of 1,6	sh,wb,ho, or	Medium tree with rough brown bark and dense, deep green foliage. Massed pink to red flowers in December-February. Grows better in frost free areas.
<i>Eucalyptus flocktoniae</i> merrit	12x8	sl,lm,cl	2,4,7. Drier parts of 5,6	sa,rv,sh,tb, ho,or	Small tree or mallee. with dark green foliage and smooth bark. Good street tree for drier areas. White flowers September-December.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus formanii</i> Forman's mallee	6x6	sl,lm,cl	4,5,7	rv,ho,or	Small tree with bark persistent at the base and smooth above. Very narrow light green leaves and massed white flowers December-April.
<i>Eucalyptus forrestiana</i> subsp. <i>fuchsia</i> gum	4x3	sl,lm,cl	2,3,4,5,6,7	rv,or	Decorative mallee with thick glossy green leaves and pendulous scarlet flower buds. Flowering period December-March.
<i>Eucalyptus gardneri</i> blue mallet	10x6	sl,lm,cl,gr	2,4	rv,sh,wb, tb,ho,or	Distinctive, small tree with blue-grey foliage, light yellow flowers and a smooth light coppery coloured trunk. Flowers March-November.
<i>Eucalyptus globulus</i> subsp. <i>bicostata</i> eurabbie	40x20	sl,lm	1,3. Wetter areas in 2,6	wb,tb,ho	Upright blue gum from Victoria and NSW. Similar to Tasmanian blue gum though often has fuller crown and wider branching. Capsules in twos and threes on branchlets
<i>Eucalyptus globulus</i> subsp. <i>globulus</i> * Tasmanian blue gum	45x25	sl,lm	1,3. Wetter areas in 2,6	tb,ho	Fast-growing, tall, smooth-barked tree with long strap-like adult leaves and rounded blue-grey juvenile foliage. Capsules occur in singles. Needs a good site to sustain strong growth.
<i>Eucalyptus gomphocephala</i> tuart	30x20	sd,sl,lm	1,3. Wetter areas of 2,5,7	rv,sh,wb, tb,ho	Medium-spreading tree with fibrous grey-brown bark. White flowers January-April. Grows best where summer moisture is available.
<i>Eucalyptus grandis</i> * rose gum	35x20	lm	1,3. Wetter sites in 6	tb,ho	Tall northern NSW tree with a straight smooth trunk and glossy green foliage, Flowers April-August.
<i>Eucalyptus guilfoylei</i> yellow tingle	30x20	lm,cl	1. South coastal areas	rv,tb	Tall, rough-barked tree with discolorous leaves and white flowers. Best suited to south coastal areas and better soil types.
<i>Eucalyptus halophila</i>	3x4	sc,sl,lm,cl	6	sa,or	Spreading mallee with cream-coloured flowers during mid summer. Matt, grey-green foliage and light brown box-type bark.
<i>Eucalyptus jacksonii</i> red tingle	45x30	sl,lm	1. South coastal areas	tb,ho	Tall tree with persistent fibrous bark. White flowers January-March. Does better in south coastal areas.
<i>Eucalyptus kochii</i> subsp. <i>kochii</i> Watheroo mallee	5x6	sl,lm,cl	Wetter areas of 4,5,7. Drier parts 2,6	rv,wb,ho, or	Rough-barked mallee with blue-grey foliage. White flowers December-February. Also called the oil mallee because of its high cineole content.
<i>Eucalyptus kondininensis</i> Kondinin blackbutt	12x8	sc,sl,lm,cl, cy	2,4	sa,wl,rv, sh,tb,ho	Upright, spreading tree with persistent black bark on the lower trunk. Glossy, green foliage, cream flowers October-December. Good street tree.
<i>Eucalyptus kruseana</i> bookleaf mallee	3x3	sc,sl,lm	2,3,4,5,6	or	Very decorative mallee with rounded silver foliage and creamy yellow flowers. Foliage used in floriculture trade.
<i>Eucalyptus lehmannii</i> bushy yate	4x5	sc,sl,lm,cl	3,6. Wetter areas of 2,5	rv,wb,ho, or	Mallee with smooth bark and rounded crown. Tight clusters of yellow flowers January-April. Similar in appearance to <i>E. conferruminata</i> .
<i>Eucalyptus leptopoda</i> tammin mallee	5x5	sd,sl	5,7. Drier parts of 2	rv,or	Spreading mallee with attractive peeling bark. Cream flowers December-March. Light green foliage.
<i>Eucalyptus lesouefii</i> Goldfields blackbutt	12x8	cl,cy	4,7	rv,sh,ho,or	Short-trunked tree with distinctive persistent bark on lower trunk. Matt green foliage, with pale yellow flowers November-February.
<i>Eucalyptus leucoxylon</i> subsp. <i>megalocarpa</i> yellow gum	8x6	sl,lm,cl	1,2,3,6. Wetter areas of 4,5	sh,wb,ho, or	Spreading tree from South Australia and Victoria. Smooth bark, matt green foliage and abundant flowers. Common variety "rosea" is similar.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus leucoxylon</i> subsp. <i>leucoxylon</i> SA blue gum	12x8	sc,sl,lm	1,2,3. Wetter areas of 4,5,6	sh,tb,ho,or	Medium-sized, upright tree with spreading crown. Smooth bark, matt green foliage and abundant flowers.
<i>Eucalyptus longicornis</i> red morrel	20x10	cl,cy	2,4,7. Drier parts of 5,6	rv,sh,tb,ho	Straight-trunked tree with rough bark and a spreading crown of glossy green leaves. Creamy white flowers November-March.
<i>Eucalyptus loxophleba</i> subsp. <i>lissophloia</i> smooth barked york gum	6x6	sl,lm,cl	2,4,7	rv,sh,ho,or	Large mallee with very glossy green foliage and coppery coloured smooth bark. White flowers September-February.
<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> york gum	15x10	sl,lm,cl	2,4,5,6	sa,rv,sh,tb,ho	Medium tree with spreading crown of glossy green foliage. Persistent bark on the lower trunk and smooth above. White flowers September-December.
<i>Eucalyptus macrandra</i> long-flowered marlock	5x5	sc,sl,lm,cl	6	ho,or	Smooth-barked mallee with profuse yellow-green flowers in January-March. Good street tree.
<i>Eucalyptus macrocarpa</i> subsp. <i>macrocarpa</i> mottlecah	4x5	sd,sc	2,3,4,5,6	or	Spreading mallee with silvery-blue foliage and large red flowers October-January.
<i>Eucalyptus maculata</i> * spotted gum	30x15	sc,sl,lm,cl	1,3. Wetter areas of 2,5,6	sh,wb,tb,ho	Upright and well-formed tree with a dense crown of dark green foliage. Smooth, light bark with purplish blotches. White flowers May-September.
<i>Eucalyptus marginata</i> jarrah	25x15	sl,lm,gr	1,3. Wetter sites in 2	tb,ho	Tall tree with persistent fibrous bark and dark green leaves. White flowers September-January. Relatively slow growing.
<i>Eucalyptus megacarpa</i> bullich	15x8	sc,sl	1. Wet sites	wl,or	Variable formed species, distinctive with its alabaster white bark, large leaves and white flowers. Needs a summer wet site to do well.
<i>Eucalyptus megacornuta</i> warted yate	10x8	sc,sl,lm,cl	2,3,4,6	rv,sh,ho,or	Fast-growing, open-crowned species with unusual green flowers and densely warted bud caps. Grows well on a wide range of sites.
<i>Eucalyptus melanoxydon</i> black morrel	15x10	lm,cl	4,7. Drier parts of 2	rv,sh,tb,ho	Rough-barked, upright tree with glossy dark green foliage. Cream flowers December-March. Good species for difficult sites.
<i>Eucalyptus melliodora</i> yellow box	20x15	sl,lm,cl	1,3. Wetter areas of 2,5,6	sh,wb,tb,ho	Graceful, medium-sized, eastern Australian tree species with fibrous, grey bark and grey-green foliage. Flowers September-February. Regarded as top honey producing species.
<i>Eucalyptus microcarpa</i> grey box	20x15	sc,sl,lm,cl	1,3. Wetter areas of 2,5,6	rv,wl,sh,tb,ho	Medium-sized, eastern states species with dull green foliage. Persistent bark on trunk and larger limbs, becoming smooth on smaller branches.
<i>Eucalyptus microcorys</i> tallowwood	35x15	sl,lm	1	tb	Tall, eastern coast species with straight trunk and persistent fibrous bark. Creamy white flowers August-December.
<i>Eucalyptus muelleriana</i> yellow stringbark	35x20	lm,cl	1	wb,tb	Tall, south-eastern Australian species with straight trunk and persistent, fibrous bark. Does best in good soils with summer moisture.
<i>Eucalyptus myriadena</i> snap and rattle	10x8	lm,cl,cy	4,7. Drier parts of 2	sa,rv,sh,wb	Upright, spreading tree with dark green foliage. Rough, persistent bark on lower trunk, smooth above. White flowers November-April.
<i>Eucalyptus nicholii</i> narrow-leaf peppermint	20x15	sl	1,3. Wetter areas of 2,5,6	sh,wb,or	Graceful, medium-sized tree from NSW. Weeping, blue-green foliage and persistent, rough bark. White flowers March-April.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus nutans</i> red-flowered moort	5x5	lm,cl,cy	6	rv,ho,or	Small, spreading mallee with a moderately dense crown. Red (sometimes cream) flowers September-October.
<i>Eucalyptus occidentalis</i> var. <i>occidentalis</i> flat-topped yate	18x10	lm,cl,cy	Wetter sites 2,3,4,5,6	sa,wl,rv, sh,tb,ho	Quick-growing, medium tree with a flat-topped shady crown and rough basal bark. Creamy white flowers November-May. Suited to moister sites, tolerates mild salinity.
<i>Eucalyptus oldfieldii</i> Oldfield's mallee	5x5	sd,sc,sl	5,7. Drier areas of 4	rv,wb,or	Spreading mallee with a rounded crown of grey-green foliage. Large, white flowers July-November.
<i>Eucalyptus patens</i> Western Australian blackbutt	30x20	sl,lm,cl	1	sh,tb,ho	Straight-trunked tree with thick fibrous bark and blue-grey foliage. Grows best on moist, but not waterlogged, sites.
<i>Eucalyptus phaenophylla</i> mallee white gum	4x5	sc,sl	2,4,6	rv,wb,ho, or	Small, spreading mallee, formerly confused with <i>E.redunca</i> . Smooth-barked species with pale yellow flowers August-November.
<i>Eucalyptus pileata</i> capped mallee	6x5	sc,sl,lm,cl	4,7. Drier parts of 2,6	rv,sh,wb, or	Attractive mallee with smooth coppery bark which peels off in long ribbons. Glossy dark green foliage. White flowers February-May.
<i>Eucalyptus pilularis</i> eastern states blackbutt	35x20	lm	1	tb	Tall forest species from eastern Australia with a smooth white trunk above persistent basal bark. Needs good soil and summer moisture to do well.
<i>Eucalyptus platypus</i> var. <i>heterophylla</i> coastal moort	4x5	sd,sc,sl	3,6. Wetter areas of 5	rv,wb,ho, or	Rounded-crown, small tree with dark foliage and smooth, light brown bark. Massed white flowers.
<i>Eucalyptus platypus</i> var. <i>platypus</i> moort	5x6	cl,cy	2,3,4,5,6	sa,rv,wb, ho,or	Small tree or mallee with matt green, thick leaves forming a compact, rounded, dense crown. Massed white flowers September-January.
<i>Eucalyptus preissiana</i> bell-fruited mallee	3x4	sc,sl,lm,cl, gr	1,3. Wetter areas 2,5,6	or	Decorative mallee with large yellow flowers contrasting with thick blue-green foliage. Versatile ornamental species.
<i>Eucalyptus regnans</i> mountain ash	40x20	lm	1	tb	Very tall, straight-trunked species from south-eastern Australia. Needs very good soil and abundant summer moisture to survive.
<i>Eucalyptus resinifera</i> red mahogany	30x15	sl,lm	1	tb,ho	Tall forest species from the eastern states with thick persistent bark. Needs a good soil type and summer moisture to do well.
<i>Eucalyptus robusta</i> swamp mahogany	25x20	lm,cl,cy	1,3	sh,wl,tb	Rough-barked, eastern states species with a spreading crown of large, dark green leaves. White flowers May-July. Needs a moist site to grow well.
<i>Eucalyptus rudis</i> WA flooded gum	15x15	sc,sl,lm,cl, cy	1,3. Wetter sites in 2,5,6	wl,rv,sh, wb,ho	Spreading often multi-trunked tree with persistent basal bark and smooth branches. Suited to moisture-gaining and mildly saline sites. Good revegetation species.
<i>Eucalyptus saligna</i> * Sydney blue gum	35x20	sl,lm,cl	1,3. Wetter areas of 2,6	sh,tb	Fast-growing, tall, forest species from eastern Australia. Clean white bark and strongly discoloured leaves. White flowers January-April.
<i>Eucalyptus salmonophloia</i> salmon gum	20x15	sc,sl,lm,cl	2,4,5,7	rv,sh,tb, ho,or	Umbrella-shaped tree with very distinctive salmon-red fresh bark. Shining, bright green foliage, White flowers December-March.

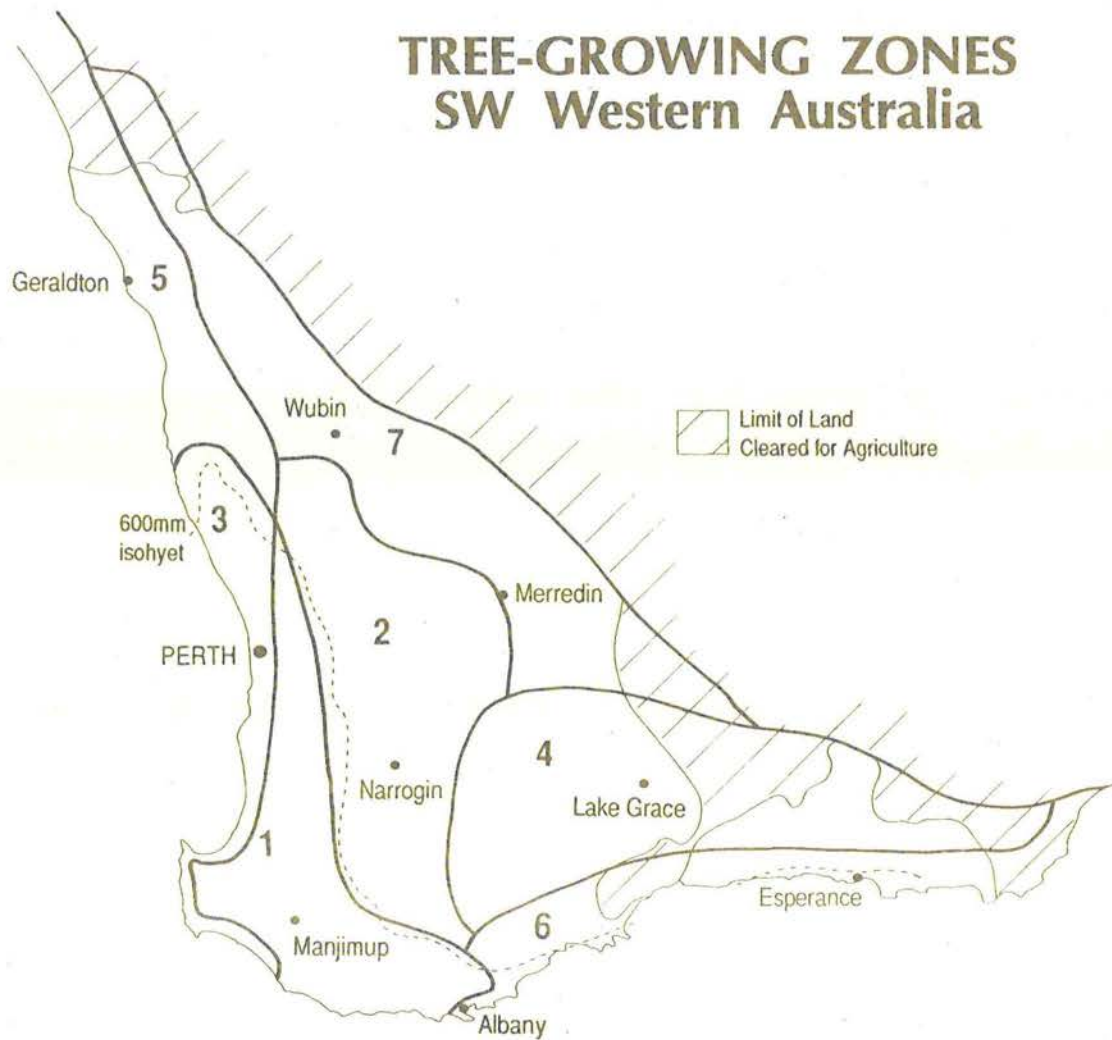
SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus salubris</i> var. <i>salubris</i> gimlet	12x10	lm,cl,cy	4,7. Drier parts of 2	rv,sh,tb, ho,or	Compact, glossy foliage and attractive, red-brown bark on fluted, twisted trunks. White flowers December-March. Good street tree for drier areas.
<i>Eucalyptus sargentii</i> salt river gum	10x8	sc,sl,lm,cl, cy	2,4,5	sa,wl,rv, ho,or	Upright, spreading tree with rough basal bark and smooth coppery bark above. Glossy olive green foliage. Creamy white flowers October-January. Salt tolerant.
<i>Eucalyptus semiglobosa</i> Jerdacuttup mallee	5x5	sl,lm	6, Coastal areas	rv,ho,or	White-trunked mallee with creamy white flowers and thick dark green leaves. Flowering April-June. (Formerly <i>E. goniantha</i>)
<i>Eucalyptus sheathiana</i> ribbon bark mallee	7x6	sc,sl,lm,cl	4,7	rv,sh,ho,or	Attractive small tree with peeling bark. Large, grey-green leaves. Light yellow flowers January-April.
<i>Eucalyptus sideroxylon</i> subsp. <i>sideroxylon</i> Pink-flowered ironbark	15x10	sc,sl,lm,cl, cy,gr	1,3. Wetter areas in 2,5,6	sh,wb,tb, ho,or	Medium-sized tree from eastern Australia with persistent, very thick dark fibrous bark. Blue-grey foliage and massed flower (often red or pink).
<i>Eucalyptus spathulata</i> var. <i>grandiflora</i> swamp mallet	4x3	sc,sl,lm,cl	2,4,6	wl,rv,wb, ho,or	Attractive mallee with smooth, coppery new bark. Glossy, olive-green foliage. Masses white flowers December-March.
<i>Eucalyptus spathulata</i> var. <i>spathulata</i> swamp mallet	8x6	sc,sl,lm,cl, cy	2,3,4,5,6	sa,wl,rv, sh,wb,ho, or	Rapid-growing, adaptable species with matt olive-green foliage. Massed white flowers December-March. A good street tree for drier areas.
<i>Eucalyptus stoatei</i> scarlet pear gum	6x5	sl,lm	6	rv,wb,or	Spreading mallee with distinctive, large, red flower buds, flowering intermittently throughout the year. Good street tree for drier areas.
<i>Eucalyptus stricklandii</i> Strickland's gum	8x6	sc,sl,lm,cl, gr	4,7	rv,sh,ho,or	Decorative small tree with thick, glossy leaves, bright yellow flowers and coppery coloured bark. Good street tree.
<i>Eucalyptus talyuberlup</i> pretty yate	5x5	sc,lm,gr	Wetter areas of 6. Drier parts of 1	rv,wb,ho, or	Rounded-crown, smooth-barked mallee with distinctive, clustered seed capsules. Large yellow-green flowers May-September.
<i>Eucalyptus torquata</i> coral gum	10x8	sc,sl,lm,cl, cy,gr	2,4,5,6,7	sh,ho,or	Blue-grey-green foliage forming a compact crown. Showy pink-red flowers through most of summer. Thick persistent bark. Good street tree.
<i>Eucalyptus torwood</i> torwood	8x6	sl,lm,cl,gr	2,4,5,6,7	ho,or	Small tree with massed pink-red flowers, blue-grey foliage and smooth bark. Good street tree.
<i>Eucalyptus transcontinentalis</i> redwood	15x10	sc,sl,lm,cl	2,4,7	rv,sh,wb, tb,ho,or	Attractive, small tree with smooth bark and blue-grey foliage. Massed yellow flowers August-November.
<i>Eucalyptus uncinata</i> hook-leaved mallee	3x4	sc,sl,cl	2,4,6	rv,ho,or	Grey-barked mallee with light green foliage. White flowers January-April.
<i>Eucalyptus viminalis</i> subsp. <i>viminalis</i> manna gum	35x20	sc,sl,lm,cl	1,3	sh,tb	Tall, forest species from the eastern states. Distinctive habit of shedding long ribbons of bark when mature. Needs good soil to grow well.
<i>Eucalyptus wandoo</i> wandoo	20x15	sc,sl,lm,cl, cy,gr	2,3. Drier parts of 1	rv,sh,wb, tb,ho	Spreading-crown tree with smooth white bark and grey-green foliage. White flowers December-May.
<i>Eucalyptus websteriana</i> Webster's mallee	4x5	sl,lm	2,4,7	or	Unusual, small tree with curling orange bark, broad, light green leaves and pale yellow flowers

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Eucalyptus woodwardii</i> lemon-flowered gum	8x6	sl,lm,cl	4,7. Drier parts of 2	ho,or	Attractive, small tree with massed yellow flowers, smooth bark and large grey-green leaves. Good ornamental for drier areas.
<i>Eucalyptus yilgarnensis</i> yorrell	12x10	sc,sl,lm,cl, cy	2,4,5,7	sa,rv,sh, ho,or	Small tree with glossy green foliage, white flowers and smooth coppery bark above rough basal bark.
<i>Hakea baxteri</i> fan hakea	6x4	sc,sl,lm,cl, gr	2,4	or	Rounded shrub with unusual fan-shaped foliage. An interesting ornamental species that adapts to most soils.
<i>Hakea bucculenta</i> red pokers	4x3	sd,sl	2,5	rv,or	Upright, spreading shrub with long narrow leaves and large, bright red flowers.
<i>Hakea francisiana</i> grass-leaf hakea	4x4	sd,sl	2,4,5	rv,or	Spreading shrub with smooth grey bark, bright light green leaves and massed red-pink flowers.
<i>Hakea laurina</i> pincushion hakea	5x4	sc,sl,lm,cl, cy	2,3,4,5,6	rv,or	Distinctive, spreading shrub with large rounded red-cream flowers, matt green leaves and smooth grey bark. Excellent ornamental species.
<i>Hakea lissocarpa</i> honey bush	2x3	sc,sl,lm,cl,gr	1,2,3	rv,or	Dense, prickly shrub with masses of creamy white, sweetly scented flowers. Excellent shrub for attracting birdlife.
<i>Hakea multineta</i> grass-leaf hakea	4x3	sd,sl,gr	2,5	rv,or	Smooth-barked shrub with bright green leaves and long spikes of pink flowers.
<i>Hakea oleifolia</i> olive leaf hakea	6x4	sl,lm,cl	1,3. Wetter areas of 6	rv,or	Small tree with olive-green foliage and discreet white flowers. Good street tree for higher rainfall areas.
<i>Hakea pandanica</i>	2x2	sd,sl	4,6	or	Erect, open shrub with white flowers and grey-green foliage. Interesting ornamental species.
<i>Hakea petiolaris</i> sea urchin hakea	4x4	sl,lm,gr	2,4	or	Cream-coloured flower contrasting with blue-green foliage and shining grey bark makes this species a good garden specimen.
<i>Hakea undulata</i> wavy-leaved hakea	2x2	sl,gr	2,5,6	or	Upright shrub with irregularly shaped leaves. White flowers in spring.
<i>Kunzea baxteri</i> Baxter's kunzea	2x2	sc,sl,lm,cl	1,3,6	or	Compact, rounded shrub with bright red, bottlebrush style flowers.
<i>Kunzea pulchella</i> granite kunzea	3x3	sc,sl,lm,gr	2,4	or	Decorative species with silky grey-green leaves and vivid scarlet flowers.
<i>Leptospermum erubescens</i>	2x3	sd,sc	2,3,4,5,6	rv,or	Spreading tea-tree with white or pinkish flowers. Good for stabilising sandy sites.
<i>Melaleuca acuminata</i> broom bush	2x2	cl,cy	2,4,6	sa,wl,rv, or	Spreading, understorey species with masses of fragrant, cream flowers. Good revegetation species.
<i>Melaleuca armillaris</i> * bracelet honey-myrtle	6x5	sl,lm,cl	1,3. Wetter areas of 2,5,6	wl,sh,wb, or	Small tree from south and eastern Australia, with rough grey bark, narrow leaves and massed white flowers. Prefers summer damp sites.
<i>Melaleuca brevifolia</i> mallee honey-myrtle	4x4	cl,cy	1,2,3,4,5,6	sa,wl,rv, wb,or	Bushy shrub with tiny dark leaves, white flowers and rough bark. Good for revegetation on difficult sites.
<i>Melaleuca cuticularis</i> salt water paperbark	8x6	sc,cl,cy	1,2,3,4,5	sa,wl,rv, sh,or	Spreading-crown tree, with white papery bark. Massed white flowers in early summer. Suitable for saline sites that are winter wet and summer damp.
<i>Melaleuca diosmifolia</i> green honey-myrtle	3x3	sl,lm,cl	1,3,6	or	Large, dense shrub with unusual small leaves crowded thickly along the branches. Pale green to yellow-green flowers in late spring or early summer.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Melaleuca elliptica</i> granite honey-myrtle	3x2	sc,sl	2,4,6	wb,or	Low, spreading shrub with rough peeling bark, light green leaves and large red flowers. Suited to summer damp sites
<i>Melaleuca hamulosa</i>	3x4	sl,lm,cl,cy	2,3,4,6	sa,wl,rv, wb,or	Dense, spreading shrub with fine foliage and creamy white flowers. Excellent revegetation and understorey species.
<i>Melaleuca huegelli</i> chenille honey-myrtle	5x4	sd,sl	1,3. Wetter areas of 5,6	or	Large shrub with numerous white candle-like flower spikes in early summer. Needs some summer moisture to survive.
<i>Melaleuca hypericifolia</i> hillock bush	5x4	sc,sl,lm,cl	1,3	or	Attractive woody shrub from temperate New South Wales, with large red-orange flowers in early summer.
<i>Melaleuca incana</i> grey honey-myrtle	3x3	lm,cl	1,3,6	wl,or	Soft, weeping shrub with grey-blue foliage and yellow flowers. Needs a moist site to succeed.
<i>Melaleuca lanceolata</i> Rottneest Island tea tree	6x5	sd,sc,sl	2,3,4,6. Wetter parts of 5	sh,wb,or	Small tree with dense dark foliage. Masses of white flowers in summer. Suited for coastal areas with summer moisture.
<i>Melaleuca lateritia</i> robin redbreast bush	2x3	sc,cl,cy	2,3,6	or	Attractive shrub with thin linear leaves and large orange-red flowers (summer to early autumn). Best in wet depressions.
<i>Melaleuca nesophila</i> western tea myrtle	5x6	sd,sc,sl	1,3. Moist sites 2,5,6	rv,sh,wb, or	Spreading, domed, small tree with thick flakey bark. Rounded leaves and massed mauve flowers. Most suited to the south coastal areas.
<i>Melaleuca pauperiflora</i> subsp. <i>fastigiata</i> boree	4x3	lm,cl	2,4,5,6,7	rv,wb,or	Upright large shrub with coarse-textured bark and massed white flowers. Good understorey species.
<i>Melaleuca pauperiflora</i> subsp. <i>pauperiflora</i> dryland tea tree	4x4	sl,lm,cl	2,4,5,6,7	rv,wb,or	Rough-barked species with masses of white flowers. Grows into a small tree and is a good understorey species. Has been used for fence posts.
<i>Melaleuca platycalyx</i>	1x1	sl,lm	2,4,7	rv,or	Mauve-flowered shrub with elliptical bluish-green foliage.
<i>Melaleuca radula</i> graceful honey-myrtle	2x2	sc,sl,lm,cl	2,3,4,5,6	or	Attractive spreading small bush with fluffy mauve-pink flowers in July-September.
<i>Melaleuca raphiophylla</i> swamp paperbark	8x8	cl,cy	1,3,6. Wet sites	wl,sh,wb, or	Bushy-crowned, small tree with fine grey-green foliage and massed white flowers. Does best in wet, swampy conditions.
<i>Melaleuca spicigera</i>	1x2	lm,cl,cy,gr	2,4,7	rv,or	Low-branching shrub with blue-green ovate leaves and pinkish-mauve flowers. Good bird-attracting species.
<i>Melaleuca steedmanii</i> Steedman's honey myrtle	2x2	sc,sl,lm	2,4,6	or	Open, spreading shrub with narrow elliptical leaves and showy spikes of red flowers.
<i>Melaleuca thyoides</i>	2x2	sc,sl,cl,cy	2,3,4,5,6	sa,wl,rv, or	Low, spreading shrub with rough, grey bark and very small leaves. Flowers creamy white, late spring-early summer. Excellent revegetation species.
<i>Melaleuca wilsonii</i> Wilson's honey-myrtle	2x2	sc,sl	1,3	or	South eastern Australian species with dense foliage and corky bark. Deep pink flowers September-October.
<i>Pinus canariensis</i> Canary Island pine	25x15	sc,sl,lm,cl, gr	1,3. Wetter areas of 2,5,6	sh,wb,tb, or	Robust pine tree from the Canary Islands. Stout, bright green needles and thick-plated bark. Attractive feature tree for park situations.
<i>Pinus halepensis</i> Aleppo pine	15x8	sd,sc,sl,lm	2,4,5,6	sh,wb,or	Small-stature Mediterranean pine, with relatively short needles and thick-plated bark. Needs access to summer moisture if in sandy soils.

SPECIES	SIZE	SOIL	ZONE	USES	DESCRIPTION
<i>Pinus patula</i> drooping needle pine	15x10	sl,lm	1,3. Wetter areas of 6	sh,wb,or	Graceful species from Central America with long soft needles and gold-coloured tips. Plated orangey brown bark.
<i>Pinus pinea</i> stone pine	10x8	sd,sc,sl,lm	1,2,3. Wetter areas of 5,6	sh,wb,or	Small tree from the northern Mediterranean with large cones which yield edible nuts. Needs access to summer moisture to survive.
<i>Pittosporum phylliraeoides</i> native apricot	5x4	sc,sl,lm,cl	2,3,4,5,6,7	sa,rv,or	Graceful, pendulous, dense, mid-green foliage. White flowers with unusual orange-coloured seed capsules.
<i>Santalum spicatum</i> sandalwood	4x4	lm,cl	2,3,4,5,7	tb,or	Small often twisted tree, rough bark and stiff blue-grey foliage. Needs host species for long-term survival. Fragrant timber and edible fruit. Slow growing.
<i>Tamarix aphylla</i> * athel pine	8x6	sc,sl,lm,cl, cy	2,3,4,5,6.	sa,wl,sh, fo,or	Native of Asia Minor, forming a small many-branched tree. Needle-like foliage and tufty, pink flowers.

TREE-GROWING ZONES SW Western Australia



CLIMATIC/GEOGRAPHIC ZONES

Zone No.

1. Main forested area of the south west - includes the higher rainfall zone, fertile soil types and strong coastal influence.
2. Moderate rainfall areas of the Wheatbelt.
3. West coastal area with moderate rainfall and strong Indian Ocean influence.
4. Eastern portion of the Wheatbelt under the influence of the Southern Ocean.
5. Northern extension of the Wheatbelt with a milder climate near the coast and some summer moisture.
6. South Coastal zone with moderate to low rainfall but with distinctive summer moisture particularly near the coast.
7. North eastern, lower rainfall part of the Wheatbelt, with consistently low humidity and shorter growing season.

FURTHER READING

- Trees For Rural Australia** (1990) by K.W. Cremer (ed). CSIRO, Melbourne. 432 pages.
- Regreening Australia. Caring for young Trees 2.** (1990) by Nan Oates. CSIRO, Melbourne. 61 pages.
- Planning for Sustainable Farming.** (1991) by Andrew Campbell. Lothian Books, Melbourne. 234 pages.
- Think Trees, Grow Trees.** (1985) Institute of Foresters of Australia and Dept of Arts, Heritage and Environment. APGS, Canberra. 210 pages.
- Growing Trees for Farms, Parks and Roadsides.** (1988) by Julianne Venning. Lothian Publishing Company. 126 pages.
- Revegetation Guide to the Central Wheatbelt.** (1991) by E.C. Lefroy, R.J. Hobbs and L.J. Atkins. Dept of Agriculture Western Australia. Bulletin 4231.
- Bush Regeneration.** (1989) by Robin A. Buchanan. TAFE Student Learning Publications. Sydney. 259 pages.
- Agroforestry in Australia and New Zealand.** (1985) by Rowan Reid and Geoff Wilson. Goddard and Dobson, Box Hill, Victoria. 255 pages.
- Using Trees on the Farm in South-western Western Australia.** (1992) by Andrew Thamo. Small Tree Farm, Balingup, WA. 100 pages.
- Managing Your Bushland: a Guide for Western Australian Landholders.** (1992) by B.M.J. Hussey and K.J. Wallace. CALM, Western Australia. 196 pages.
- Technical pamphlets and bulletins on tree growing may be sought from the Department of CALM, Greening Western Australia, the Department of Agriculture and other organisations.

PLANT PROPAGATION CENTRE
Burnside Road, West Manjimup, WA
Phone: (097) 72 1377 Fax: (097) 72 1211

The Plant Propagation Centre is a leading forestry facility which integrates research and operational activities.

Consolidated on one site, 11 kilometres from Manjimup, it has a seedling production capacity of twenty four million plants; manages seeds for some 400 species, and contains a research unit for tree breeding for a range of commercial species.

Originally, the land upon which the main nursery is now situated had been taken up as 'group settlement' in the 1920s, but then it reverted to the Crown. It served as a tobacco-growing training centre late in World War II, and later was managed as a research station for horticulture by the Department of Agriculture.

The Forests Department took control of the farm in 1966, to begin growing karri and other eucalypts for its afforestation programs.

A major overhaul of the nursery function and administration, during 1988 and 1989, culminated in an official opening of the Plant Propagation Centre in July 1990.

Functions such as research, pine production, and seed management, previously dispersed at other locations, have been amalgamated into the expanded Plant Propagation Centre. As a result, technical and economic benefits have accrued to the afforestation business in the south of Western Australia.

NARROGIN PLANT NURSERY
Hough Street, Narrogin, WA 6312
Phone: (098) 81 1113 Fax: (098) 81 1645

The Narrogin Nursery has been providing an annual supply of native tree seedlings to rural WA since 1967. With a current capacity of 450 000 containerised seedlings, the facility, administered and managed within CALM's Narrogin District, which also manages over 200 nature reserves, specialises in local species, which are grown to order in pots and trays, and distributed to customers throughout the Wheatbelt and Goldfields, mainly for farmland revegetation and amenity planting projects.

In the Forests Department's earliest days it pioneered native seedling propagation and the use of trees for agricultural and arid areas. The first inland nursery was established in Kalgoorlie in 1946. By 1955, the facility was transferred to the Dryandra settlement, where seedlings were grown in terracotta pots, then removed and wrapped in newspaper for dispatch. Labour input was intensive, and the site relatively isolated.

This resulted, twelve years later, in its relocation to the current, more functional site in the Narrogin township, where CALM is a leader in providing seedlings and advice for rural revegetation.

