ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS



MELALEUCA & ALLIED GENERA STUDY GROUP

NEWSLETTER NO. 3 - OCTOBER 1991

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Dear Member,

Firstly, a correction - the date on Newsletter No 2 should be April 1991 not April 1990.

Thankyou to all those who have written and let me know what they are growing and the successes they have achieved and the disappointing failures which have occurred.

Revision of Melaleuca

Yes, it continues and just to make sure you don't get too complacent about names I have a few more changes as listed below:

M lanceolata has been divided into four subspecies:

M lanceolata ssp lanceolata - from S.A. & eastern states of Australia

ssp occidentalis - from Rottnest Island & west coast of W.A.

ssp planifolia - from W.A.

ssp thaeroides - from W.A.

A recently named species $\underline{\text{M xerophila}}$ from the arid areas of W.A. & S.A. intergrades with M lanceolata.

M halmatororum now includes a ssp cymbifolia. This ssp was previously known as M cymbifolia. I presume we now have two ssp in the halmatororum group (ssp halmatororum & ssp cymbifolia).

We have $\underline{\text{M calycina ssp calycina}}$ and a new subspecies - $\underline{\text{ssp dempta}}$ - on which the long star-like protuberances on the fruit are absent.

M conferta has been re-named M lecanantha

The unnamed species on page 234 of Ivan Holliday's "Field Guide to Melaleuca" is M bromelioides.

M coccinea has been divided into three subspecies:

M coccinea ssp coccinea - the form which is commonly cultivated

ssp eximia - from Mt Burdett near Esperance W.A.

ssp penicula

M rhaphiophylla from the Gawler Ranges in S.A. is now M armillaris ssp akineta.

Callistemon paludosus is now C sieberi

Callistemon sieberi is now C pityoides

It appears that the plant previously known as \underline{C} 'Severn River' should be referred to as \underline{C} pungens. Although this has not been definitely determined it appears this species is more variable in colour than previously thought.

Seed Bank

A current seed list is attached. Stocks of some seed are getting low and require replacement. Thanks to D. Arnall, J. Wilcox and J Hand for supplying seed. I have also received seed from J. Irons, Secretary of the Australian Plant Society in England.

As previously requested please forward any spare seed you may have of Melaleuca, Callistemon or Allied Genera species.

Cutting Exchange

Response to the request for members to advise what plants may be available for cutting exchange has been disappointing with only one response coming forward. As a result of this response cuttings are available from

Melaleuca alternifolia

armillaris (a form with large brushes) diosmatifolia elliptica filifqlia fulgens ssp fulgens (red) fulgens ssp steedmanni (red) huegelii hypericifolia linarifolia megacephala radula (mauve) 'Revolution Gold' 'Snowstorm' stypheloides tamariscina ssp irbyana tamarascina ssp pallescens thymifolia (mauve)

If you would like cuttings of any of these let me know. I will forward the request on. It would be expected that the recipient would reimburse the cost of postage to the sender.

If you are prepared to participate in the cutting exchange please let me have a list of plants you have available.

Melaleuca 'Georgiana Molloy'

This plant has been on sale in southern nurseries for some years. It is presumed to be a natural hybrid of $\underline{\mathtt{M}}$ teretifolia and $\underline{\mathtt{M}}$ laterita and was named in honour of Georgiana Molloy – a pioneer settler of Western Australia who contributed a great deal to the knowledge of the Western Australia flora. M'Georgiana Molloy' is a compact shrub to about 2 metres high with soft needle-shaped leaves and bearing a profusion of brilliant cerise flowers along every stem.

Australian Plants in England

Jeff Irons is Secretary of the Australasian Plants Society in England whose members are involved in growing Australian and New Zealand plants in that country.

Although a number of plants from various genera from both these countries are being grown I will concentrate on the Melaleuca and Callistemon genera.

Jeff grows three Melaleuca species - squamea, squarrosa and ericifolia. The M squamea provenance is from Tyndall's Range in Tasmania but it is not wind hardy. Neither M squamea or M squarrosa set seed. Weather conditions can be quite harsh. During winter soil can be frozen with dessicating winds blowing for up to three weeks and soil temperatures down to $-24\,^{\circ}\text{C}$. Callistemons being grown are C

pityoides, paludosus, rigidus, subulatus and viridiflorus. Of these C pityoides is the most hardy.

At the recent Chelsea Flower Show in London one of the exhibitors was a nurseryman who is a member of SGAP (Vic) and the A.P.S. His stand of plants with unfamiliar names attracted coverage from the garden press and T.V. He had a flowering plant of Callistemon 'violaceus' which was being offered as an indoor plant. Jeff further advises that C viridiflorus is hardy in the cold country of Essex and a friend of his in Germany where the temperature gets down to -18°C has found to be the hardiest he has grown.

Foliage in Floral Art

David Jones, Victoria has a floristry business which supplies flowering material and greenery to some of Melbourne's florists. He is endeavouring to increase

awareness of the beauty of Australian plant foliages which can be used in wholly Australian plant arrangements or combined with exotic plants. Some of the foliages being trialled are M armillaris, decussata, squarrosa, ericifolia, diosmatifolia. Good luck David, I hope it works out well for you.

Callistemon & Melaleuca at Port Pirie S.A.

Gary Leske is carrying out a considerable amount of experimentation with soils and fertilisers on his block of what appears to be an extremely difficult soil type - a heavy red clay which is sticky when wet and rock hard when dry. Average rainfall is 300mm with May and June usually being the wettest months and with a temperature range from 3°C to 43°C.

Raised beds of various soil mixes are being used on top of the natural clay e.g. 20cm of gravelly loam, 10-15cm of sandy gravel, 10-40cm of builders sand/horse manure/pine needles mix, alkaline drift sand. Some plants are being grown in the natural clay soil.

Work on the garden started in June 1989 so plants are still fairly young. However, growth rates quoted by Gary appear to be quite satisfactory. Gary's aim is to create a native garden of species not normally grown in Port Pirie and at the same time to create a garden that is attractive and show that native gardens are not ugly, woody plants which tends to be a common concept to the uninitiated. To this end the garden has been divided into rockeries, shrubberies, pond area, a small rainforest area and a fernery. The project is commendable and I will be interested to follow the progress of its development. At present Gary has five Callistemon species and about 30 Melaleuca species as well as a considerable number of species of other genera.

Australian Plants in Central Queensland

Lindsay Daniels lives and works on Biloela Research Station operated by Queensland Department of Primary Industries. I have known Lindsay for many years as we in Biloela during the period 1962-1973. Lindsay has been operating a small nursery for, at least as long as I have known him and sells 2000-3000 plants per year mostly to local landholders, householders and to the local Shire Council. Eucalypts are the biggest sellers followed by Callistemon and Melaleuca which are used as wind breaks and screens and, particularly Callistemons, as bird attractors. The greatest demand is for M bracteata and its cultivars, 'Revolution Green' and 'Revolution Gold'. Other Melaleuca sold include M linarifolia, armillaris, leucadendra, stypheloides and viridiflora with a few of the smaller varieties such as M incana, hypericifolia, thymifolia etc.

Callistemon species most in demand are C (or M) viminalis, polandi, 'Kings Park Special', Dawson River (a form of C (or M) viminalis and salignus.

Lindsay's small nursery has had considerable influence on the number of trees

planted in and around Biloela and I hope he continues his good work for many years to come.

Visit to Armidale

In July my wife and I travelled to Armidale to address a meeting of New England Group of SGAP. I hope I was able to impart some knowledge of Melaleuca to them. I learnt a lot about Melaleucas by visiting some of the very interesting gardens around Armidale. Fortunately the weather was fairly kind to us although it was quite cold on the day we left to return home.

The African Connection

Derrick Arnall corresponds regularly and I am always pleased to receive his letters. Derrick's property is at an altitude of 1050m surrounded by dry savannah forest. Most species of Callistemon, particularly C polandi grow well for him but attempts to grow Melaleuca species have generally been disappointing although some of the larger growing species are growing reasonably well. For some reason or other however M viridiflora is a failure. Maybe it doesn't like the altitude as it grows naturally along the coastal area of Queensland.

From Mt. Nelson Tasmania

As mentioned in the last Newsletter Joan Wilcox is growing a number of Melaleuca and Callistemon species. Results of Joan's endeavours are included in the attached summary of members' reports.

Most of the Callistemons being grown by Joan also grow well in Brisbane which is an indication of the adaptability of this important and attractive genus of Australian plants.

Joan advises that her block is $\frac{1}{2}$ an acre in extent, is 280m above sea level with poor rocky soil which dries out quickly and to which she has added a lot of good loam. Water supply is good.

Feature Plants

In the last Newsletter I requested comments on a number of Melaleuca species. I realised when I prepared the list that a number were Northern Australian species. I hoped that someone may have tried them. I did get some response.

Derrick Arnall has one plant of M argentea on his property. M abietina was a total failure as was M decora and M tamariscina ssp irbyana.

I have compiled a few notes on the species in question:

M abietina - I have been unable to find any conclusive description on this species except that it is a medium shrub. It may be equivalent to M cuticularis and that a M eleutherostachya var abietina was reported in 1866. On reading through previous Newsletters it was growing in some gardens. If anyone still has it growing I would appreciate some comments on it.

Macuminata - A spreading or erect shrub to 3.5m. Narrow elliptical decussate leaves are carried in two pairs of opposite rows. Cream flowers in long, sometimes broken, spikes are produced on old wood in spring. This plant is widespread in temperate Australia and occurs in W.A., S.A., Vic and N.S.W.

<u>Margentea</u> - This is a large spreading tree with papery bark and pendulous silvery-green narrow foliage. It likes ample moisture and is found along creeks and watercourses in Northern Australia often with part of its root system permantently inundated. Cream to yellowish-green flowers are produced profusely in terminal clusters. It has been used successfully as a street tree and in parks and large gardens in Brisbane. Some excellent specimens of this tree can be

seen/Katherine Gorge in N.T.

M bracteosa - This can be either an erect or spreading shrub to 90cm with similar spread. I can't find any reference to its origin except that it favours a sand over clay soil which can be winter water logged which would make it useful in poorly drained conditions. Flowers are greenish-white to cream or pink to mauve in dense sub-globular to oblong spikes.

M cheelii - This grows naturally in the Burrum River area to the south of Bundaberg in Queensland. It can develop into a medium sized tree to 8m with white terminal flower spikes to 40mm long. This is an attractive plant with papery bark and narrow ovate leaves but although it was available in nurseries some years ago it now appears to have lost favour as a nursery plant and is rarely available.

<u>M cajuputi</u> - This species comes from the Top End of the N.T. and can vary in height from 2m to 40m. The trunk is often stout and twisted with white to greyish to grey-brown papery bark. Young growth is silky and leaves become smooth and thick as they mature. Dense terminal flower spikes are produced either singly or in 2's or 3's and can be white, greenish-white or cream. This tree also occurs in S.E. Asia. Aboriginals used the bark for shelters, to cover food, as tinder for starting fires and to make fish traps. The wood was used for dugout canoes.

 $\frac{M\ decora}{N.S.W.}$ This species grows naturally from S.E. Qld to the southern coast of $\frac{N.S.W.}{N.S.W.}$ It is generally a tall slender shrub to 5-8m with papery bark and creamy white terminal flower spikes which are produced profusely in late spring or early summer. It tends to grow naturally in swampy areas and will therefore tolerate poor drainage. The bark is used quite extensively by Art-in-Bark enthusiasts.

M tamariscina ssp irbyana - This grows naturally in S.E. Qld. It grows to 6m with a dense pendulous crown. Leaves are stem-clasping and very small, about 2mm and bark is papery. White flower spikes are produced in Summer. This plant is tolerant of a wide range of soils and is an excellent garden plant. It maintains good shape without the need for extensive pruning.

M groveana - This is an erect open shrub to 3m with narrow-elliptical leaves to 3.5cm. It occurs near Torrington in N.S.W. and in the South Burnett and Moreton Districts of Sth Qld. It is regarded as being a rare plant. It is a small tree to 10m with layered papery, fibrous bark which becomes hard. Leaves are narrowly-elliptical to 55mm long by 3-7mm wide. Open, cream terminal flower spikes are produced in late spring and early summer. It will tolerate poor drainage and a fairly wide range of soils and will tolerate some shade. So far as is known this plant has not been introduced to the nursery trade.

Feature Garden

Feature garden for this issue is the Redlands District Special School garden at Thornlands on the Eastern side of Brisbane. The dominant species planted here is Callistemon. Groundsman Mr. E. Knight has been employed there for 10 years and has endeavoured to obtain as many Callistemon species and cultivars as possible for planting in the grounds. Many of them have been successful, some have not grown well and some have been complete failures. The School is located in an area of open forest where the dominant species is scribbly gum (Eucalyptus signata), tallowwood (Eucalyptus microcorys), Casuarina sp, Banksia integrifolia and understorey shrubs and grasses including Boronia rosmarinifolia, Hibbertia vestita and Kangaroo grass. The surface soil is a grey silty loam which tends to be hard-setting and which is underlain by a reddish-yellow clay at depths rarely exceeding 150mm. These soils are generally regarded as being of low fertility. Surface drainage is good. Water supply is drawn from town mains and is generally adequate to maintain moisture requirements except, perhaps, during extremely dry periods such as this area is experiencing at present.

In general plants in the school grounds don't receive any special treatment although most plants are in gardens mulched with sawdust and/or wood chip and watered periodically.

A large number of plants for the early plantings, which goes back 7 or 8 years, were obtained from Harry Infield, a previous Callistemon Study Group Leader and an enthusiastic supporter of the use of Callistemon ("Natures own bottlebrush") in gardens, parks and for street plantings.

A Plant Nursery was established at the school some years ago under the control of Mr. Knight. Its aim was to provide a "built-in" place where children attending the school could obtain work experience and develop work skills. It would also raise money for the school. This project has been successful and it produces some 12000 - 14000 good quality plants per year. Until this year was open to the public and it also provided plants on a wholesale basis to Redlands Shire Council and to landscapers. It is now closed to the public and supplies wholesale only. Plants purchased by Redlands Shire Council are distributed to local householders via their "Free Tree" programme and which last year accounted for 10000 plants.

The wide variety of callistemon species and cultivars planted in the school grounds ensures that a substantial pool of material is available for future propogation if, and as, required.

So far as can be determined there is approximately 105 different species and cultivars growing in the school grounds some of which are unusual and not readily available from nurseries. Some of the more unusual are:

C'Wollumbin' - a form of C viminalis which grows to 3m and has orange coloured flowers in spring and summer and occasionally during autumn. Cuttings of this plant are extremely slow to strike and it is a fairly slow grower at first.

C subulatus 'Pumila' - a small shrub to 1.5m which carries a profusion of red flowers in late winter and spring. Easy to strike and grows well into a dense shrub.

<u>C subulatus 'Benjamin'</u> - a medium shrub similar in growth habit to C subulatus but differing from it in that the stamens are coloured pink and mauve which gives a mottled effect to flowers which are produced in late spring.

C'Injune' (dark pink) - this shrub resembles C'Injune' in growth habit but the flowers which are produced in summer are of a much darker pink than usual.

C'Glasshouse' forms - there are five cultivars within this group which originated from seedlings in the garden of Mrs Morgan at Glasshouse Mountains in S.E. Qld. 'Glasshouse Country', 'Glasshouse Beauty & 'Glasshouse Gem' grow to about 4m and produce different shades of pink flowers in spring. C'Snowball' grows to about 2m and produces pure white flowers in spring. 'Ngun Ngun' (pronounced gun gun) is named after a nearby mountain and grows to about 4m. Fairly large red flowers produced in profusion in spring. New growth is a rich red colour and very attractive.

The 'Glasshouse' group are believed to be natural hybrids between C salignus and C recurvus.

C 'Austraflora Little Cobber' - believed to be a form of C pityo ides with pale yellow flowers. It grows to about 0.6m but has not flowered to date. It may be suitable as a small rockery plant.

C 'La Grand Vermilion' - the origin of this plant is uncertain but the name suggests a flower of vermilion (scarlet). In fact, the flower is a purplish-red with golden anthers. It is not a strong grower. It is reputed to grow to 4m.

C'Redlands Pink' - a volunteer seedling which came up in the school grounds. It appears to be a form of C salignus. This plant is only a few years old and has reached a height of 1.5m. It produces a considerable number of fairly large mid-pink flowers in spring.

A considerable number of plants from other genera are also grown in the school grounds; for instance:

Melaleuca - Some 18 species and cultivars are grown which include M quinquenervia (red & white forms), M viridiflora (red , pink & burgundy forms), M thymifolia (four colour forms) and M bracteata 'Revolution Gold' and some of the more unusual as follows:

 $\underline{\text{M fulgens}}$ ssp fulgens - the salmon coloured form is growing and flowering satisfactorily.

 $\underline{\underline{M}}$ sp aff cornucopia - an attractive shrub which is currently 3m tall. It is a bushy shrub which carries a profusion of creamy white flowers in summer and autumn. It is easy to grow from cuttings and has been hardy in this location.

M foliolosa - a small tree from Cape York which will grow to 8m. Its unusual feature is the very small leaves which tightly clasp the branches and branchlets and which give it a broom-like appearance. Small creamy white flowers which produce copious quantities of nectar are produced profusely in spring and summer.

M microphylla - This plant is about 6 years old and has grown into a dense rounded shrub 2.5m high but has, so far, failed to produce flowers. It would be an excellent screen plant and is attractive even without flowers.

Grevillea - Some 30 species and cultivars of Grevillea are growing in the grounds ranging in form from prostrate ground covers, semiprostrate shrubs, medium shrubs to fairly tall shrubs.

Other Genera - other genera represented include:-

Astartea
Hakea
Kunzea
Leptospermum
Bauera
Baeckea

Banksia
Brachychiton
Buckinghamia
Xanthostemon
Scaevola
Westringia

Plus occasional plants from other genera.

I have prepared a fairly comprehensive plant list for the school grounds which is available to anyone who may be interested. Just let me know and I will forward a copy.

New Releases

Alata Nursery at Lismore N.S.W. in conjunction with Harry Infield, Demesne Farm Arboretum (near Forster N.S.W.) has released five new Callistemons:

C 'DemesmePink Parfait' is a natural hybrid between C citrinus & C

salignus. It is a dense rounded shrub to 2m with clear pink flowers in spring and autumn. It is very hardy and requires a sunny position. Pruning after flowering will help develop shape.

- C'Nodding Red' is a striking shrub because of the contrast between its bluish foliage, its bronze new growth and its blood red flowers. It grows to about 2m.
- C 'Demesne Western Royal' A form of C phoeniceus with extra prolific flowering. It is an erect shrub to 2m with grey-green foliage and fiery red flowers in spring. It will tolerate wet areas but is also hardy.
- C'Demesne Bonanza' is a natural hybrid of C recurvus (prev. C'Tinaroo') and C viminalis. It is a fairly tall shrub to 3m but retains compact shape with small leaves and red flowers in spring. It prefers a sunny, moist position.
- C 'Demesne Reliance' is a seedling of C 'Captain Cook'. It grows taller than its parent (to about 2m) and has larger very abundant red flowers in spring and autumn. It prefers a sunny, moist position.

Members' Reports

Some members have forwarded reports of Melaleuca and Callistemon being grown by them. I have summarised these reports and the results are attached.

Regards,

APPENDIX A

MELALEUCA SPECIES

Plant	Growing At	Age	Height	Flowers	Soil Type	Comments
M fulgens ssp fulgens	Cobram Vic	9 yrs	2.2m	Yes Nov-Dec	SL/RC	Bushy shrub, afternoon sun
	Malawi Africa			*		Grows poorly
	Myrhee Vic					
	Port Pirie S.A.	0.8m		SG/C	Regular tip pruning, slight yellowing, raised from seed	
M squamea	Heswall England			Yes		Flowers but doesn't set seed Susceptible to wind damage Tyndall Range form is wind and root hardy
	Mt Nelson Tas			Yes		Grows and flowers well in damp position
M squarrosa	Heswall England			Yes		Flowers but doesn't set seed Less hardy than M squamea
M ericifolia	Heswall England					
M radula	Malawi Africa			Yes		Plant survived and flowered for a number of years .
	Port Pirie S.A.	1 yr	0.15		Clay	Slow growing but healthy

M viridiflora	Malawi Africa	Total failure
	Bracken Ridge Q a) 7 yrs 2.5m Yes Jun-Jul RSL b) 8 yrs 5m Yes Jun-Jul	a) Dark pink form b) Burgundy weeping form Both forms flower well
M alternifolia	Malawi Africa	Some surviving - many losses
M stypheloides	Malawi Africa	Some surviving - many losses
	Brisbane Q Various up to 6m Yes Aug-Oct Various	Used as street trees
	Mt Nelson Tas 3m	Growing in damp position
	Myrhee Vic	
ilian-	Tatura Vic	A weeping form grows on a property near Tatura
M quinquenervia	Malawi Africa	Growing slowly but satisfactorily
	Brisbane Q Various Up to 20m Yes Apr-Jul Various but generally wet areas	Native to the coastal part of S.E. Qld - grows in areas permanently or intermittent-ly waterlogged
M decora	Malawi Africa	Poor germination, no plants survived

M decora	Brisbane Q	Various	Up to 8m	Yes Oct-Dec		Native to coastal swamp areas from Brisbane to South Coast of N.S.W.
M elliptica	Malawi Africa			No		
	Mt Nelson Tas	2 yrs	0.6m			Slow growing - set back by cold winter winds
	Myrhee Vic					
	Cobram Vic	9 yrs	2.2m	Yes Nov-Jan	SL/RC	Fairly bushy shrub in full sun
	Port Pirie	2 yrs	0.8m		ADS	Grown from seed - healthy, regularly trimmed
M huegelii	Malawi Africa			No		
	Myrhee Vic					
M tamariscina ssp irbyana	Malawi Africa					No plants survived
	Brisbane Q	Various	Up to 4m	Yes Sep-Oct	Various	Native to S.E. Qld & Northern N.S.W likes good moisture, used fairly widelin gardens
M tamariscina	Malawi Africa					Flowers erratically
*	Myrhee Vic			-		

M bracteata	Malawi Africa			Yes		Grows well
	Brisbane Q	Various	Up to 6m	Yes Sep-Oct intermittent flowers rest of year	prefers	Widely used with cultivars Revolution Green; Revolution Gold & Golden Gem as garden plants. Occurs naturally over much of Northern & Eastern Australia
M leucadendra	Malawi Africa					Grows reasonably well
	Brisbane Q	Various	Up to 1.5m	Yes Jul-Sep	Various	Used as feature trees in med ium to large gardens and in parks. Widely used aa a street tree
M linarifólia	Malawi Africa					Grows reasonably well
	Mt Nelson			Yes		a) Grows in sunny positionb) Grows in semi-shade
	Myrhee Vic					
	Port Pirie				SG/C	Grew well for a while but eventually died
	New Lambton Hts	5				
	Brisbane Q	Various	Up to 5m	ı Yes Sep-Oct	Various	Native to Brisbane area Used as a street tree

M armillaris	Malawi Africa					Grows reasonably well
	Mt Nelson Tas	6 yrs	4m			Used as fence screeners
1.armillaris 'Mauve Mist'	Mt Nelson Tas	5 yrs	3m			
M acuminata	Mt Nelson Tas	4 yrs	1.1m	No	Gritty soil	
M decussata	Mt Nelson Tas	4 yrs	1.1m	Yes		Growing in shaded position in poor soil
	Myrhee Vic					
	Brisbane Q		Up to 2m		Various	Grows well but flowers are generally sparse
M citrina	Mt Nelson Tas	3 yrs	1m	Yes	SL	Sheltered sunny position
	Cobram Vic	3 yrs	1.7m	Yes Oct	SL/RC	Scattered flowers, bushy shrub growing in full sun
	Port Pirie S.A.	$1\frac{1}{2}$ yrs	0.25m		SG/C	Grown from seed. Fe treat- ment req'd for chlorosis
M gibbosa	Mt Nelson Tas	4-5 yrs	1m	Yes		Growing in damp position
M hypericifolia	Mt Nelson Tas	5 yrs	2m			Used as a fence screener
	Myrhee Vic	·)-				

M hypericifolia	New Lambton Hts					
	Brisbane Q	Various	Up to 2.5 m	Yes		Grows well in well drained situations
M diosmafolia	Mt Nelson Tas	5 yrs		Yes		2 plants in damp position 1 plant in dry position All plants growing well
M laterita	Mt Nelson Tas	5 yrs	1m	Yes		Growing in open moist position, flowers sparsely - salmon & red colour forms
	Cobram Vic	4 yrs	1.5m	Yes Nov-Jun	SL/RC	A bushy shrub which produces scattered flowers, receives top sun
	New Lambton Hts	5				=
M macronycha	Mt Nelson Tas	5 yrs	1m	Yes		Grows in open position, a straggly plant
	Port Pirie S.A	• $1\frac{1}{2}$ yrs	0.25m		Clay	Slow growing, some chlorosis
M micromera	Mt Nelson Tas	5 yrs				Growing in moist position in shade, growing well
	Cobram Vic	3 yrs	1.5m	Yes Sep-Oct	SL/RC	Heavy flowering, bushy shrub In full sun
	Port Pirie S.A	. 1 yr	0.6m		SG/C	Growing well

M nesophila	Mt Nelson Tas				Strong grower
M polygoloides	Mt Nelson Tas	2 yrs			Growing well in a sunny position
M sclerophylla	Mt Nelson Tas	3 yrs			Growing in a open position in dryish soil, an unthrifty plant
M seriata	Mt Nelson Tas	6 yrs	0.6m	Yes	Flowers profusely in a warm position
M fulgens ssp steedmanii	Mt Nelson	Tas			Slow growing, in too much shade
	Cobram Vic	9 yrs	1.1m	Yes Oct-Nov SL/RC	An open shrub with scattered flowers, grows in full sun
M thymifolia	Mt Nelson Tas			Yes	Grows in moist position in semi-shade, flowers well
	Cobram Vic	9 yrs	1.2m	Yes Nov-Jan SL/RC	Heavy flowering, bushy shrub In full sun
	New Lambton Ht	s			
	Brisbane Q	various	Up to 1.5m	Yes Sep-Jan With occas- ional flowers rest of year	Widely used as a garden plant - Four colour forms available

M violacea (prostrate)	Mt Nelson	4 yrs			Gravelly soil	Growing well
	Port Pirie S.A.	<u>1</u> yr	0.8m		SG/C	Healthy plant
M wilsonii	Mt Nelson Tas	4 yrs				Growing well in a sandy dry position
	Cobram Vic	2 yrs	0.8m	Yes Oct-Nov	SL/RC	Heavy flowering, bushy shrub In full sun
M halmaturorum	Myrhee Vic					
M 'Georgiana Molloy'	Myrhee Vic					
M incana	Myrhee Vic					
	Brisbane Q			Yes Sep-Oct	Various	Will persist for a few years in a dryish situation but usually succumbs to root disease
M lanceolata	Myrhee Vic					
M spathulata	Cobram Vic	9 yrs	1.2m	Yes Oct-Nov	SL/RC	Heavy flowering, bushy shrub In full sun
	Myrhee Vic					
M holosæricea	Myrhee Vic					

M_pulchella	Myrhee Vic					
M suberosa	Myrhee Vic					
	Port Pirie S.A.	1½ yrs	0.25m		Clay	Very open shrub despite regular tip pruning, some chlorosis
M subfalcata	Myrhee Vic					
M gibbifolia	Myrhee Vic					
M calothamnoides	Myrhee Vic					
	Brisbane Q	Various	1 - 1.5m	Yes Mar-May	Sands & Sandy loams	Grows & flowers reasonably well in well drained sites Not generally regarded as being long lived
M nodosa	Myrhee Vic					
	Brisbane Q	Various	Up to 4m	Yes Sep-Oct	Silty loams & clay loams	Native to Brisbane area where it is often found in areas which are wet for extended periods
M cardiophylla	Myrhee Vic					
	Port Pirie S.A.	∄ yr	0.4m	No	BS/C	Grown from seed, healthy plant
M teretifolia	Myrhee Vic					

M filifolia	Myrhee Vic					
-	Cobram Vic	8½ yrs	2.1m	Yes Nov-May	SL/RC	A heavy flowering open bush in full sun
	Port Pirie S.A.	$1\frac{1}{2}$ yrs	0.45m	No	SG/C	Grown from seed. A very healthy plant
	Port Pirie S.A.		O.5m		Clay	Growing well, tip pruned regularly
M glabberima	Myrhee Vic					
	Port Pirie S.A.	½ yr	0.3m	No	BS/C	Grown from seed - rapid growth, needs Fe treatment to control chlorosis
M glomerata	Myrhee Vic					
M platycalyx	Myrhee Vic					
M densa	Myrhee Vic					
M coccinea	Cobram Vic	$1\frac{1}{2}$ yrs	0.8m	No	SL/RC	A bushy shrub in full sun
	Port Pirie S.A	•	0.5m	No	Clay	Growing well, tip pruned regularly
M falcata	Cobram Vic	$1\frac{1}{2}$ yrs	0.2m	No	SL/RC	A bushy shrub in full sun
M. aff scabra	Cobram Vic	$1\frac{1}{2}$ yrs	0.4m	Yes Nov	SL/RC	A heavy flowering bushy shrub in full sun

M lateralis	Cobram Vic 1 yr	0.3m	Yes Nov	SL/RC	A heavy flowering bushy shrub in full sun
	Port Pirie S.A.			BS/C	Did not survive
M megacephala	Port Pirie S.A. ½ yr	0.8m	No	SG/C	Grown from seed, healthy plant
M ciliosa	Port Pirie S.A. 1 yr	O.4m	No	BS/C	Grown from seed, healthy plant
M diosmatifolia	New Lambton Hts N.S.W.				
	Brisbane Q Various	Up to 2m	Yes Sep-Oct	Various	This plants grows & flowers fairly well in Brisbane area in well drained sites
M psammophila	New Lambton Hts N.S.W.				
M undulata	Port Pirie S.A. 1 yr	0.6m	No	BS/C	Grown from seed, tip pruned regularly
M cuncata	Port Pirie S.A. 1 yr	0.12m	No	BS/C	Grown from seed, slow growing
M trichophylla	Port Pirie S.A. ½ yr			BS/C	2 plants - both growing well
M thymoides	Port Pirie S.A. ½ yr			BS/C	Slow growing

M leptoclada	Port Pir	ie S.A. ½ yr	BS/C	Showing new growth
M leptospermoides	Port Pir	rie S.A. ½ yr	BS/C	Showing new growth
M acerosa	Port Pir	rie S.A. ½ yr	BS/C	Grown from seed, rapid growth
M depauperata	Port Pi	rie S.A. ½ yr	ADS	Showing new growth
M pentagona	Port Pi	rie S.A. 1 yr 0.3m	ADS	Grown from seed, health plant
	1			
SOIL TYPES	SL/RC	sandy loam over red clay		
	SG/C	10-15cm of sandy gravel over clay		
	RSL	red sandy loam		
	ADS	alkaline drift sand		
	SL	sandy loam		
	BS/C	builders sand combined with horse manure and pine needles to a depth of 10-40 cm over clay		

APPENDIX B

CALLISTEMON SPECIES

Plant	Growing At	Age	Height	Flowers	Soil Type	Comments
C paludosus Pryors Selection Reeves Pink pilyoides (syn sieberi) speciosus pinifolius subulatus viminalis Western Glory White Ice violacea Candy Pink brachyandrus citrinus - lilacineus carmineus rigidus	Mt Nelson Tas					All plants (except C speciosus) are hardy at Mt Nelson and grow in most conditions Grown from seed 1989 Grown from seed 1989
C violaceus citrinus salignus recurvus formosus Dawson River Cedar Creek Captain Cook polandi	Malawi Africa					Most of these callistemons are growing well in Malawi. C polandi does exceptionally well
C pityoides paludosus rigidus subulatus viridiflorus	Heswall England					C pityoides is hardy. The others are less hardy. Temperatures can read as low as -24°C combined with dessicating winds

C polandi	New Lambton Hts			
polandi Rose Opal citrinus (mauve) citrinus	N.S.W.			Pink form
'Angela salignus Harkness				Pink/White Red form
pinifolius subulatus Hinchinbrook				Green form
rugulosus Gyra				
pachyphyllus sp				Pink form From Inverell
C viminalis	Bracken Ridge Q 12 yrs	5m	Yes Jul-Oct RSL & intermittent during rest of year	A good bird attractor
Rose Opal	11 yrs	2.Om	Yes Aug-Oct RSL	•
pachyphyllus	11 yrs	1.5 - 2m	Yes Jul-Sep RSL &intermittent through year	Red, green and pink colour forms
recurvus (syn Tinaroo)	plante 1980	d 4m	Yes Sep-Nov RSL	Removed 1988
pearsonii (syn Rainbow Fall <u>s</u>)	plante 1980	d 1.2m	Yes Sep-Nov RSL	Plant 1 died following wet winter 1990 Plant 2 growing well
pityoides (syn sieberi)	plante 1980	d 1.5m	Yes Sep-Oct RSL	Became unthrifty and was removed 1991
Glasshouse Country	3 yrs	1.5m	Yes Sep-Oct RSI & Apr-May	L Healthy grower

C Glasshouse	3 yrs	1.5m	Yes Sep-Oct RSL & Apr-May	Healthy grower
Glasshouse Ngun Ngun	3 yrs	1.2m	Yes Sep-Oct RSL	Healthy grower
Glasshouse Beauty	3 yrs	1.3m	Yes Sep-Oct RSL	Strong grower
Packers Selection	8 yrs	1.3m	Yes Sep-Oct RSL	Open shrub
Mr Foster	5 yrs	2.2m	Yes intermittent through year RSL	Very large flowers
Injune	12 yrs	5m	Yes Dec-Jan RSL	An erect multi-stemmed shrub
sp Eldorado	12 yrs	5.5m	Yes Sep-Oct RSL	An erect multi-stemmed shrub open red brushes with red petals
Adina	2 yrs	2.2m	Yes Sep-Oct RSL	A tall grower, needs pruning to contain size
Braeside	7 yrs	1.6m	Yes Aug-Oct	Has not recovered well from pruning in 1989
Captain Cook (pink)	3 yrs	2m	Yes Aug-Sep	Heavy flowerer, pink with black anthers

MELALEUA & ALLIED GENERA STUDY GROUP

SEED LIST

MELALEUCA micromera MELALEUCA abietina microphy11a accuminata minutifolia acerosa neglecta adnata nervosa arcana nesophila argentea nodosa armillaris pauperiflora bracteata pentagona brevifolia platycalyx calveina pubescens ciliosa pustulata citrina quinquenervia coccinea radula dealbata raphiophylla decora sp aff cornucopia decussata scabra diosmatifolia spathulata ericafolia squamea filifolia stypheloides fulgens ssp fulgens suberosa genistifolia tamariscina ssp pallescens glabberima tamariscina ssp tamariscina halmaturorumteretifolia huegelii thymifolia (mauve) huegelii (purple bud) thymoides hypericifolia thyoides incana uncinata lanceolata undulata lanceolata (pink tips) viminea laterita viridiflora (red) leucadendra wilsonii linarifolia alternifolia linarifolia (Snowstorm) squarrosa macronycha CALLISTEMON 'Beroondah Station'

citrinus 'Austraflora Firebrand' 'Emu Creek' 'Endeavour' C salignus (pink) linearis salignus (white) 'Malawi Giant' pachyphyllus (red) species (dark red) pachyphyllus (white) violaceus pearsoniiviridiflorus pinifolius polandi polandi (broad leaf form) recurvus rugulosus 'Running River'