

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTSMELALEUCA & ALLIED GENERA STUDY GROUPNEWSLETTER NO. 5 - SEPTEMBER 1992

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Dear Member,

As I start writing this newsletter (late September) Callistemons around this area are producing their spring display. *C polandii* flowered well for about 2 months during late winter and is now finished except for a few remaining flowers. Many other species and cultivars are taking its place with a profusion of flowers in all colours creating a wonderful sight. The broad-leaved form of *Melaleuca leucadendra* produced a good display of white strongly perfumed flowers. Of course, the nectar-feeding birds are enjoying the display as much as we are.

Name Changes

Surprise, surprise, I don't have any name changes to report in this issue but don't become too blasé about it as my spies tell me there is another batch of name changes not far away.

Members Reports

Paddy Lightfoot is convenor of the Landscape Committee of Shortlands Wetland Centre, Shortland. Landscaping of the gardens here has been carried out by Newcastle S.G.A.P. Paddy has forwarded a list of *Callistemon* and *Melaleuca* spp and forms which have been planted. No doubt there has been many species from other genera planted also.

The plants growing naturally in the area include:

Melaleuca	stypeloides	Callistemon	salignus (white)
	ericifolia		
	quinquenervia		
	linariifolia		

Melaleuca species which have been planted within the area are:

Melaleuca	hypericifolia	Melaleuca	leucadendra
	decussata		incana
	thymifolia		nodosa
	laterita		radula
	viridiflora		armillaris

Callistemon species and cultivars which have been planted include:

Callistemon	pachyphyllus	Callistemon	citrinus
	(red, green & pink)		(white, red & mauve)
	pinifolius		sp 'Ayr'
	(green & red)		sp 'Ewan Road'
	sp 'Genoa River'		polandii
	polandii		'Kings Park Special'
	(Hinchinbrook Is Form)		comboynensis
	citrinus 'Anzac'		citrinus 'Angela'

Callistemon	viminalis (Dawson River, Capt Cook, & Wilderness White)	Callistemon	sieberi
	brachyandrus		recurvus
	sp 'Fairhill Firebrand'		formosus
	sp 'Western Glory'		pearsonii (syn 'Blackdown Tableland')
	sp 'Harkness'		sp 'Hannah Ray'
	sp 'Austraflora Firebrand'		montanus
	sp 'Tyrian Rose'		violaceus
	pallidus		sp 'Severn River'
	sp 'Eastland'		macropunctatus
			viridiflorus

This brief report suggests that a visit to Shortlands Wetlands Centre would be a worthwhile stopover for anyone travelling through Newcastle. You might even get a guided tour if you ask Newcastle S.G.A.P. nicely. Keep up the good work!

Arnold Rieck resides at Rosewood and is a member of Ipswich S.G.A.P. This group is involved in creating an endangered species garden at Bundamba College of T.A.F.E. Many of the plants being used are indigenous to the Ipswich area which originally carried large areas of dry rainforest but which has been largely cleared for farming and grazing pursuits. In addition to the local species many endangered species from other parts of Australia including a number of Melaleucas are to be tried. Arnold can obtain use of the propagating tunnel at Ipswich State High School where he started the Horticultural Course some seven years ago. The climate in Ipswich is generally less humid than that of the most part of Brisbane. Winter minimum temperatures are often a few degrees lower than Brisbane while summer Maximums can be a couple of degrees higher.

All the best to Ipswich S.G.A.P. for the success of their project.

David Randall of Cobram, Victoria has forwarded an updated list of the 34 species of Melaleuca he is growing. In comparison to a report forwarded by David in July, 1991 most of his plants have doubled in size with many of them having flowered during the intervening period.

David advises that he is prepared to send cuttings to members requesting same. His address is in the Membership List forwarded with the last newsletter.

Melaleuca species that David is growing are: *acerosa*, *ciliosa*, *citrina*, *coccinea*, *conothamnoides*, *cordata*, *cuneata*, *densa*, *elliptica*, *falcata*, *fulgens*, *fulgens* spp, *steadmanii*, *georgeana*, *holosericea*, *lateralis*, *laterita*, *leptospermoides*, *megacephala*, *micromera*, *pentagona*, *platycalyx*, *pungens*, *scabra*, sp aff *scabra*, *seriata*, *spathulata*, *striata*, *suberosa*, *thymifolia*, *thymoides*, *tricophylla*, *urcilaris*, *wilsonnii*.

Should you require cuttings of any of these plants please contact David. Likewise, if you are prepared to supply cutting material please send me a list of what you have and I will publish it in the next newsletter.

Jack Van Dam retired from the Army in 1978 and bought a 50.2 ha farm in Kangaroo Valley. He was president of the local S.G.A.P. for a few years and has compiled a list of all the flora in the Shoalhaven area including an annex listing all the orchids (106 sp) and other annexes listing flora used by aboriginals and early settlers. Jack does a considerable amount of propagating and sells native plants from his farm. He has 71 species of Melaleuca growing and has planted a range of Callistemon.

I have taken an extract from Jack's letter which details his propagation techniques which other members may find useful.

"The sowing mixture I use is by volume:

- 1 x sifted perlite
- 1 x sifted vermiculite
- 1 x washed, sifted, coarse river sand
- $\frac{1}{2}$ x peat moss
- all mixed in a hand-turned concrete mixer.

I use cut down polyfoam brocoli boxes filled with quartz gravel as a bog basis in my unheated glasshouse. The boxes are automatically kept topped up. When big enough to handle, I pot seedlings into small round tubes over a period of weeks, depending on growth and losses. I do not use fertilizer at this stage. Punnets with seedlings are taken out of the bog and placed with small pots in groups in the glasshouse and watered up to four times a day automatically. When small potted seedlings are big enough they go into square tubes as per column C (see attached sheet ED). The potting mix for small round pots and square tubes is coarse washed river sand, compost made only from composted rice hulls and granulated cow dung equal by volume. I collect dry cow dung, mature for months, then put it through a 'Rover Muncher'. I mix this with composted rice hulls, then further compost in 200 litre plastic drums for as long as possible. I mix by volume (usually a bucket) of 2 x washed river sand, 1 x compost, 1x ice cream container of dynamic lifter or dynamic lifter blood and bone mixed by concrete mixer put in bins and again matured as long as possible - kept damp not wet. I have also tried just a light sprinkling of Nutricote purple for native plants on top or mixed in the soil, when I go to square tubes. So far with good results. The tubes go in foam boxes in an open bush-house to harden. Again this is watered automatically. I use numbered plastic strips for 'name tags' till I have plants of a presentable standard."

I also enclose a copy of a Sowing and Potting Records Check Sheet developed by Jack for his use. I feel sure he would not mind if other members used his sheet.

Jack's Nursery would be worth a visit by those looking for native plants. If you wish to contact him to find out what he has available his address is in the Membership List.

Gary Leske wrote in April and advised that Port Pirie had a good start to the year with a mild summer and some good rainfall. As a result his plants are growing well with few losses in the past summer. His problem now seems to be lack of space (that's my problem too!! ED) and he has had to remove a few plants to give others some space to develop.

Gary says his *Melaleuca glabberima*, *cardiophylla* and *elliptica* are growing rapidly and require frequent cutting back (half his luck - I would be happy if I could just get them to grow here ED).

Earlier this year I exchanged correspondence with Mr. R. Travis, Texas A. & M. University, U.S.A. in relation to Australian plant species he may be able to grow in Texas which has a climate somewhat similar to Central Queensland. I sent him a list of C.Q. plants which may be suitable and suggested he contact the Australian Tree Seed Centre for possible supplies of seed.

Thursday Plantation which operates extensive plantations of *Melaleuca alternifolia* for Tea-Tree oil production in N.E. New South Wales and S.E. Queensland wrote to request any information the Study Group may have in relation to propagation of *Melaleuca* from cuttings. Most of their plants are currently grown from seed but it is becoming obvious that it is desirable to propagate trees with superior genetic qualities from cuttings. The initial objective of propagation from cuttings would be to optimise the following criteria:

1. When to take cuttings (seasonal criteria)
2. Which part of the tree (Young shoots, semi-hard wood, mature wood) would be optimal for cuttings.
3. Selection of optimal rooting substrate (sharp sand, peat, perlite, vermiculite etc. and mixtures thereof).
4. Use of auxins to induce higher ratios of root production.
5. Determination of environmental conditions (shading, moisture, temperature, substrate pH etc).

In my reply to the Manager I passed on what I know about propagation but if any member should have any information either in the form of suggestions or as a result of practical experience please let me know so I can pass it on to Thursday Plantation.

The Technical Manager of the Plantation, Mr. Robert Riedl, has issued an invitation to all Study Group members and friends to visit the visitors centre, the factory and laboratory facilities and the plantation whenever they happen to be in the locality. The plantation is situated adjacent to the Pacific Highway near Ballina. The telephone No. is (066) 867273. Postal address is: Pacific Highway, Ballina, N.S.W. 2468.

Rob Smart owns a farm of 1500 ha at Jerramungup, W.A. in a rainfall area of 360mm per year. I asked him about *Melaleuca acuminata* and he advises that it grows naturally there and attains a height of 2.5m with a spread of around 3m. It grows mainly on a light brown loam which is underlain at 15-40cm by a light clay. It is mostly well drained. It can also be found growing in depressions and waterways which can be water-logged for some months. In its main habitat it is the dominant understorey to *Eucalyptus spathulata* and *occidentalis*. Other associated species are *Melaleuca glaberrima*, *M pauperiflora* and *Acacia redolens*. Soil pH is about 7.5. Rob also provided a list of 34 species which grow naturally on or near their property and a list of a further 14 species which are being grown. Soil conditions vary over a wide range from well-drained sandy soils, through clay loams, clays, winter wet areas to salty areas. *M cuticularis* is salt tolerant and grows near salt lakes, *M halmatororum* is being used more in salt situations and *M hamulosa* grows naturally in winter wet areas adjacent to fresh and salt lakes. *M thyoides* also shows a reasonable degree of salt tolerance.

Addition to Study Group

I have decided to include the genus *Leptospermum* in the "Allied Genera" part of the Study Group. This is an important and colorful genus which has not been catered for in any past or present Study Group.

I am not going to present great detail about *Leptospermum* in this newsletter and hope you will send me lots of information on your experiences for the next newsletter.

To start off I will list the ones we have growing in our garden:

Leptospermum flavescens - About 5 years old and has reached a height of 2.3m with spread of about 2m. It has flowered in late winter/early spring in the past 3 years. Previous flowerings have been sparse but this year it flowered very heavily despite being blown over by a strong south wind earlier in the year and being tied back to a strong stake.

Leptospermum flavescens 'Pacific Beauty' - This was one of the first plants we put in after we moved into this house in June 1979. It flowered in its first year while quite small and has flowered well in each succeeding year. It has reached a height of about 1m with a spread of about 3m. It has been subject to attack by a small white scale insect but an occasional spray of white oil seems to keep it under control.

Leptospermum flavescens 'Pink Cascade' - We have two plants of this cultivar, each about 4 years old. Both flower for most of the year with the heaviest flowering in late winter/early spring. The plants have completely different habits. One is completely prostrate and about 1m in diameter while the other is quite upright and shows no sign of being prostrate or even semi-prostrate. These have suffered minor infestations of white scale but a couple of sprays with white oil have controlled it.

Leptospermum whiteii - After about 7 years this plant has developed into a sparse open shrub with a height of about 2m and a spread of about 3m. It has never flowered and, although it gets threatened with destruction it seems to get left in the hope that it may flower "next" year.

Leptospermum speciosum - This plant has been a bit crowded by other plants but it has reached a height of about 1m and flowers well each year. Its tight terminal groups of flowers are quite attractive. It sets seed well and I have been able to collect some for the seed bank.

Leptospermum rotundifolium - We had this growing for a few years but it eventually died

possibly because it got too shaded. We have another one planted but it is still small and hasn't yet flowered. Our son had a very good specimen of this at his first house at Nerang on the Gold Coast and our daughter is growing it successfully in her garden at Alexandra Hills in Redlands Shire (east of Brisbane).

When we lived in Rockhampton we had a hollow log about 2m long under a *Leptospermum flavescens* and in which a *Cymbidium canaliculatum* was growing. We bought the subject log to Brisbane with us and leaned it against one of the carport pillars on the western side of the house. The *Cymbidium* must have liked it there because it grew and flowered well. A couple of years after moving to Brisbane a *Lept. flavescens* seedling appeared in a crack in the log. We let it grow on in the assumption that "it won't grow there". How wrong we were. It not only grew but thrived and eventually got to the stage where it took control of the log. The *Leptospermum* root was strong enough to stand the log upright without any other support. The *Leptospermum* eventually got too large for the available space so we cut the top growth off it, severed the root and laid the log in another part of the garden with the *Cymbidium* in the sun. We now thought the *Leptospermum* would die but we were wrong again. It developed new top growth and sent roots through a crack in the lower side of the log into the ground below. It is thriving again and firmly fixed to the ground. At present it is holding its own with a *Syzygium wilsonii* which is trying to grow over the top of it. Because of its demonstrated determination to grow we will probably let it go for, at least, a few more years unless it becomes too large or creates a problem.

Melaleuca in Central and North West Australia

Plenty Highway

During June/July Verna and I did a trip through Central Australia, / across the Tanami Desert into Bungle Bungle National Park, along the Gibb River Road from Derby to Wyndham, across to the south west side of the Gulf to Borroloola and Burketown then home via Lawn Hill National Park, Porcupine Gorge National Park (North of Hughenden), Charters Towers, Emerald and Roma.

In the Tanami Desert we came across quite extensive stands of *Melaleuca glomerata*, unfortunately not in flower. The structure of the soil, soft and fluffy, and the presence of little ground cover other than *Frankenia* sp indicates that the soil is slightly saline. The *M glomerata* plants were about 3m high and very bushy.

Further along in an area of slightly ridgy stoney country a small area of plants which could have been *M dissitiflora* was seen. Again there were no flowers or fruit so a positive identification was not made.

Around the Granites Gold Mine flowering plants of what I considered to be *M nervosa* were found. These were medium shrubs to about 2.5m. Flower colour was yellow green.

After leaving Windjana Gorge N.P. and joining the Gibb River Road to travel to Wyndham we crossed King Leopold Range. From King Leopold Range almost to Wyndham extensive stands of *M minutifolia* were seen, in fact, in some areas they were the dominant trees over areas extending for many kilometres. Unfortunately none of those were in flower. There is little likelihood of *M minutifolia* becoming an endangered species.

There were large stands of *M Leucadendra* and *M argentea* growing along the waters edge in Manning Gorge and Chamberlain Gorge.

From Borroloola we drove into the Gulf Savannah country on the way to Burketown. A very large-leaved form of *M viridiflora* was flowering well through this country. These were quite large trees, up to 8m high. Flower colours were generally creamy white or pale greenish but there was a red flowered form growing near Hells Gate Roadhouse.

Melaleuca argentea, *M bracteata*, *M linariifolia*, *M viridiflora* were noted in Lawn Hill N.P. Again there were very few flowers about except for an occasional flower on *M viridiflora*.

In all, it was a very good trip. Unseasonal rain through the centre about one month prior to our visit ensured the country looked fresh and quite green with a good selection of plants in flower. The weather was kind to us throughout with clear, warm days and mild nights until the last couple of nights before we got home when the temperatures plummeted (-1°C at Roma on the last night).

Cut Flowers Project

The Institute of Plant Sciences with the Department of Food and Agriculture is currently in the second year of a funded project, from the Rural Industries Research and Development Corporation, to develop cultivars of several BAECKEA species as cut flowers. A range of BAECKEA species has been obtained from around Australia and a number of cultivars of *B. behrii* have been planted on commercial farms. These will be assessed over the next two flowering seasons.

To ensure the success of the project they require material from further species which may have potential as cut flowers. As well as BAECKEA they are also interested in other small-flowered Myrtaceae including SCHOLTZIA, ASTARTEA and THRYPTOMENE.

The Institute is looking for small amounts of cutting material and any that can be provided will be gratefully received.

Should you have cutting material or require further information please contact:

Mr. Tony Slater
Institute of Plant Sciences
P.O. Box 174
Ferntree Gully
Vic. 3156
Telephone: 03 8819222
Fax: 03 8003521

Seed List

A current Seed List is attached. Those marked * are in short supply so if you can help with supplies of those it will be appreciated.

Now that *Leptospermum* is being included I would appreciate any *Leptospermum* seed you may be able to provide.

Subscriptions

Subscriptions were due at 1st July. Most have paid but if there is a red X on the first sheet of your newsletter it indicates you are unfinancial.

Conclusion

Please forward any information you have on *Melaleuca*, *Callistemon* and

Leptospermum or, for that matter any genus allied to these.
Hoping to hear from you in the near future.

In the meantime.

Regards,

Col Cornford

Col Cornford

Errata

In Newsletter No. 4 Callistemon 'Angela' was described as having flowers with inner part white, outer part red with golden anthers. Correct description is: inner part pink, outer part white with golden anthers.

SEPT 1992

MELALEUCA & ALLIED GENERA STUDY GROUP

SEED LIST

LEPTOSPERMUM ~~canescens~~ lanigerum
epacridoideum
erubescens
~~flavescens~~ polygalifolium
grandiflorum
grandiflorum (green foliage)
horizontalis continentalis 'Horizontalis'
~~lanigerum~~ var macrocarpum
leuhmanii
nitidum
'Pacific Beauty'
'Pink Cascade'
rupestre
~~scoparium~~ rotundifolium
sericeum
squarrosum

MELALEUCA & ALLIED GENERA STUDY GROUPSEED LIST

- | | | | |
|-------------|----------------------------------|-------------|-------------------------------|
| MELALEUCA | *abietina | MELALEUCA | micromera |
| | accuminata | | microphylla |
| | *acerosa | | *minutifolia |
| | *adnata | | neglecta |
| | arcana | | nervosa |
| | argentea | | nesophila |
| | armillaris | | *nodosa |
| | bracteata | | *pauperiflora |
| | brevifolia | | *pentagona |
| | cardiophylla | | *platycalyx |
| | citrina | | polygaloides |
| | coccinea | | pubescens |
| | *conothamnoides | | *pulchella |
| | cordata | | *pungens |
| | *cuticularis | | *pustulata |
| | dealbata | | quinquenervia |
| | decora | | radula |
| | *densa | | rhapsiophylla |
| | diosmafolia | | *scrabra |
| | *diosmafolia (yellow) | | sieberi |
| | decussata | | sp aff cornucopia |
| | diosmatifolia | | spathulata |
| | elliptica | | spicigera |
| | ericifolia | | squamea |
| | filifolia | | *squarrosa |
| | foliolosa | | striata |
| | fulgens | | stypholoides |
| | genistifolia | | *suberosa |
| | *gibbosa | | *subfalcata |
| | *glabberima | | tamariscina ssp pallescens |
| | glomerata | | tamariscina ssp tamariscina |
| | halmatororum | | teretifolia |
| | huegelii | | *teretifolia 'Georgina Molloy |
| | huegelli (purple bud) | | thymifolia (mauve) |
| | hypericifolia | | *thymoides |
| | incana | | thyoides |
| | lanceolata | | tricophylla |
| | *lanceolata (pink tips) | | uncinata |
| | *laterita | | undulata |
| | *laxiflora | | viminea |
| | leucadendra | | *violacea |
| | linariifolia | | viridiflora (burgundy) |
| | linariifolia 'Snowstorm' | | viridiflora (red) |
| | *macronychia | | wilsonii |
| | megacephala | | |
| CALLISTEMON | 'Adina' | CALLISTEMON | polandii |
| | citrinus 'Austroflora Firebrand' | | polandii (broad-leaved form) |
| | 'Emu Creek' | | recurvus |
| | citrinus 'Endeavour' | | rigidus |
| | 'Guyra Hybrid' | | salignus (pink) |
| | sp (ex Malawi) | | salignus (white) |
| | linearis | | teritifolius |
| | pityoides | | viminalis 'Malawi Giant' |
| | phoeniceus | | violaceus |
| | pinifolius | | viridiflorus |

SOWING AND POTTING RECORD

YEAR: 1992

CHECK SHEET MELALEUCA.....

- A - Sowing date
- B - Germination date
- C - Potting date
- D - Remarks

SP	A	B	C	D
Alternifolia	21/2/92	MAR/APR	JUN	Pottings in
Bracteata	"	"	"	Column C to
Decora	"	"	"	square tubes
Decussata	"	"	"	
Engelsii var Corrugata	"	"	"	
Glaberrima	"	"	"	
Globifera	"	"	"	
Hamulosa	"	"	"	
Helmatorum	"	"	"	
Heugellii	"	"	"	
Incana	"	"	"	
Linariifolia	"	"	"	
Megacephala	"	"	"	
Micromera	"	"	"	
Microphylla	"	"	"	
Oldfieldii	"	"	"	
Platycalyx	"	"	"	
Postulata	"	X	X	No go
Quadrifaria	"	MAR/APR	JUN	
Quinquinervia	"	"	"	
Radula	"	"	"	
Scabra	"	"	"	