ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

MELALEUCA & ALLIED GENERA STUDY GROUP

NEWSLETTER NO 7 - NOVEMBER 1993

Leader: Colin Cornford

16 Eldorado St BRACKEN RIDGE Qld. 4017. Ph: 07-2698256

Dear Member,

Spring is with us once again and as usual with it has come the magnificant flowering displays we have come to expect from our diverse Australian flora. As usual the callistemons are flowering well. For the first time in its 7-8 year life our C. 'Purple Splendour' has given us a good display probably because it has received plenty of sun following the loss of a large neighbouring Grevillea venusta which came down with the strong winds from cyclone David earlier in the year.

The Melaleucas are coming on nicely and should flower well. Our 2m high M. thymifolia is covered in bud. M. tamariscina subsp pallescens is putting on a good display. Leptospermum polygalifolium and L. 'Pacific Beauty' presented their usual good display. My daughter has a C. viminalis pink about 1.5m high which was covered in flowers from the ground up.

New Names and Combinations for some Melaleuca spp:

An article in Nutysia 8 (3): 333-350 (1992) described new names and combinations for some Melaleuca sp and subsp from the S.W. of W.A. which are considered to be rare or threatened. Six species and two subspecies, M. araucarioides, M. fissurata, M. ordinifolia, M. pomphostoma, M. ringens, M. sculponeata, M. viminea subsp appressa and M. huegelii subsp pristicensis are described as new. M. tenella Bentham is reduced to a subsp of M. incana R. Br. and M. densa var pritzellii Domin is raised to specific rank.

Brief descriptions of the species listed are as follows:

M. argucarioides Barlow sp nov: Shrub to 1.5m high. Leaves tenate, semi-appressed and crowded in 6 regular rows along the axis 1.7-3.5mm long, 0.7-1.8mm wide, petiole 0.3-0.8mm long, venation obscure. Inflorescence a basal or terminal spike of 8-17 crowded monads to 10mm long. Stamens 1.8-5mm long, filaments cream to yellow. Fruits shortly bell-shaped 2.5-3.5mm long

<u>Distribution:</u> Confined to the Ongerup-Cape Riche area of W.A. in well-drained sandy or loamy soils in heaths or open eucalypt woodlands. Flowering in July and October.

M. fissurata Barlow sp nov: Low shrub to 1.5m tall with rough bark. Leaves spirally arranged, broadly elliptic 4.0-5.0mm long, 1.5-2.0mm wide, petiole 0.5-0.7mm long. Inflorescence a lateral cluster of 1-5(10) flowers on old wood. Stamens white 5-10mm long. Fruit cup-shaped.

Distribution: From Mt. Ney to Lake King N of Esperance. Occurs in mallee or woodland in sand or sandy loams overlying clay or clay loam. Flowering in July - August.

Melaleuca huegelii subsp pristicensis Barlow ssp nov: Spreading shrub or tree 0.9-2 (rarely 5)m tall. Leaves spirally arranged 1.8-4.0mm long, 1.5-2.5mm wide, sessile or weakly peltate. Inflorescence subbasal on lateral stems or terminal on main axes, (5)10-20(30)mm long. Stamens mauve to pink, 2-3mm long. Fruit globular c.3mm long,

3.5-4.0mm diameter.

Distribution: Dirk Hartog Island and Tamala Station in the south end of Shark Bay, W.A. Grows in heathland in sand. Flowers in September-October.

Melaleuca incana subsp tenella (Bentham) Barlow comb. et stat nov:

Shrub to 1m. Leaves ternate (3.5) 7-9mm long, 0.5-0.9mm wide, petiole 0.5-1mm long. Inflorescence a basal or terminal spike or head, 5-25mm long. Stamens 3.5-6mm long with filaments white to yellow. Fruit shortly bell-shaped.

<u>Distribution:</u> From near Esperance to Cape Le Grand National Park in S.W. W.A. Grows in swampy and moist areas. Flowers from August to October.

Melaleuca ordinifolia Barlow sp nov:

Low shrub to less than lm tall. Leaves decussate (4.0) 4.5-5.5 (7.0)mm long, 1.0-1.5mm wide, petiole 0.5mm long. Inflorescence a lateral cluster of 1-3 flowers on old wood. Stamens white, 5.0-5.5mm long. Fruit shortly cup-shaped, 3-4mm long, 4-5mm diameter.

<u>Distribution</u>: S.W. W.A. from Cranbrook to Hammersley River in mallee shrubland on loams and clays. Flowers from August to October.

Melaleuca pomphostoma Barlow sp nov:

Dense shrub to 1.5m high, bark grey, rough and thick. Leaves spirally arranged, (3)5-8(10)mm long, 1-2mm wide covered with numerous white pustulate stomata. Inflorescence a basal or terminal spike up to 15mm long. Stamens 10-14mm long, filaments greenish-yellow. Fruits broadly bell-shaped, 3-5mm long, 4-7mm diameter.

<u>Distribution</u>: A small area in S.W. W.A. near Ravensthorpe and Eyre Range. Flowering recorded in April, May and August.

Melaleuca pritzelii (Domin) Barlow comb. et stat nov:

Shrub to 1.2m. Leaves decussate 1.2-2.5(4.1)mm long, 1.2-2.0mm wide, sessile. Inflorescence lateral on old wood or terminal, a cluster of 10-15 flowers. Stamens light cream, 3.6-6.5mm long. Fruit cup-shaped, 2.0-2.4mm long, 3.6-4.0mm diameter.

<u>Distribution</u>: S.W. W.A. from near Ongerup to near Pootenup in mallee heath or tall shrubland on shallow, poorly drained sands over clay. Flowers August-September.

Melaleuca ringens Barlow sp nov:

Shrub to 3m. Leaves spirally arranged, 4.5-6.6mm long, 1.8-3.0mm wide, petiole 0.9-1.1mm long. Inflorescence in terminal spikes 9-30mm long. Stamens 4.8-7.0mm long, filaments cream. Fruit cylindrical to bell-shaped, 4-5mm long, 4-7mm wide.

<u>Distribution:</u> Point d'Entrecasteaux, W.A. Occurs in sand over limestone on exposed high ridges or cliff tops. Flowers September-October.

Melaleuca sculponeata Barlow sp nov:

Shrub 0.4m tall, lignotuberous, multistemmed. Leaves decussate, 1.9-3.1mm long, 0.8-1.1mm wide, sessile. Inflorescence a lateral cluster on old wood of c. 10 flowers. Colour unknown. Fruit depressed-globular, 2-2.5mm long, 3-4mm diameter.

<u>Distribution</u>: Near Ravensthorpe W.A. in mallee heath on light grey sand over clay. Flowering time not known.

Melaleuca viminea subsp appressa Barlow subsp nov:

Shrub 1.3-4.5m high. Leaves spiral, moderately densely arranged, 5-9mm long,

0.6-2.0mm wide, petiole 0.8-1.2mm long. Inflorescence basal spikes and terminal spikes or heads, 8-40mm long. Stamens 5-5.5mm long, filaments cream. Fruit cylindrical to bell-shaped, 3-4mm long, 2-4mm diameter.

Distribution: Near Ongerup, Mt. Burdett and N.W. of Skeleton Rock, W.A. near creeks or wet depressions in clayey soils, possibly associated with granite. Flowers September-October.

Members Reports:

Maria Pesavento lives at Atherton in North Queensland, altitude 700m, rainfall 1300mm per year. Soil is well-drained, red and of basaltic origin. The original vegetation was upland tropical vegetation which she and her husband are regenerating.

among other plants she grows the following Leptospermums:

L. neg L. woo L. 'Pa L. po L. pe L. pe L. pe L. po	rviflorum glectum oroonooran acific Beauty' lygalifolium ssp tropicum tersonii ssp petersonii tersonii ssp lanceolata lygalifolium 'Mt. Wallum'	6 yr old 5 yr old 6 yr old 1 yr old 2 yr old 10 yr old 4 yr old 6 yr old 2 yr old	2.5m 3m 1m 1m 1m 4m 1.5m 2m	flowers well not flowered
	achyandrum	2 yr old		

Maria also forwarded a list of the Callistemons in her garden. Unfortunately the list is too long to include all of them but I'll list a few as follows:

shaded but still flowers C. polandii 'The Pyramid' large pale yellow flowers C. pachyphyllus viridus attractive pink new foliage C. 'Mauve Mist' has the longest flowering period C. 'Adina' this is the type specimen for C. polandii C. polandii 'Cape Flattery Form' provides food for birds and fruit bats, C. polandii - garden form thick and bushy red, weeping habit C. 'Hannah Ray' fast growing (This cultivar also grows and C. 'Kings Park Special' flowers well in Brisbane - Ed.)

John Turrell from Parkes is still propagating plants for giveaways round Parkes. At present he is providing plants, both native and exotic for a carpark area at the Village Square Complex in Parkes. John uses a lot of recyclable materials in his propagation and plant production work. I must say a big "Thank You" to John for his further donation of \$300.00 to Study Group funds and I can assure him it will be put to good use. John is 84 years of age. I hope I can be as active when I am that age.

Derrick Arnall of Malawi writes regularly and it is always a pleasure to receive his letters. Derrick has trouble getting the smaller species of Melaleuca to survive whereas he has little or no difficulty with the larger growing species. He does not have the same problem with Callistemon and has a good variety of plants from this genus. As well as Callistemon, Melaleuca and Leptospermum Derrick also grows a number of other Australian species.

Byron Williams of Kew has been growing Callistemon for 25 years at Kew and Port Fair: He has sent some photos of some of the Callistemons in flower in his garden. He has a plant known as C. 'Hamilton's Hybrid' which he bought some 20 years ago and which has not reached more than 3-4 feet in height. From the photographs it looks similar to C. 'Western Glory' but Byron says the flower of C. 'Hamilton's Hybrid' lacks the softer mauve pink tinge of C. 'Western Glory' and the brush is more "wiry". Does anyone know of C. 'Hamilton's Hybrid' or its parentage? Byron also has a "real" 'Captain cook' now 20 years old which has remained small. (We acquired a C. 'Captain

Cook' in 1973 to plant in our garden in Rockhampton. We were in Rockhampton last year and drove past our old house. The 'Captain Cook' is still there and is only about 1m high. Another "real" one. Unfortunately, many nurseymen grew from seed of the original 'Captain Cook' but most of them did not retain the dwarf habit. Ed.) Also in his garden is a seedling from C. 'Gawler Hybrid' collected at Port Fairy which has brighter red flowers speckled with more gold and which are produced in clusters. Flower size is similar to that of C. 'Gawler Hybrid'.

Mark Ashdown is a fairly new member from Heidelberg West, Vic. and he has forwarded me a list of Callistemons, Melaleuca and Leptospermum he is growing in a clay which has had gypsum, compost and sandy loam added. In addition, most plants in slightly raised beds. At present all plants in the genera mentioned are around 12 months old with some having flowered. Mark has 24 species of Melaleuca, 9 species of Callistemon and 2 Leptospermums. He will keep me informed of progress and I will include a further report in a future newsletter.

David Randall forwarded a further comprehensive report on the progress of his 34 species of Melaleuca. His plantings go back to 1982 and some of the older plants are reaching considerable size e.g. a M. citrina which is $2.6m \times 2.3m$ after 5 years, a M. elliptica which is $2.4m \times 1.7m$ after 10 years and a M. fulgens which is $2.7 \times 3.9m$ after 11 years.

Ian Waldron owns 12 acres at Jimboomba which is between Brisbane and Beaudesert. Over the past 7 years a large number of native species have been planted but have had to battle due to a shortage of water, both naturally and artificially. Two storages, each of about 1.5 megalitres capacity were constructed in March this year to provide a water supply. To indicate how dry this area has been Ian's property received just one inch of rainfall between November, 1992 and May, 1993. The property is on the upper slopes of the Burnam Range and was originally poor quality grazing country which was extensively logged at some time in the past. Soils on the property range from clays to very deep sandy loam. Because of the aspect of the property it is protected from cold westerly winds (which we get during winter) and frosts have not been experienced.

Tan has many Callistemons, Melaleuca and Leptospermums growing. His list shows 46 Callistemons, 11 Leptospermum and 34 Melaleuca. Some of the interesting ones not widely grown in this area are:

Callistemon citrinus lilacinus
Callistemon 'Kotara Fire'
Callistemon 'Phil May' (Does anyone know the origin of this? Ed.)
Callistemon phoeniceus
Melaleuca capitata
Melaleuca hypericifolia prostrate 'Ulladulla Beacon'
Melaleuca incana
Melaleuca nesophila
Melaleuca squamea
Melaleuca wilsonii var victoreae

It is interesting to note that Ian has his M. incana which is six years old and 2m tall with a spread of 1.5m growing in a moist, not well drained deep sandy loam. It has normally been the practice to plant W.A. species in dry positions in this area but as M. incana grows in swampy areas in W.A. maybe we have been on the wrong track. I have a M. incana growing in a moist area and it is doing well. Previous attempts to grow it in a drier area have met with little success.

Barbara Graham is the Leader of the Calothamnus & Allied Genera Study Group and keeps me in touch with what is happening to her Melaleuca and Callistemon plants. Her area experienced a very dry summer and autumn this year with the result that some plants stressed fairly badly and some died. Barbara lives at Woolomin near Tamworth. She also forwarded a list of the Melaleuca and Callistemon sp in Dulegal Arboretum.

Details of the Arboretum plants are as follows. M. stypheloides and M. lanceolata are about 18' high and stressed but surviving. M. ericafolia look as though they could succumb to the dry. M. decussata are growing slowly. The M. linariifolia plants are in a situation which receives a bit extra runoff rain and are doing well. M. gibbosa all died when the water in the dam receded to the stage where it was beyond reach of their roots. M. bracteata and M. armillaris are also planted near the dam but have stayed healthy. The M. steedmanii are growing in heavy clay and may not last.

Callistemons doing well are C. polandii, C. Baroondah Station, C. Injune, C. Malawi Giant, C. salignus, C. salignus x polandii, C. viminalis and C. sp Lana. Most of the C. citrinus have died. The C. Western Glory' and C. Demesne Bicentennial' are stressed.

In her own garden Barbara is growing M. ericafolia, linariifolia, viminea, steedmanii, lanceolata and 16 species and cultivars of Callistemon. These are growing well as they are able to be watered whereas the Arboretum plants have to rely on rainfall.

Barbara Buchanan writes that she has extended her range of Allied Genera to include Beaufortia, Eremea, Kunzea etc. Barbara has a specimen of M. brevifolia which is now 20 years old and which flowers erratically but which gets cut by severe frosts occasionally. Callistemon species being grown include C. 'Wild River', C. 'Dawson River', C. brachyandrus, C. 'Packers Selection' and a couple of seedlings from the latter. Barbara has a plant growing which was reputed to be M. densa but, on flowering, discovered it is probably M. blaerifolia. She also has another mystery plant which was labelled as M. minutifolia but it was labelled wrongly and hasn't yet been identified. (How many plants are wrongly labelled in nurseries? Ed.)

Our Recent Trip:

During August/September Verna and I did a trip to Adelaide travelling via S.W. Qld. (Cunnamulla, Noccundra and Warry Gate), Sturt, Mootwingee, Kinchega and Mungo National Parks in western N.S.W. and then through Wentworth, Mildura and Renmark to Adelaide. We returned via Port Pirie, Wilmington, Flinders Ranges and Gammon Ranges National Parks, Maree, the Birdsville Track, Windorah, Charleville to home. We had visited Sturt N.P. 4 years ago so didn't spend much time there on this trip. There had been fairly good rain through the area and quite a few annual plants were in flower. were some very good patches of Swainsona in purple and orange colours and one white form in the clay soil areas. Mootwingee N.P. is well worth a visit - spectacular scenery, very good aboriginal art and engravings, plenty of good walking tracks and lots ϕf plants in flower. One black cloud — one of the slide films I used in Mootwingee has gone missing. Kinchega N.P. surrounds the Menindee Lakes. Much of Kinchega is open plain but there are a number of sand ridges which support good colonies of Australian plants. There were large areas of white, heavily-flowering Olearia on one of the sand ridges close to Menindee. We had an enforced stay of an extra day there because of rain which made the back soil road out of the camping area very greasy. Our intention was to follow the road along the Darling River to Pooncarie and then to Mungo N.P. but the rain prevented this. We had to return to Broken Hill and then to Wentworth to approach Mungo from the south. Mungo, as most of you probably know, was originally a lake but some 15000 years ago the watercourses feeding into it changed course and since then, with no inflow, it has been dry. The prevailing south-westerly winds have blown sand across to form a crescent-shaped dune (lunette) along the eastern shore. Erosion has carved interesting shapes into the lunette. The bed of the lake carries mainly saltbush. Around the lower parts of the lunette large tracts of bright yellow senecio were flowering. Mallee eucalypts are the predominant vegetation beyond the eastern side of the lunette with E. dumosa, E. gracilis, E. socialis and E. foecunda predominating.

The greenness of the irrigated country around Mildura, Renmark contrasted sharply with the dry nature of the country we had previously traversed.

Adelaide is a very attractive city and we thoroughly enjoyed our stay there. From Adelaide we had a pleasant day trip through Fleurieu Peninsula to Victor Harbour and

Goolwa. The greenness of that country was impressive. We called on Study Group Member Gary Leske in Port Pirie. His garden is 4 years old but quite well developed considering the poor quality soil he had to start with. Mounds with gravel mulch are being used and this is giving good results. He has a good variety of Melaleucas and Eremophilas with daisies growing wild in the pathways. Thanks Gary for letting us see your garden.

Flinders Ranges scenery is rugged and spectacular. We did the 20km walk through Wilpena Pound and although it was overcast, which tended to dull the colours in the rocks, it was well worth the effort. There were lots of acacias in flower in the higher areas along with many other plants. I was interested to find Callistemon teretifolius growing on the rocky upper slopes — no flowers but the abundance of seed capsules indicates it does flower well. We found Melaleuca glomerata and Melaleuca lanceolata growing in this area but no flowers. There were a couple of other Melaleuca species but, again, no flowers and I was not able to identify them.

We found some fairly large patches of Sturt's Desert Pea near Arkaroola. The Gammon Ranges N.P. was generally drier than the Flinders Ranges but there were of Acacia, Senna (Cassia) and Dodonea to photograph, among others.

The southern end of the Birdsville track passes through the Tirari Desert which, in the section traversed by the road, is fairly featureless undulating clayey and sandy clay soil plains carrying annual and perennial grasses and herbs but not a great deal of flowering plants — at least not when we came through. Further north, the track passes through Sturt Stony Desert and it is rather awe—inspiring to be able to stand in one spot and see nothing but stones with, perhaps, an occasional small plant, stretching to the horizon in every direction. Towards the northern end the track enters the Strzelecki Desert which is comprised mainly of sand dunes with flat clayey swales between the dunes. The sand dunes carry a wealth of annual plants, the predominant one when we came through being the poached egg daisy (Myriocephalus stuartii). We arrived back to Queensland to very dry conditions (although it was a bit greener from Betoota to Windorah). We ran into rain after leaving Quilpie and it rained all the way from Roma on our last day.

Hope I haven't bored you with all this detail but it really was a wonderful trip.

Feature Garden:

The feature garden for this newsletter belongs to Mrs. Esther Wilson at Kallangur which is approx. 24 km north of Brisbane G.P.O. Esther owns 3/4 acre (in 3 blocks) and has been living there since 1978. Soil is a well-drained red clayey loam. In her own words: "It is hard to believe what my three blocks looked like. There were no more than a dozen scrawny trees, a bush that stretched from the back ramp to the dividing fence, two stands of bananas, no driveway, over a half metre deep drain and no paths, just the house, the old shed and an unused well."

How different it is now. The area is virtually all under plants with pathways leading from one area of interest to the next.

To start with all the original trees, bananas etc. were removed and planting of Australian plants began. As the number of plants being put in the ground increased mowing of the intervening spaces was becoming a problem so rings were made around each plant and mulched with whatever material was available. The "lawn" started to encroach on the rings so they were enlarged as they were trimmed. Less area to mow!!! In time the rings started to join up to leave intervening pathways. 35 pine trees growing along the boundary of the next door property were a nuisance but provided considerable mulch in the form of cones and needles but the quantity was insufficient to meet the demand. It so happened that the 5 acre paddock across the road had been slashed so a supply of grass for mulching was available from there and laboriously carted across by wheelbarrow. Although this grass mulch was put down thickly it soon broke down to a thin layer. The plants were growing happily. In 1983 Esther started to plant a rainforest along the back of the block. The previous gardens in this section were done away with and the whole area mulched. By this time garden trimmings

were being obtained from neighbours and put through a shredder. All trimmings from her own garden also went through the shredder. Trunks from trees that have come down were used as garden edges.

In November, 1987 new neighbours removed the 35 pine trees. The tops were appropriated by Esther and shredded for mulch. The trunks and larger branches were also acquired and used for garden edges.

Anzac night 1988 saw disaster strike. A severe wind storm caused massive damage to trees and shrubs which took six months to clean up and put right again.

Watering restrictions in Pine Rivers Shire are fairly severe and it is not possible to keep the garden fully watered. I feel sure that the strong commitment to mulching has conserved moisture and has carried the garden through the recent dry periods with minimal losses.

Callistemons being grown are brachyandrus, 'Blush Pink', 'Captain Cook', citrinus 'Angela', comboynensis, 'Eastland', citrinus 'Endeavour', 'Eureka', 'Harkness', gilesii, 'Glasshouse Beauty', 'Guyra Hybrid', 'Hannah Ray', 'Howie's Fireglow', 'Jenny Wren', 'Kings Park Special', 'Lana', linearis, 'Little John', 'Mauve Mist', 'Mr. Foster', pachyphyllus (pink, red green), 'Packers Selection', phoeniceus nana, 'Pindi', pinifolius green, 'Pink Alma', polandii, 'Prolific Pink', rigidus, salignus pink, salignus 'Rose Pink', sieberi (pityoides), 'Snowdrift', sp Boulia, sp Ebor, sp Emu Creek, sp Genoa River, Sp Girraween, Sp Happy Valley, sp Injune, Sp Marlborough, sp Running River, sp Stoney Creek, sp Walsh's Pyramid, 'Tinaroo Dazzler' (recurvus), viminalis pink, 'White Ice', 'Wildfire of Newcastle'.

Leptos permum species being grown include brachyandrum, 'Cardwell', 'Copper Glow', horizontalis (continentale), juniperinum, laevigatum, luehmanii, 'Pacific Beauty' 'Pink Cascade', rotundifolium, sericatum.

Melaleuca species include alternifolia, arcana, elliptica, fulgens, 'Golden Gem', tamariscina ssp irbyana, laterita, leucadendra, nodosa, quinquenervia, 'Revolution Gold', thymifolia, viridiflora.

As well as the plants listed above there are many many other plants both large and small growing in the garden. The rainforest area alone contains over 60 species varying in size from large trees to shrubs to climbers to smaller plants such as cordyline, costus and ground covers. Some of the plants being grown successfully are generally regarded as being doubtful for the Brisbane area.

It is always a pleasure to visit Esther's garden as there are few, if any, times when there is not a considerable number of plants in flower.

The garden is a haven for wildlife. Frequent visitors include bearded dragons, blue-tongue lizards, skinks, possums and bandicoots. Visiting and/or resident birds include parrots, kookaburras, owls, honeyeaters, galahs and cockatoos to name a few.

Overseas Visitors:

During August, Jeff Irons, Secretary of the Australasian Plant Society in England, and his wife Betty visited Australia. We had the pleasure of their company for a couple of days before they went to N.S.W. During their stay with us we took them to visit Edgar and Pat Burt's garden at Glasshouse, north of Brisbane. Edgar has been grafting Grevilleas for some years and has hundred of Grevilleas on their 2 acre block. At the time of our visit most were in flower and provided a spectacular display.

Slide Programme:

The slide programme on Melaleuca is still available. Two Groups have borrowed it so far. If you would like to borrow it please let me know. There is no charge. I will pay the postage out and the borrower pays the postage back.

Garden Design Study Group:

Leader of this Group, Diana Snape, will be grateful for any information about what grows where and how well it grows. You can contact Diana direct or, if you wish, forward information to me for onward transmission. I have already forwarded a list of the smaller growing Callistemon and Melaleuca ssp which are grown in gardens in this area.

Membership Fees:

Subscriptions were due on 1st July 1993. A red X on the front of your newsletter indicates your subscription for 1993/94 has not yet been received.

Please keep the information rolling in.

Regards and all the best for Christmas and the New Year.

COL CORNFORD