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ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

MELALEUCA AND ALLIED GENERA STUDY GROUP

ABN 56 654 053 676

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NEWSLETTER NO. 22 June 2001

Dear Members,

We have had a very good flowering of Melaleuca viridiflora in its various colours over the past few months and many of them are budding up again for the fourth time this season. As a matter of interest I picked some flowers from the weeping burgundy form of M. viridiflora and placed them in a vase inside, in plain water, to see how long they might last under those conditions. I was pleasantly surprised. After 4 days inside a few of the flowers had started to wilt but they still retained their colour and were still in reasonable condition. Most of the flowers had lost a few petals but, unlike Callistemons under similar conditions, there was no stamen drop. The flowers were discarded on the 6th day, some fairly wilted and some still in reasonable condition, but still with no stamen drop and still retaining good colour. Has anyone else had any experience with vase life of Melaleuca species?. If so, please let me know.

The red form of Melaleuca quinquenervia (identified as such by Qld Herbarium) has also been flowering quite well. The flowers of this form are slightly smaller than those of the standard form, are a deep red in colour but without the pale—coloured anthers of Melaleuca viridiflora. It will grow to a fairly large tree up to 12 metres in height and with the papery bark of the standard form. The broad-leaved forms of M.leucadendra are flowering well at present while M. quinquenervia is still flowering, having started to flower in February.

Brisbane has a new set of Botanical Gardens on the site of the old Roma Street railway marshalling yards and known as "Roma Street Parklands". The gardens cover an area of some 17 hectares and incorporate Albert Park which is one of the original parks in Brisbane. The Albert Park section has been rejuvenated with some of the old trees (camphor laurel) removed and new plantings established. The new gardens are international in nature with sections representing many countries but incorporating a large Australian section with many plant communities represented including both dry and wet areas and with many water features. Should you happen to be in Brisbane they are

well worth a visit. They are about 10 minutes walk from the city centre. Walking tracks throughout the parklands are very well graded. Most of the various gardens in the parkland are numbered and cross-referenced to a map in the brochure provided at the entry. A substantial number of the permanent plants have individual name plates adjacent to them.

Apart from the Melaleucas there is not much from our group in flower at present except for a few flowers on Callistemon viminalis and quite a few flowers on Callistemon comboynensis. Many of the Leptospermum species flowered heavily earlier in the year. The L. "Aphrodite" and the L. "Rhiannon in our son's garden at Ormeau flowered well again this year. The few plants I have seen around of L. Merinda "flowered very heavily during late summer and early autumn for a period of about 3 months. This latter plant is well worth growing but it needs to be trimmed occasionally to maintain its shape , otherwise the long, arching branches just keep getting longer and tend to encroach on adjacent plants. There are a few plants of L. squarrosum around and these have been flowering for a fairly long period. The flowers are attractive but the plant tends to be a bit straggly and open.

Last year I had 2 Agricultural Science students from France approach me for information on Callistemon which they were studying as part of their course and this year I have been approached by an Agricultural Science student from Italy who, to complete her degree course, is writing her thesis on Callistemon. From correspondence with her it appears that information on Callistemon is hard to find in Italy. We saw a few Callistemons growing in Italy last year, mostly growing in pots and mostly with mauve coloured flowers. She has promised to send me a copy of her thesis when it is complete so it will be interesting to read her conclusions.

ALTERATIONS TO SEED LIST AND NAME CHANGES

SEED LIST ALTERATIONS

As a result of the recent revision of Melaleuca, which now has 219 species listed, there has been some name changes and the amendments to the seed list as published with Newsletter No. 21 are shown below:

Melaleuca acerosa is now Melaleuca systena

Melaleuca genistifolia is now Melaleuca decora (they were previously 2 separate species)

Melaleuca neglecta is now Melaleuca brevifolia (they were previously 2 separate species)

Melaleuca smartiorum is now Melaleuca sapientes (This has been known in the past as Melaleuca holosericea but M. holosericea is a rare plant and may be extinct)

Melaleuca striata is a doubtful species. It does not fit the concept of Melaleuca and its taxonomic position is being reviewed

Melaleuca citrina is a doubtful species. It may end up in the Callistemon genus

Melaleuca thymoides is a doubtful species. It does not fit the concept of Melaleuca and its taxonomic position is being reviewed

Melaleuca calycina spp dempta is now Melaleuca dempta (Melaleuca calycina is now a separate species)

NAME CHANGES

Melaleuca urceolaris Type A (Volume 1 – Field Guide to Melaleuca – Holliday) is now Melaleuca brophyi

Melaleuca urceolaris Type C (Volume 1 – Field Guide to Melaleuca – Holliday) is now Melaleuca laetifica

Melaleuca sharkiensis is now Melaleuca eulobata

Melaleuca smithiorum is now Melaleuca fabri

Melaleuca acuminata now has 2 subspecies --ssp acuminata and ssp websterii

Melaleuca armillaris now has 2 subspecies - ssp akineta and ssp armillaris

Melaleuca cajuputi now has 3 subspecies - ssp cajuputi, ssp platyphylla and ssp cumingiana – the latter being found in Malesia

Melaleuca huegelii now has 2 subspecies - ssp huegelii and ssp pristicensis

Melaleuca incana now has 2 subspecies - ssp incana and ssp tenella

Melaleuca macronychia now has 2 subspecies - ssp macronychia and ssp trygonoides

Melaleuca nervosa now has 2 subspecies - ssp nervosa and ssp crosslandiana

Melaleuca pauperiflora now has 3 subspecies - ssp pauperiflora, ssp mutica and ssp fastigata

Melaleuca pentagona now has 3 subspecies - ssp pentagona, ssp latifolia and ssp raggediensis

Melaleuca tuberculata now has 3 subspecies - var. tuberculata, var. arenaria and var. macrophylla

Melaleuca viminea now has 3 subspecies - ssp viminea, ssp appressa and ssp demissa

Melaleuca apodocephala now has 2 subspecies - ssp apodocephala and ssp calcicola Melaleuca lateriflora now has 2 subspecies - ssp lateriflora and ssp acutifolia

There have been a number of new species named as well as those listed above but these will be left for a later newsletter/s and will be listed with brief details of their occurrence and whatever other details may be available.

NEW SPECIES OF PHYMATOCARPUS (P. interioris)

The Western Australian genus *Phymatocarpus* F. Muell. was established in 1862 with *P. porphyrocephalus* F.Muell as its sole, and hence type, species. Mueller added a second species, *P. maxwelli* F. Muell in 1875. Both of these species have a more or less coastal distribution, the former in the Murchison River-Eneabba region and the latter from Mount Barker east to Israelite Bay. During preparation of an account of the genus for Flora of Australia it was noted that several populations, seemingly of *P. maxwelli*, occurred in the Lake King-Peak Charles area to the north of the range of *P. maxwelli*.

Further investigation showed that these populations represent an undescribed species of the genus; this is described below as *P. interioris*.

Shrub to 1.5 m tall . Leaves 4.4-9.2 mm long,3-7.5 mm wide, short-petiolate or subsessile; blade glabrous or hairy, very broadly ovate to circular to transversely elliptic, in transverse section sublunate, the veins 5-9 and parallel – pinnate. Inflorescence with 2-6 triads; bracteoles absent . Hypanthium sericeous . Sepals costate or not, very broadly triangular or elliptic, 0.7-0.8 mm long. Staminal ring well developed, 1.4-2.8 mm long. Stamens 23-30 per flower, often in distinct antepetalous clusters (the bundle claw per se weakly developed), the filaments glabrous, mauve, purple or pink,3.3-5.5 mm long . Style 7-8 mm long . Ovules 5-10 per locule, Fruit 2.7-3.9 mm long with the distal rim flat or more or less so. Seed generally ovoid; cotyledons obvolute.

P. interioris occurs in southern Western Australia in the Lake King – Peak Charles area. It grows in mallee and eucalypt woodland. shrubland and low heathland, apparently preferring well-drained sandy soil that often overlies clay. Flowers have been recorded between September and November

MELALEUCA DEANEI

Melaleuca deanei was named after Henry Dean, a railway engineer who was involved with construction of a number of railway and tramway lines in N.S.W.in the early 1900s. He was also a keen and knowledgeable botanist. He has at least 4 plants named after him - Boronia deanei, Eucalyptus deanei, Acacia deanei and Melaleuca deanei. Melaleuca deanei is listed as vulnerable under Schedule 2 of the N.S.W.Threatened Species Conservation Act 1995. The typical habitat of this plant is in heath on sandstone in 2 distinct areas on the Hornsby and Woronora Plateaux (in the Kur-ring-gai/Berowra area and the Holsworthy/Wedderburn area). The N.S.W. Scientific Committee estimates the total population is between 1000 and 3000 plants at approximately 75 locations, the majority of which contain only a few individuals. Many sites occur on the edge of fire trails which makes small populations susceptible to catastrophic events and localised extinction even when they are in conservation reserves. Melaleuca deanei is reported to be a striking plant to 3 metres with creamy white "bottlebrush" flowers and with attractive grey/green foliage.

MELALEUCA NEMATOPHYLLA

In 1993 the late Edgar Birt who was well-known in Grevillea circles and for his prowess with grafting of Grevillea species grafted a cutting of M. nematophylla on to a root stock of Callistemon viminalis and gave it to Ralph Hickling to try in his garden. Ralph planted it in granite soil on his property at Kilcoy near a drain which carries some seepage for a period after heavy rainfall. This particular plant has grown well and is now some 2 metres high with a spread of 1metre or so. It has been flowering well for a number of years, is in a healthy condition and appears as though it will continue to grow well.

Has anyone else had any experience with grafting of Melaleuca species?

MEMBERS REPORTS

Reports from members have been a bit light on over the past 6 months but I hope you will all get your writing hands into action and let me know what you are growing and your successes and/or failures with any of the genera covered by the study group for the next newsletter – it doesn't have to be a long report – just a few lines will be of interest.

<u>Trevor Gilbert</u> from Dubbo in N.S.W. advises, although they had a very wet October/November last year and a very hot January this year, he has had reasonable success with his plants:

Melaleuca elliptica produced the best flowering it has ever had.

Melaleuca radula flowered poorly this year.

Melaleuca viminea is now a large plant, above the roof line of the house, but flowered poorly.

Melaleuca glomerata had its first flowering after 3 years in the ground and is now 2.5 metres high.

Melaleuca linophylla is a neat single – trunked tree some 4 metres high and flowers well each year.

Callistemon "Injune" is a large tree which dominates the backyard and provides a major shade source in summer. Trevor's report was forwarded in Jan.2001 and, at that time, this tree had just finished a very heavy flowering.

Callistemon pachyphyllus flowers each year but requires heavy pruning each season.

Callistemon flavovirens is a new plant which has not yet flowered but which is growing well.

Trevor supplies seedlings to a number of firms in the Dubbo area and it has been reported that most of the Melaleuca seedlings he has supplied have shown good growth in their first year.

Paul and Barbara Kennedy live at Strathmerton in the northern part of Victoria near the Murray River. Their aim is to set up an arboretum of Australian plants and in the five years they have been on the property they have planted 350 Eucalypt species, 150 Hakea species, 68 Banksia species as well as numerous plants of other genera including Melaleuca and Allied Genera. This latter group is too numerous to mention in one article so we can look forward to further reports from Paul and Barbara. Their back paddock is 18 acres in extent and is characterised by two sandhills with a claypan in between. Soils, therefore, vary from deep sand to heavy clay but the clay soils can be quite friable when wet owing to the relatively large quantity of sand within the profile. Soils are slightly acid with pH in the range of 6 to 6.5. Winters are cool with frosts down to -4 degrees and occasionally down to -6 degrees with hot summers. Rainfall is unreliable with rain generally received around Easter and again in August/September.

Average rainfall is 450 mm (18 inches). A dam, 2..1 metres deep, has been constructed in the claypan with an island at one end and a shallow wading pond for water birds at the other end. The earth removed from the wading pond was mounded and covered with 150 mm of sand.

This report covers the Callistemons currently being grown

The mound built from the earth removed from the wading pond has been planted as follows: Callistemon sieberi August 1999; Callistemon pachyphyllus October 2000; Callistemon salignus (red) August 1998 (flowered in spring 2000); Callistemon rugulous October 2000; Callistemon recurvus October 2000; Callistemon phoeniceus July 1998 and Callistemon speciosus July 1998. The 1998 plantings are now 1 metre high while the 1999 plantings are 600 mm high.

The following Callistemons are planted elsewhere on the property:

Callistemon brachyandrus - planted in clay loam 3 years ago and is now 2 metres high with flowers in December 2000. It is watered occasionally in dry periods.

Callistemon citrinus - planted in clay 4 years ago and now 1.5 metres high. It receives dappled shade from nearby trees and receives some water in dry periods. It flowers in November.

Callistemon formosus - planted in deep sand in September 1999 and has currently reached a height of 800 mm. It is frost tender and is covered during winter. It is watered regularly in summer. There is moisture in the sand at a depth of 1.5 metres so, when the roots reach this, it should require less water. It is becoming obvious that this plant would appreciate a wetter summer climate. (Editors note: C. formosus was once readily available and fairly widely grown in the Brisbane area but, in recent years it appears to have lost favour and is now rarely seen in nurseries - it does become quite large - to 8 metres with a spread of 4-5 metres - and possibly, because of the trend towards smaller house blocks in recent years, its size does not appeal to owners of these smaller blocks.) Callistemon polandii - the remarks which have been applied to C. formosus also apply to this plant.

Callistemon linearis - this plant is on the island in the dam and was planted in September 1999. It has survived with minimal watering but gets plenty of water when the dam fills. As the water level in the dam recedes the roots of this plant follow it down. Callistemon subulatus - planted in a friable clay loam and is now 3 years old and 1 metre high. It has flowered twice, is frost hardy and is watered occasionally in dry weather.

Callistemon pallidus - the comments for C. subulatus also apply to this plant.

Callistemon pinifolius - planted in sandy loam in September 1998. It has grown slowly and flowered for the first time in 2001. It is the red flowered form.

Callistemon rigidus - this plant is 3 years old, is growing in deep sand and has reached a height of 1.5 metres. It flowers each year. Leaves of this plant tend to yellow with lack of moisture but quickly green up with watering.

Callistemon viminalis - planted in sandy loam in 1997 and is now 2 metres high. It flowers in December.

Byron Williams from Kew in Victoria has had his pen busy again writing articles for the APS Victoria Newsletter, mainly on Callistemons. He has also had an excellent article published in " Australian Plants On Line " entitled " Growing Callistemon From Seed ". It is a very interesting article which contains a lot of information on how to propogate seedlings, why it is important to use cuttings if it is required to reproduce a particular Callistemon and a considerable amount of information on the various plants which have arisen from seed obtained from various species and cultivars. access to the Internet this article is available at http://farrer.csu.edu.au./ASGAP/. Should you not have Internet access and would like a copy of the article please let me know and I am sure Byron will not mind if I forward a copy to you. Byron obtained seed of C. "Pgymy Pink" and C.sp "Mt Mee" from the seed bank some time back and he advises that the seedlings grown from these are facing their second winter and are looking healthy. The seed of "Pygmy Pink" came from Derrick Arnall in Malawi and, apparently, is a pink-flowered, small growing plant. C. sp "Mt Mee "comes from Mt Mee which is to the north- west of Brisbane, towards the northern end of the D'Aguilar Range at an altitude of some 400 metres, and is, apparently, a species in its own right but which has not yet been given a specific epithet. It produces red flowers and grows to some 1.5 - 2 metres high. To digress from the subject and as a matter of interest fairly large areas of high level heath grow on Mt Mee where a wide range of plants can be seen including a Crowea which appears to be an isolated population and is not known from any other area in southern Qld.

Byron has grown 2 plants from seed of C. "Western Glory", one of which produced mauve purple flowers while the other was red. He also grew 2 plants from seed of C. "Hamiltons Hybrid", which has been growing in his garden for some 30 years, one of which produced flowers of a plum red colour which aged to a deep pink while the other appears to have reverted to one of its probable parents - C. "Endeavour" as it almost identical to that plant in foliage and flower colour.

NEW CALLISTEMON CULTIVAR

A new Callistemon cultivar has appeared in the nurseries here, known as Callistemon "Mary MacKillop". The label states it has glossy leaves, lettuce – green new growth and produces large cardinal red brushes in spring and summer. It is reported to grow to a height of 2-2.5 metres with a spread of 1-2 metres. The plants I have seen bear a strong resemblance to Callistemon viminalis. It will be interesting to follow its progress and to see how it performs.

CALLISTEMON ARBORETUM AT CLARENCE TOWN. N.SW

I have been contacted by Mr. Ron Wilton from Clarence Town, near Newcastle, in N.S.W. who is setting up an arboretum of Callistemon and presently has some 160 species and cultivars planted. His eventual aim is to have all the available species and cultivars in the arboretum but he is having considerable difficulty tracking down a number of these. He has obtained a number of cuttings from Mt Annan Gardens which brought his numbers up quite a bit more. He has sent me a 'wish list ' and I list part of it below—

Callistemon

acuminatus, acuminatus pink, Aileen Black, American Beauty, All Saints, Armidale, Bluff Red, Bob Bailey, brachyandrus 'California', brachyandrus 'nana', Braeside, Briar Hill, Bronze Wing, Cameo Pink, Chico Red, Coochy Coochy Station, Demesne Bronwyn, Demesne Cherie, Clearview Nora, Clearview pink, Clearview Robin, Clusters, Demesne Bonanza, Demesne Eartha, Demesne Reliance, Demesne Special, Demesne Western Royal, flavovirens, Enid, Cinderella, Evelyn Rice, formosus red, formosus rubra, formosus pink tips, formosus pink, Genoa River, Gibraltar Range, gilesii, Girraween, Glen Aplin, Great Lakes, Clearview Ruby, Greenbriar, Injune x pungens, Injune x Severn River, Inverramsay, Jeffersii, rugulosus pink, rugulosus violaceus, Sid Reynolds 'Old Duniald', Marjorie Burden, Mt Kobble, Nabiac Red, Oakey Creek, Pendulous, Parry's Hybrid, phoeniceus 'nana', phoeniceus 'Pastel Pink', Pink Clusters, Pink Surprise,

I have never heard of some of the names listed but some of the members of the group may know of them. Should you have them growing, or know where they may be located, would you please contact Ron at - 50 Marshall Street, Clarence Town, N.S.W. 2321 or by phone at 02-49964514. If you do send any information to Ron I would appreciate a copy of it for my records.

SEED/CUTTINGS SWAP PROGRAMME

It has been suggested that the group instigate a seed/cuttings swap programme where members may be able to obtain seed or cuttings of difficult-to-get species and cultivars from other members. The first one up is — Byron Williams who would like to obtain cutting material of Callistemon "Kotara Fire " and of Callistemon " Demesne Great Lakes ". Byron's postal address is P.O. Box 513, Kew, Vic,3101 so, should you be able to help please contact him at that address. Should anyone have any requests for plants they would particularly like please let me know and your requests will be listed in the next newsletter.

MEMBERSHIP FEES

Postage for items other than standard letters has risen to some extent but, at this stage, it is not intended to increase membership fees above the current \$5 for Australian membership and \$AUS12 for overseas membership as I feel I can keep solvent at these rates. Membership fees are due on July 1 2001 for the ensuing year.

FINANCIAL STATEMENT

RECEIPTS		EXPENDITURE	
Balance as at 11/9/2000 Membership fees	\$861-07 \$118-00	Petty cash Photocopy NL21	\$22-20
Total Less expenditure	\$979-07 \$168-06	and stationery Postage NL21 Postage(slide set)	\$70-30 \$42-00
Total	\$811-01	and stamps Purchase seed GDT	\$22-81 \$9-25 \$1-50
		Total	\$168-06

Balance as per bank statement 12/03/2001 ---- \$811-01

The photocopy and stationery item included re-supply of envelopes, copy paper and printer ink refill. It now costs around \$10 to forward the slide sets by registered post but I consider this cost worthwhile to try to avoid loss of the slides, most of which are from my collection and which would be difficult to replace.

I hope your plants keep growing and flowering well for you. Should you have any information which may be of interest to other members please let me know so it may be passed on .

Regards
Col Cornford