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PROSTANTHERA STUDY GROUP

NEWSLETTER NO. 9

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STUDY GROUP MEETING

VENUE SYLVAN GROVE NATIVE GARDEN

TIME Saturday, 14th September 9.30 a.m.

Robert Miller will give us a guided tour of "his" favourite garden not only to view Prostanthera but also see a wide variety of interesting plants including a rain forest area. This garden is open to the public throughout the year but closed weekends during winter months.

On conclusion of this garden tour, members who feel like a drive of about 40 minutes, can continue this meeting at my home for any further discussion and see the Study Group collection of Prostanthera.

SYDNEY WILDFLOWER EXHIBITION 1985 : CASTLE HILL SHOWGROUND 28th/29th September.

Our Prostanthera Study Group display this year will probably have less plants than previous displays. We are hoping the quality of plants is of better standard and we are able to label plants more accurately than in the past. Members who have plants for this display can take them direct to the Exhibition or bring them to the Study Group meeting, two weeks before hand, and I will arrange to take them and return them to you at a later date. As well as the outdoor display, there is also an indoor area for Study Groups to exhibit other material, i.e. photos etc. Anyone who can assist here please let me know.

BI CENTENARY, 1988, SYDNEY

This Study Group has undertaken to grow in pots as wide a variety as possible and build up a sizeable collection of Prostanthera for displays during the 1988 Bi-Centenary year. About 200 plants have now been potted on into 200 mm and 300 mm pots, of these selected plants will also be displayed at the Sydney Wildflower exhibition in September.

I have started this collection with the help of Robert Miller, who has a similar collection at his home at Picnic Point. Please advise if you are interested in being involved in this project. Blue Mountains member Roger Bagley has offered to help look after plants when we have progressed more. I realise this tends to isolate members not living near Sydney. However while not being able to help directly, some interstate and N.S.W. people have been supportive in collecting or making available plant material, some of which resulted from the plant list update on the green form in the last Newsletter (No. 8).

MEMBER PLANT LIST UPDATE

I know a previous list was circulated by Les Taylor a few years ago, those returns have been kept for referral.

The lists returned to me (not a lot) indicate the typical collection of Prostanthera being grown. About 30 species, plus several forms of *P. lasiantha*, *P. ovalifolia* and *P. rotundifolia*, of these 30, 10 species are being grown by only one or two people. The mailing list for our newsletter includes 12 S.G.A.P. Groups, I was pleased to have a reply from the Marcondah Group, Vic. Three of their members listed Prostanthera they are growing and also sent one specimen for identification. So far I can only guess it is one species growing near Rylstone, N.S.W. I would welcome other groups to become more involved.

The following is the 32 species (referred to above). I am not including hybrids in plant lists at the moment, (of which there are many beautiful plants). In a later newsletter, I will include an article about them.

P. aspalathoides (as indicated about the most difficult), *P. baxteri*, *P. behriana*, *P. cuneata*, *P. cruciflora*, *P. denticulata*, *P. cineoliflora*, *P. discolor*, *P. gilesii*, *P. hirtula*, *P. incana*, *P. incisa*, *P. lanceolata*, *P. lasianthos*, *P. linearis*, *P. marifolia*, *P. melissifolia*, *P. nivea*, *P. nivea* var. *induta*, *P. ovalifolia*, *P. phyllicifolia*, *P. rhombea*, *P. rotundifolia*, *P. rugosa*, *P. saxicola* var. *montana*, *P. scutellaroides*, *P. sieberi*, *P. striatiflora*, *P. spinosa*, *P. stricta*, *P. teretifolia*, *P. violacea*,

COMPLETE STUDY GROUP PLANT LIST AUGUST 1985

<i>P. sp. aff. aspalathoides</i>	Grampians	Niel Marriot
<i>P. sp. aff. aspalathoides</i> S.A. (<i>P. florifera</i>)		Botanic Gdns. Canberra
<i>P. baxteri</i>		
<i>P. baxteri</i> var. <i>crassifolia</i>		
<i>P. behriana</i> S.A.		Botanic Gdns. Canberra
<i>P. caerulea</i>	Mt. Wilson N.S.W.	Robert Miller
<i>P. calycina</i>		Les Taylor
<i>P. chlorantha</i>		Burrendong Arboretum
<i>P. cineoliflora</i>	Aspley Falls N.S.W.	Botanic Gdns. Canberra
<i>P. collina</i>		Burrendong Arboretum
<i>P. cruciflora</i>		
<i>P. cryptandroides</i>		
<i>P. cuneata</i>		
<i>P. cuneata</i> "Alpine Gold"	Tas.	Mary McEvoy
<i>P. densa</i>	N.S.W.	Robert Miller & Kevin Stokes
<i>P. denticulata</i>	Lovett Bay	Robert Miller
<i>P. denticulata</i> prostrate		
<i>P. aff. denticulata</i>	"Hands on the Wall" N.S.W.	Robert Miller
<i>P. aff. denticulata</i>	Grampians	Peter Olde
<i>P. discolor</i>		
<i>P. eckersleyana</i>		Les Taylor
<i>P. granitica</i>		Burrendong Arboretum
<i>P. grylloana</i>	W.A.	Botanic Gdns., Canberra
<i>P. aff. hirtula</i> prostrate		"Floribunda" Nelson Vic.
<i>P. sp. aff. hirtula</i>	Buddawang Range N.S.W.	Botanic Gdns. Canberra
<i>P. hirtula</i>		
<i>P. howelliae</i>	Cox's Gap N.S.W.	Robert Miller
<i>P. sp. aff. howelliae</i>	Kandos Works Dam (several color forms collected)	Robert Miller
<i>P. incana</i>	Carters Creek N.S.W.	Robert Miller
<i>P. incana</i> (several forms)		
<i>P. incana</i> (pseudonym <i>marifolia</i>)		Burrendong Arboretum
<i>P. incisa</i>	Mt. Boss	Burrendong Arboretum
<i>P. incisa</i>	Catterack Creek N.S.W.	Robert Miller
<i>P. incisa</i> variegata		Burrendong Arboretum

<i>P. incisa</i> var. <i>pubescens</i>		Robert Miller
<i>P. lanceolata</i>		Burrendong Arboretum
<i>P. lasianthos</i>	Kallista Pink	
<i>P. lasianthos</i>	Catteract Creek	Robert Miller
<i>P. lasianthos</i> mauve form		"Wirribirra Sanctuary"
<i>P. sp. aff. lasianthos</i>	Gulf Stream N.S.W.	Burrendong Arboretum
<i>P. lasianthos</i> var. <i>subcoriacea</i>	Vic	
<i>P. lasianthos</i>	Kangaroo Valley N.S.W.	J. Moon
<i>P. lasianthos</i>	Mundle N.S.W.	Robert Miller
<i>P. lasianthos</i>	Redlands N.S.W.	Robert Miller
<i>P. leichhardtii</i> round leaf		Burrendong Arboretum
<i>P. leichhardtii</i> narrow leaf		Burrendong Arboretum
<i>P. lepidota</i>		Burrendong Arboretum
<i>P. linearis</i>	Woy Woy, Woronora River N.S.W.	Robert Miller
<i>P. linearis</i> colour forms		'Sylvan Grove'
<i>P. lithospermoides</i>	Moonee Hwy. N.S.W.	Burrendong Arboretum
	and	Botanic Gdns. Canberra
<i>P. magnifica</i>	W.A.	Frank Hadfield
<i>P. marifolia</i>	Beecroft Peninsular N.S.W.	Brian Timmis
<i>P. sp. aff. marifolia</i>	Batemans Bay	Robert Miller
<i>P. megacalyx</i>	Qld.	Peter Althofer
<i>P. melissifolia</i>		
<i>P. monticola</i>	Mt. Buffalo	Botanic Gdns. Canberra
<i>P. microphylla</i>	W.A.	
<i>P. nivea</i>	Boonoo Boonoo Falls N.S.W.	Robert Miller
<i>P. nivea</i>		
<i>P. nivea</i> (forms)		Burrendong Arboretum
<i>P. sp. aff. nivea</i>	Eagowra N.S.W.	Robert Miller
<i>P. nivea</i> var. <i>indita</i>		Burrendong Arboretum
<i>P. odoratissima</i>		Burrendong Arboretum
<i>P. ovalifolia</i>	Rankin Springs	Brian Timmis
<i>P. ovalifolia</i>	Jolls Bridge	Brian Timmis
<i>P. ovalifolia</i>	Whian Whian State Forest	Robert Miller
<i>P. ovalifolia</i>	Wyong	Robert Miller
<i>P. ovalifolia</i>	Redlands Dyke	Robert Miller
<i>P. ovalifolia</i> pink-purple	Brundah	Robert Miller
<i>P. ovalifolia</i> "rosea"		
<i>P. ovalifolia</i> "variegata"		Mary McEvoy
<i>P. sp. aff. ovalifolia</i>	Kandos Works Dam	Robert Miller
<i>P. ovalifolia</i> var. <i>latifolia</i>		
<i>P. porcata</i>	Mt. Buddawang	Botanic Gdns. Canberra
<i>P. phyllicifolia</i>		
<i>P. sp. aff. phyllicifolia</i>	Mt. Canobalis	Robert Miller
<i>P. prunelloides</i>	Glenbrook Reserve N.S.W.	
<i>P. prunelloides</i>	Rylstone N.S.W.	Sid Cadwell

<i>P. Prunelloidos</i>	Kerabee - Cox's Gap N.S.W.	Robert Miller
<i>P. prunelloides</i>	Kurrajong N.S.W.	Robert Miller
<i>P. prunelloides</i>	Putty Rd., N.S.W.	Noel Gane
<i>P. rhombea</i> (mauve)	Erckine Creek N.S.W.	Robert Miller
<i>P. rhombea</i> (white)	Glenbrock Reserve N.S.W.	
<i>P. rhombea</i> pink		
<i>P. ringens</i>		Burrendong Arboretum (les Taylor)
<i>P. rotundifolia</i> type form		Graham Quint
<i>P. rotundifolia</i>	Mendocran N.S.W.	Roger Bagley
<i>P. rotundifolia</i> so.	Goulburn/Glowworm Tunnel	Robert Miller
<i>P. rotundifolia</i> (pink)		
<i>P. rotundifolia</i>	Grampians Vic.	Peter Olde - Brian Timmis
<i>P. rotundifolia</i> several forms		Burrendong Arboretum
<i>P. rugosa</i>	Darkey Creek	Robert Miller
<i>P. saxicola</i> (blue flowers)	Menai, N.S.W.	Robert Miller
<i>P. saxicola</i>	Jervis Bay N.S.W.	Robert Miller
<i>P. saxicola</i>	Kanangra Walls	Robert Mills
<i>P. saxicola</i> var. montana		
<i>P. sp. aff. staurophylla</i>		Botanic Gdns. Canberra
<i>P. sculellarioides</i>	Whian Whian State Forest	Robert Miller
<i>P. scutellarioides</i>	Castlereagh State Forest	Robert Miller
<i>P. scutellarioides</i>	Qld. Nat. Park McPherson Ranges	Robert Miller
<i>P. sieberi</i>	South Coast N.S.W.	Brian Timmis
<i>P. spinosa</i>	Grampians Vic	Brian Timmis
<i>P. striatiflora</i>		
<i>P. stricta</i>	Mt. Vincent N.S.W.	Botanic Gdns. Canberra
<i>P. teretifolia</i>		Burrendong
<i>P. violacea</i>		
<i>P. walteri</i>		Botanic Gdns. Canberra
<i>P. sp.</i>	Boonoc Boonoc Falls	Burrendong Arboretum
<i>P. sp.</i>	Widden	Kevin Stokes
<i>P. sp.</i>	Grampians	Ray Brown
<i>P. sp.</i>		Bob Tomkins
PROSTANTHERA MAGNIFICA		

This plant was collected by Frank Hadfield from W.A. in 1982. *P. Magnifica* is fast becoming a feature of Frank and Jean's garden in Hurstville, N.S.W. I was surprised to see so many plants, a lot in bud and some flowering. These plants are inclined to be tall and spindly, usually a single stem with no lower foliage. *P. magnifica* exhibited at the 1984 flower show varied in color. In some plants the large calyx was light mauve while others were a brilliant dark purple. Frank explained this minor mystery, he had taken cuttings from two or three distinctly different plants not realising this difference, as the plants were not in flower.

PROSTANTHERA MEGACAYLX

Peter Althofer sent me cuttings of this great plant he collected in Qld. last year. The material was dry and dropping leaves, it seemed unlikely any would strike, however a few managed to root. I gave one to Frank Hadfield with which he has been very successful with cutting grafts using *P. nivea* as a stock. Frank has several good plants of *P. megacalyx*, two of them about 250 mm. tall.

FURTHER THOUGHTS ON GRAFTING PROSTANTHERAS

Copy of Grafting Article By Bob Tomkins : Previously published by S.G.A.P. (ACT).

I recall a S.G.A.P. meeting back in 1973 when wise men descended from the National Botanical Gardens and displayed vigorous specimens of various *Prostantheras* growing vigorously on *Westringia fruticosa* rootstock. They proceeded to coach humble S.G.A.P. people in the practice. They assured us the method was straightforward; there were no incantations to be muttered or anything of that sort.

The information was more widely disseminated in our newsletter of August 1973 (an article by Keith McIntyre) and, I presume, elsewhere. After some five years of research, the Gardens in *Growing Native Plants* vol. 7 1977 ventured that "it appears that..... the grafting of *Prostantheras* on to *Westringia fruticosa* is indeed successful. It is strongly recommended that both amateurs and nurserymen adopt this practice as standard in producing *Prostanthera* plants".

Why, five years further on, is this very good advice neglected? Even the most ardent lover of *Prostantheras* would readily concede that many of these beautiful plants are not reliable on their own roots under common garden conditions. Why do nurseries (and S.G.A.P. see Jo Benyon's article in the May 1982 newsletter) continue to produce vast quantities from cuttings? The answers, I suggest, include:

- (a) *Prostantheras* can be produced quickly, easily and cheaply from cuttings.
- (b) Being very attractive in a pot, particularly when in flower, they are readily saleable.
- (c) Most will die soon after planting out thus creating the possibility of other sales.
- (d) There is no public demand for grafted plants.
- (e) Buyer resistance might be anticipated to the higher prices necessary for a grafted plant.
- (f) Despite the fine pioneering efforts of the National Botanic Gardens, perhaps others have not found grafting to be an efficient propagation method.

Availability of grafted plants in nurseries is something I have heard dark whispers about but never encountered. The disinterest of nurserymen is understandable, if unfortunate. That S.G.A.P. has followed suit is, I think, inexcusable. To propagate from cuttings for sale large numbers of unreliable plants runs directly counter to our aims of promoting Australian plants as garden subjects - it must eventually only serve to make them unpopular. It also ignores an improved propagation method, one which is likely, moreover to have wider application. Jo Benyon's call in the last newsletter for a re-think on S.G.A.P. propagating activities was timely indeed.

There are many beautiful *Prostantheras* which are rarely seen in cultivation - plants which can be rendered hardy by grafting. Some of the well-known species have rarely seen variants. Consider just one species, the well known 'purple mint bush' *Prostanthera ovalifolia*. There are some hardy clones around of the normal purple hue but how often do you see any of the variants? I have seen in full bloom that patch of *P. ovalifolia* which, in his book 'Cradle of Incense' George Althofer has described in these words:

"To say that amazement followed by awe, was paramount in my mind at the unfolding of the never-to-be forgotten picture, would be putting it mildly. Such a plethora of flowering plants of almost all conceivable colours scrambled, and at times seemed to flow in a river of kaleidoscopic colour between the giant rocks as to leave me speechless, and my brain numb with the beauty of it all. There were Mint-bushes with near white flowers. Mint-bushes with palest pink flowers, with all shades to the deepest rose, then through all the gradation of blue and mauve to the glory of purple and violet. It was amazing that such a wealth of colour variations should be crammed in one small area."

Potential abounds and proven is the method of making these plants ideal garden subjects. Let us get on with the job. Meanwhile, buy cutting grown plants from nurseries only as stock from which to grow your own grafted plants. Ask at the same time when grafted plants will be available.

HOW TO GRAFT YOUR OWN Top cleft method

The National Botanic Gardens recommended the 'top cleft' method - see vol 7 'Growing Native Plants' for a description and illustrations. For a top reference book on the subject see 'The Grafters Handbook' by R.L. Garner - I got mine from Johima Books in Sydney.

The 'top cleft' method has given me reasonable success over a number of years. My success rate, while more than adequate for home garden and hobby purposes, would never be a commercial proposition. No doubt results could be improved with greater skill and more sophisticated propagation facilities but I think even then, because of difficulties in warm weather in maintaining the scion, the method would have to be confined to the winter months.

Approach method

Other methods were tried but it was not until last year, after attending a University of New England weekend grafting course, that I was inspired to try the simplest of all grafts, the approach graft. Not only is this easy to do, it has also proved for me almost 100% successful with a variety of species. Failures can be attributed mainly to impatience on my part or accidental damage.

Approach grafting can be carried out virtually anywhere - special facilities are not necessary. It can be done at any time of the year, preferably when both stock and scion are growing strongly. Scions continue growing throughout and a sizeable plant is rapidly achieved. At least six weeks is allowed before detaching the scion from its parent bush, some require longer. After detachment the new plant may need to be placed in humid conditions and gradually hardened off.

It should be noted that some *Prostanthera* species will not graft directly on to *Westringia* and it is necessary to use an intermediate or 'nurse' graft. *P. nivea* var. *induta* is a very suitable intermediate. A little more work is involved but no real problems.

It would, I assure you, be well within the capabilities of all S.G.A.P. propagators, including novices, to produce good numbers of grafted plants by the approach method. Probably nurseries would need to look at more streamlined methods. My experiments would suggest that cutting grafts may be the answer.

Cutting-Graft Method.

I have tried several different methods of cutting grafts. So far the best results have been X grafts using struck cuttings of *Westringia* and fresh *Prostanthera* cuttings.

Westringia fruticosa cuttings were struck, the cuttings somewhat longer than normal. The roots were trimmed, as appropriate, for easy handling. They were then joined to fresh *Prostanthera* cuttings and returned to cutting medium, about 10 to a punnet. The union was kept above the medium.

There were few deaths involving one or both parts of a union. However, in most cases a successful graft was achieved.

Where fresh cuttings of *Westringia* were used results were similar, but in most cases the *Prostanthera* rooted first and proceeded to dominate the union (even though the *Westringia* was hormone dipped).

The experiments need to be repeated because both my record keeping and maintenance of cuttings was inadequate. Also, the hormone used may have 'gone off'. I am nevertheless encouraged to think that an efficient commercial method of producing grafted *Prostantheras* is likely to be found along these lines. I hope someone will take this up. My garden is developing a definite minty tang and I want to move on to other 'difficult' genera.