ISSN-0811-529X

Association of Societies for Growing Australian Plants

EREMOPHILA STUDY GROUP NEWSLETTER No. 84

December 2004

My apologies for the late arrival of this Newsletter. I had good intentions to have it out in early October, however, my wife had a serious accident, dislocating and fracturing her shoulder, later she developed clots on the lungs. Consequently my time for 'other' things has been sorely restricted. It is only now that I have the time to sit down and prepare this issue, albeit rather abbreviated.

This issue is relatively short, not because of the lack of time, but due rather to the small amount of material received since number 83. To those who have sent in material I thank you. I welcome any correspondence which can be of use to other members of the Study Group. I hope to have articles from both Ken Warnes and Russell Wait in the next issue; they spent a very interesting time, once again, in the outback and from a brief phone conversation I had with Ken a few days ago it seems that there are plenty of hybrid eremophilas out there in natural surroundings.

I have received news that one of our members, Charles Loxley, passed away recently. Charles joined the Study Group in 1994 and since then has been a keen supporter of eremophilas as garden plants in the Sydney area. When the Sydney meetings started he supported them and attended regularly. He was in the words of one of our members a bright and cheerful person with a love for the natural environment – a person with whom they could communicate their thoughts about all manner of concerns. At the same time I was advised that the wife of Max Hewett, leader of the Verticordia Study Group also passed away recently.

Myrnie & I will be away next year for about six weeks, from early March to mid-April; we are attending the World Orchid Conference in Dijon, France and then travelling to England & Wales, catching up with some relatives and planning to see a number of the gardens etc. This means that the next Newsletter will be out in May (all things being equal).

FROM THE SYDNEY GROUP

Their last meeting, held on 31st October, was a very well attended and valuable event. Twelve members attended and they dealt with quite a range of topics. They referred to a number of suppliers of eremophilas and in so doing highly commended Peter Lang for the way in which he is able to prepare a selection of plants to meet a particular set of requirements. It was also pointed out that the plants from Peter arrived in excellent condition.

In addition they noted the following suppliers:

Dianne Akers (Charleville, Qld), Fairhill Nursery (Qld), Goodwinii (Stirling North, SA), Kuranga (Vic), Mildura Native Nursery (Vic) and Neilsen's Native Nursery (Loganholme, Qld). {Unfortunately Pinery Nursery (SA), has now closed: Peter & Ronda Hall have moved to Port Augusta and the Pinery property has been sold.}

Members' Thoughts on their successes and failures, including the effect of some extreme hot weather on newly planted eremophilas.

Janelle Speight had lost some, probably due to the prevailing conditions of dryness, intense heat and then heavy rain. She had fed an *E. maculata* with cow manure and appeared to have saved it. She said that previously she had assumed eremophilas would not need fertiliser until Noel Gane reported on his success with horse manure (Condell Park caviar). She added later that she endorses the potting of small plants into larger pots to enable additional root growth before they go into the ground. She witnessed a nursery in WA doing this with their banksias to give them a better start.

Helen Lane stated that she had not lost many. She tried to ensure that plants had a good start with a dose of Plant Starter because in the Dubbo (NSW) area it was inevitable that they would be stressed in their prevailing conditions. Strong root systems would ensure healthy plants. She added that she pots on into larger pots, at least 125mm, to allow extra root development before she puts them into the ground. She has been forced to use old tyres to protect small plants from wallabies and rabbits – it helps with strong winds as well.

Arthur Dench said that he was using waste cardboard from a recycling facility as mulch. He also found cardboard pulp added to the soil was also a help in retaining moisture. He agreed with Helen that a strong root system was essential. He always places fertiliser in the hole before planting. He has found that Seasol® induces good root growth. There is a granulated seaweed available on the market that will allow one to prepare their own seaweed fertiliser. He is using gro-cones to protect small plants from strong winds that can devastate them in a very short time.

Ian Cox said that he neither had nor achieved a normal success rate with recent cuttings that he had put down for rootstock plants and thought it might have something to do with the recent weather conditions.

Noel Gane said he had little trouble even though prevailing winds blow strongly across the sports field opposite his home. He considers that his preparation gives his plants a great chance to survive. He pots on into a mixture of a cheap potting mix, "Condell Park caviar", compost, blood & bone and native plant food in a 125mm pot or larger, often a 200mm one. When the plant is growing strongly he digs a larger than normal hole so that he can add more "caviar" below and around the plant. This ensures the roots grow more and the plant remains healthy.

Kyrill Taylor said that the large, square pots now available should encourage good root growth. There is depth for the roots to go down and the shape is conducive for this.

On another topic, Helen asked about pruning – when and how heavily? Several commented that they tip prune young plants, this helps them to develop into well-shaped bushes later on. There was consensus that general pruning should take place after flowering, possibly early summer, but that most eremophilas could be pruned at any time. Noel indicated that he sometimes took off half a bush and that they were quick to re-shoot and provide a more attractive shrub.

(Thanks to the Sydney Group for their contribution to the Study Group as a whole. I have been receiving minutes of their meetings regularly. They have now been meeting for twelve months; their October 2004 meeting was their anniversary one. Colin)

FROM YOUR LETTERS

Rosemary Pedler – Koolunga, South Australia

Eremophilas form the backbone of my dry-land garden. A thirty-plus year old *E. salicina* shades & shelters a large area of the garden on the east side of the house. On the exposed north side, *E. glabra*, prostrate, large, dense & bushy forms provide a valuable wind and shelter break. I have a number of different forms of *E. glabra* and value their longevity and hardiness. They are drought resistant and seldom get a mention in newsletters.

Eremophilas are the dominant species in plantings on either side of the approach to my entrance ramp. Vary large bushes of *E. oldfieldii* var. *angustifolia*, *E. psilocalyx*, *E. oppositifolia*, *E. scoparia* and *E. dempsteri* with under plantings of *E. drummondii*, *E. nivea*, *E. maculata* var. *brevifolia* and others.

My favourite groundcover is *E. glabra* 'Roseworthy form'; also the grey-leaf forms from Western Australia, with their yellow flowers, do well.

Brian James – Padbury, Western Australia

I first became interested in eremophilas many years ago when I travelled into the wheatbelt and goldfields. I took photos and made the effort to identify them but couldn't buy them from nurseries. I joined the Study Group but have been a silent member for too many years. During some of this time I have been involved in establishing a plant nursery for the Northern Suburbs Branch of the Wildflower Society. The nursery is running well with volunteers growing a very varied collection of WA plants that aren't grown by commercial nurseries.

A couple of years ago I decided I would make the effort to try to propagate some eremophilas as I was in the Study Group. I started by using cuttings as we had been successful with this method with many other species. I started by buying some plants to use as parent plants and this was quite successful so then expanded my collection to 24 species. That is without the many different types of "glabra" that we are growing.

I have planted many of them in my garden and most are growing well even though I live in the limestone dune area north of Perth.

We sell to the public but only are at the nursery on Saturday mornings. However we are attracting a number of customers by word of mouth. We also sell at our monthly meetings. We should be able to get these wonderful plants into suburban gardens especially as we are on water restrictions which are set to remain.

As yet I haven't tried grafting but will get there but, like many of us, full time work is the hindrance. I have grown *Myoporum insulare* which I will try as a root stock.

I have been amazed at the lack of eremophilas available to the public in WA considering the variation in the plants that grow in this state.

Now to some species which stand out. *E. biserrata*, *E. calorhabdos*, *E.* 'complanata', *E. subfloccosa*, *E. decipiens* var. 'linearifolia', *E. weldii*, *E.* 'subteretifolia', *E.* 'pinnatifida', *E. laanii*, *E. ionantha* and the varieties of *E. glabra.*

Thelma Roach – Naracoorte, South Australia

We recently moved from our property in Lucindale and now live in Naracoorte with a much smaller garden. The soil type has changed from non-wetting sand to a stony limestone, well-drained ridge, sloping to the north.

Fortunately it was a vacant block (with plenty of weeds, I might add), however, after the house was finished we had the coarse, reddish soil pushed around to form "hills & gullies" and planted eremophilas, Sturt peas, grevilleas, hakeas etc. We have been astounded at the growth of the plants, especially the eremophilas. The list below is what I have, all doing very well and flowering. To say that I am pleased is an understatement.

The following are the plants which I have planted since last January and they are all growing well and flowering beautifully. *Eremophila nivea*, *E. macdonnellii*, *E.* 'rugosa', *E. abietina*, *E. glabra* (red), *E. oldfieldii*, *E. cuneifolia*, *E. dalyana*, *E. maculata* var. *brevifolia*, *E. platycalyx*, *E. youngii* var. 'lepidota', *E.* "Summertime Blue", *E.* "Yanna Road", and an *E. bignoniiflora* crossing.

On the strength of this I purchased eremophilas from the Geranium (SA) sale, including *E. scaberula*, *E. racemosa*, *E. latrobei* (red & apricot), *E.* 'splendens', *E.* 'subteretifolia', *E. oppositifolia*, *E. drummondii*, *E., hillii*, *E.* 'lucida' & *E.* 'shonae', plus a few prostrates. I have managed to find room for them all.

EREMOPHILA PUBLICATION

I have received several requests for information about the book which has been long awaited by members of the Study Group. At the time of preparing this Newsletter I do not have the details of cost but I understand that, considering the size of the publication (some 900 pages), it will be respectable. (Bob has requested that the cost be contained since the majority of purchasers will be hobbyists – I think that we as a Study Group could probably guarantee a sale of some 100 copies without much effort.) The relatively low print run will be a factor. A publication date is still not confirmed.

PROPAGATING EREMOPHILAS

Ian Cox has drawn my attention to the following report. The Grevillea Study Group Newsletter No 69, October, 2004, includes a report of a study undertaken at the University of Queensland on the Propagation of *Grevillea* (Sanjaya et al, 2004). The study included comparison of attempted propagation of both tip and stem cuttings of two *Grevillea* hybrids in each of the four seasons. The particularly interesting aspect of this study is that the research team investigated the application of a rooting hormone, not only to the base of the cuttings but **also to the top of the cuttings.** The hormone was the commonly-used Indole-3-butyric acid (IBA) applied to the top in a low concentration (1g/L), cf Clonex Red 8g/L. Normal strength was used on the bottom of the cutting.

The report refers to the hormone as auxin which is the name given to the naturally occurring hormone found in all plants, indole acetic acid (IAA). Obviously auxin is being used in a wider sense than the natural hormone.

I cannot recall ever hearing of any benefit being derived from the application of auxin to the top of a cutting, nor, indeed, anyone ever investigating this, unless the old method of soaking prepared cuttings in water to which had been added a couple of drops of Formula 20 equates to this. I cannot recall what Formula 20 was although it may have been naphthalene acetic acid which has been used alone or in combination with another hormone.

It may be worth members experimenting on *Eremophila* with this propagation technique, particularly those regarded as difficult to strike. Clearly this does not take the place of grafting when the plant cannot tolerate the soil and/or climatic conditions in which it is attempting to grow.

However, **I offer a warning**. Some auxins including Clonex, which I use, state that they may be carcinogenic and should be handled with care. If the top of the cutting is to be dipped, clearly a safe handling technique must be devised.

Gordon Brooks

(I received this communication by email just as I was about to close off this issue, but decided to include it since I was short of material and also because it could be of interest to members of the Eremophila Study Group and worth a try. Gordon asked if I had heard of any other trial on eremophilas using such a technique – no I haven't, but there may be other s who have heard of or seen reported the use of tip treatment of cuttings with hormones to induce better root results.

I would be interested to have reports of any such results and will report on them in the future. Colin)

HORMONES USED TO INDUCE ROOT GROWTH

The arrival of the above notes from Gordon suggested that I should have a look at the notes I have accumulated on stimulation of roots by the use of auxins; plant hormones which have the function of stimulating plant growth.

According to the *Wordsworth Dictionary of Botany* auxins are plant growth-regulators; plant growth-substances; plant hormones. An auxin is a substance produced in one tissue, migrating to effect the development of another tissue. The tissues producing the auxin are typically meristematic and the effect of the auxin specific. They correlate the growth of the plant.

The natural indole-acetic acid (IAA) is an auxin found in plants. Indole-butyric acid (IBA) is a synthetic hormone which is found to have similar effects to that of IAA. α-naphthyleneacetic acid (NAA) is also a synthetic hormone which has a similar, root producing effect.

Used separately or in combination, these three hormones are the principal ingredients of most commonly used root-stimulating preparations on the market and which are used both commercially and for domestic use. To these three are added a number of other specialized hormones etc. which are combined to give selected mixtures for specific plants and for particular stimulation of plant growth.

The root striking powders used are generally an inert carrier, like fine talcum powder, through which the hormones have been dispersed in the quantities calculated to give the appropriate concentration, *e.g.* 2.5g/kg. (I used to make my own combinations by dissolving the hormone in alcohol and mixing thoroughly with the talcum and then drying thoroughly in a low temperature drying oven.) To these powders there are sometimes added small quantities of fungicides.

Most of the hormone preparations on the market have relatively low concentrations of active ingredients, and they are designed to work on either softwood, semi-hardwood or hardwood material.

The solutions or gels are prepared in similar fashion, the hormones are generally not readily water soluble so are dissolved in alcohol and diluted in water to give the correct concentrations. If a too high concentration of alcohol is used there is a tendency for the alcohol to dehydrate the stem tissue being dipped and this can be fatal so far as establishing roots is concerned. I prefer to make mixes which are no higher than about 50:50, alcohol:water.

I recall an article which was published in an early issue of the newsletter in which Tony Clark reported on the use of hormones in various concentrations for striking cuttings of eremophilas, which were found to be difficult to strike. He recommended using very high concentrations of the hormones for these and is reported to have had success.

The comment in the above article re the carcinogenic properties of some ingredients in root-producing hormones is poignant. It is important to take precautions whenever handling horticultural chemicals, no matter what their intended purpose. It pays to read the labels on all products and ensure that the product is being used by you for the purpose for which it was marketed.

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