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Association of Societies for Growing Australian Plants

EREMOPHILA STUDY GROUP NEWSLETTER No. 73

April 2001

I commented in the last Newsletter about the variability of weather conditions leading into December. I think that nothing much has changed. We have experienced a very dry, record hot spell here in Adelaide, with the greatest number of days in excess of 35^{o}C since about 1906. I gather from the comments heard from others that this has been rather common for the southern and western areas of the country, with once again, rather serious flooding in northern NSW & in many parts of Queensland.

Several members have commented about their losses over this past few months. Fortunately many were able to take cuttings of their latest acquisitions or were able to get additional grafts, but alas many lost otherwise well established plants. I would like to hear from members about the successes and losses, and particularly if you are able to shed any light on the most likely causes. If you can suggest any remedies please let us have your thoughts for next issue.

Special thanks to those who have contributed to this issue. The results of the SGAP Canberra Region's propagation group are most interesting and I think will provide some help to those who might like to try their hand at propagating eremophilas from cuttings. Some of the species refered to by Norma Boschen might encourage you to write about those of them which you have growing.

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ASGAP CONFERENCE - CANBERRA

I indicated in the last Newsletter that I am attending and have been asked to present a short paper on eremophilas as they relate to the theme of the Conference, "Australian Plants in a Changing World".

I also indicated to the organisers that I would, on behalf of the Eremophila Study Group, arrange for a display for the Wednesday night. It would be very much appreciated if members who live near to Canberra, or those who are travelling to the conference could let me know of their intentions and if they can assist in any way.

I will be able to provide a slide programme and some posters, which I hope to be able to set up, but will not be in a position to have live material of any kind.

I encourage as many of you who can to attend the Conference. They is an excellent opportunity for us to meet together with members from other societies, and if time permits we might also be able to get together informally to talk about eremophilas if there is enough interest and if we can fit it into what is genarally a tight schedule for everyone.

Colin Jennings

EREMOPHILAS IN CANBERRA

(I was very pleased to receive this report from Lyndal Thorburn - it is a summary of the results obtained by members of the SGAP Region Canberra over the period 1998 - 2000. Thanks to the efforts of the people concerned we have a very comprehensive summary of their work with eremophila cuttings in the Canberra region; one not generally considered as ideal for the genus.)

This paper reports cutting results by SGAP Canberra Region Inc. over the period 1998 to 2000. The cuttings were resourced from 7 SGAP members in the region including ourselves. SGAP Canberra region makes an income by selling plants that it propagates itself and it keeps a database off all cuttings and their success outcomes. The data for this report were drawn from this database.

The species used for cuttings and the percentage success rate for these are shown in **Table 1**.

It shows that the success rate for the genus overall is about 50%, with a range from 30% to 100%. Success rates have been rising slightly over time, with the success rate for 1998 being 45%, 1999 being 55% and 2000 at 65%. This probably reflects the growth of expertise among the Society in response to experience with the genus.

The species that are selected for cutting are those known to survive in the Canberra climate, which is subject to severe frost. Rain falls evenly throughout the year, approximately 50mm per month, but in some months the whole month's rain arrives in one or two days, so we have weeks of clear sunshine in between.

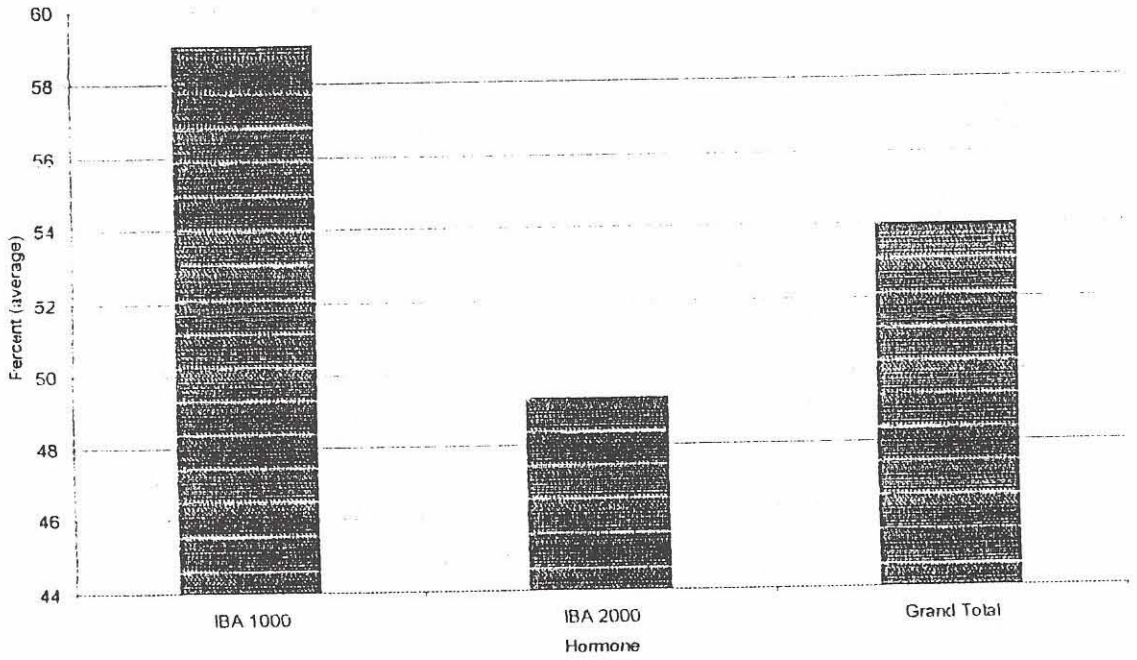
Table 1: SGAP Canberra Region Eremophila Cuttings and Success Rates 1998-2000

Species	Number of Cuttings	Percent Success Rate
alternifolia	13	62
calorhabdos	32	87
'*campanulata*'	14	100
compacta	27	13.3
debile	30	31
decipiens	23	43
denticulata	13	16.5
drummondii	60	54.5
fraseri	16	94
glabra	113	66.1
ionantha	16	81
laanii	83	44.5
lehmanniana	23	39
maculata	107	45.6
metalicorum	16	50
microtheca	63	36
nivea	16	31
nivea x drummondii	23	39
oppositifolia	16	50
'*subteretifolia*'	16	69
weldii	17	29
"Summertime Blue"	8	75
TOTAL	**745**	**50.6**

Treatments

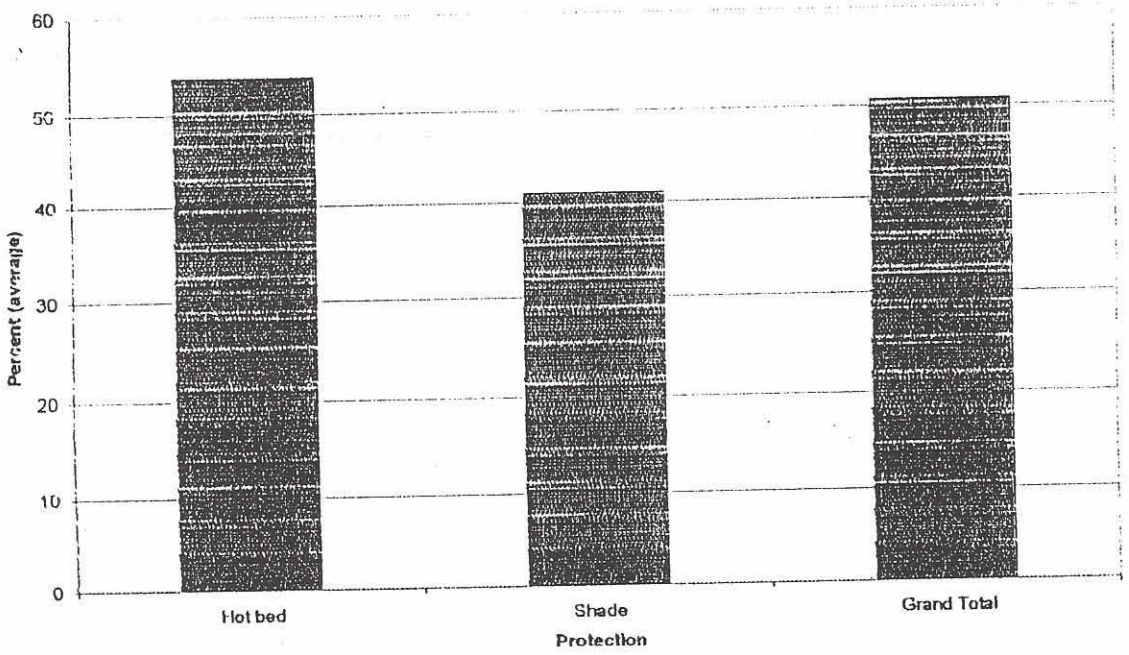
All cuttings prepared by SGAP Canberra Region are treated with IBA hormone and are either placed in hot-beds owned by the society with automatic misting or are simply misted without the hot-bed treatment. An analysis of the cuttings reported above shows that the success rate among those treated with IBA 1000 was higher than the success rate for those treated with IBA 2000 (**Fig 1**).

Figure 1: Effect of Different Hormone Treatments on Success Rates



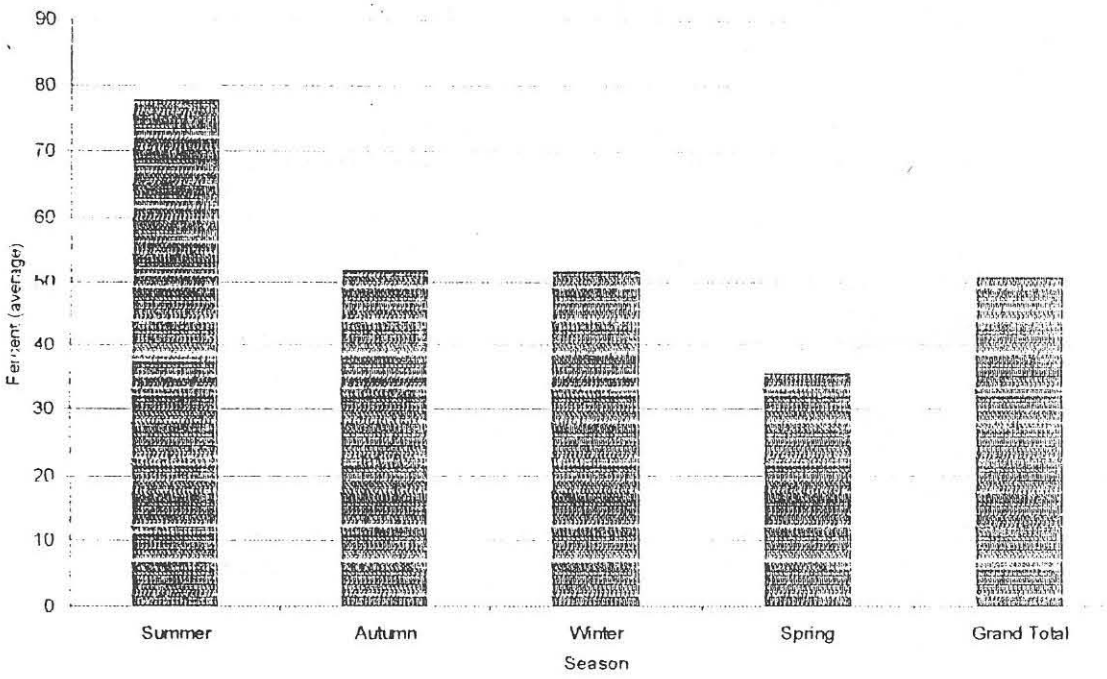
Similarly, the success rate for those placed in the hot-bed with automatic misting is greater than the success rate for those given misting alone (**Fig 2**). Although Canberra has a dry climate, the Society finds that "browning off" is a problem when striking cuttings. It may be that the additional bottom heat to the cuttings enables them to strike more quickly, thus minimising the time that they are receiving mist water and hence minimising the chance of fungal attack.

Figure 2: The Effect of Different Heat Treatments on Success Rates



Cutting bees are held at all times of the year and **Fig 3** shows the results of cuttings taken in different seasons. Cuttings taken in summer clearly have a much brighter success rate, again perhaps because it reduces the chance of browning off due to the high evaporation rate. Last year, we reported high success rates for cuttings taken in January in our own non-SGAP cutting activities and these results are consistent with those.

Figure 3: The Effect of Season on Success Rates



Interestingly, spring appears to be the season with the lowest success rate, with autumn and winter roughly the same.

Conclusions

From the results above, it appears that *Eremophila* cuttings are most successful if taken in summer, if treated with IBA 1000 rather than higher concentrations of hormone, and if provided with bottom heat during the period of root formation.

Acknowledgements

Thanks to SGAP Canberra Region propagation group for allowing access to raw data in order to prepare this report.

Lyndal Thorburn

FROM YOUR LETTERS

NOEL GANE - Panania, NSW

As previously stated I live not far from the local stables. A Year or so ago I noticed at the end of the yard a square, fenced off, with a horse just walking around. The owner said that the market gardeners take as much of this stable manure as they can get, so I got some for my eremophilas. There are quite a lot of soft-wood shavings in the mixture.

Last year I started collecting the offerings and spread it over the gardens to a depth of about 75mm, commencing about Easter.

This was really a great mulch, as our winter was just about the coldest three months we have ever had here. A few frosts, but the plants never looked better.

Stable manure is just there for the asking and already bagged.

I use three or four drums (with lids), holding approximately 28 to 30 litres of water. Fresh manure is placed in the drum to a quarter of its depth and the drum is then filled with water and covered with the lid and the mixture left for three or four days. Using a watering can with the nozzle removed I water at the base of the plants. This, I can assure you, really works and I still only use Paton's Native Plant Food and Blood & Bone.

Due to the small size of my land I replace lots of plants from time to time, simply because I like collecting whatever species I can get, but I must say that they all seem to like this treatment.

LYNDAL THORBURN - Queanbeyan, NSW

Lyndal sent a cutting from a plant which she has been growing as *Eremophila subfloccosa* and asked if it could be identified for her.

The specimen was given to Bob Chinnock for his comments. It turned out that the piece was from the type form of *E. subfloccosa* 'subsp. subfloccosa' which comes from the SW corner of WA. The interesting feature of this plant was that the leaves were smaller and more rounded than is usual. As a rule the leaves of this subspecies can be elongated to almost 25mm.

Bob suggested that Lyndal should try to get some of this form propagated and spread it around. although she reported that it has proven difficult to strike, just sitting and not forming roots, yet staying green.

ALAN ANDERSON - Monbulk, Victoria

We moved into our new house in the 'Dandenong Area' about five months ago and have since established a mainly native garden to complement the abundance of native grasses, shrubs, orchids, ferns, and trees etc., already in existence.

Even though I have been told that eremophilas will not fare too well in our area I have in excess of 30 different ones, all growing in a northerly, sunny aspect. So far all of the plants which are grafted have been growing profusely, whilst the others appear to be quite happy; especially since we had a long, dry summer.

I would like to thank two of our Study Group members, Ian Mitchell and Merele Webb. They were the closest to us according to our 2000 membership listing, so I rang them. They were not only helpful with cuttings and plants but we were also given useful advice and plenty of encouragement.

I'm sure that all members could do likewise in order to discover new species for their collections and for ideas about growing. Ultimately this could awaken the gardening public to a very unique species. Most people I speak to didn't know that such a plant exists. I will keep members informed as our garden progresses, its successes and failures.

RUSSELL WAIT - Natya, Vic

The blue *E. interstans* that is in cultivation now could be a hybrid, since the true species is a creamy-white. This blue plant was collected by Ken Warnes in about 1977.

On my last trip to WA I came across some plants of what I am sure is the hybrid between *E. interstans* and *E. dempsteri*. The first plants which I came across were in a tight clump and had a blue to blue-pink flower colour.

There was a lot of variation in the fruit with regard to the hairs. The leaves were much like those of *E. interstans.* There were more plants out in the open and I could pick them because of their shape, which was about intermediate between *E. interstans* and *E. dempsteri.*

Also found in 2000 was a new species, *E.* 'prolata'. This is closely related to *E. freelingii*, however, has narrower leaves and the bush is more rounded. I have one growing and Ray Isaacson also has one.

I still have a number of specimens which I am not sure of from that trip and will await identification by Bob Chinnock before passing comment.

NORMA BOSCHEN - Warracknabeal, Vic.

I have made a list of most of the newer species, some may not be new to some members. I have included a couple which have proven too difficult to grow even on a graft. My "Yanna Road" is growing well on its own roots, but has failed to thrive on a graft. Some of the new collections are frost tender and very much affected by the damp, humid weather in the spring. (This letter arrived in mid-March from Norma. Ed.).

I visited Darley Park, Bacchus Marsh, Victoria, recently and was amazed to see *E. mirabilis* nearly two metres high - it has only reached about one metre here, growing in a pot. The heavy frost hits it and only light frost knocks the flowers off. (I was similarly amazed at the collection of eremophilas growing in Darley Park last October - they were superb and a credit to those caring for the Park. Colin)

I have included some new collections of older species.

We are having a very long, dry spell; the last rain was in the middle of January. There are very few flowers on any of the eremophilas at the moment, except for *E. youngii* 'subsp. lepidota' (it may have its roots into some water from the plant-house).

Eremophila 'alatisepala'
: My new plant is still growing in a pot

Eremophila 'arbuscula'
: I have a grafted plant about 2m high. It's quite attractive with its long, grey leaves and small cream flowers in January. After the flowers drop, the calyx and seed remains and looks quite showy.

Eremophila 'arguta'
: I've had material of this twice. It was easy to root, but after the cuttings were potted-up, they died. The grafts failed also.

Eremophila 'caespitosa'
: After several times of nearly losing all my material (due to fungus disease) I put a grafted plant in the garden - it has survived for two years. It is a small plant with quite showy, white flowers and small hairy leaves and calyx. I do not think that it has much potential.

Eremophila 'canaliculata'
: My first plant failed, probably due to frost. My second plant is still growing in a pot.

Eremophila 'caperata'
: Broom-type plant - will root. It is about 1m high and the flowers are whitish

Eremophila 'citrina'
: My plants are in pots, they are frost tender for me.

Eremophila 'clavata'
: Small plant, very like *E. caerulea* - tough, grows well - mine is on a graft.

Eremophila 'conglomerata'
: My last plant died recently. They grew well in the pots, but when put out into the garden they did not grow any more.

Eremophila cuneifolia
: I have two new collections, both with small leaves. The original collection is very frost tender. One of the new ones is growing well and stood the first winter well. It hasn't flowered much.

Eremophila falcata
: My collection from the Great Victoria Desert is one year old. It will root and graft; it also came up from seed - but there are no flowers yet. It stood up to last year's winter well. I chose

a plant with a nice curl to the leaf. I feel that it has considerable potential - its leaves are dark green.

Eremophila 'fallax'

My plant, collected from the Great Victoria Desert, is slow growing and has small white flowers. (grafted).

Eremophila 'fasciata'

Small plant about 60cm high. Very crowded, long grey leaves. My plants are two years old and growing in the ground and also in a pot. Very attractive mauve flowers in spring - affected by fungus. Has lots of potential.

Eremophila 'flabellata'

Small, green plant, mauve flowers - slow grower.

Eremophila 'flaccida'

I saw this plant near Newman. It has large green, roundish leaves and large, pale mauve flowers. I keep it in a pot as it is frost tender.

Eremophila fraseri 'subsp. galeata'

Long, large green leaves. Has not produced any flowers yet. Frost tender. About six year old and growing in a pot.

Eremophila glabra 'subsp. albicans'

Beautiful - collected from Steep Point. Is a small plant to 75cm high by 1m wide. Has attractive orange flowers.

Eremophila 'glandulifera'

Very attractive plant. My three plants are still in large pots.

Eremophila glutinosa

Very frost tender - it didn't survive last winter when frosts were light.

Eremophila homoplastica

Small, green plant about 10cm high at present. Has survived about two years. Grafted.

Eremophila hughesii

In the wild it is a long, tall, spindly plant. My plants, from three different collections, are up to 75cm high and are still small, rounded bushes, mauve flowers. They are about three years old.

Eremophila 'jucunda'

My plant was nice when it was young. Stands up to the winter, but has gone woody with age.

Eremophila linearis

Very slow growing on a graft. Seed collected on the Gunbarrel Highway has germinated.

Eremophila 'lucida'

This plant has very sticky leaves and the bees love it. Last autumn I sprayed it with insect repellent and it made some new shoots.

Eremophila 'malachoides'

Not as nice as in the wild - mauve flowers - small plant, but a bit "leggy". It responds to heavy, hard pruning.

Eremophila 'pachomai'

Very attractive, grey-leafed plant. Slightly frost tender. My plant is about 75cm high - slow growing, with pale mauve flowers.

Eremophila paisleyi

New collections from the Great Victoria Desert. They are doing well - mauve and white flowers.

Eremophila 'perglandulosa'

Small, green plant 50cm high by 1m wide. It has small mauve flowers in summer - it seems to be very brittle, as large portions break off easily.

Eremophila 'phyllopoda'

This is a medium shrub with long, grey leaves. I have two plants growing in pots.

Eremophila pterocarpa 'subsp. acicularis'

This is an attractive, small grey shrub. Like 'subsp. pterocarpa' only smaller. Growing well on a graft.

Eremophila punctata

I have several collections of this which are two years old. They went through last winter well.

Eremophila 'pungens'

I saw this on the Gunbarrel Highway where it was about 50cm high by 1m wide. My plant is about two years old on a graft, growing in a pot. It has a large, mauve flower and goes through the winter well.

Eremophila 'reticulata'

My plant is 1-2 years old and it has a small, round leaf. The cream flowers have a pink calyx. I feel that it has some potential.

Eremophila 'rhegos'

Frost tender. Has attractive, large mauve flowers.

Eremophila scaberula

Only small plants of this at the present

Eremophila 'shonae subsp. diffusa'

This is a small, fine, green plant. It has reached about 60cm high by a similar spread in three years.

Eremophila 'simulans'

I have several collections, they have green leaves and mauve flowers.

Eremophila warnesii

This is a very attractive plant - and has gone through winter very well on a graft.

After writing this species list and comments I realize that I don't know very much about lots of them. I have many plants ready to go into the garden. Russell Wait visited about a month ago - he brought material of *E.* 'hispida', a new collection of *E. muelleriana*, a cream *E. interstans* (mine are all mauve) and a few others - I was moderately successful, but some were cooked in the cutting box.
Hope that you can use some of my comments in the Newsletter.

COMMENTS ON A FEW OF NORMA'S NOTES

I have a plant of *E.* 'lucida' growing in the front garden in a totally exposed site, well established on a very sandy soil which also tends to repel water. I was given this plant as a seedling by Bob Chinnock after his last trip to WA. This is now nearly 2m high and has developed into a very nicely rounded bush. The ivory coloured flowers tend to appear from the older growth and are thus a bit lost amongst the foliage. Lower branches/stems loose their leaves, giving the lower part of the bush an open appearance. Appears to stand up to most conditions, although we do not have frosts here.

Another seedling obtained at the same time and still in a pot is somewhat starved by comparison, still flowering well and on the ends of the growths, but alas it is in need of a good site to bring out its potential. There is also a pink (red) flower form and as far as I know is growing very well in Bob's garden - mine in a pot is looking healthy, and ready to plant out.

I have *Eremophila* 'jucunda' growing both in a pot and in the ground. Neither plant is what I would call "happy" although they both flower regularly, but sparsely. I can certainly endorse Norma's comments about it becoming woody. **(Please note the correct spelling is "jucunda" NOT "jacunda"** Ed)

Bob Chinnock has a magnificent tree of *E.* 'arbuscula' growing in his front garden. It is now well over the height of the eaves of the house, probably about 3-4m high and looking lovely when in flower. After flowering it leaves a mess though. I am not sure of it strikes easily, but a graft would probably be the best bet. Some has been distributed in the past, probably at one of the workshops - has anyone had any success with it? It is the tallest of the eremophilas, growing to 11m high in its natural surroundings.

A plant of *E. fraseri* 'subsp. galeata' was obtained from Ray Isaacson about six years ago and since I had nowhere "suitable" to plant it, I put it near to the low bank of a seasonal creek which passes through our property. Its roots are in an almost permanent moisture zone and it always looks lush - having now reached about 60cm high and with a spread of over 1m, without being artificially watered. Lower leaves tend to drop and this gives the plant a rather unkempt appearance. Flowers appear at almost any time of the year and have done so for at least the past four years. Being brownish in colour they are often hard to see.

Colin Jennings

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