

Association of Societies for Growing Australian Plants
EREMOPHILA STUDY GROUP NEWSLETTER No. 68

August 1999

It would seem that my comments at the start of the last Newsletter are still relevant today - the weather does not appear to have been too kind to quite a few people in a number of locations across the country. I hope that the effects have not been too severe where you are and that the eremophilas, plus the other plants in the garden are doing well.

My wife and I enjoyed a very pleasant ten weeks overseas, and we both found it rather difficult to come back to earth after such a time away, during which we did not have to concern ourselves with the everyday matters usually encountered. Unfortunately where we visited there were not many opportunities to see eremophilas, although we did manage to catch a glimpse of a couple, once in Kew Gardens, again in Glasgow Botanic Gardens and in the Cambridge University Botanic Garden I think we saw an *E. glabra*. As one would expect, there are not likely to be too many eremophilas growing in the northern hemisphere, especially in the colder climate areas where we were travelling.

Contributions for this Newsletter have been very few in number again, maybe we are being a bit ambitious producing three per year, but I am sure that with the extra effort from all members of the Study Group we can produce a more noteworthy publication each time - I feel as if I have to think up new ideas each time to keep things moving. I do thank Ken Warnes for the articles he has supplied over the past few months, and Russell Wait has provided some more information about his trials with germination using smoke and non-smoke treatments.

I thank those of you who have paid your subscriptions, and especially for holding payment until after I returned home, it saved a lot of mail redirection and made it a lot easier for both Bob Chinnock and myself.

Congratulations to Dave Gordon on the occasion of his 100th birthday celebrated in early July. Dave was, I believe a Foundation Member of the Study Group in 1972 and has continued his membership throughout the life of the Group. He has made a number of contributions to the Newsletters over the years and has had many visitors to his property 'Myall Park', near Glenmorgan in Queensland. The Gordon name is recognised via the hybrid grevilleas 'Robyn Gordon', 'Sandra Gordon' and 'Merinda Gordon'. I can recall him sending me a cheque for \$15 back in 1991 and a further \$10 in 1992, and with the cheque a brief note suggesting that this should see him through. I think he is close to using up his credit. I trust that he had a very enjoyable celebration on reaching his century and that he enjoys the times ahead. I think that it would be only fitting that we do not call on him to make any further contributions to the Study Group, but that he will get his Newsletter anyway.

Colin Jennings

SUBSCRIPTIONS

Due to my absence and the possible confusion about paying subscriptions before June 30th, I have decided to send Newsletters to all who were financial to June 30th 1999 and placed **A RED STICKER** again on the top of this page if you are still unfinancial.

If you do not pay before the next Newsletter which is due out in November, then I will have no alternative but to remove you from the mailing list. If you wish to continue membership please act promptly. If you do not wish to continue, I would appreciate a note to that effect.

Colin Jennings

EREMOPHILAS FOR THE GARDEN

I still have copies of this available for sale to members of the Study Group at a cost of \$9.50, postage included. To date I have distributed almost three hundred via the Study Group, which has meant quite a reasonable addition to our funds and this has helped us to keep our subscriptions so low.

Colin Jennings

BOB CHINNOCK 1999/2000

Just a brief note to let you know that Bob Chinnock will not be at the Adelaide Botanic Garden for the next twelve months, he will be working in Kew Gardens, London. He will therefore not be able to receive your letters seeking assistance, nor will be able to help with the identification of those cuttings which from time to time you send in for identification. We wish Bob and Shona all the best and trust that they have a very enjoyable and rewarding experience while they away. I will keep you all in touch with anything relevant to the Study Group via the Newsletter.

ASGAP CONFERENCE - BRISBANE

Unfortunately I was not able to attend the Conference and therefore the Study Group did not get the exposure I had hoped I might be able to give it by putting in the display which was offered to us. On the agenda for the Study Group Leaders' Meeting was the matter of the ASGAP Study Group Manual, which expresses the aims of Study Groups, and spells out in some detail the manner in which Study Groups are to operate. When finalized, this document should be available for all to read; I will keep you informed.

Colin Jennings

PESTS

Some years ago I was concerned that a native flea beetle was going to be a problem with eremophilas, but this has not eventuated. Wingless grasshoppers are, however, a seasonal summer problem and have caused severe damage to mature plants and the death of young ones.

Two different types of scale are currently a problem. I do not know if I have introduced them or whether they are common species finding new hosts. I suspect one has come on *Myoporum* spp. used for grafting, as it is concentrated on the stock and rarely invades the scion in large numbers. In the early stages it is very small, transparent green and virtually invisible, but matures to a yellow-brown. Small ants move it about and invade the cutting frames for this purpose. It can certainly kill young plants, due to the stock collapsing, and at this time of the year (mid-March) must be monitored carefully.

During winter and spring *E. maculata* and a large *Correa schlechtendalii* are attacked by huge numbers of a much larger scale, sub-globular and squashing a deep purple-red. This is probably the common black or brown scale, with branches covered in sooty mould. Branch by branch the plants die. The vast majority of the scale die as the foliage dries, but there are enough left for reinfestation with the return of winter. White oil alone has proven ineffective, but I plan to add some insecticide such as Maldison or Rogor.

Do any other members have this problem? If so, how do you control it?

Ken Warnes, Owen, SA

ERNEST GILES AND *EREMOPHILA SCOPARIA*

While recently reading *Australia Twice Traversed*, the published journals of Ernest Giles, I was intrigued with the following excerpt from Book III, as he entered the Nullarbor Plain while travelling from Fowlers Bay to Youldeh (Ooldea, as it is better known).

"Although the plain was covered with vegetation, there was no grass whatever upon it; but a growth of a kind of broom, two to three feet high, waving in the heated breezes as far as the eye could reach, which gave it a billowy and extraordinary appearance. The botanical name of this plant is *Eremophila scoparia*."

This was between Colona and Pidinga and he mentions more of the same between Pidinga and Youldeh. I have travelled through this area in a good season and although it was a long time ago, (1969), I don't recall any particular population of *E. scoparia*. His description makes me believe they were either young or regrowth plants and probably a response to either a major natural fire or the regular burning by the natives of the region, as he regularly reports smoke from hunting fires.

Due to the lack of water there is no pastoral industry in the area, so the change must be due to natural causes.

From the trip in 1969 *E. hillii* (red and orange flowers), *E. decussata* (grey and gold foliage - *E. delisseri* at the time), *E. battii* and the SA form of *E. decipiens* were brought into cultivation, but we failed with *E. latrobei* subsp. *glabra*, *E. gibsonii*, *E. alternifolia*, *E. platythamnos* subsp. *villosa* (known as *E. exotrachys* then) and *E. paisleyi*. This trip was described in length in the *SA Journal*, January 1970 with no mention of *E. scoparia*.

Ken Warnes, Owen, SA

SEED TRIALS

(The notes below have been taken from a letter which Russell sent to me in late June - some of the details have been left out since they are not essential to the information contained. Ed.)

Before I sow the seeds I check them to see if they are viable - I usually take four plump drupes and cut them open and look for the plump, white seeds. The best way to open the drupes is to split them from the bottom along the division, and then into quarters, then I look for the seeds. There can be twelve or so seeds in the drupes of some species. Some species with smaller drupes have to be cut crossways to the way the seed lies so that viable seeds can be found; unfortunately some of the seed is destroyed by this latter process. Even if I find no viable seed in the drupes I still sow the drupes. I found no viable seed in some *E. pantonii*, however, two seedlings came up in November from fruits sown in September.

This year (1999) in March I sowed more seed and used smoke water, but I sowed the seed out in the plantation, and not in propagation boxes. The reason for doing this was that I have so many boxes holding seed in the propagation area awaiting germination, that I am running out of room.

The soil in the plantation is sandy loam over a clay sub-soil. I made up two plots the same, banking soil around the perimeter - this being done to allow me to flood irrigate the plots.

The seed was checked for viability and then sown into dry soil, this was followed by a watering of 30 litres of water plus 0.5 litres of smoke water in one plot and 30 litres of water only in the second plot. Twelve hours later both plots were watered to a depth of 2cm and covered with 75% shade cloth, and similarly watered a further twice on that same day. The next day each plot was flooded with 2cm of water in the morning and again the second night. Each plot was again watered once only on the following day. After that the plots were watered as I thought they needed it. The shade cloth was left on for five days, when some succulents began to appear in each plot - no doubt from seed naturally present in the soil.

The following results have been obtained so far (16.06.99):

	smoke treatment	non-smoke treatment
<i>E. bignoniiflora</i>	7	2
<i>E. (polyclada x divaricata)</i>	6	1
<i>E. (polyclada x bignoniiflora)</i> No1	2	1
<i>E. (polyclada x bignoniiflora)</i> No2	6	1
<i>E. ramiflora</i>	2	1
<i>E. youngii</i>	6	no data
<i>E. foliosissima</i>	1	no data
<i>E. spec. nov.</i> (95262-6)	1	4
<i>E. miniata</i>	nil	1

(Other results were provided but not with comparisons, so have been omitted).

I have managed to get germination of the following species by using the smoke water treatment, however, the percentage germination has not been very high.

E. glabra, *E. granitica*, *E. denticulata*, *E. maculata*, *E. youngii*, *E. virens* and *E. nivea*.

It seems as if *E. racemosa*, *E. maculata*, *E. drummondii* and *E. pantonii* prefer to germinate in the spring, the others in the autumn. I have one problem with autumn grown seedlings of *Eremophila* and that is frost and

overwintering them. I have also found most need to have some size before they are planted out into the plantation after germinating in the propagation area. Two April frosts this year killed one *E. cuneifolia* and affected a couple of others.

Of further interest, I left the hose dripping for three days at the base of a plant of *E. hygrophana*, I forgot to turn it off! The result was about forty seedlings. There were a lot of drupes on the ground when I came to dig the seedlings up and I had to cut five before I found one with a viable seed in it. It looks as if there is going to be a variation in the seedlings, as some have goldish tips to the leaves and others grey. Also I found one seedling each of *E. maculata* and *E. longifolia* at the base of the same plant.

Last year I planted most of my plants out in the plantation in late September, using a dripper system for watering and most have responded well with good growth

In summary, my thoughts on the use of smoke water are that the drupes should be kept wet for the first three or four days and that they should be sown in late summer (February), this also applies if no smoke is used. Results so far suggest that smoke treatment is effective for many species.

Russell Wait, Natya, Victoria

CUTTINGS

Early spring seems to be about the best time of the year for taking cuttings from eremophilas in order to get plants ready to plant out before the heat of the summer or, if you choose next autumn. In the past I have been able to send cutting material to members of the Study Group, the only cost involved being the postage.

If you would like to receive some cutting material in either late September or early October I will try to arrange to get some to you. I am not sure which species will be available, it all depends on what is suitable to take cuttings from. I also manage to get some material as a result of the SA Regional Show, held here about the second week in October. What I can get depends somewhat on the cuts that are presented for display. I can usually obtain a selection from those on display, mainly because most of what is used comes from members of the Study Group anyway, and they are a fairly generous bunch.

Please let me know which species you would like to receive - I cannot promise any of the rare or recently described species, although there could be a good selection of worthwhile ones.

Colin Jennings

CHANGES AT THE GARDENS

Those members living in SA will be aware that there are some dramatic changes taking place at the Adelaide Botanic Gardens, but those of you living interstate will perhaps not have heard of these changes. Firstly, the herbarium building is being demolished as part of the change and the entire herbarium section is to be housed in the 'old tram barn', which has been totally rebuilt within the existing framework. This is part of the redevelopment, which will result in the building of a Wine Centre on the site of the existing herbarium and gardens administration area. A rose garden is also included in the redevelopment. The administration area will now be in the Goodman Building, once the nerve centre of Adelaide's transport system and also a heritage building. As this is being printed, walls are being removed in the existing building and there is a massive exercise going on packaging herbarium specimens, library, records etc. etc. ready for the transfer due to start next week. When I rang Bob to confirm a few things today (July 20th) he suggested that I get this Newsletter in ASAP or else it might have to be done in another place. Thanks to Bob it is being fitted in between the delicate manoeuvres taking place inside the building.

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