# Association of Societies for Growing Australian Plants EREMOPHILA STUDY GROUP NEWSLETTER No. 67

April 1999

It would seem that we have been experiencing quite a diversity of weather conditions across the continent since I last prepared a Newsletter. My rain gauge has recorded the grand total of 18mm till the end of February, and two spells in March yielding a further 45mm. I understand that this is common throughout most of South Australia, yet in some areas of Queensland and Western Australia and into the north of NSW, floods have been a major problem.

It does make it rather difficult therefore to make suggestions as to 'how to grow eremophilas' and to cover the diversity of conditions likely to be encountered. I was asked a few weeks back by a person who rang to ask me, as Leader of the Study Group, how to grow eremophilas in a country area of Victoria. The conversation led to the local conditions and the weather - the caller and I agreed we could not really make predictions but rather generalisations only could be offered, which I did, and that he would have to make the most of his own environment and do a bit of experimenting. Just what do you do to accommodate extreme frosts in spring, followed by severe drought conditions through summer, followed by floods in winter, especially when the conditions from which the species come, in WA particularly, do not match any of these possibilities?

I have no doubt that we could supply some of the answers, that is after all what a Study Group is supposed to be able to do! Isn't it?

The dearth of material from members these past three months has no doubt been related to the problems experienced - I do hope that it is not through lack of interest, and I would like to ensure that the next Newsletter due out in early August will contain a lot more of your contributions. I do thank the members who have sent in material and I have made full use of anything received in the preparation of this issue.

My wife and I will be overseas for about two and a half months from early April. If you have any material for the next Newsletter or need to contact anyone about the Study Group, please contact Bob Chinnock at the Adelaide Botanic Gardens, the address appears at the end of each Newsletter.

Colin Jennings

## SUBSCRIPTIONS

Subscriptions will again fall due at the end of June 1999 for those who have not paid in advance. If your subscription is coming up for renewal you will find a red sticker on the top of this page. I suggest that you hold your payment until after 20th June, for the reasons given above; it would be less of a problem all round if your could avoid sending payments etc. to me until after that date. The reason for making note of this now is that the next Newsletter will be out in late July or very early August, which is after the due date. See note above re other matters to do with the Study Group.

Colin Jennings

## EREMOPHILAS FOR THE GARDEN

I still have about forty copies of this popular book. It is available to members of the Study Group at a cost of \$9.50, postage included. If you still wish to purchase a copy please let me know; perhaps you could encourage others to buy one, a small amount from each sale goes into our general funds to offset higher subscription costs for everyone.

Colin Jennings

#### **CUTTING GRAFTS**

In the last issue I referred to using Cutting Grafts on material collected during the seminar last October, and said that I would report on the results in this issue.

The results are to say the least a bit gloomy: not because the grafts did not take, but that the material used as stock did not strike, and died back from the base to the point of the graft. Many of the graft unions were in fact still good, but the die back gradually caused failure. I could have tried to resurrect them, but thought that I should allow them to reach their own fate and so report on the results. I did get a few positive results, including one using the white flowered form of *Eremophila dempsteri*, and surprisingly, one cutting of this species also struck - I have never had any great success with any of the 'broome' type eremophilas in the past, although I know of one grower in the SA Region of SGAP who put in a batch of *E. scoparia* (wrongly labelled), and got an almost 100% strike rate, without any special conditions being applied.

I have not given up on the process, but next time I think that I might try using cuttings which have recently set roots and use these, rather than try to work with unstruck cuttings or semi-mature, cutting started plantlets, which I find a bit awkward to manipulate in their pots/bags or tubes.

Colin Jennings

#### FROM YOUR LETTERS

## Jocelyn Lindner - Ouyen, Vic

We returned from the weekend at Warracknabeal to find that we had a very severe wind storm and lost many trees and shrubs. *Eremophila interstans* and *E. gibsonii* were almost casualties with only one branch of the latter left.

I had some success with doing cuttings and cutting grafts from the material I brought from Norma Boschen's, but I should have done more cutting grafts. I had two small cuttings of the yellow E. miniata, one grafted onto a rooted Myoporum sp. This promptly died, the other E. miniata I did as a cutting graft and after two weeks or more I noticed that it was rather sick looking, then I realised the stock was dead, so I cut the cutting off and did a fresh cutting graft and to my amazement it brightened up and I now have a healthy plant.

(In reply to my suggestion in the last Newsletter, Jocelyn has written the following about Grafting onto Struck Cuttings:)

I have tried grafting onto struck cuttings with some success. I tried three cuttings of *E. gibsonii* and three of *E. abietina* from my sick looking plant. The *E. abietina* cuttings all took but none of the *E. gibsonii* survived. They are much easier to handle and I would say the method is successful and perhaps it wasn't the right time to take *E. gibsonii*, I covered each plant with a cut-off plastic soft drink bottle. I find this easier than plastic bags. I also sit cutting grafts on the heat pad for a few weeks.

# Warren & Gloria Sheather - Armidale, NSW

We have grown native plants in or near Armidale for about twenty years. Four years ago we moved to a large block, west of Armidale where we are establishing a large native plant garden.

Eremophilas play an important role in our horticultural endeavours. We find they are hardy, fast growing, free flowering, bird attracting and most species are draught and frost tolerant.

We propagate most of the plants used in our garden and have had some exciting success with eremophilas. All our eremophilas are propagated from cuttings. We use a propagating bench with bottom heat and intermittent misting. The cuttings are dipped in Purple Clonex Gel containing 3000 ppm IBA. The cuttings are then placed in 50mm thumb pots containing Hortico seed and cutting mixture. Seven cuttings are placed in each thumb pot. Most eremophilas produce roots in four weeks or less. Individual struck cuttings are potted on into native tubes. After a few months they join the other plants in the garden.

Eremophila glabra and E. maculata in their various forms are surviving and thriving in our garden. Many plants of E. maculata 'Aurea' light up the garden with their bright yellow flowers. Eremophila denticulata is a recent addition to our horticultural menagerie. cuttings of this species have produced roots in two weeks.

*Eremophila macdonnellii* is growing vigorously and produces masses of purple flowers over a long period. We are looking forward to introducing more eremophilas into our garden.

#### Ken Warnes - Owen, SA

On a brief trip last September, travelling north west of Port Augusta, (SA), towards the eastern shores of Lake Gairdner, I collected a number of *Eremophila* species, most of them occurring as a few plants at widely scattered locations. They included *E. duttonii*, *E. glabra*, *E. latrobei* ssp. *glabra*, *E. alternifolia*, *E. longifolia*, *E. oppositifolia*, *E. serrulata* and *E. scoparia*. This was very hard country (175mm rainfall), and we noticed that apart from the uncommon *E. scoparia* all the species were bird pollinated, with a combination of fleshy fruits and/or conspicuous sepals. This could explain the scattered populations.

I also collected a very bushy growing *Myoporum*, the inland form of *M. montanum*. It has been propagated both by me and Pinery Nursery, who had come across a separate source of material and we intend to proceed with trials to see whether it will prove a suitable grafting stock for very dry conditions.

#### INDEX TO NEWSLETTERS

At the Workshop held in Warracknabeal last October Bob Drummond handed to me a very comprehensive index which he had produced, detailing where one could find details of all the listed eremophilas which have been written about since the first Newsletter, until issue number 65.

This exercise has no doubt taken Bob quite a bit time, although he pointed out that it started as an exercise for his own benefit to find where he might locate references to the different eremophilas which we have from time to time reported on. Bob indicated that he was going to prepare a more general index, when time permitted, detailing items of interest, or topics which have been written about.

His index is hand written, but when I return from overseas, I will try to get it together in a form which we could make available to members, selling it at a reasonable cost.

If anyone is interested, please let me know when you pay your subscription or just drop me a line.

Colin Jennings

#### **CUTTING GRAFTS**

Following some collecting trips and the weekend at Warracknabeal I set quite a number of grafts, both as tip wedge or whip, using stock plants or as cutting grafts. I am no expert, but I having given a demonstration of cutting grafts I thought that I should report on the results.

In general I have had better results with cutting grafts sealed in plastic bags than I did with grafts on stock plants in a cold frame that didn't seal very well. However, since then I have initially covered grafts in this frame with plastic bottles and results are better.

For convenience I placed up to eight cuttings in 10cm pots in plastic bags. It saved space and time but created problems. Some grafts took quickly, some died or rotted and when the bag was opened for hardening-up the slower ones died. Potting on from my grit and vermiculite cutting mix requires complete open root transplanting and I also had losses at this time. A better propagating frame and individual tubes as described by Colin Jennings in Newsletter # 66 would solve this problem.

I have had similar results with both tip wedge and whip methods, however, I found the former to be much easier to handle as the wedge can be forced into the cleft. The two halves of the whip have to be firmly held between the thumb and forefinger while the initial taping is done and at the end of the day I

discovered an arthritic thumb joint of which I had been blissfully unaware until then. I also found it essential to <u>firmly</u> wrap <u>both</u> ends of the graft, otherwise some curling back will occur. I also had more trouble with the collapse of tissue within the graft, but this may have been caused either by bruising from the earlier mentioned tight holding or the fact that in general I probably used softer stocks on whip grafts.

On the other hand the joint is neater and I have had less trouble with Myoporum shoots within the graft itself, both advantages mentioned by Neil Marriott in his presentation in October at the workshop.

Species successful as cutting grafts in plastic bags include *E. abietina* var. abietina, *E. lachnocalyx*, *E. lactea*, *E. longifolia* (let's see it sucker now!), *E. maculata* (various forms), *E. 'magnifica'*, *E. miniata*, *E. 'pachomai'*, *E. sturtii*, *E. "Yanna Road"* and *Myoporum turbinatum*. Several of these failed in the cutting frame.

Grafts which took, but were lost at a later stage include: E. aff. georgei., E. gibsonii, E. latrobei ssp. glabra, E. resinosa, E. rotundifolia, and E. spathulata.

Failures include E. duttonii, E. 'flaccida', E. interstans (SA Form), E. platythamnos and 'Diocerea ternata'. Most of these failures are very viscid and yet other viscid species are quite easy. In general I also found woolly leafed species were unsuitable in plastic bags.

In another small, better sealed cold frame, without the aid of plastic bottles I had success with E. 'acrida', E. bowmanii ssp. bowmanii ssp. nutans, E. 'canaliculata', E. 'conferta', E. latrobei ssp. latrobei, E. 'mirabilis', E. 'prostrata', E. 'simulans', E. willsii, and E. viscida among others.

Ken Warnes, Owen. SA

# Eremophila "Yanna Road"

Last spring I came across a single plant growing in a garden at Bugaldie, north of Coonabarabran, NSW. I had never seen the plant before and the owner could only tell me that he had bought it at a nursery. I guessed that it was a hybrid between *E. gilesii* and the grey leafed *E. latrobei* ssp. *latrobei*, and that it must have originated near Quilpie in Queensland. (I wonder if I would have thought this if I had seen it growing in a garden in WA or SA!).

To my surprise Bob Chinnock confirmed my 'diagnosis' on my return. Apparently it is widely grown in the eastern states as "Yanna Road". It seems that Yanna is a property to the west of Charleville, i.e. towards Quilpie, a fact confirmed by the driver of a Queensland registered car with a Charleville garage sticker in the window that I spotted at Port Wakefield (SA), some 2000km from home. You have to be a detective in this game.

It is a most attractive, low growing shrub, 1.5m wide x 0.5m high. It has the habit of *E. gilesii*, with grey, lanceolate and soft foliage, the sepals are perhaps, compared with *E. gilesii* a little broader, but the fruits compare with *E. latrobei*. The bright pink flowers have deeply dissected, wide spreading lobes, which compare with *E. miniata*. Altogether a very lovely hybrid which has grafted easily, although cuttings have failed for me.

If anyone has more exact information I would be pleased to know about it, since on my collecting trip to Queensland I completely circled this area.

A hybrid that I did bring back from Queensland in 1991 was collected from a gutter on the Emmett - Quilpie Road. This was E. polyclada x E. bignoniiflora, i.e., the opposite cross to that which Bob Chinnock collected on the Emmet - Isisford Road and which also occurs west of Mildura in Victoria. It is doing very well on limestone at Owen, looking a bit like a tall (3m), leafy E. polyclada. Flowers are a rich cream with magnificent flared lobes which really make the flowers stand out.

Ken Warnes, Owen, SA

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Some of the principle functions of the Committee are the determination of species, populations and ecological communities to be listed as endangered, vulnerable or extinct under the Act; the determination of key threatening processes; and to keep the Schedules of the Act under review for the amendment or omission of the species, populations, communities and processes listed.

back to top

# The Listing Process

The Act encourages community involvement in the protection of threatened species\*, populations and communities and the identification of Key Threatening Processes through a public exhibition process. Any person may make a nomination to either include, amend or omit a species etc in the schedules of the Act. The Committee assesses and decides to either accept or reject the nomination.

If accepted, the Committee will make a Preliminary Determination to either support or not support the proposal to include, amend or omit the species etc. The Preliminary Determination is then placed on public display for a period of 30 days and public submission are sought. When a Determination is made a notice advertising the Preliminary Determination is placed in the Government Notices section of the *Sydney Morning Herald* (usually the Friday edition). In addition, where a Determination is likely to affect a particular part of the State, a Notice is also placed in a local paper on the same day or in the following week depending on the publication schedule of the local paper.

Under the Act the Committee must consider all submissions received during the exhibition period before making a Final Determination to either include, amend or omit the species etc. from the Schedules. The Final Determination is also advertised via the publication of Notices in the newspaper.

back to top

# Implications of listing

The listing of a species, population or ecological community in the schedules of the Act serves to identify the species, populations and communities that are most at risk of becoming endangered or extinct.

Species, populations and communities that are listed under the Act are protected such that the impact of any action affecting them must be properly assessed. One of a number of matters for consideration in the assessment of actions, such as development proposals, is whether the proposed development will have a significant effect on threatened species, population or communities. This is not a ban on all actions but a process to ensure that these actions are compatible with the continued

\* The phrase "Threatened species" includes both endangered species listed on Schedule 1 of the Act and vulnerable species listed on Schedule 2. Species includes all plants and animals (excluding fish and marine vegetation within the meaning of the Fisheries Management Act, 1994). Species includes any defined subspecies and taxon below a subspecies and any recognisable variant of a subspecies or taxon.