Association of Societies for Growing Australian Plants EREMOPHILA STUDY GROUP NEWSLETTER No. 77

August 2002

I was pleased to be able to accept an invitation to speak at the Annual General Meeting of the Friends of The Arid Lands Botanic Garden in Port Augusta, SA, on August 3rd. My wife and I were able to 'get away' on the Friday and spent the night at Hawker, after driving through the Flinders Ranges to Wilpena and then on to Blinman, we returned to Hawker via the Parachilna Gorge. There is strong evidence of the low rainfall throughout much of the mid-north but the areas through the gorge were quite well grassed. Emus were prevalent and according to latest news items are now in plague proportions throughout the cereal belt which is on rather marginal lands.

I spoke to the group about the diversity in the genus *Eremophila*, relating colour, shape etc. to pollination, and also referred to the various methods which have been employed to propagate the species. I was fortunate to have a good selection of grafted eremophilas which I had obtained from Ray Isaacson a few weeks earlier. They were quite popular and about fifty plants were taken to be grown in the region. Interest in the genus is very strong within this group, since the Gardens have a very good selection of eremophilas established in the beds surrounding the Visitor Information Centre and restaurant. Unfortunately there had been a very severe frost regime in the area over the previous few weeks and many of the plants were showing signs of this. I was able to present a selection of slides of some of the less commonly cultivated eremophilas to finish the presentation.

I have also been invited to present a workshop session sometime later in the year for the gardeners at the Mount Lofty Botanic Garden. The reasoning behind this programme is designed to provide the gardeners with information about plants over a wide range of families as part of their on-going training.

NEWSLETTER INDEX

Some time back I mentioned that Bob Drummond had done a lot of work in preparing an index of the species referred to in past Newsletters. I have finally had time to rearrange the format of his work and to make a few minor corrections. I am now able to offer to members a copy of this index up to and including issue # 68, (August 1999.) It is included with this issue. There is no reference to species in the first 31 issues, since they are indexed in the booklet covering the first 31 Newsletters. Over the next few months I might be able to update this to the most recent issue.

PLANT DESCRIPTIONS

Colin Theakstone has once again offered to provide some material for the Newsletter. He spoke to me a month or so ago, suggesting that he would like to prepare some descriptive material to help identify features relating to eremophilas. He is putting together a very useful diagrammatic, descriptive account of the terminologies used. I intend to use these in future issues of the Newsletter.

MY FAVOURITE PLANTS

I have to say that they are Emu Bushes, or Eremophilas, they are so hardy, showy and forgiving. One of the first ones that I planted was an *E. maculata* 'Aurea'. That plant is now five years old and flowers for nine months of the year The many honey-eaters which visit our garden love that bush. It grows tremendously fast, even after severe pruning it grows back very quickly.

There is also another E. maculata in our garden, it is a red-flowering one and is prostrate. Very nice.

I am very proud of the next one, *E. nivea*, which I grew from cuttings from a friend's garden. I planted two cuttings together some three years ago and I now have a dense plant that stands about a metre tall and flowers profusely.

Next comes the very showy E. *Kalbarri Carpet'. I think that this is a prostrate form of E. subfloccosa. It flowers 3-4 times a year and the Eastern Spinebill loves it especially.

Visitors usually home in on the peculiar smell of *E. microtheca*. It has very small flowers and because the plant is now five years old and my pruning technique early on was more hesitant, the heart of the plant has a lot of dead wood.

Next is E. "Yanna Road", thought to be a natural hybrid from Queensland. It is a silvery-green plant with lovely pink flowers. Our plant grows in a semi-shaded position and it flowers on and off throughout the year.

I also have the ground covering E. 'subteretifolia'. This plant has only been growing in one of the new beds since December last, but it is growing well and already shows its orange, tubular flowers.

Another plant with silver foliage is E. glabra. This form has orange-red flowers and strikes very easily.

During our visit to Gloria and Warren Sheather's garden I was allowed to take a cutting from their *E. denticulata*. I have two plants from that cutting and both are now 40cm high and looking healthy.

I have a few other Eremophila cuttings in my shade house, but time will tell with these.

Last year I joined the Eremophila Study Group and through them obtained a publication of past Group Newsletters 1972-1985 at a cost of (I think \$6) but well worth it, as well as the book *Eremophilas for The Garden*.

So about eremophilas - plant some and enjoy.

Joke Meyer

(This article, which I have altered very slightly, has been previously printed in the Tamworth Group's Newsletter. Colin.)

CULTIVATION NOTES - EREMOPHILAS IN THE DANDENONGS ON THEIR OWN ROOTS

How adaptable are eremophilas? In the Dandenongs, cool-wet winters pose quite adverse conditions for 'desert lovers'. Located in The Patch, just uphill from Monbulk, my garden has deep, chocolate coloured loam topsoil that is quite acidic and drains very well on a slope facing north and with large trees and shrubs on the south and west fence-lines giving protection from frosts and strong winds. Before I got the 'eremophila bug' about six years ago, I had successfully established over 40 WA Banksia species and 20 Dryandra species, indicating that the soil was good enough for plants from areas with much lower rainfall to cope. But how would eremophilas cope with the moist winter air? Well, quite a few species have prospered and flowered well, but others, as listed below, have not. All are on their own roots except for a grafted E. 'mirabilis'. The very limited availability of grafted plants and the ease of striking most (of those I got hold of) eremophilas from cuttings made me try to grow them on their own roots. I expected that growth would be much slower and often limited to the warmer months, but some plants flower very well even during the colder months. None have ever needed artificial watering during Melbourne summers, not even in their first year in the ground when I kept an eye on them for signs of water stress.

But during winters there is die-back of young branchlets, and if these are not removed in time, grey mould can set in, expanding and killing neighbouring branchlets. The browning off often seems to start at the base of the current year's growth. Often branchlets die back and the gap is quickly covered up when new growth sets in, but occasionally there was more extensive die-back and some deaths as a result. Not unexpectedly, it is more prevalent with hairy species, though interestingly some hairy plants have been little affected. Yet *E. christophorii* also showed some die-back every winter, but recovered fast in spring with rapid growth. Attack often, but not always, starts on spent flowers, and their removal certainly helps. However, this can be time-consuming for those species that flower during winter.

For many species and forms, my experience relates to several plants, up to five in some instances, as I often propagated from the first plant as soon as cutting material was available. So here is my assessment.

Reliable, good growth and flowering, good looking plants, no or little browning of branchlets: *E. maculata* (several forms), *E. maculata* x *E. racemosa*, *E. glabra* (green leafed forms, but not the Murchison River form, see below), *E. oppositifolia*, *E. scoparia*, *E. weldii*, *E. youngii*, *E.* 'veneta', *E. biserrata*, *E. decipiens*, *E. drummondii*, *E. microtheca*, *E. bignoniiflora*, *E. bignoniiflora* x *E. alternifolia*, *E. laanii* (pink form). The last three grow fast and quickly become leggy unless pruned regularly. The others require little maintenance. All have proved quite adaptable to this cool winter - wet location given a sunny position and good air circulation.

Eremophila splendens:

My favourite with its orange-red flowers, round leaves and very rapid growth, though it can become leggy quickly and needs regular pruning. Despite its hairiness, only occasional browning of a few branchlets occurs in winter, but it's not a real problem as it quickly re-shoots from below the point of attack, essentially saving pruning. A most rewarding plant in full sun and an uncrowded position and very easy to propagate as well.

Eremophila maculata x E. duttonii (2 plants), E. platycalyx:

Slower grower and fewer flowers, but also attractive plants. Same for *E. oldfieldii* subsp. *angustifolia* and *E. abietina* (early days - both 1 plant only and still relatively young, but growing steadily and looking healthy). Worth a place in the garden.

Eremophila neglecta and E. tetraptera:

Very slow growth indeed, only a few flowers so far, but look OK and no problems of browning/die-back, but tend to lose lower leaves.

E. racemosa (white/yellow form), E. macdonnellii (several forms, green, grey-green, and grey leaves, purple and white/pink flowers), E. ovata, E. christophorii, E. nivea, E. purpurascens:

Flowering well and looking quite presentable in general. Eremophila christophorii, E. racemosa and E. purpurascens show quite rapid growth, E. nivea is not too bad, while the others are relatively slow. However, invariably some browning and die-back of branchlets occurs during winters but usually recovering OK, though a couple of plants of E. macdonnellii failed to recover from winter damage. Can be grown here but need frequent inspection during winter to cut out dead material and thus limit any attacks. With its more open structure, E. purpurascens is least prone to damage to adjacent branchlets. For E. christophorii I find it necessary to remove spent flowers quickly during the wetter months, as this definitely is where the attack starts, the non-hairy leaves not being a problem. For E. macdonnellii I remove spent flowers and green fruit once the humidity arrives in autumn, yet the grey-leafed forms also get attacked on the stems and leaves.

Surprisingly, the very hairy *E. bowmanii* subsp. *latifolia* has presented no real problems (a very open sunny position, one of the best available, probably helps) but I inspect it very frequently and remove all flowers and calyces as soon as they have finished flowering, as they get attacked very quickly in humid conditions. Relatively slow growth. Another high maintenance plant in this locality.

Eremophila racemosa (red/pink form), E. calorrhabdos, E. denticulata:

Fast growth, good flowering, very little die-back of young branchlets but many of the lower leaves turn brown and drop in winter, thus giving the plants a very leggy appearance that was hard to correct with pruning. Can be grown here but don't look their best; I have not managed to grow them to my satisfaction. However, one plant of *E. racemosa* (pink/red) in a large pot on the sunny balcony grew more slowly and kept many of the lower leaves. With regular tip pruning it has been maintained as an attractive, bushy plant that flowers well.

Eremophila inflata also loses a lot of its lower leaves which makes it look leggy, but as it is slower growing, this is not a real problem. Profuse flowering makes up for a somewhat sparse look.

Eremophila densifolia and E. chamaephila:

Slow growth, leggy, due to dropping of older leaves and not responding well to pruning. Survive and flower but look sparse. Not really satisfactory either.

Eremophila enata (1 plant only) survived for three years and had lots of flowers but made little vegetative growth. It died this May, reason unknown.

Eremophila gilesii, E. spectabilis, E. latrobei (greyish leaves), E "Yanna Road" (1 plant each):

Struggled, some growth and flowers survived for about two-three years, but considerable die-back during winters and eventually death. I don't think these will adapt to this climate even in the sunniest spot in the garden.

Eremophila glabra (Murchison River form) is almost as sensitive, while growing well during summer, it is prone to extensive die-back or death in winter.

The only grafted plant, E. 'mirabilis', shows no problems but is not a rapid grower here.

Thus, more species than I might have expected have proved adaptable enough on their own roots. However, compared with WA banksias and dryandras which require very little attention once planted out, many of the eremophilas I have tried need a fair bit of time and maintenance, partly because of the much faster growth of many species calls for regular pruning and partly because of the need to remove dead material during the humid and cool months of the year to avoid fungal infestations that can quickly do considerable damage. Some might say you need to be slightly mad to cultivate eremophilas in this adverse climate.......

Hans Griesser

FROM YOUR LETTERS

Alan Anderson - Monbulk, Victoria

My garden is eighteen months old and of the ten acres approximately one and a half acres have been planted, with grevilleas and eremophilas being the dominant genera.

We share the bush block with Brush and Ring Tailed Possums and several Brushtail Wallabies, plus over fifty species of birds. In deference to a previous newsletter most of my forty plus species of eremophilas are ignored by the wallabies.

When the *E. gibbifolia* is in flower it is attended by native bees in large numbers. The European bees also try to partake of the nectar, but the flowers are obviously more suited to the native bees.

I have begun grafting cuttings with at least twelve different species. I started with *Myoporum montanum* and *E. decipiens* as stock plants. I selected the *E. decipiens*, since it was my most vigorous and successful performer. Sadly this species proved to be a total disaster as a stock plant. The *M. montanum* on the other hand has been successful.

I have now successfully grafted the following species:- E. abietina, E. nivea, E. 'mirabilis', E. polyclada, E. neglecta, E. bowmannii, E. racemosa, E. granitica, E. latrobei, E. glabra, E. psilocalyx and E. drummondii. All of these onto M. montanum.

I have not grafted *E. glabra* (Murchison River form), since two grafted plants previously purchased both grew profusely, but then split at the base and were not good garden specimens.

I also purchased two *E. nivea* plants. After growing gracefully to approximately 1.2m high, they suddenly had branches with foliage drooping and eventually dying off. Maybe our cool climate has something to do with it!

I have acquired an Eremophila with the name "Thundercloud" on the label. It appears to be a prostrate plant with large light coloured 'maculata' type flowers.

(The plant with the name "Thundercloud" on the label is in fact a cultivar of E. maculata. It has been around for quite some time and I think might have originated from a grower on the West Coast of SA. I know that I bought a plant of it from a native plant nursery in Gawler, SA., the owners were at that time members of the Study Group. It is very strongly coloured, generally a mauve/purple with heavy spotting, and the flowers are quite large for the species. I am not sure of its habit of growth. Colin.)

Sue Oldfield - Rockbank, Victoria

... I did grow some cuttings of *E. deserti*, the only indigenous species (around here). On the advice of a friend I put some soil from under an existing bush and behold some roots appeared.

Do we know much about what I suppose are mycorrhizal affiliations?

(I have not come across any real information, anecdotal or research, which reports on the effects of mycorrhiza on the striking of cuttings or the improved development of plants which have been infected with it. I am well aware of the importance of specific mycorrhiza required for the germination of orchid seed, especially the terrestrial genera, and growers of Australian Native Orchids do often place a small amount of the soil from a parent plant in with tubers when they pot on or separate clumps.

Anyone who can shed any light on the effect of mycorrhiza on eremophilas and their resultant well-being as a result is asked to let Colin know.)

Joke Meyer - Tamworth, NSW

Joke has only recently, five years ago, become interested in our native plants and in that time has come to very much appreciate the eremophilas. So much so that she gave a short talk to a meeting of the Tamworth Group. She has passed on the text of that talk for me to reproduce in our Newsletter, which I have done under a separate heading.

"We had 36mm of rain last week after 10 weeks of 'glorious' weather, and although a few of my plants have suffered (the old plants only get watered when it rains, because we only have tank water.) I'm glad of my eremophilas."

Charles Farrugia - Seven Hills, NSW

Here are some observations of plants of *E. microtheca* and *E. macdonnellii* (Simpson Desert form) growing in my garden.

In summer 2000 I planted two *E. microtheca* plants (grown from cuttings) in the lower section of my sloped front garden. Two months later the one in the shadier side started getting brown stems and after a while died. The other one which was in full sun for the whole day survived.

During October to mid-November, which was a very dry period, this plant was in full bloom. When the rain came at the end of November, it started to flower again. It did the same after a wet period at the end of December.

In mid-January the stems of this plant also started to turn brown. It was pruned back and although new growth started to appear, it also died. I also noted that the ones growing in pots were starting to show the same symptoms, so I stopped watering them and the symptoms disappeared.

This made me conclude that of all the eremophilas which I have growing, *E. microtheca* is the one which least tolerates "wet feet". Another plant is growing under a climbing rose, providing a very dry site, has never shown any symptoms of the brown stem, although it did not flower as well or as many times as the one which died.

On 16th February 2002 we experienced a very bad storm and as a result my two-year old *E. macdonnellii* was snapped a few centimetres above the grafting joint, leaving three lower branches that were hugging the ground. Four months later there is still no new growth on the main stem, but the new growth on the three branches is quite healthy. (Looks like there are three separate plants.)

I also buried a section of one of the branches in the ground hoping that it would form roots.

It is also worth noting that the section which was broken off was left standing in a bucket of water from 16.02.02 to 30.03.02 and this remained quite healthy with the occasional flower being produced. I even managed to strike a cutting that was taken from the piece on 30.03.02.

(Eremophila microtheca can prove to be a very touchy plant and certainly does not like "wet feet". Several members living in the more humid climates from about Sydney northwards have similar problems with many of the more arid-land species, especially those from the more open, gibber country in WA. Drainage is an essential to growing eremophilas and I think that many of the problems we encounter are due to over-watering, either naturally received or as a result of us being "too kind" with our watering regimes.

I might also add that the species which have furry or hairy leaves are also prone to attack by fungus in humid climates, especially if the air movement is restricted. Colin)

Russell Wait - Piangil, Victoria

In 2001 my wife Beryl and I took off for WA via SA and the NT.

In SA I was able to find *E. pentaptera* growing in undulating gibber country. It was growing in a low-lying, but draining area that had received water in the previous couple of months, since all of the lower leaves were covered in mud. The plants were flowering after the good "drink" and had also grown quite a bit. It is a plant which I have trouble growing because of the frosts which I get here.

In the NT I was able to find the new species which is in the 'Hygrophanae' group. It was growing mainly on the side of a mountain range in amongst the rocks, but the odd one at the base was growing in sand. It is a lot like E. 'warnesii' in both size and habit.

Also in the NT I found the very tall (2.2m) and wispy E. willsii var. integrifolia. The flowers varied from light pink to maroon.

Eremophila 'acrida', a low bush was found on the side of a hill. Eremophila elderi, an upright bush, was found on a rocky out-crop.

In the NT we also called in at Old Andado Station and saw the *Acacia peuce* trees that are known for their very large pods which hang down like presents on a Christmas Tree.

We travelled into WA via the Docker River, travelling along part of the Gunbarrel Highway from just west of Giles through to Carnegie Station. I had done the latter part of the highway from Warburton in 1997 after rain. This time it was a lot drier and nowhere near as good since it was very hard to find plants and when we did, to work out what they were.

Arnold Rieck - Rosewood, Queensland

I'm one of the folks who joined the Eremophila Study Group at the ASGAP Conference in Canberra. I'm happy to renew my membership

Re Eremophilas - I had a pale cream *E. maculata* which I found in the horse paddock at Bungunya State School several years ago. It was the only one in an area with spotted red-magenta maculatas. I took some cuttings, raised some and planted out one, but it grew too large and I had to prune it back heavily. Too heavily and it died. There is a lot of seed in the garden so I think I'll try the bag in the toilet cistern come spring. How long should I leave the seeds in the cistern before I plant them out?

(It is not uncommon to find the yellow form of E. maculata in stands of the species. When the Study Group held a field trip near Morgan in SA as part of a weekend workshop, we found numbers of plants of the yellow form scattered amongst the more common reds and orange-reds. In all there were probably about ten plants within the four or so kilometres we searched. Re the cistern treatment - I have not heard of this method, but soaking the fruits in water for several weeks has resulted in some

germination of seed. It seems best to allow the seeds to germinate first, then plant the fruits out, this way you are assured that you have something growing to start with. Colin)

Lyndal Thorburn - Queanbeyan, NSW

Whenever we buy eremophilas the labels say they flower in autumn and spring. Here we are in the middle of winter and we have had the following species in flower since early June (and they are still going.)

E. maculata 'Aurea', E. decipiens, E. youngii, E. maculata 'Pink Mini', E. laanii (deep pink), E. oppositifolia (a magnificent purple-on-purple plant if full flower), E. maculata var. brevifolia, E. alternifolia (cream), E. 'crenulata', E. abietina var. abietina and E. macdonnellii (dark purple).

We have had frosts down to minus 7°C so far this winter and all these eremophilas have been fine. The only other things we have flowering at present are *Crowea* (which flower all year) and some *Correa*. If others have the same experience perhaps it is time for us to start promoting eremophilas as winter flowering native plants! I think a bank of purple *E. oppositifolia* interspersed with orange *E. decipiens* would be a great winter feature along the driveway.

(To add to Lyndal's winter flowering plants I can add these additional ones flowering here in Adelaide at the end of July as I prepare this Newsletter. *Eremophila neglecta*, E. 'rostrata', E. foliosissima, E. 'glandulifera', E. exotrachys, E. 'obliquisepala', E. duttonii, E. scaberula, E. strongylophylla, E. 'recurva', E. 'citrina', E. compacta and E. georgii. So there are many which are other than spring/autumn flowering. The only difficulty is in convincing the 'trade' that this is so - they have invested quite heavily in their labels. I remember having quite a battle some time back trying to convince one commercial venture that they were selling E. microtheca, under the label E. weldii and could not, perhaps would not, be convinced that they were in error.)

DONATIONS OF CUTTINGS

(From time to time cuttings are made available to members of the Study Group. The usual cost is that of postage and packing only. If you are interested in receiving a selection of material please let Colin know in the next month or so. Names of those wanted would be helpful, but I cannot promise too many of the rarer ones. The best time for this material to be sent is in Sept/Oct or in Feb/March, so it would help if you could also indicate the best time for you to receive it. Choice may be limited, since it depends on where I can source the cuttings and at what time they are best taken. Colin)

I received a note from Hans Griesser who has recently moved from the Dandenongs in Victoria to Gumeracha in the Adelaide Hills and is intending to start up a collection of eremophilas in his new location. He is interested in receiving donations of cuttings.

"Although I have joined the Study Group only recently, I grew eremophilas for many years in the Dandenongs in Victoria, first only a few species, then about six years ago I started to grow a much wider range of species (see my article elsewhere in this Newsletter.) However, in late May of 2002 I had to leave it all behind when I moved to SA, in the Adelaide Hills, where I have plenty of space (10 acres) to now re-establish a native garden. I'd like to include a wide variety of eremophilas. Hence I would be most grateful for any donations of cuttings from Study Group Members.

My address is:- Hans Griesser, "Lanherne", Lobethal Road, Gumeracha, SA 5233. If you wish to contact me via email:- <Hans.Griesser@hotmail.com> or you can phone me:- (08) 8389 1295.

Many thanks in advance! I hope to meet some of you soon; please visit when in the vicinity."

ASGAP Eremophila Study Group Leader Colin Jennings, 4 Kinnaird Crescent, Highbury, South Australia 5089 email address: colmyr@senet.com.au

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