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Association of Societies for Growing Australian Plants

EREMOPHILA STUDY GROUP NEWSLETTER No. 71

July 2000

It is very pleasing to note that the response to the pleas in the last newsletter did not fall on deaf ears and I received a number of very positive responses which you will find printed further on in this issue. I have also received a number of offers of articles from members when they return from trips planned for the early spring months. I am sure that we can all benefit from these articles. Now that we have the ball rolling I hope that I do not have to keep on printing reminders about the need for articles for future newsletters.

I am also very pleased to let you know that in early May I received a phone call from Colin Theakstone, the husband of one of our Study Group members. Colin offered to do some drawings of eremophilas in response to the note last month, in which a request was made for some more drawings of ermophilas which could be used to assist our members identify some of the less commonly seen and grown eremophilas. Two of his contributions are published below.

Just after I heard from Colin, I received in the mail a pleasant surprise - Jocelyn Lindner, from Ouyen in the north-west of Victoria, sent a selection of drawings which she had done of eremophilas in flower in her garden at that time. I will use these in this and future issues of the Newsletter.

If you have paid your subscription since the last Newsletter you will find your receipt included with this issue.

Bob & Shona Chinnock are close to the end of their stay in the UK, where Bob has been working as the ABLO at Kew. With the modern communications of email etc., it is not a difficult task to keep in touch regularly; even at that distance I have been able to get Bob's help with 'things eremophila'. While Bob has been away his eremophilas have not been idle - material has been taken from his garden plants to be used by a student in Canada who is currently studying for a Master's Degree. It is hoped that when Bob has more time after returning that we might get a bit of feed back on what this research is leading to. I might also mention that there is a student at ANU studying for his Doctorate, he is also researching eremophilas. Both of these studies entail DNA testing. Maybe at the end of all this, and perhaps from future studies, we may be closer to establishing some, or all, of the 'family tree' of the Family Myoporaceae.

A plea - If any one is growing *Myoporum cordifolium*, could they please contact Colin urgently. I will pass the message on to Bob. A small amount of live bud/flowering material of this species is urgently required by Bob Chinnock when he returns to Adelaide for the Canadian researcher. Plants were in cultivation but we have lost track of them and those we know of have died. Perhaps you could make an effort to propagate this species if you have it growing and make sure that it is well distributed for future survival. I believe that it might also have been sold under the name of *M. salsaloides*.

Colin Jennings

FROM YOUR LETTERS

Lyndal Thorburn - Queanbeyan, NSW

I just wanted to pass on the amazing success we had with *Eremophila* cuttings taken in summer. We did a lot on January 2nd and have had a very good strike rate. They were all treated with IBA 1000 and placed in a mix of vermiculite and a little sand.

E. pinnatifida	3 out of 8 (others replaced)
E. subteretifolia	8 out of 8
E. densifolia	7 out of 8
E. glabra (Mingenew)	16 out of 16
E. drummondii x *nivea*	6 out of 8
E. fraseri	6 out of 8

We use small squat pots with 16 cuttings to a pot (4 rows of 4)

WORKSHOP DETAILS ARE ON PAGE 5

Margaret Lee - Brighton, SA

I always enjoy the Eremophila Study Group Newsletter and am a bit envious of the success of others. Although I had some success with propagating in the early days, I've managed to kill almost every *Eremophila* I've planted.

The exceptions are *Eremophila maculata*, the almost prostrate form, which is very dense and responds well to cutting. It must be over thirty years old and about 3m in diameter, still dense and flowering well. It started off in full sun, then in the dry shade of *Acacia normalis* for many years , then full sun again and now a new *Acacia* is beginning to shade it. I've taken cuttings and distributed them around the garden. The birds love the yellow form which is a little younger and about 1m high by 4m x 1m. When I was cutting it back recently the honeyeaters left me in no doubt that I was removing their dinner, they swooped at me and chattered madly.

I wonder whether it would be useful to have something in the Newsletter about the uses of eremophilas in the garden (apart from their beauty, novelty and challenge).

The two I have mentioned are excellent hedge plants in our alkaline clay. They receive no artificial water and therefore have an advantage over the exotic box hedges. For those who like the formal look of low hedges around garden beds, the prostrate form is ideal and a quick trim twice a year keeps it looking fresh and dense. The yellow form is good for taller hedges. Both, of course, provide food for honeyeaters. (We don't have any emus in Brighton).

Five plants of *Eremophila drummondii* have managed to survive for about ten years. They are covered in beautiful blue flowers during spring and with their dense, fine green foliage make an attractive edging plant to about 0.25m. Repeating the blue with other taller plants which flower at the same time, such as *Solanum* , makes them even more showy. These plants are growing under *Eucalyptus lansdowneana* in very dry conditions, facing north.

Eremophila macdonnellii (Simpson Desert form) has been doing well for two years. It is never without flowers, except for one week last May and with lavender-blue against the roundish silver-grey leaves it makes a very useful contrast in the garden. The form is neat and rounded, and it doesn't look as though it will grow very high. Again, great for the front of a perennial border which is not going to get too much water.

Eremophila complanata survived for several years, but probably succumbed to too much water from a nearby downpipe in winter. It is rather leggy to grow alone, even when pruned, and needs to be in a border with other plants which will grow close and support it. The pink flowers are beautiful though and it is worth persevering with. I had *Pavonia hastata*, with its own pink flowers, next to it, and although the flowers looked good together, the leaf forms were perhaps too different.

Denise Winning - Stirling North, SA

My husband Geoff and I have a two and a half acre Hobby Nursery at Stirling North which is just outside Port Augusta. It is here that I operate my nursery, propagating eremophilas for sale. It is named 'Goodwinii Eremophila Gardens' and visitors are most welcome.

I noticed in the Newsletter that you mentioned 'Arid Lands Botanical Gardens' as having an 'excellent selection'. My nursery boasts around 200 plants on display and I have a supply of well established plants available for sale.

We are located just off the National Highway as you approach Port Augusta from Adelaide. You turn off the highway to Stirling North and take the first turn left on the Quorn Road. We are the last house on the right.

Jim Thomson - Dooralong, NSW

(I have had a number of replies to the matter of a membership number/membership status as required by ASGAP for people to be members of Study Groups. I have contacted Jan Sked, ASGAP Study Group Co-ordinator - her answer to my questions appears separately. Jim's response appears to summarise the feelings expressed by many of you.)

I enclose a cheque for ... to keep me financial for a while. My Region, I suppose is Sydney, or possibly NSW. My Group is Central Coast. I haven't a clue about my membership number - although in this 'Big Brother' situation we seem to be entering, I'm sure that I have one somewhere. (it will be on someone's data bank!)

I paid my subscription in March at our ... meeting, so I suppose I'm financial until March 2001.

I certainly don't blame you for implementing the new rules of our parent organisation, but you may well have guessed that I am not at all impressed by the framers of the new regulations. It seems to me that every year we get further into Orwells' "Brave New World". Big brother watches us ever more closely. Our interests and information about us, are recorded by commercial interests and sold to others. The Government is currently recording massive amounts of information about small business people. Now ASGAP is behaving like a big brother in training.

For what end? Presumably to discourage people from joining Study Groups without paying their SGAP fees.

If there are those who can afford to be members of ASGAP, and don't join, but seek to be members of Study Groups, they are mean in behaviour and spirit. From my association with SGAP people I would say that they will be very few in number and may be ignored - treated with the contempt they deserve. There will also be those with interests in study groups who simply cannot afford normal fees - even the concession fees. It will reflect little credit upon us to kick these people out of our study groups.

There. That's off my chest.

PS The last twelve months have been consistently wet and humid. I've lost probably half of my prized eremophilas. Oh for a touch of South Australia's climate!

Cherree Densley - Killarney, Victoria

I recently had the opportunity to obtain a hot-house, but have had to remove several large eremophilas and other plants to make way for it. I cut the eremophilas back fairy hard and dug them up, and transplanted them. Have any other members had luck transplanting eremophilas? I'll let you know if they survive.

Norma Boschen continues to do a great job promoting eremophilas. She and her husband, Keith were our guests at SGAP Warrnambool recently and she showed a great collection of slides from their collecting trips. She gave me a small, healthy plant of *E. macdonnellii* she had grown from seed I had collected for her in the middle of the Simpson Desert in May 1998. She had used smoke water to induce germination. She also brought pieces of some of the new ones for our members to have a go at grafting. Hope we have success. Pieces I grafted 4 weeks ago (Mid April) are still looking 'fine and upstanding', so here's hoping. Most of them were cutting grafts, and I don't think the cuttings of myoporum have struck yet, although there are fresh buds shooting near the leaves, so they appear OK.

.... your idea of grafting onto struck cuttings seems to be a good one and I am going to give it a go soon. I put in heaps of cuttings as stock pieces, but a few days of hot weather and insufficient moisture around the leaves didn't help very much and lowered my success rate. I need to do some more before it gets too cold, but my new hot-house should be a help.

When should I remove the grafting tape? What have been the success rates of other members who have tried cutting grafts? I need some advice on hardening off those grafts too. I am such an impatient gardener but I don't want to rush the process.

The eremophilas in the garden here at Killarney continue to grow very successfully and be much admired. The New Holland honeyeaters love the eremophilas and are kind to the flowers. However, in the autumn we do get a flock of Singing Honeyeaters which come in from the beach - about 2km away, and they are very severe on the flowers. They work their way systematically over each bush and when they move on to the next, they leave a carpet of flowers!! They have such beautiful voices, I forgive them. They disappear back to the beach when the Coast Beard-heath (*Leucopogon parviflorus*) is flowering.

(I would have to agree with the comments re the New Holland Honeyeater - they are present in our garden throughout the year and each day can be seen working over every flower on a rather large and straggly plant of *E. glabra*. They seem to be able to establish the location of every flower One day I sat and watched from our bedroom window - the one bird visited every flower and as far as I could establish did not visit the same flower twice. Colin)

Michael Alp - Adelaide, SA

Michael rang to say that he had taken up the offer from Ken Warnes to visit his property at Owen in the mid-north of SA in response to the note about the germination of many seeds resulting from the early rains in his area this year. He reported that he collected quite a few and still had many of them growing on his own property in the Riverland of SA near Waikerie and that they were looking quite healthy.

Michael also reported that he had been experiencing trouble with scale insects, especially those white scales with red spots. He mentioned that malathion and white oil by themselves proved ineffective, yet a mixture of the two, in the recommended doses 'did the trick'.

Beverley Rice - Truro, SA

(In response to a question re the control/eradication of Christmas Beetle, Beverley, in a recent phone conversation made the following comments.)

She could not recall exactly where in NSW she came across this, but her recollection was that in uncleared areas where *Bursaria spinosa* was still growing in the understory, Christmas Beetle was not a problem, yet in areas which had been cleared and in which the shrub was not present, the Christmas beetles were a problem.

She understood that the reason was:- a wasp which lived in association with *Bursaria spinosa* also used the Christmas Beetle as a host for its own larvae. The details were a bit hazy and Beverley asked if anyone else had heard of this and if they could shed any more light on the topic.

Philip Docherty - Mullewa, WA

Mullewa's climate seems to favour the raising of eremophilas and I have been busy stocking my garden with plants, mainly from Mary Squire, Mukinbudin, and some from Zanthorrea Nursery in Perth. The garden is situated on a hill consisting of gravel over granite. Our annual rainfall is about 250mm, of mainly winter rain. To date I have had few fatalities, and those that did die were, I think, root bound.

Numerous eremophilas grow in the Mullewa Shire. I have tried to propagate only two, *E. glabra* subsp. *albicans* and *E. elegans*, with a differing degree of success. The former was by far the easier, it was simply a matter of placing it in the soil/potting mix and it struck.

In March of this year I made a trip up to the Murchison River, (in flood due to heavy summer rains) and I noticed beneath all the *E. maculata* bushes (all recently inundated with the flood waters)masses of seedlings sprouting. I wondered if this flooding was, maybe, the trigger that broke them out of their dormancy. With this in mind I am trailing an area where I pump out the waste water, (even though it's not rainwater) from or desalinator over an area of mixed seed to see if regular flooding will trigger them into action.

As it will soon be spring and what I perceive to be a favourable time to propagate cuttings; I was wondering if it would be possible to publish a step by step guide to propagation. Detailing cutting material, hormone gel(s) used, potting media, whether temperature control is important etc.

(References to the response to flooding have been written about in the Newsletter from time to time - it does appear as if there is a positive reaction. The article from Russell Wait below seems to suggest it does work on a smaller scale - we await the outcomes of Philip's trials. Perhaps others might like to try this and report on their results, Ed.)

TELECONFERENCE HOOK-UP FOR STUDY GROUP LEADERS

This was to have been held on July 22nd. It was decided at the last Conference that there should be a meeting of Study Group Leaders by Teleconference, to bring up to date all matters relating to the Study Groups and to allow for discussion by the Leaders on a number of issues which affect them and the running of the Groups. Unfortunately this was cancelled due to lack of support from too many leaders of Study Groups. What a pity - I thought that this would have been an ideal way to discuss matters of importance to Study Groups.

IN PRINT RECENTLY

I was pleased to see several articles on eremophilas in the June issue of *Australian Plants*, one by Jocelyn Lindner from Ouyen in the north west of Victoria, a second by Jan Hall from Yarrawonga, in north eastern Victoria both dealing with eremophilas as cut flowers. Also in the same issue is a reprint of the article which we printed in the Newsletter some time back from Paul Rezl in the Czech Republic dealing with seed germination.

We still have copies of *Eremophilas for the Garden*; these sell at $8 each plus $1.50 postage. Also available is the booklet of edited issues of the Newsletter to #31, at $8.50 posted, as well as back issues of the Newsletter @ 50 cents per issue.

STUDY GROUP WORKSHOP - TRURO, SA

In the last Newsletter the date for the workshop was not stated, but it was indicated that it would probably be in October. Due to other commitments in October for both Beverley and myself, it has been decided to hold the workshop on the weekend, **September 16th & 17th**. This might help some who were unsure about the October dates. Beverley Rice's property is just north of the small township of Dutton, on the Truro - Eudunda Road. This is about an hour's drive north-east of Adelaide on the main Adelaide to Renmark Road.

The Saturday programme is planned to be run along the lines of the weekend held at Warracknabeal/Horsham two years ago. On Sunday we plan to travel from Truro to the River Murray town of Morgan to view a wild population of *E. maculata* which is well known to locals for its diverse colour range; in this area it is possible to see another half dozen or so *Eremophila* species in the wild, including *E. oppositifolia*, *E. scoparia*, & *E. alternifolia*. Already some arrangements have been made for some interesting sites to visit. I am told that there is also some very interesting viewing for bird-watchers and for those interested in plants other than eremophilas.

As soon as we know who is attending we will arrange for a team of presenters to provide a worthwhile programme. It is intended to offer sessions on the usual 'wants', like grafting, raising from seed and cutting preparation and care. If you would like anything additional to this please let Colin know. Those attending will also be asked to bring some cutting material for exchange - this has in the past proven to be a very welcome part of our get-togethers. We may also encourage some of the more adventuresome growers to bring some of their grafted plants for exchange or sale; in this way we can extend the distribution of the less commonly grown species and as a result, allow for them to be more widely grown by members of the Study Group - after all one of our objectives is to study the growing requirements of the genus as a whole, and the best way to do this is to ensure that the species are being grown in as wide a set of conditions as possible.

Cost of registration will be $30. This will include the following:-

Morning and Afternoon Teas on Saturday
Lunch on Saturday
a Three Course Meal (probably with a choice) at the Weighbridge Motel in Truro (including the use of facilities for an after-dinner 'meeting', with supper
Picnic Lunch on Saturday - probably near Morgan
Papers as presented at the weekend, including postage etc.
and of course the friendship of others with a like interest - which no cost can be placed on

Accommodation is available in Truro: the new, relatively small Weighbridge Motel has five rooms, so you would need to be quick, but there are plenty of motels in Nuriootpa, Angaston and Tanunda, all of which are less than a twenty minute drive away. For those who wish to camp out, there is plenty of room on the property, but you will have to bring your own camping gear or caravan. **Please bring a thermos flask for Sunday's outing.**

Please now confirm with Colin, by August 9th, that you will be attending - details will be sent to those who do so. Thankyou to those who have previously expressed an interest. It has been decided not to print all of the details in the Newsletter, since they only apply to the ones who will be attending, and it saves on costs as well.

I would like to thank Beverley for the initiative she has taken in arranging this weekend and for the background work which she has done in helping to 'get it off the ground'. I hope that you, the members, will make the most of this opportunity to meet together once again.

MORE SEED TRIALS

Here are the results of my attempts at more *Eremophila* seed germination trials; most of the seed was collected in the wild.

I levelled out an area in the plantation and put a bank around it and one down the middle - the total area is 2m by 5m. The soil is a sandy loam, over a clay loam.

There were 61mm of rain on 21/22 Feb and on 26 Feb I split the seeds into two lots. One lot was soaked in water for 24 hours and the other in smoked water for 24 hours. The whole area to be planted was filled with water to a depth of about 30mm and the next day (27 Feb), the seeds were sown by making a drill and tipping water and the seeds into the drill and then covering. The same treatment was used for the smoke treated seeds.

75% shade-cloth was placed over the ground to try to slow down the evaporation rate until the first seed came through on 5 March.

A 3692-9, *E. glabra* (Leonora) and 2182 E. gilesii were the first through. On 6 March I recorded 3692-9 (6 seedlings); 3385-9, *E. abietina* (the one and only); 3276-9, *E. battii* (2); 4263-9, *E. forrestii* (2) - when I picked these seeds up I though they were *E. fraseri*; 2182-9, *E. gilesii* (6); 2182, *E. duttonii* (1) - some of these seed were from under a yellow flowering plant; 3274-9, *E. falcata* (1) - 4 are now potted up.

There were also three other collections of *E. gilesii* and they did not come up until 24 April.

Others to come up were 5429, *E. densifolia* subsp. *pubiflora* (1) - which died later; 5447-9, *E. racemosa* (25); 2329-9, *E. serrulata* (10); 3365-9, *E. gilesii* (4); 2223-9, *E. sturtii* (2); 3558-9, *E scoparia* (5); 3846-9, *E. metallicorum* (1) - died later; *E. nivea* (lots germinated); 3040-9, *E. gilesii* (2); 2897, *E. gilesii* (2); 2168-9, *E. neglecta* (2).

The ones underlined are those which germinated after water treatment only.

The seeds were watered by flooding when needed.

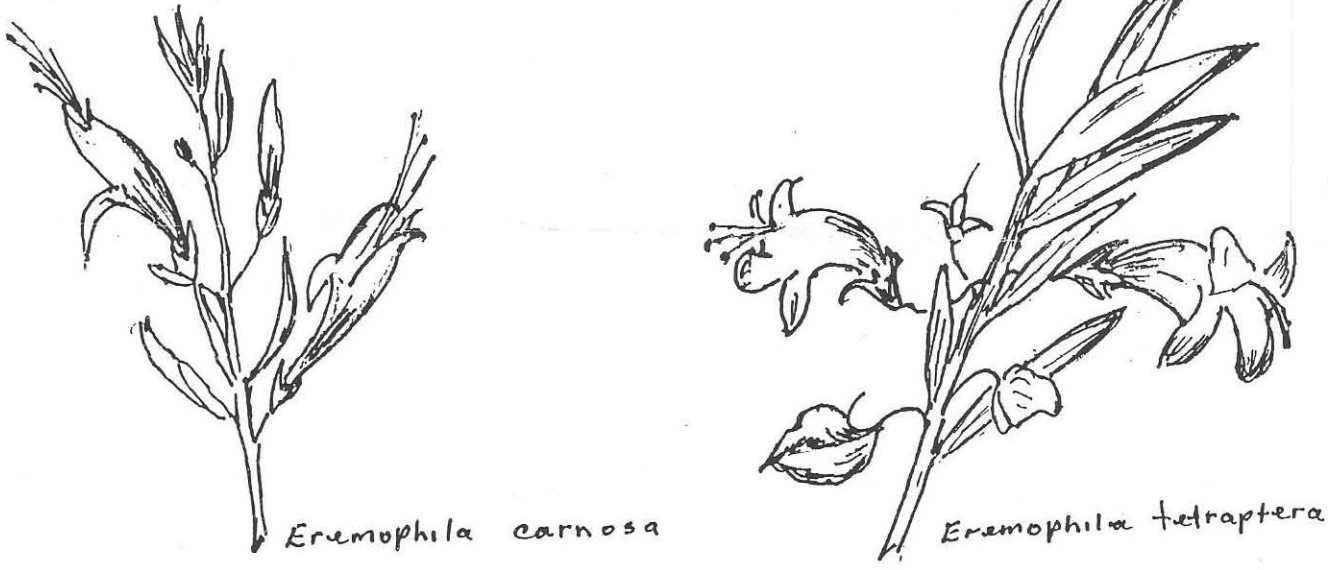
The only three which did not germinate were:- *E. freelingii*; 5262-6 an unknown species; and *E. glabra*. Overall it was a good result for the number of species, but the percentage germination was low. The best were 3692-9, *E. glabra*; 5447-9, *E. racemosa* and *E. nivea*.

The smoked water was 1L of water to 150mL of smoke concentrate. 250mL of this mixture then put into a 1L yoghurt container with the seeds.

After this success I wondered about the concentration; so on 16 March, other seeds were soaked for 24 hours using 100mL per 1L and 300mL per 1L. Seven lots of seed were tried and only one has not come up yet (21 June). *Eremophila calorhabdos* only first appeared on 31 May. The first to appear was 6182-7, *E. compacta* on 24 March, with most being about 17 May (I did not record between these two dates). The only one to be better was 3336-7, *E maculata* (20) for the 300mL/1L and (9) for the 150mL/1L. All of the others gave similar results.

The first experiment was tried on a sand hill with *E. willsii*, *E. gibsonii* and *E. platythamnos*, since these grow in sand. I had no success.

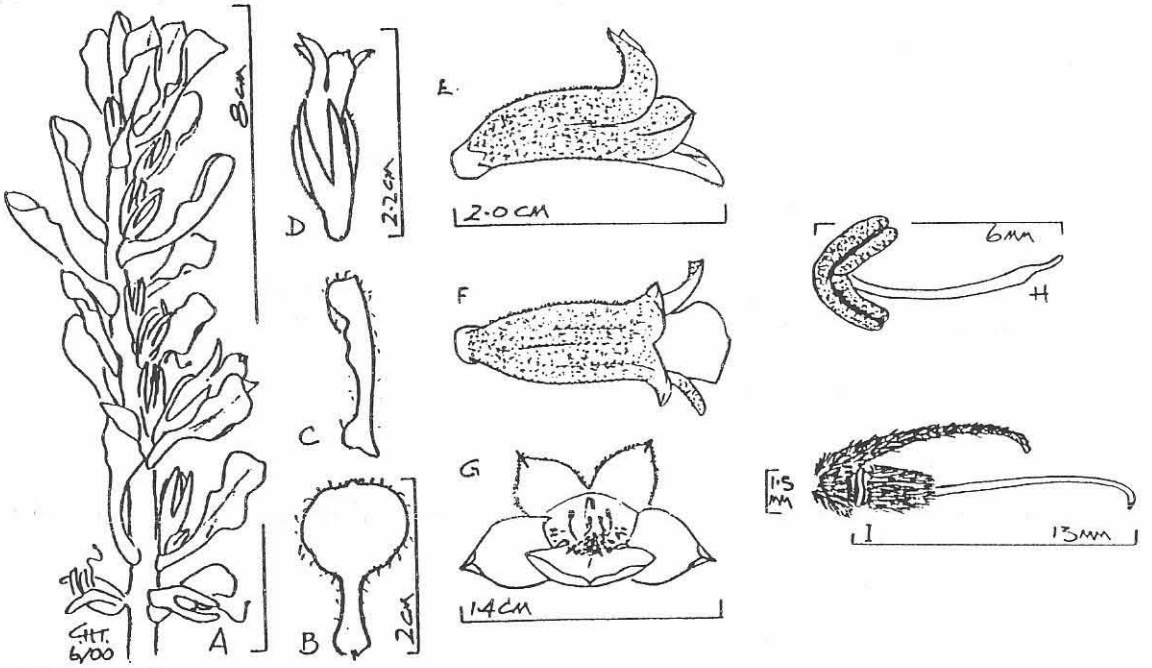
Russell Wait - Natya, Vic



SOME LESS COMMON EREMOPHILAS

We very much appreciate the work of Colin Theakstone in preparing the artwork of the two species below. They are his 'first attempts' at such an exercise and I think he is to be congratulated on his outcomes. I am sure that members will appreciate the offer made by Colin in response to a request a little while back for some more artwork in our Newsletter. The specimens were supplied by Russell Wait.

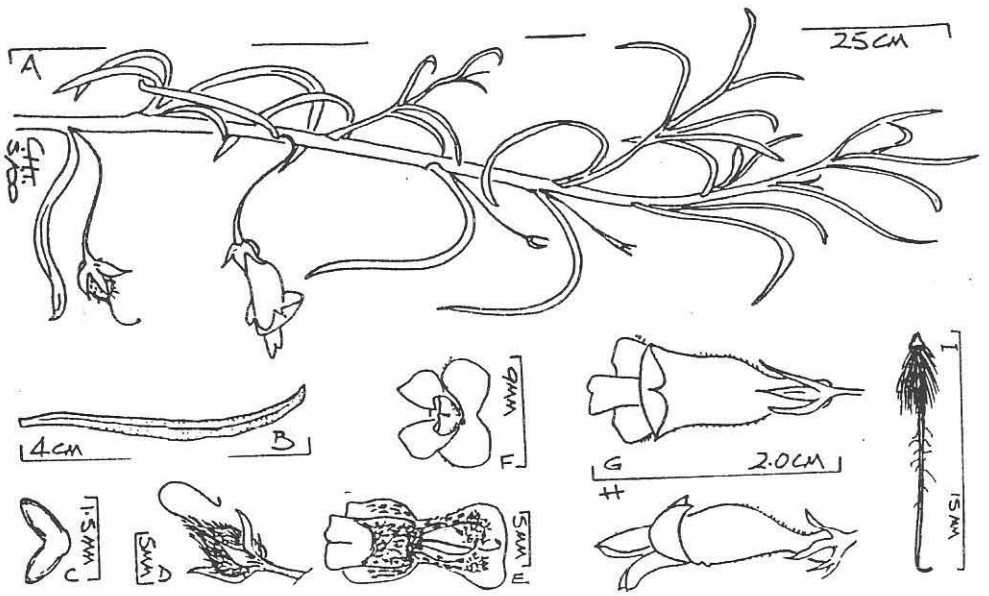
E. warnesii has grey foliage and blue flowers; it is a low bush, 0.8m x 1.3m. It was mostly growing in amongst grass on the side of a mountain, but was also found at the bottom in grass or under acacias. It grows SE of Mount Augustus, WA.



Eremophila warnesii

A, habit. (NB drawing does not show the complete covering of dense, pale 'down' over all parts, with the exception of the inside of the petals.) **B&C**, leaf - top & side. **D**, flower with calyx. **E,F&G**, corolla - side, top & front. **H**, stamen. **I**, gynoecium. (NB base of gynoecium still attached to calyx, with 4 of 5 calyces removed).

3335-7, sp. aff. *E. granitica*, with mostly blue, but the occasional odd, white flowers, grows on the Gunbarrel Highway, East of Carnegie, WA. It is a low bush, 1m by 1.3m, and was found growing under mulga with *E. latrobei*, *E. maculata* and *E. longifolia*.



sp. aff. *Eremophila granitica* 3375-7

A, habit. **B**, leaf. **C**, leaf-cross section. **D**, fruit (very hirsute, calyx relatively glabrous). **E**, flower (cut open) front view. **F**, flower - front view. **G&H**, flower - top & side views. **I**, gynoecium.

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