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Association of Societies for Growing Australian Plants

# EREMOPHILA STUDY GROUP NEWSLETTER No. 82

May 2004

Since preparing the December issue a number of interesting events have taken place. Myrnie & I were able to attend the National Conference, held in Launceston from 12th January till 16th January. Unfortunately other commitments in Hobart prevented us from being there for the final two days.

The lecture programme was excellent, mostly focused on the geology and flora of Tasmania, but sufficiently arranged to make it interesting for us, as visitors, to appreciate what we saw when we went about looking at the scenery and the plants of the 'South Island'.

I was not able to present a display on this occasion, partly because I did not know what was arranged for the Study Group Leaders and also because it was not possible to take plant material into Tasmania without a lot of difficulty.

I thank those who have contributed articles for this issue – it is good to be able to put together a Newsletter without having to work out what I am going to use to fill the spaces to make it look adequate.

I still have a small amount of Nescofilm® for sale and will be able to purchase more if it is required. Prices are as advertised previously. In addition there are still copies of *Eremophilas for the Garden* available, also at previously advertised prices.

**Future Workshops.** At the recent Study Group workshop, the question was asked "when will we be having the next one and where will it be?" We had members from Queensland and Western Australia and each was asking about having one in their home state.

Obviously the questions arise: Is there enough interest? Where would it be held? Who will be prepared to do the necessary ground work?

The next ASGAP Conference is to be held in WA and since the 'home' of eremophilas is WA it might be possible to organise something at or around that time. To try to arrange anything around conferences is tough, since there is such a tight schedule, and extras are difficult to slot in. If we have enough members attending the Conference and they wish to have a Study Group workshop as an add-on, then I am prepared to do whatever I can from a distance. The amount of time available could be just one day and that might be a problem – a lot of travel and expense for such a short time, unless you are a registrant at the Conference.

## SUBSCRIPTION RENEWAL

**If you find a RED STICKER attached to the top Right Hand Corner of this Newsletter IT IS TIME FOR YOU TO RENEW YOUR SUBSCRIPTION.**

**SUBSCRIPTIONS ARE DUE BY THE END OF JUNE**

**Please forward $5 to Colin Jennings to ensure continuation of membership of the Study Group**

## FROM YOUR LETTERS

**Alec Hawtin – Irymple, Vic**

After the workshop and Russell's demonstration of smoking seed etc., I made a smoke outfit using some ducting and a bee-keeper's smoker.

I used two shelves from an old fridge to sit the containers for potting mix on. The containers were converted dip tins; used for grape picking and the old way of dipping fruit prior to drying. They are made full of holes and I lined them with mesh to stop the potting mix from falling through and for an easy way of bagging the mix lifting it with the mesh.

I used smoke water, soaking some *E. bignoniiflora* over night and then planting them in the smoked mix and some germinated in 9-10 days. The fruits had been cut in half long-ways before smoking overnight and placed one in each square of a polystyrene seed tray.

There has been no further germination after the initial growth period. The seedlings have been potted on and seem to be OK.

Our locust friends are hatching so I will probably spray "Green Gard' again soon before they mature. We only found a few adult pairs of locusts over winter; nothing like the previous 2 to 3 years when they damaged our eremophila bushes.

The local area, bush grown *E. maculata* have had some flowers and are putting on some growth after our long dry spell was broken by some welcome rain.

I have tried grafting without much luck and will persevere, hoping to succeed in the future, I think that I have more thumbs than fingers when grafting small stuff. It's OK when grafting or budding grape vines, they are bigger and easier to hold.

**Charles Farrugia – Seven Hills, NSW**

So far this summer in Sydney has seen days of very high temperatures, high humidity and imposed water restrictions; with few rainy days which did not make any difference to the soil.

During this period I lost quite a few prostantheras, (which are being replaced by eremophilas), but only two eremophilas. *Eremophila glabra* 'Burgundy' a prostrate form appeared dead, but three weeks later new growth started to appear, but then a week further on after very high temperatures this plant's resurrection ended. The other to succumb was a lime-coloured *E. glabra*, which probably died because it was being thoroughly overshadowed by a magnificent *E. nivea*. Apart from these two all of my other eremophilas are doing well.

**Gordon Brooks – Castle Hill, NSW**

Beverley Rice's comments in the last newsletter seeking descriptions of the different forms of *E. glabra* would be welcome here. The same goes for *E. maculata*. Indeed there are forms of *E. maculata* without spots in the throat. How do we distinguish this from *E. racemosa* unless their place of origin is known?

We are growing a number of hybrids but I must confess to buying, or receiving gifts of such plants, so really have no useful information to pass on. Some have come from Peter & Marion Lang's nursery in Mildura and may have come from material supplied to them by Russell.

**Ken Warnes – Owen, South Australia**

Two questions regarding chimeras. Can some be described as hybrids of asexual origin and can they set viable seed? I gather not from the example of *Sanseveria* but the plant at Russell's didn't seem to fit that description.

## EREMOPHILAS IN WESTERN SOUTH AUSTRALIA

Russell Wait, in his report in Newsletter #81 of our few days together, mentioned only the two more significant species we collected, but as a proud South Aussie, I would like to tell of a few others which we found.

Firstly, we travelled north from Ceduna on a 200km coast to railway (Transcontinental) sand hill crossing known as Goog's Track. Small, grey-leafed forms of *E. glabra* made a promising start and once into the sand proper we soon came across *E. platythamnos* subsp. 'villosa' at the base of the dunes; the subspecies identified by the villous hairs on the calyx and corolla.

Further north a fine leafed form of *E. gibsonii* was common on the crest of the dunes. It is not very attractive, but obviously a great favourite of the *E. platythamnos* subspecies as the two were hybridising freely. On one dune we found over a hundred seedlings with the greater majority hybrids. The seed must come from the *E. platythamnos* subspecies, the pollen from the *E. gibsonii.* Russell, who has seen this hybrid on several occasions, says that it is rare to find hybrids amongst *E. gibsonii.* This hybrid is so commonly found that Bob Chinnock allocated the name 'arenaria' to it.

*Eremophila paisleyi* subsp. 'paisleyi' was a common, yet unremarkable species, but a small growing, acute leafed *E. willsii* subsp. 'integrifolia' was much more attractive. I had promised that we would see this species at the Barton RS, but we found it a long way south-east of there.

Once we reached the railway, we traveled a further 250km west; mainly between the dunes, to Ooldea on the Nullarbor Plains. As described, we collected *E. arachnoides* subsp. *tenera* over a 20km stretch, ending just west of Mt Christie RS, thus extending the range of this population. Unfortunately the records were in Russell's press. There was lots of *E. latrobei* subsp. *glabra,* the same form as found nearly to Port Augusta. At Barton RS the promised *E. willsii* subsp. 'integrifolia' was located.

Further west, some spectacular *E. alternifolia* and at Immarna RS the large crenate, very viscid form of *E. glabra* found in the Ooldea Range. The Ooldea Range is really the stabilized coastal dunes that ring the margins of the Nullarbor Plains and carry a very distinctive flora. The *E. gibsonii* through here was much better, more like those of Central Australia. This stretch of country was in wonderful condition, with a great array of large trees and flowering plants.

At Ooldea RS, in the north eastern corner of the Nullarbor, it seemed mush drier. The most easterly recorded population of *E. hillii* is 1km south of the line and is the home of the plants in cultivation. The form here tends to be low and spreading. We found only six plants of E. 'decussata', many fewer than in 1969 when it was brought into cultivation as *E. delisseri*, from which it has since been split by Bob Chinnock. Several dry-looking plants of *E. battii* and many *E. alternifolia* & *E. latrobei* were sited, which from now on had a broader leaf. We failed to locate *E. delisseri*, collected here by an SGAP group in 1971.

We travelled into the Maralinga-Tjaratja Lands, (armed with the appropriate permit), finding more *E. hillii* as we drove to intersect the Watson-Maralinga Road. Right at Maralinga Gate was *E. paisleyi* subsp. *paisleyi*, a lovely, rounded, billowing shrub to 2.5m high. The flowers were small, but there were up to ten in each axil. It looks as if this is one we have failed to propagate. Next time!!

Back to the railway at Watson RS and west to Cook; with only *E. latrobei* as company; apart from rocks and old dog spikes, (from the railway line maintenance).

Again utilizing our permit we traveled north on the Yoke's Hill road, across 100km of rocks. The purple-foliaged *E. maculata* which Russell has described are obviously scattered widely across the Nullarbor. The colour must be a combination of genetics, soil and environment, as the inside of the bush and the underside of the lower leaves was green. Not all plants were so coloured. The colour has faded in the nursery, time will tell if it reappears, but they are not easy to strike.

We eventually found two plants of *E.* 'dendritica', another new species which Bob has separated from *E. delisseri.* Then we found the eight *E. delisseri* that Russell listed. My description: "take the best *E. nivea* you have seen; make a rounded bush, add 50% more flowers and you're on the way." SUPERB!!!

Further on we found a large area of mixed *E.* 'dendritica' and *E. hillii*; the latter were more open, with smaller, rounded leaves, similar to those collected north of Rawlinna by Russell. The best flowering forms were a psychedelic red, BRILLIANT!!! In about ten square metres were to be found also *E. battii* and *E. latrobei.* Who said nothing but saltbush!

Off the plain, onto some rolling country and then again into the Ooldea Range we came upon a wonderful selection of rare and unusual eucalypts. We collected *E. arachnoides* subsp. *tenera* again, not surprising, as it occurs at Warburton and is probably widespread and continuous north of the Ooldea Range in inaccessible country. The two

plants of a soft, hairy, grey-leafed *E. platythamnos* subsp. 'villosa' completed the better of our collections, but as these are scattered on a roadside near Laverton, I guess we'll have to do it all again. Personally I can hardly wait.

**Ken Warnes**

## ABERRATIONS AND MORE HYBRIDS

Having seen the chimera at the Study Group weekend leads me to describe some other aberrant growth observed or reported in eremophilas.

On the way to Natya I visited Tom Loffler at Waikeri, a former Study group member who still has a good collection. Some of his work on seed germination is in early newsletters. Tom's plants 'do it tough' and among them is a mature plant of what we in South Australia call the Gawler or Roseworthy forms of *E. glabra*, depending on the nursery from which it is purchased. This form was known from a single, self-layering plant covering a 10m by 3m roadside bank. The foliage is small, dense, broad lanceolate, slightly toothed; flowers are small, orange-red, with the main flush in October. The original is now gone, a victim of sub-division. Very few had the pleasure of seeing the original plant but its progeny are widely grown in SA at least and there are plans to replant it.

In the middle of Tom's plant, which is several metres across, is what appears to be a typical Adelaide Plains, low-growing form of *E. glabra*, which Tom assures me is growing from a damaged stem of the groundcover plant. Apparently enough grass grew through the plant to carry a fire and when this plant recovered this new growth appeared. Tom has read that the growth from various depths of the damaged tissue can vary and that this is the explanation. Can anyone explain further?

The question that immediately springs to mind, was the Gawler plant a result of just such an occurrence in the past, but in reverse? I've never seen or heard of another plant like it and the new growth on Tom's plant is very like that of the Owen-Pinery area 35km north. An orchid enthusiast told me that 'there's lots of it at Curramulka" (a town on the York Peninsula), but I have never found it there.

The other strange happening that I have observed and which was also reported to me recently by Denise & Geoff Winning of Goodwinii Nursery, is the appearance of five-pointed flowers on short side-shoots. These odd flowers always occur terminally, i.e. they take the place of the growing tip, have a short tube and flare out like miniature lilies. I've only seen this on *E. maculata*, as was the Winning's plant. A scientific friend saw mine and said that it was a well documented phenomenon, but I don't recall the details. Are there any more starters or any other examples?

**Ken Warnes**

## MORE ON HYBRIDS

While at Tom's I had the chance to discuss some of his hybrids. I'm pretty certain that the *E. nivea* x *E. drummondii* common in cultivation is from his property. I recently saw the same hybrid growing in front of the Uniting Church in Kimba and I believe the cultivated plants are from Tom's original. This makes the un-registered 'Eyre Princess' a real misnomers.

The other hybrid becoming more widely available is not *E. nivea* x *E. carnosa* as it is usually labelled. Tom deduced this from the juvenile foliage and agrees that it is more likely *E. nivea* x *E. christophorii*. Just look at the plant and it's pretty obvious. The two parents grow together in Tom's garden so please try and make this correction.

Another apparent hybrid comes from the first form of *E. biserrata* in cultivation, the smaller leafed, denser growing one. This must have crossed with a low growing or prostrate *E. glabra*, as the progeny is still virtually prostrate but with olive-green foliage and red flowers. Not as wide-spreading as *E. biserrata*, yet!!! Since my visit, Tom has told me that he is 'all fired up to get back into seed germination'. I sense trouble ahead.

On the swap table at the Study Group weekend were at least two new *E. maculata* hybrids. One brought in by Frank Fitzpatrick appeared to be a purple-stemmed *E. maculata* from Nyngan, crossed with a white *E. viscida*. The two grow side by side in his garden at Walpeup and it was described in Newsletter #80. Frank calls it Walpy Glen and has since sent me some pieces of this and others of similar parentage, which are planted in a separate section of the garden. The other appeared to be *E. maculata x E. alternifolia* but I do not know who brought it in; Peter Hall is one who is trying to strike it.

Both of these plants had prominent purple markings on a pale background and had striking flowers.

One of the talking points at Russell's was the apparent hybrid between *E. maculata* and *E. glabra*. This was a dense bush with orange buds and pink flowers. He plans to register this plant so it was 'hands off'. The *E. maculata* parent came from seed collected from a cutting grown plant from Goyder's Lagoon, growing in my garden, but as other *E. maculata* were present, this seedling itself is probably a combination of two forms. We each independently suggested that the *E. glabra* is probably one collected by Ray Isaacson in WA, many years ago – it is a dense, rounded, olive-grey, orange-flowered plant.

The pollen provider in these hybrids is usually only an educated guess, but it is amazing how often there is something about the plant which gives a clue. If you see something different just step back, take a deep breath, observe and think hard. If you are playing around with seed please keep good records. If you see it in the field, look around and ask yourself "What's been going on here?"

There is obviously enormous potential for anyone wanting to create an entirely new world of hybrid eremophilas. It won't be me, but as I write, I have two plants of volunteer seedlings from grey-leafed *E.* 'decussata' that probably have *E. caerulea* from 4m away as a parent. The leaves are broad and linear.

One that's been around for some years, and I am told is becoming popular in Victoria, is probably grey-leafed *E.* 'decussata' x *E. parvifolia*, from 15m away, judging by the foliage shape and colour and the flower type and markings, and is erroneously called 'Warnes' by some nurseries. (See Newsletter #78:4)

**Ken Warnes**

## HYBRID LISTING

Ken Warnes supplied to me a listing of hybrids which are known to him. He presented it in a document which I have modified slightly due to space and I hope ease of reference.

Attached to this Newsletter is a summary of what has been put together so far about the hybrids which are known in cultivation or in the wild. Ken Warnes prepared the original and it has been perused by a number of other members of the Study Group. If any member of the Study Group has any comments to make about the contents or would like to advise us of any additional information, I suggest that you send it in to me and I will pass it on to Ken.

Bob Chinnock has made the following comments re the table and its contents in a reply to notes from Ken Warnes in April 2004

"Interesting lot of hybrids, but I still question whether the *E. interstans / E.dempsteri* is one. I presume that you are referring to the lilac *E. interstans* in cultivation. I still think it is just a colour variant. Lilac is common in that group and it is probable that *E. interstans* is a derivative so it is likely that ancestral forms from which the group (*E. interstans, E. dichroantha* and *E. dempsteri*) was derived were lilac-purple flowered. The colour gene for lilac is probably in *E. interstans* but recessive. You get pink forms of *E. paisleyi*, *E. sturtii* and *E. mitchellii* even though the flowers are normally white."

"With regard to the hybrid between *E. drummondii* and *E. nivea*: "The plants in cultivation are most likely from the Kimba plant, as I brought back a lot of cuttings (which were distributed on my return.) I have enclosed below the details that appear in the table of hybrids that I am including in the monograph. I was giving a talk at Kimba and was shown the said plant which had come up in the front of the church. I concluded that it was a hybrid between *E. nivea* and *E. drummondii*. Both parents were present, close together. I have a plant of it in my garden which was certainly from that source."

Notes from that collection read:
"*E.drummondii* x *E. nivea* Kimba, E.P., S.A R.J. Chinnock 9168 (AD) Spontaneous in Church gard. 30.xi.1996"

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| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | code ref | ref | parent 1 | parent 2 | parent 3 | (W) (H) | location | source | potential | cultivar |
| 2 | 76x73 | 1 | *cuneifolia* | *phyllopoda* | | W | Pilbara (WA) | Wait | ? | |
| 3 | 202xM28 | 1 | *alternifolia* | *M. platycarpum* | | W | Mt Laura, Whyalla (SA) | Chinnock | high | |
| 4 | 202x126 | 2 | *alternifolia* | *bignoniiflora* | | H | Mildura (V) | Schilling | high | |
| 5 | 59cx60 | 1 | *platythamnos* subsp. *gibsonii* | *gibsonii* | | W | W/ SA, WA?/NT | Wait/Warnes | moderate | |
| 6 | 126x125 | 1 | *bignoniiflora* | *polyclada* | | W | Mildura, Lake Wallawalla (V) | Schilling | high | |
| 7 | 126x125 | 2 | *bignoniiflora* (f) | *polyclada* (m) | | W | Emmett-Isiford Rd (Q) | Chinnock | high | |
| 8 | 126x125 | 3 | *bignoniiflora* (m) | *polyclada* (f) | | W | 20km W Emmett (Q) | Warnes | high | |
| 9 | 126x125x134a | 4 | *bignoniiflora* | *polyclada* | *divaricata* (?) | W | Mildura, Lake Wallawalla (V) | Schilling | V. high | |
| 10 | 190x192 | 1 | *biserrata* | *glabra* | | H | Waikerie (SA) | Loffler | good | |
| 11 | 149bx171 | 1 | *bowmannii* subsp. *latifolia* | *cordatisepala* | | W | N. Jundah (Q) | Warnes | good | |
| 12 | 149bx153a | 2 | *bowmannii* subsp. *latifolia* | *latrobei* subsp. *latrobei* | | W | E. Windorah (Q) | Chinnock | | |
| 13 | 34axD4 | 1 | *caerulea* subsp. *caerulea* | *Dioscera violacea* | | W | WA ? | Chinnock | interest | |
| 14 | 55xM28 | 1 | *crassifolia* | *M. platycarpum* | | W | Waikerie (SA) | Mack | interest | |
| 15 | 136x24a? | 1 | *decussata* | *parvifolia* subsp. *parvifolia* | | H | Owen (SA) | Warnes | high | |
| 16 | 136x.... | 2 | *decussata* | unknown | | H | Owen (SA) | Warnes | ? high | |
| 17 | 11x9 | 1 | *dempsteri* | *psilocalyx* | | W | S Norseman (WA) | Chinnock | moderate | |
| 18 | 11x14a | 2 | *dempsteri* | *interstans* subsp. *interstans* | | W | N Norseman (WA) | Chinnock | V. high | 'Blue Interstans' |
| 19 | 188x192 | 1 | *denticulata* | *glabra* | | H | Monarto (SA) | Govt. nursery | screening | |
| 20 | 134ax125 | 1 | *divaricata* subsp. *divericata* | *polyclada* | | W | Mildura, Lake Wallawalla (V) | Schilling | V. high | 'Summertime Blues' |
| 21 | 43x118 | 1 | *drummondii* | *rotundifolia* | | H | Owen (SA) | Warnes | high | |
| 22 | 43x38 | 2 | *drummondii* | *nivea* | | H | Kimba (SA) | UCA | moderate | |
| 23 | 43x38 | 3 | *drummondii* | *nivea* | | H | Waikerie (SA) | Loffler | high | 'Eyre Princess' |
| 24 | 214x185a | 1 | *duttonii* | *maculata* subsp. *maculata* | | W | SA/NSW/NT (>6 sites) | Warnes/Clark | high | |
| 25 | 18xsp.nov | 1 | *falcata* | sp. nov. 'sulcata' | | W | Plumridge Lakes (WA) | Goods | high | |
| 26 | 84x192 | 1 | *georgei* | *glabra* | | W | WA | Wait | interest | |
| 27 | 60x59c | 1 | *gibsonii* | *platythamnos* subsp. *villosa* | | W | inland SA | Wait | moderate | |
| 28 | 64ax153 | 1 | *gilesii* subsp. *gilesii* | *latrobei* | | W | Cunnamulla-Charleville | Cockburn | good | 'Yana Road' |
| 29 | 78ax79a | 1 | *goodwinii* subsp. *goodwinii* | *willsii* subsp. *willsii* | | W | Old South Rd. Alice Springs (NT) | Warnes | good | |
| 30 | 78ax80 | 2 | *goodwinii* subsp. *goodwinii* | *prostrata* | | W | Rainbow Valley | Isaacson | good | 'Rainbow Gem' |
| 31 | 99x78a? | 1 | *hughesii* | *goodwinii* subsp. *goodwinii* | | W | Giles Weather Station (WA) | Bizzae | good | |
| 32 | 181x202/185? | 1 | *laanii* | *alternifolia/maculata* ? | | H | Owen (SA) | Warnes | poor | |
| 33 | 185ax185b | 1 | *maculata* subsp. *maculata* | *maculata* subsp. *brevifolia* | | H | Warracknabeal (V) | Boschen | high | |

| | A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|---|
| 34 | 185ax186 | 2 | *maculata* subsp. *maculata* | *racemosa* | | H | Warracknabeal (V) | Boschen | high | |
| 35 | 185ax192 | 3 | *maculata* subsp. *maculata* | *glabra* | | H | Natya (V) | Wait | V. high | |
| 36 | 185ax210 | 4 | *maculata* subsp. *maculata* | *viscida* | | H | Walpeup (V) | Fitzpatrick | V. high | |
| 37 | 185ax202? | 5 | *maculata* subsp. *maculata* | *alternifolia* | | H | Study Group Swap | | V. high | |
| 38 | 38x135 | 1 | *nivea* | *christophorii* | | H | Waikerie (SA) | Loffler | good | |
| 39 | 38x ? | 2 | *nivea* | *?* | | H | Natya (V) | Wait | V. high | |
| 40 | 115x132 | 1 | *oppositifolia* | *scoparia* | | W | Reptile Park, Whyalla (SA) | Hudson | high | |
| 41 | 115x201 | 2 | *oppositifolia* | *serrulata* | | W | Mt Laura, Whyalla (SA) | Hudson | moderate | |
| 42 | 130x132 | 1 | *pantonii* | *scoparia* | | H | Owen (SA) | Warnes | moderate | |
| 43 | 130x135 | 2 | *pantonii* | *christophorii* | | H | Owen (SA) | Warnes | good | |
| 44 | 24ax132 | 1 | *parvifolia* subsp. *parvifolia* | *scoparia* | | W | W/E Nullarbor | Chinnock | moderate | |
| 45 | 80x79a | 1 | *prostrata* | *willsii* subsp. *willsii* | | W | Rainbow Valley | Isaacson | high | |
| 46 | 118x43 | 1 | *rotundifolia* | *drummondii* | | H | Owen (SA) | Warnes | high | |
| 47 | 11x9 | 1 | *dempsteri* | *psilocalyx* | | W | S Norseman (WA) | Chinnock | moderate | |
| 48 | 31x39? | 1 | *verticillata* | *microtheca ?* | | H | Adelaide | Chinnock | low | |
| 49 | 133ax132 | 1 | *youngii* subsp. *youngii* | *scoparia* | | H | Owen (SA) | Warnes | moderate | |