

Australian Native Plants Society (Australia) (ANPSA)

Eremophila Study Group Newsletter No. 116

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Eremophila macdonnellii – Simpson Desert form (grafted) – from Karlo Taliana

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Letter from the Editor

Welcome to the February 2017 edition of the Eremophila Study Group Newsletter.

We had some sad news this month about the passing of two great supporters (see next column). We are grateful for their contributions to our little group and are very sorry for their families' losses.

We have had 35 expressions of interest in our **ESG Gathering in South Australia in September 2017**. Those who have responded will be sent emails if/as plans develop. It is not too late to express interest, through www.surveymonkey.com/r/ESG_SA_2017

Since the last Newsletter I have sorted through the documents held by our previous esteemed leader, Colin Jennings and delivered to me by Ken Warnes in September. The Australian National Botanic Gardens has accepted a set of newsletters for their library. Colin Jennings had also developed a collection of pressed Eremophila specimens, with individual dried specimens placed on to backing paper, covered with plastic and held down by sticky tape. Unfortunately, no record was kept of provenance and hence these specimens are not of any academic value (plus, the sticky tape is disintegrating and the plastic is not of archive quality). I intend, however, to scan each one and put them on our website so there is a continuing record of this collection.

Finally, I had the privilege of presenting about the genus and the Study Group to the November meeting of the Canberra/ACT branch of ANPS. This was well received and resulted in five new members on the night, and sale of some of the remaining stock of our Newsletters 1-30 book. I now have a standard slide set available, and would be happy to share this with others if you are speaking at any events.



Lyndal Thorburn
Leader and Newsletter Editor,
Eremophila Study Group

Vale Keith Pitman

We have learned, sadly, of the recent death of Keith Pitman in South Australia. Members who attended the South Australian Eremophila workshop a few years ago will recall his massive knowledge of grafting and his willingness to give time our cause. He was a great supporter over many years and we should record his assistance in establishing many new species in cultivation. He was a life member of ANP South Australia and was also an authority on Verticordia.

...and Tim Kolaczyk

We have also heard in the last week of the shock death of member Tim Kolaczyk. A new member of the Study Group, Tim had moved recently from NSW to SA and had become prominent through his enthusiastic support of Eremophilas at the Arid Lands Botanic Garden and as co-organiser for our Study Group weekend in September 2017. Photos of his are in this newsletter and he has been a great contributor for the short time he has been a member.

His family is in all our thoughts.

What's New in the Study Group

Website Challenge

Your challenge for 2017 is to provide more photos for uploading to our web page, (<http://anpsa.org.au/erem4.html>), and while we are at it why don't we try to get all the Eremophila species on that page?

To be accepted photos must: be at least 1MB in size; have good focus (preferably good depth of field); be taken by the person submitting them and be taken in strong daylight.

Please email to the editor and make it clear they are for website submission.

New members

We have had an influx of new members since our last newsletter. Welcome to John Carter (ACT), Jennifer Carter (SA), Robb Grundy (NSW) Ronda Hall (SA), Christine Leary

(ACT), Neil Marriott (Vic), Phil Price (ACT), Karlo Taliana (NSW) and Ben Walcott (ACT).

The Study Group currently has 118 members, of which 35 are from Victoria, 22 from NSW and 20 from SA. With the recent influx, ACT now has 12 members.

Research news

More new species

We are flooded with new species!! A paper in *Nuytsia*,¹ published in mid-December 2016, described 13 new “geographically restricted” species. The photos in this article are reproduced with permission – all by Bevan Buirchall unless specified. The notes here are a summary of the information in the *Nuytsia* article, with a few added comments. All new species flower in winter/spring and in response to rain, except for *E. pusilliflora* which flowers from autumn to spring.

E. ballythunnensis (below) is a low-growing, open shrub 10cm-40cm wide and 25cm-60cm wide. It has purple flowers and is found in the upper Murchison between Ballythunna Homestead (after which the species is named) to near Bilung Pool on the Mullewa-Carnarvon Road. It is related to *E. yinnetharrensensis* and *E. muelleriana* and in relation to the latter has smaller leaves, smaller sepals and a different coloured flower.



¹ Buirchell, B and Brown, A (2016): *New species of Eremophila* (Scrophulariaceae): *thirteen geographically restricted species from Western Australia*, *Nuytsia* 27:253-267

E. capricornica (below) is a small shrub 50-75cm high and 50-75cm wide with mauve flowers which is found from east of Newman across to Jigalong growing in



sandy clay loams. It is named for the Tropic of Capricorn, along which it grows. It is related to *E. margarethae* and *E. demissa*, being distinguished from the former by oblanceolate leaves, shorter pedicels, and glabrous style (shrub below).



E. daddii (over) is a large shrub 2m-3m high and 2m-4m wide. The flower is light cream with green and mauve spots and long narrow petals. It is known from a single location north of Wiluna. It is named in honour of Ron Dadd who found the species in 2008 and has spent many years cultivating the genus. *E. daddii* is related to *E. fraseri* and *E. grandiflora* but has duller leaves, a paler corolla and different hairs. It also has similarities with *E. flaccida* and *E. galeata*.



E. ferricola (below) is an erect shrub 1m-3m high and 1m-2m wide. It has greenish-yellow flowers and is known from a single location north of Mullewa. The name means iron-dwelling and refers to the ironstone soils in which it grows. It is most closely related to *E. gibbosa* and *E. serrulata* and is distinguished



from the former by its longer lanceolate leaves and from the latter by its more erect habit and eglandular hairs on the corolla.

E. hamulata (below) is a shrub 1m-2m high and 0.8m-1.7m high. Flowers are mauve-purple. The name refers to the hooked leaves, which are similar to those of *E. phillipsii* (except that *E. hamulata* has only one flower per axil, and its leaves lack a distinctive smell). It is found between McDermid Rock and Diemals Station.



E. jamesiorum (photo Phil James - below) is a tall wispy shrub 1.5-2m high and 0.5m-1m wide. It is named in honour of Phil and Marlene James from the Eremophila Native Nursery in recognition of their contribution to understanding of the genus. It is found from the Alfred Marie Range west to the Carnegie in the Gibson Desert. The species is related to *E. hughesii* and *E. pendulina*. While all have tall wispy habits, the new species has a single flower per axil and eglandular hairs on the inner sepals and a densely hairy ovary.

E. laccata (flower and fruit below) is a low-growing, spindly shrub 30cm-120cm high and 40cm-100cm wide. The name refers to the Latin word for “varnish” and refers to the fruit. *E. laccata* is related to *E. shonae* and *E. battae* but it has fewer ovarian hairs than *E. shonae* and no hairs on leaves and stems when compared to *E. battae*.



E. pusilliflora (below) is a low-growing open shrub 30cm-50cm high and 50cm-1m wide.



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It is found between Turee Creek and Pingandy Creek and systems leading into the Ashburton River.

The name refers to the small flowers, which are 4mm-7mm long and can be red, pink or purple, or even pale yellow or cream suffused with red. It is related to *E. forrestii* and is distinguished by its small flowers and that its sepals change colour as they age.

E. regia (below) is a low growing shrub 20cm-30cm high and 30cm-50cm wide with pinkish-red flowers. It is found in the Princess Range



on Prenti Downs Station. It is related to *E. latrobei* but has narrower leaves and is much smaller. There is also a lemon-

flowered form.

E. resiliens (right) is a low shrub 15cm-30cm wide and 30cm-75cm wide. It has deep reddish purple flowers with a white throat. It is known from a restricted area west of Carnegie. The name refers to the Latin word from “springing back” which refers to its ability to recover from drought. Like *E. yinnetharrensii* is it related to *E. muelleriana*, but it is shorter, and has narrower leaves. It also has similarities to *E. revoluta*, *E. lanata* and *E. caespitose*.



E. scrobiculata (top of next column) is a low spreading shrub 30cm-50cm high and 80cm-1 metre wide, and lilac flowers. The name refers to the numerous shallow pits and depressions found on its terete leaves. It is closely related to *E. exilifolia*, but it grows lower, has sub-sessile flowers and has a shorter corolla.



E. victoriae (below) is a small shrub 40cm-50cm high and 40cm-75cm wide. It has purple flowers which turn white with age. It is found in the Great Victoria Desert between the Anne Beadell Highway and Tjuntjuntjarra.



E. yinnetharrensii (below) is an upright, wispy shrub 1.5m-3m high and 1.5m-4m wide. It has



purple flowers. The species is found on Yinnetharr a Station and is believed to be most closely related to *E.*

muelleriana but has shorter hairy sepals, and a taller wispy habit and the purple rather than maroon flowers.

Ian Tranter has contributed the following concordance of the new species against those already listed but not named in the back of the Brown and Buirchall book, *Eremophilas of*

WA:

E. ballythunnensis = sp Ballythunna p291

E. capricornia = sp Jigalong p297

E. daddii = sp Lorna Glen p303

E. ferricola = sp Tallerang p318

E. hamulata = sp McDermid Rock p304

E. jamesiorium = sp Young Range; related to *E. hughesii* and *E. pendulina*, collected 1992/3, Gibson Desert (location withheld)

E. laccata = sp Mt Methwin; related to *E. shonae* and *E. battii*. Eastern Neds Creek Station

E. pusilliflora = sp Pingandy p313

E. regia = sp Princess Range p315

E. resiliens = sp Nooloo Breakaway p310

E. scrobiculata = sp Wanna p319

E. victoriae; related to *E. viscimarginata*. Collected 2010, two populations in Great Victoria Desert (location withheld)

E. yinnetharrensis = sp Yinnetharra p323

Antibacterial properties of *E. alternifolia* (continued)

The November 2016 Newsletter reported on a June 2016 article in the Journal of Ethnopharmacology on antibacterial properties of *E. alternifolia*.² Phil Price has since written to say that Aboriginal women, working through the Western Desert Dialysis Program based in Alice Springs, make commercial quantities of two *Eremophila*-based medicines

* Irmangka Irmangka is made from dried leaves of *E. alternifolia*, and is used to treat sore muscles and joints, arthritis and bruising, as well as an external inhalent for colds and ‘flu (photo below); and



² Biva, I, Ndi, C, Griesser, H and Semple, S (2016): *Antibacterial Properties of Eremophila alternifolia - an Australian aboriginal traditional medicine plant*, Jnl Ethnopharmacology 182: 1-6

Arrethe is made from *E. freelingii* and is used for dry skin, rash/eczema, cuts, burns, abrasions, and as another chest rub for colds and ‘flu.

Both are made in large quantities (the women have preferred collection sites where the plants have higher oil levels in their leaves) and are sold through a wide range of retail outlets. Both are used widely in remote Aboriginal communities in the NT, SA and WA.

Internet searching has also turned up that *E. alternifolia* as a key ingredient in commercial “bush rubs” made by Sacred Grove. We make no recommendation as to efficacy, but report them here to record the use of *Eremophila* in commercial products.

Eremophila woodiae

Russell Wait

I went on a little trip through five States and a Territory in late 2016 and while in Queensland I collected *E. woodiae*. It was growing west of Longreach on stony country. There were only a few plants (less than 100) in each place that I saw it, and not growing close together but covering quite a large area.

Most weren’t flowering and the colour varied from very pale lilac through to lilac (see below). The sepals form a vase-shape and are



* quite stiff.

We originally collected it in June but no-one managed to grow it as it was too cold so I went back in late September and re-collected it and I have managed to get it to grow by grafting and cuttings.

Most of the cuttings have died and I have only a couple of grafts still growing but it looks as though it is going to be a challenge to keep it growing as I am sure it is only slow growing.

It is a low shrub that is mostly wider than high and was very consistent in leaf shape (shrub below). Most bushes only had a small amount of growth on them even though it was a wet year up there.



Also near the same location were three hybrids between *E. cordatisepala* and *E. latrobei* and one that looked quite interesting.

Forms of *E. glandulifera*

Edited from emails from Ken Warnes and Brian Freeman

There appear to be at least four forms of *E. glandulifera* in cultivation.

The taller growing pale pink form is usually very easy to grow, and according to Ken was introduced by Ray Isaacson (photo Russell Wait, below).

The lower growing darker pink form (pics below from Brian) is much more difficult to grow but can make a spectacular plant when in flower. It has larger flowers and leaves and a lower habit than the tall one but often goes spindly and needs seasonal pruning to maintain its shape. Peter and Ronda Hall brought it back from WA originally.

Brian's *E. glandulifera* is a slow grower, probably due to his cooler summers and wet overcast winters, so it hasn't needed pruning and so far it is staying a neat bush. It is reasonably easy to graft and his garden has many scattered around as it's a nice plant. The

rootstock is believed to be *M. montanum* Monaro Marvel, however it does reshoot because of the "closeness" of the buds and branches.



There is a 3rd form which is more of a *forrestii* look-alike but with a very dark pink flower which can also be a bit tricky and dies back in SA in winter. It has a more open habit and Russell Wait suspects it could be a hybrid with *E. forrestii* which naturally grows nearby.

Russell has also collected a further form that appears to be mid-way between the upright and low growing forms (below).



Ken has a flower on an un-named collection from Russell which is probably another new

form, with an almost white flower (only a potted on cutting graft at this stage).

...and three (?) of *E. eriocalyx*

Ken Warnes

There are three *E. eriocalyx* forms that I know of and they're all something of a dual colour.

The one known as the white one in reality shows up as pale pink in bud and opens to a creamy pearl, certainly not pure white (photo below, Lyndal Thorburn).



There is also a "blue" one with an almost violet bud opening to lavender – the "blue" is not really blue at all (all those antho-cyanins at work) (photo from Russell Wait below).



There are two forms of the violet-flowered form – one lower and spreading and one slender and upright. Upright plants (of all colours) grow to about 1.4 metres max in height but develop a reasonable crown as they

age (and respond to pruning after flowering). I have specimens about 40 years old of the pink/cream one.

A third variety, not yet in general circulation has a yellow bud opening to a creamy yellow. I scored the yellow budded one through Halls so it was probably a Phil James derivation and may have been a chance one-off collection.



Two of these forms are compared below (photo Russell Wait).



Pollination must be by a specialised and determined critter as the throat is a spongy mass of hairs except for a narrow track down each side. I suspect such a critter is absent from my block because all forms show no sign of

developing fruits. Can be very pretty in flower but it doesn't last long and shows no sign of flowering out of season (which is mid-spring). Can be struck as well as grafted.

I suspect I saw plants growing naturally north of Laverton but the convoy couldn't stop. They were always on rocky jump-ups and very spindly looking plants in a dry year.

For historical interest: When we started up in the early '70s there was listed *E. eriobotrya*. There is a *Grevillea eriobotrya* (I think.). Climb all over me if I'm wrong, but it must have been *E. eriocalyx* that was intended and would have been the "white" form. I reckon my first plant would have been about 1973 but I would be guessing at the collector and/or supplier of the plant/cuttings. I have 2 plants in the patch so possibly struck them myself. It's too long ago.

Editor's note – Russell Wait has also reported a pink form and has sent the photo below, but this was not mentioned by Ken in his notes above. Interestingly, Russell's plants are all flowering now, whereas my experience is that this species flowers in October and then not at all for the rest of the year. Any input from members on this issue is welcome.



Eremophila macdonnellii

Thanks particularly to Ken Warnes for most of the information here

E. macdonnellii is a variable species but has no defined sub-species. Bob Chinnock's book describes it as a rounded variable shrub 0.3-1.2 x 1.2-1.5m. It is widespread and common in Central Australia across SA, NT and WA and just extending into western Qld. It naturally

occurs on the margins of sand dunes, swales and sand plains, and is usually associated with *Acacia* scrubland.

According to Ken Warnes, Bob Chinnock spent some time in deciding if sub-species could be established but decided that the variations were too great and lacked consistency to support such an idea. The only consistent feature is the calyx united to the base. The sepals are reduced to five teeth on the upper rim of the cup-like calyx and vary in size and arrangement between various forms.

E. macdonnellii leaves range from grey to green and flowers are deep purple, rarely pink or white. The pedicel length and thickness varies, with southern forms 10mm in length and northern and eastern forms up to 40mm in length. Bush size and shape varies according to the form. Leaf size and shape is also variable, as is the type and density of the tomentum. Most specimens in cultivation have grey or grey-green leaves (below, grey-leaved Simpson Desert form from Karlo Taliana – plant now deceased – and grey-green southern form, also below, from Ken Warnes).



Ken reports first collecting *E. macdonnellii* Simpson Desert form in 1974 on a visit to Atula Station which is on the northern edge of

the Simpson Desert. This property has now reverted to Aboriginal ownership and the name is no longer in use but it is on the lower reaches of the Plenty River south east of Jervois Station as the Plenty heads out into the Simpson.

Ken reports: "I picked the first piece as I opened the access gate to the property but could only guess at its identity. Keep in mind that we didn't know this form before this visit. I saw quite a lot of it in various areas but no sign of bud, flower or fruit. I guessed it was *E. macdonnellii* but it was a gut feeling only.

"We headed down into the Desert, the property unfenced on its southern boundary, looking for cattle tracks where the stock may have followed green feed or showers into positions of potential perish and then headed cross-country, crossing huge dunes and the remains of the water courses looking for tracks. We found no tracks but did see large numbers of "the" plant all about the same size until eventually we started to see a few flowers which proved it was indeed a form of *E. macdonnellii*. Then in just one swale we found large numbers of flowering and fruiting bushes and many of these were already showing signs of die-back and senescence. Perhaps a chance storm the previous year had got them growing - 1974 was a great year out there, it was just a continuous garden.

"It was on this evidence that I first deduced that this form at least must germinate in large numbers in suitable conditions (there were lots of them), grow rapidly (all of similar size and apparent age) and quickly go into decline after reaching maturity indicating a relatively short life span. In the years since I have seen nothing to change my mind that this is the general rule for this form at least. I have seen large numbers of the southern forms behave similarly although perhaps not quite so clear cut as with the northern Simpson Desert form.

"Similarly, approaching Mt. Dare from the north-west, we found large numbers across a flood plain, all the same size and only a few flowering along the roadside where extra water had lain. This was a form similar to Noel Gane's pink-flowered form and has also been found just west of Marla and between William

Creek and Coober Pedy, which would have to be the southern limit of the species."

The lack of flowers in natural populations means Ken collects from several plants because the degree of flowering is not obvious. In all cases the flowers are dotted all over the bush rather than concentrated on any tip and so it's hard to pick good flowering stems for display.

Populations where vast numbers of plants appear to be of similar size and age and any plants which have flowered well rapidly develop dead wood and go into decline.

Forms

In large natural populations, regional form is generally very consistent. It is recognised that even though there are no official sub-species, forms can be distinguished according to original location or growing characteristics.

The lack of clearly defined sub-species has also led plant nurseries to feel free to name their own varieties. Ian Tranter has recorded a number of general descriptors such as "mounding", "prostrate", "mini" or "low" for height, or describe leaf characteristics (fine leaf, grey leaf, green leaf). Ian's photo of the "mounding" form bought from Lang's in Mildura is below



The small-leaved form has, as its name implied, much smaller leaves than other forms photos below and next column, Russell Wait).



Noel Gane's pink flowered form can be found in many locations in northern SA, and is olive-green and hairy.

In relation to regional forms, Ken has collected a bright green, glossy, hairless form from between Chamber's Pillar and Maryvale Station. The ones he collected from Maryvale (below) had no flowers at the time, but one of them has a flower the same as the Simpson Desert form on an open, bright green bush.

There is a further regional form collected from the Hale River crossing form (below and next column, photo Ken Warnes).



Ken also collected a very small leaved form after crossing the channel of the Mary River on the road to Palm Valley, again in large numbers with few flowers, and another from William creek (below, Ken's photos)



Russell Wait also reports growing *E. macdonnellii* Lake Eyre form to 2m x 4 m and had 6 forms from grey to green and a small-leaved form with yellowish green leaves.

Nurseries are also selling forms labelled Everard Range and “Northern Territory form”. Below, an “inland, pink” form (photo Tim Kolaczyk) – this is typical of what Ken calls the southern form, because of its short thick pedicel.



By far the most popular (available?) regional form, however, seems to be the Simpson Desert form, which has dark purple flowers against a grey or grey-green leaf (photo of bush, Charles Farrugia and photo of flower, Ken Warnes – note the long pedicels on the close-up).



Several photos of the Simpson Desert grey-green form are below (immediately below, from Brian Freeman, followed by two photos from Russell Wait).



Cultivation

In the wild *E. macdonnellii* always grows in very well drained, often sandy soils, so drainage is definitely a major factor in cultivation. The largest Ken has seen was at Tom Lofflers at Waikerie on a red sand hill, which would have recreated its home patch conditions of sand and drainage although in nature it grew in the swales, not the ridges.

The Boschen/Goods/Wait book reports it grows in either full sun or filtered shade, is drought tolerant and can survive without supplementary water.

It seems to be relatively frost hardy, surviving in gardens in Canberra.

However, many members report trouble keeping various forms of *E. macdonnellii* alive in the garden. Charles Farrugia reports difficulty keeping the green leaved form for more than 12 months, despite trying planting in both in full sun and broken shade. The original ones he had in the garden, including the pink flower form from Noel Gane and two other sources, have also died.

Charles also reports a plant grafted on to *Myoporum* stock and planted out in his front garden facing East, on clay soil and with natural drainage, lasted around 3 years with very little pruning but by then end was very straggly. It should be noted that in Newsletter 24, then member Rosemary Pedler reported a plant being 8 years old (narrow green-leaved variety) – she recommended rough treatment to prolong their garden lives.

Ken suggests keeping young plants in propagation continually because 2-3 years seems to be their life as attractive, dense bushes.

Perhaps heavy pruning to promote new crown growth is necessary to prolong their life. Plants affected by the fires at Pinery have responded with strong growth from the base on cutting grown plants and Ken has one totally destroyed on in the Pinery Fires of 25 November 2015, and which is now 300mm high x 600m wide and flowering well. Sample regrowth on one of his plants is below.



The Simpson Desert form is reported to be more reliable, but Russell Wait notes it is prone to wind damage. All forms are brittle and can be a challenge to transport as pot plants over distances (e.g. when buying in Victoria or South Australia and trying to transport back to Canberra).

Propagation

In cultivation *E. macdonnellii* will germinate readily if conditions are right so this supports the suggestion that it germinates and establishes in large numbers when suitable conditions prevail. Ken notes that it appears as chance seedlings in his plantation, often well away from any parent plant. The question is what is moving the fruits, as they are too heavy to blow and it's not wet enough to float them.

Propagation is also possible and effective from both cuttings and by grafting.

While grafting helps, it doesn't seem to change the plant's behaviour to any great extent and so the short life span is unlikely to be due to root rot or such disease factors.

Hybrids

Ken reports that *E. macdonnellii* cross-pollinates within the species and that he has many forms that are of garden origin e.g. Simpson Desert with green leaves and Simpson Desert with small leaves (his pic below).



Ken also has volunteer seedlings that appear to be infra-specific crosses. He has found two hybrids. The first is with *E. strongylophylla* (below, photo from Ken), about which he is confident because the calyx is undivided to the base and a William Creek *E. macdonnellii* (see earlier pics) is growing right next door.



The overall form of this hybrid can be seen in the photo below from Russell Wait.



Ken's other hybrid is a sterile inter-generic hybrid with *Calamphoreus inflatus*. It is named from observation and deduction. Once he realised that it was different, Ken grafted two plants, and they grew to 1m x 2m, very vigorous and healthy, bright green in colour

and covered in season with masses of small pendulous, purple cups which were completely empty, i.e. they were completely devoid of any sexual parts, a genuine vegetative mule.

As Ken says, "So if we needed proof that *Calamphoreus* is not an *Eremophila* here it is. A most unusual plant which created as much interest as the chimeras we are now seeing. Both plants collapsed and rapidly died after about 3 years so he no longer has them."

Mystery no more

Last Newsletter had a mystery photo sent in by Michael and Cathy Beamish, reportedly from their travels along the Stuart Highway. Your trusty editor managed to get this photo mixed up with another that Mike took along the Murray River near Loxton. He thinks it is an *E. divaricata* – sorry to get everyone excited!!

From your letters:

Alec and Sharon Hawtin (Vic): After 39ml in a thunderstorm on 11 November 2016 we had a hatching of young 3mm Monistra locusts on 9 December. At that size the little sods can jump 20cm, sometimes more, adults cannot do that later in life. These are a local variety and I can remember them on a boobiolla (*Myoporum*) hedge when coming home from school in the 1950s. The hoppers love *Eremophilas* and can make a mess if left alone. I go around with a hand tool and pick them off and drop them into soapy water – they don't surface.

Ainslee Lines (NSW): Thank you so much for another interesting newsletter. You put so much work into it. While I can't come to your event in Port Augusta, I do hope the planning goes well, that everything comes together well, and that everyone has an enjoyable time.

Maree Goods (Vic): I related very well to the photo of *E. ovata* in the last newsletter. My *E. ovata* did exactly the same thing – died back during the wet weather. It is the first time this has happened but then it is probably the only time this poor plant has suffered from water logging. I didn't do what John did, that is take a "before" photo. I have attached an after photo which now has a big bare patch in the middle. I

feel though that this will be all covered in by the end of summer as new shoots are appearing already.



Ken Warnes (SA) Re *E. ferricola*, I have a 2m plant and several young ones. I find it grafts very easily. I haven't tried cuttings as it appears to have similarities with *E. gibbosa* and *E. serrulata*, both of which are difficult to strike. My only concern is that there is a fair chance we all have a single clone, probably sourced through Peter and Ronda Hall via Phil James. This naturally restricts our chances of establishing viable breeding populations and increases the chance of out-crossing to hybridisation. Grafting also cuts out any chance of suckering unless the graft union is buried below ground level which is a field we should investigate.

Two years ago one of my 2m specimens of *E. ferricola* was completely defoliated by wingless grass-hoppers and died as a result. Perhaps I should have pruned it to the base but I never suspected that it wouldn't recover. The relative immobility of wingless grass-hoppers meant that they didn't find my second plant and it was not attacked.

E. gibbosa has a tall, narrow-leaved, open form not dis-similar to *E. ferricola* and a lower growing, oval-leaved form that has is similar many *Dodonaea* species. This form also suckers strongly which means my specimen must be on its own roots, not grafted. To complicate matters (in my mind at least) there is a form of *E. serrulata* from Peak Charles (SW of Norseman) that has lanceolate leaves and the green flowers are conspicuously red-spotted in the throat. It suckers readily and in my opinion it is quite distinct to other *E.*

serrulata forms. Mind you, *E. serrulata* grows from the WA Goldfields to Cobar in NSW so we can naturally expect some variation across the range. There seems to be no study leading to naming this variant. An explanation of the leaf size variation discussed in Newsletter 115 (November 2016) could be that dimensions have been simply transferred from previous descriptions which included what we now name as separate species when they were all lumped together.

In relation to the fires last year, I've been monitoring regrowth areas around the district and writing that up for the SA Journal. A mate and I have been finding things never before recorded in the Adelaide Plains and it has been the one chance in a lifetime to do so. That has included seedlings of *E. glabra* (below) and *E. subfloccosa ssp glandulosa* in two areas.

Tonight we found an *E. glabra* which appears to be the local form but from several kilometres away. This was very exciting and totally unexpected.

My plantation is a source of on-going frustration with large numbers of losses from both new and older plants from the very wet Spring plus numerous plants either rooted out or smashed up in the gales that we are having at regular intervals. Plus the jungle of weeds from the continuing rains and now a mass hatching of wingless grass-hoppers which will wreak havoc if not controlled. *E. glabra* seedlings of a WA form (of some sort) left *in situ* are below (photo Ken Warnes).



Bill Handke (ACT) Went to our place down near Tathra in September after being away 11 weeks and were disappointed to discover quite a few *Eremophilas* have carked it: all of the *E.*

mackinlayi, *E. macdonnellii*, *E. maitlandii*, *E. arachnoides*, *E. lachnocalyx*, *E. dalyana*, and *E. stronglyphylla*. The *E. recurva* and *E. pterocarpa* are not looking vigorous as they were once. All of these, as you would have immediately noted, are greys.

They were in different locations – some on a dry bank, some on a flat area which would have retained moisture better, and generally in full sun, while another was in a semi-shady spot. We have not had too much rain down there of late – a lot of rain in June but little in July and August and not too much in September. It is a shame that the greys have suffered as they are the ones which the Swamp Wallabies do not like to eat! Of other greys, I still have *E. rhegos*, *E. pantonii*, *E. bowmanii*, a couple of *E. maitlandii*, *E. Beryl's Blue*, *E. Yanna Rd*, *E. nivea* white and *E. nivea* purple, all of which are fine. The soil is pretty ordinary, thin layer over shaly stuff and I have never checked its pH levels. It tends not to hold water well.

Karlo Taliana (NSW) has started his involvement with the study group by sending the two photos of *E. warnesii* growing in Sydney in a region with 1100mm p.a. rain (grafted plant, in a raised bed)!



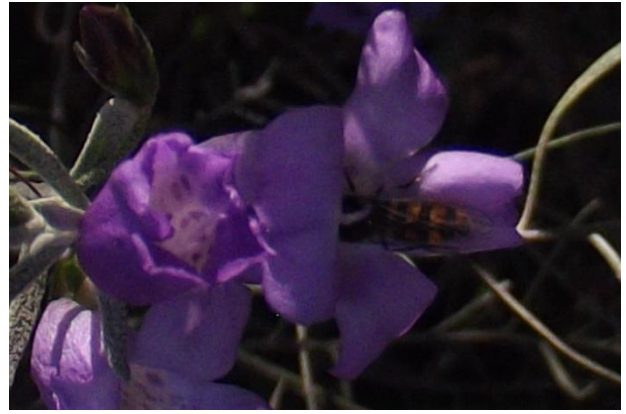
The close-up (over) shows the long simple hairs, a point of identification, centre left.



Charles Farrugia (NSW) has sent various photos from his garden. Below – *E. battii*, *E. acrida* Bushy Park Station, *E. resinosa*, *E. glabra* Roseworthy, *E. nivea* Beryl Blue. *E. stenophylla* at the end and mauve flowers at the base of it belong to *E. mackinlayi* (at present growing as a prostrate); large black pots contain *E. bignoniiflora x polyclada* (blue), *E. nivea* and *E. arbuscula*.



E. exilifolia x spathulata in Charles' garden (below). Charles also has a new Eremophila garden and *E. desertii* in fruit.



And secondly (below) of a white sport flower on her pink *E. maculata x alternifolia*. *E. alternifolia* is known, apparently, for throwing multiple colours on one bush so this is a characteristic of that parent showing through in the hybrid offspring.



Victoria Tanner (ACT) has also sent photos, firstly of a native bee deep inside a *E. nivea x christophorii*.



Tim Kolaczyk (SA) sent some interesting photos of 2nd generation *E. longifolia x scoparia* hybrids. The original plant is shown below...



...and below is the seedling coming up in the Arid Lands Botanic Gardens next to the original plants – clearly closer to the original *E. longifolia* parent. The second generation bush is also denser than the original cross.



Lyndal Thorburn (NSW): November is Eremophila month at our place – see all our flowers!



Our place was also hit by the wind storm that struck Canberra on 13 January and we lost our largest Eucalyptus tree, which fell from outside the fence into the front yard, squashing a brick

of the tank stand but missing the tank itself. Like a set of dominos, large pieces of 4 other trees came down at the same time (in total a swathe of around 40m in length), leaving a vast tract of light-filled land which we will turn into Eremophila gardens once we clean up the mess!!

Events

ESG Gathering 8-10 September 2017

Clearly we need to re-evaluate planning of this event given the tragic loss of our lead organiser. We will email once we have considered options.

However, Bevan Buirchell has accepted our invitation to be our guest speaker (Sat. night).

We have around 35 people who have registered interest and these will be sent more detail by email as plans develop. We expect members to pay the Study Group for morning teas, one dinner, a bus for one field trip and some contribution towards travel for Bevan's travel. Members will organise their own hotel/camping, and pay for their own dinners Friday night and breakfasts on Saturday and Sunday, and transport for the rest of the event. A list of recommended accommodation will be sent out to those who have registered interest.

If you want to be notified of plans and have not yet responded to the poll, the address is

https://www.surveymonkey.com/r/ESG_SA_2017

You **MUST** respond to the poll in order to get onto our mail list (unless you don't have an email address at all) – emailing the editor won't get you there!

Responding with a "yes" or "maybe" now isn't a final commitment – we will only want a payment mid-year

Sydney meeting

The next meeting of the Sydney sub-group is on **Saturday 11 February** at Charles Farrugia's home in Seven Hills from 10:00 a.m. Further info on the meeting email Sue & David Oldfield on [eremgenus4719 \(at\) hotmail.com](mailto:eremgenus4719@hotmail.com). Topics include growing Eremophila from seed (Ian Tranter to present) keying Eremophila using a microscope, and pruning.

Victorian meeting

The next meeting of the Victorian sub-group is on **Saturday 25 February** at John Upsher's home in Maribyrnong, Vic, from 10:30 a.m. Further info on the meeting email Sue & David Oldfield on [dsoldf \(at\) netconnect.com.au](mailto:dsoldf@netconnect.com.au). Topics include keying Eremophila using a microscope, and pruning. If it is a Total Fire Ban day the meeting will be cancelled so that country members don't have to drive in windy and hot conditions.

If anyone wants to join the mail list for this group please contact the editor on lthorburn (at) viria.com.au. Sue and David only have members' emails where those members have given permission for their email addresses to be shared.

Queensland meeting

The next Queensland sub-group meeting is on **Saturday 8 April 2017** at Peter and Carol Bevan's house. The group will inspect Peter's gardens and nursery after the meeting. For more information contact Jan Glazebrook at [janglazebrook \(at\) gmail.com](mailto:janglazebrook@gmail.com).

Buying Eremophila

Thanks to those who responded to the request for information on plant nurseries that sell Eremophilas. Here is the information provided by members Matt Leach, Adrian and Gail Wockner, Steve Priestley, Laylee Purchase, Martin Swanson and Ian Tranter, extended by your editor's research.

Wholesalers will usually give details of retailers they supply. Check the websites for more information on what is available – many have stock-lists online.

Australian Arid Lands Botanic Gardens, Stuart Highway, Port Augusta SA, phone (08) 8641 9116, email nursery@aalbg.sa.gov.au or website www.aalbg.sa.gov.au. Plants sold from the nursery shop and by mail order, check availability monthly. Large list of Eremophilas.

Australian Native Nursery, 141 King Road, Oakford, WA.
<http://www.australiannativenursery.com.au/>

Australian Plants Growers Markets, Yarralumla Nursery, Yarralumla ACT. ACT and regional growers sell plants on the first Saturday of every month from spring through to autumn, include at least three that regularly stock Eremophilas. http://anps-canberra.asn.au/site/images/practical_garden/g/130215_Where_to_Buy_final.pdf

Bilby Blooms, near Coonabarabran NSW. Annual spring open day on 2nd Sunday in September, and sells through regional markets (Armidale, Canberra, Coonabarabran, Dubbo, Gunnedah, Narrabri and Tamworth). Visit the nursery by appointment, (02) 6844 1044. http://www.bilbyblooms.com.au/Bilby_Blooms/Home.html

Domus Nursery, Kalamunda, WA. Wholesale http://www.domusnursery.com.au/dom_catalogue.jsp

Drylands Permaculture Nursery, 333 David Rd, Waggrakine, Geraldton, WA. <http://www.drylands.org.au/plants/docs/Nursery%20Catalogue%20July%202015.pdf>

Eremophila Nursery, Kalamunda, WA. Phil James 9293 2569 At Kalamunda Farmers Market Sundays

Geoff Miers Garden Solutions, 13 Lindsay Avenue, Alice Springs. Email geoffmiersgardensol@bigpond.com. Has a good range of Eremophilas from cuttings. Phone (08) 8953 7477.

Geographe Community Landcare Nursery, 366 Queen Elizabeth Avenue, Busselton, WA. <http://www.geographeplants.com/>

Goldfields Revegetation Nursery, 230 Tannery Lene, Mandurang Vic. Specialises in regional species but the plant list includes 160

Eremophila varieties. phone (03) 5439 5384 or email info@goldfieldsrevegetation.com.au. <http://www.goldfieldsrevegetation.com.au/index.asp>

Kuranga Native Nursery, 111 York Road, Mount Evelyn, Victoria. <http://www.kuranga.com.au/>

Lullfitz Nursery, Corner of Caporn Street & Honey Road, Wanneroo & 1071 Thomas Road, Oakford, WA <http://www.lullfitz.com.au>

Melton Botanic Garden Nursery, 21 Williams St, Melton, Victoria. Tuesday & Thursday mornings and 2nd & 4th Sunday mornings. <http://www.fmbg.org.au>

Mildura Native Nursery, Cureton Avenue, Mildura, Victoria. (03) 5021 4117 <http://nativegrowth.com.au/mildura-native-nursery> Will do mail order.

Mole Station Native Plant Nursery, Tenterfield, NSW. Will do mail order. <http://www.molerivernursery.com/default.html>

Mostly Aussie Plants, Dunkeld, Victoria. Bernie Shanahan, sells grafted stock, phone: 0478227639

Native Plant Wholesalers, Mt Gambier, SA. Wholesale <http://www.nativeplantwholesalers.com.au>

Naturalplantscape, Wandin, Vic. Wholesale. <http://www.naturalplantscape.com.au/native%20nursery%20landscaping%20eremophila.html>

Newcastle Wildflower Nursery, 260 Lake Road Glendale, NSW. Limited range of Eremophilas but sells grafted plants. Phone (02) 4954 5584 or www.newcastlewildflower.com.au.

Olive Pink Botanic Gardens, Alice Springs. Has a range of Eremophilas that only occur in Central Australia. Plants are grown by Australian Plant Society volunteers and sold to help fund Olive Pink Botanic Gardens. Sold in tubestock and 140mm pots. Email opbg.com.au

Pete's Hobby Nursery, 10 Patrick St Lowood Qld (appointment only), specialises in Queensland species. Also sells at Fernvale markets most Sundays. Contact through

Facebook, phone (07) 5426 1690, email info@peteshobbynursery.com.au.

Plantinspirations Nursery, 2c Holts Lane, Bacchus Marsh. Will do mail order.

South Australian State Flora Nursery at Queen's Jubilee Drive, Upper Sturt Road, Belair and Bremer Road Murray Bridge, SA. Website www.stateflorasa.gov.au or phone (08) 8278 7777 (Belair) or (08) 8539 2105 (Murray Bridge). Will do mail order.

Sydney Wildflower Nursery, 9 Veno St, Heathcote, NSW. Will do mail order. <http://www.sydneywildflowernursery.com.au/plants/stock-list.html>

Tarrowood Native Nursery, Bega, NSW. Wholesale only. http://www.tarrowood.com.au/catalogue/catalogue_A-F.html

Vaughan's Australian Plants at 919 Bannockburn Shelford Road, Teesdale and at 3322 Ararat Halls Gap Road Pomonal, Victoria. Attends a range of APS market days. Contact through Facebook or phone 0412 632 767. Does mail order and grafted plants. <https://www.facebook.com/vaghansnativeplants>

Wariapendi Nursery, 33 Church Avenue, Colo Vale, NSW. Does mail order <http://www.wariapendi.com.au/>

Wildtech Nursery, 60 Chesterfield Road, Glenmaggie. Mail order available through Collectors Online, minimum order of ten plants, and discounts for orders of >100. Contact via www.wildtechnursery.com.au or collectorsonline@wildtechnursery.com.au. Larger range from Summer through Autumn.

WSWA Northern Suburbs Branch Nursery, Landsdale Farm School, cnr Evandale and Landsdale Rds, Darch, WA. Thurs/Sat only <http://www.wildflowersocietywa.org.au/branches/northern-suburbs-branch/>

Wimmera Native Nursery, Dimboola, Victoria. phone (03) 5389 1458 or www.nativeshop.com.au. Does mail order.

Zanthorea Nursery 155 Watsonia Road, Maida Vale WA, Phone (08) 9454 6260 or

www.zanthorrea.com. Small range of Eremophilas.

In addition to formal nurseries, many ANPS groups have plant sales which include Eremophilas, details of which are below (thanks Ian Tranter!). Many of these sales occur on only on a few days a year.

APS Armidale & District Group, NSW. Stall in the Armidale Markets 4th Sunday of the month September to May. Plants sourced from Mole Station Native Plant Nursery <http://www.aps-armidale.org.au/>

APS Bendigo Native Plants Group, Victoria. Flower Show in spring usually September.

ANPS Canberra ACT. Plant sales on one day in March and October, ANBG <http://anps-canberra.asn.au/site/index.php/community/plant-sales>

APS Geelong, Victoria. Plant Sale in April <http://www.apsgeelong.org/index.html>

APS Grampians Group Pomonal, Victoria. Native Flower Show in October

APS Melton/Bacchus Marsh Group, Victoria. Autumn plant Sale in May <http://www.runningpostman.org.au/plant-sale.html>

APS Mitchell, Kilmore, Victoria. Annual Spring Plant Expo & Sale in October <http://www.apsmitchell.org.au/>

APS SA Plant sales (Adelaide Showgrounds) in April and October <http://www.australianplantssa.asn.au/pages/australian-plants/society-plant-sales/adelaide-plant-sales.php>

APS SA Fleurieu group has sales at Nangawooka Flora Reserve near Victor Harbor in Autumn and Spring. <http://www.australianplantssa.asn.au/pages/whats-on/calendar.php>

APS SA Northern Yorke group has a plant sale in Kadina in May. <http://www.australianplantssa.asn.au/pages/whats-on/calendar.php>

APS Wilson Park, Berwick, Victoria. Plant Sale September www.apswilsonparkberwick.org.au

APS Yarra Yarra Group, Eltham, Victoria. Plant Sales in Autumn (May) and the main one in Spring (September) <https://apsyarrayarra.org.au/>

Friends of Kings Park, Perth, WA. Plant sales March, May, and September. <http://www.friendsofkingspark.com.au/>

Friends of RBGV Cranbourne Gardens, Victoria. Plant Sales March, July & October. <https://www.rbg.victoria.gov.au/support/support-groups/friends-of-rbg/cranbourne/growing-friends-cranbourne>

Native Plants Queensland Plant Sale at Mt Coot-tha Botanic Gardens, September <http://www.npq.org.au/whats-on/calendar-of-events/icalrepeat.detail/2016/09/17/281/-/spring-flower-show-and-native-plants-market>

Future Newsletter Themes

Send in your experiences of *Eremophila calcicola* for the next newsletter – this was formerly *E. “Parmango Road”* and was named last year. It is available through nurseries (sometimes mislabelled as *E. glabra*) but we have little cultivation information. Is it frost hardy? Drought hardy? How long does it live?

There has been some discussion recently about **chimeras** (specimens where the tissue of two species has melded and appears as one plant) Chimeras can arise where the stock on a grafted plant has melded with cells of the scion and has emerged as a side shoot near the graft-scion junction, and then been grown as a cutting. If anyone can contribute an article (technical or otherwise) on this topic I would be pleased to hear from them. Chimeras are being trialled as grafting stock by some members.

About the Study Group

The Eremophila Study Group aims to further knowledge about the cultivation, propagation and conservation of the 200+ species of Eremophilas, an endemic genus of Australian plants. It is one of several Study Groups which operates under the auspices of the Australian Native Plants Society (Australia) (ANPSA).

SUBSCRIPTIONS

Membership is \$5 per annum. Subscriptions for a financial year can be sent by cheque and posted to 3 Considine Close Greenleigh NSW 2620 or paid by direct deposit into the Group's bank account:

BSB: 105-125

Bank name: **Bank of South Australia**

Account No.: 013 751 340

A/c name: **ASGAP Eremophila Study Group**

Please put your surname and state/group membership in direct deposit details

ANPSA policy is that regional groups pay for two subscriptions in recognition that Study Group material will be used by several group members

New members, please download the application form from our website and send with your cheque/transfer (details below) <http://anpsa.org.au/eremophilaSG/index.html>

Study Groups allow members with specific interests to develop that interest to the fullest extent and to contribute in a practical way to the body of knowledge on the Australian flora. Active members collect information on the genus and send their observations to the leader who collates and publishes the information, in a newsletter or in other Society publications. The Study Group can record any aspect of cultivation, propagation and ecology of the preferred genus. Study Groups are expected to publish at least two newsletters per year.

In addition to paying annual fees, members must also be members of an ANPSA-affiliated regional society (<http://anpsa.org.au/region.html>).

This Study Group aims to study the cultivation and propagation of the genus *Eremophila*; to expand cultivation of *Eremophila* in gardens; and to examine the growing requirements of the various species to improve their reliability.

For information about the Eremophila Study Group contact Dr Lyndal Thorburn, Study Group leader [lthorburn \(at\) viria.com.au](mailto:lthorburn@viria.com.au)
Ph: 0418 972 438 or 02 6297 2437 Address: 3 Considine Close Greenleigh NSW 2620

Honorary members: Ken Warnes and Russell Wait

Newsletters are available in Black and White by post and in COLOUR by email or CD.

For more general information about Study Groups, contact Ms Jane Fountain Coordinator, Study Groups, Australian Native Plants Society (Australia) ([jlfontain5 \(at\) gmail.com](mailto:jlfontain5@gmail.com))

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NEXT NEWSLETTER JUNE 2017



Photos of *E. pentaptera*
(from Ross Creek) by Marie Goods