Association of Societies for Growing Australian Plants EREMOPHILA STUDY GROUP NEWSLETTER NO. 36

August 1987

Several articles have provided an interesting newsletter for your enjoyment.

Subs are now due and remain at \$2.00. Some of you have already paid and can ignore this request, if you haven't please remit promptly.

Geoff. Needham

An Inland Contribution

by Ken Warnes

In May my brother and a friend travelled along parts of the original Gunbarrel Highway west of the Giles Weather Station in W.A. From areas in the Rawlinson and Warburton Ranges which had received rain he sent two green leaf forms of E. latrobei, a short mealy-leaved form of the same species, E. exilifolia, 3 forms of E. gilesii, one of which was very viscid, E. forrestii and E. hughesii. Several have already struck but not E. hughesii at this stage. My amateurish attempts at grafting have only succeeded with a form of E. gilesii which struck anyway. Most others died very quickly.

Eremophila psilocalyx R.I.P.

by Ken Warnes

Who will weep for my original E. psilocalyx which recently departed this life? This magnificent shrub was probably the first introduced into S.Aust. and the parent of most plants grown since. It was this particular plant which appeared in colour in Australian Plants (vol. 13, 105, 1985). I presume root rot caused its death.

Fortunately I established a young plant last year so the loss is covered. This species is very rare in the nursery trade. Similarly I lost my white E. viscida and have spent the past year trying to strike another as, until recently, I was unable to find one for sale.

I have noticed over the years that any species new to cultivation is widely available for a while but virtually impossible to purchase after a few years. I realise that it's not possible for nurseries to stock all species in cultivation, nor is this necessary or desirable but I consider it a situation that needs watching. It's certainly essential that we maintain good levels of some of the less common species among the enthusiasts because the commercial trade is not in a position to do so.

Noah's Nursery - The Continuing Story

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by Ken Warnes

Long-term members may recall the reports in Newsletters 26 and 33 concerning the volunteer seedlings following a heavy thunderstorm in March 1983. At the risk of competing with "Blue Hills" for longevity I thought an update may be of interest.

The strange seedlings under \underline{E} . youngii appear to be a hybrid with \underline{E} . scoparia. My plant is very unthrifty but I have seen a specimen 0.6 m in height x 1 m in width with flowers very similar to \underline{E} . scoparia compatible with such a cross. At this stage I would consider the hybrid to have no special value in cultivation.

Another bird-insect hybrid has developed from a seedling dug up under E. pantonii. Again somewhat unhealthy it has produced a few flowers that indicate a red-flowered co-parent. Insect attack in bud has prevented a good examination but my initial opinion is that E. alternifolia could be involved. The habit of the plant is low and spreading, which is unusual for such suspected parents.

One hybrid that is attractive appears to be \underline{E} . $\underline{pantonii} \times \underline{E}$. $\underline{christophorii}$, a plant of a much more compatible relationship with an open, attractive habit, it appears to be intermediate between these two species in all respects and has been flowering for some time.

The E. pantonii x E. scoparia hybrids are developing into quite diverse plants, some quite attractive. I lost two from collar rot but 8 remain.

The <u>E</u>. youngii hybrids are also a diverse lot, the best being strong, upright growers with large bright flowers and broader leaves than either of the <u>E</u>. youngii forms at home. Others still show the weak, corkscrew growth mentioned in earlier reports.

The E. laanii also are doing well and show variation in form and colour sufficient to reinforce my earlier opinion that the pale pink parents had been cross-pollinated by either the white or dark pink forms.

I am puzzled by the progress of the E. mackinlayi seedlings, mainly because Bob Chinnock considers that the plant from under which the seedlings came is a distinct species. I planted the strongest seedlings myself and it has grown vigorously into what appears to be a perfect cross between the 2 forms in my collection. However, another seedling I planted out appears to be a good replica of one parent and in conversation with others to whom I gave seedlings to it would appear that most are of this form, differs mainly in the colour of the tomentum. Perhaps the parent plant was both self-pollinated and cross-pollinated.

The row of 63 plants of <u>E. maculata</u> shows many variations and combinations. I have been disappointed with the degree of flowering but at Tony Clark's nursery the other day I asked where he had obtained cuttings of a superb form in his stock. "Up your track" was the casual reply. The 16 cm plant in front of me now has one main stem with a short side branch and carries over 55 buds with 3 in many axils. Flower colour of the plants is quite variable, mainly red tones, but many with highly coloured orange and copper buds. One has flowers of a lovely clear apricot, others have red tubes and yellow lobes. There is obvious potential for propagating the better ones.

Before leaving the subject of seedlings I found that Joe Mack has had some volunteers also. Many fruits, mainly from E. glabra groups had gathered in an old fish pond which filled with water after rain. As the water dried up seedlings came in the trash in the bottom of the pond. The three plants I saw had no great merit apart from the fact that one had the smallest bird-pollinated flowers I have ever seen on an eremophila.

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Once again - the big soak!

Galore Hill Nature Reserve

by Frank Prichard

Galore Hill Nature Reserve is an area of 510 hectares located 15 kilometres north of Lockhart and about 70 kilometres west of Wagga Wagga in the eastern Riverina. The bulk of the area is a naturally timbered hill which is being retained in its natural condition but on the flatter ground on the southern side a start was made in 1977 to establish a major plantation of introduced Australian native plants. There are now some 750 native trees and shrubs including well over a hundred acacias, eucalypts, and grevilleas and smaller numbers of many other genera. Over 150 additional species will be added during 1987. About 5 years ago I started a small plantation of eremophila and this has gradually been expanded to about 80 species and forms.

Rather strangely, I found that very few species of eremophila were growing in any garden in the eastern Riverina and a big percentage of experienced gardeners did not even know what an eremophila was. Only a few species could be obtained from nurseries and I could not find anywhere within a hundred miles radius where I could even find cuttings. As far as I am aware, the only species of eremophila growing naturally in the region is E. longifolia. The area has an annual rainfall of 450 mm with a hot dry summer.

Thanks to a number of members of the Study Group in Victoria, South Australia and several in N.S.W. I have gradually acquired various cuttings and grown them on for planting. Naturally, I would like to see the eremophila plantation expanded to a much greater extent. If anyone is travelling on either the Sturt Highway between Narrandera and Wagga or the Olympic Way between Albury and Wagga and can supply me with either suitable cuttings or plants in pots, I would be happy to meet them on either road by arrangement. My telephone number is (069) 205182 and address 47 Galore Street, LOCKHART 2656.

Galore Hill Nature Reserve is under the control of Lockhart Shire Council and from 1968 when it came under Council control, as Shire Engineer it was under my direct control until I retired in June, 1981. Since then I have supplied some 400 plants each year and supervised the planting of all of them.

Eremophila of the Gawler and Uno Ranges

by Ken Warnes

In July of this year I decided to introduce my family to the Gawler Ranges, a low but impressive group of hills composed of porphry granite on northern Eyre Peninsula. They rise above plains predominantly of myall-bluebush association with occasional stands of mulga and black oak in the more alkaline areas. The high hills carry a dense cover of Triodia interspersed with many small beautiful flowering shrubs; low rises and foothills are dominated by Acacia spp, dodonaeas and cassias while the plains are mainly covered by chenopods. Eremophilas were scattered throughout and this article will introduce them to you.

Our family of 6-was accompanied by Tony Clark (Nellies Nursery, Mannum) and his two young daughters so for convenience we used, as a base, the Mt Ive Tourist Centre near the southern tip of Lake Gairdner, a vast, normally dry, salt lake.

We collected 9 Eremophila spp in all but unfortunately most had been subject to heavy grazing by sheep, goats and probably euros and were anything but beautiful.

The following are some notes on the <u>Eremophila</u> found from Port Augusta 200km westward to Yardea and Scrubby Peak in the Gawler Ranges and in the Uno Range, a small but rugged range of quartzite 50km west of Iron Knob.

E. oppositifolia:

Mostly seen as a slender, upright shrub, untidy with age; widespread throughout but common only at Uno; on the flats and foothills as isolated plants. In heavy flower with a colour range from cream to good pink with the exception of a small specimen at Uno with light violet flowers. This one was especially unusual as it constituted only about one-third of a spreading, multi-stemmed shrub, the remaining two-thirds being pink. Presumably two plants had intergrown but it was impossible to separate them at ground level.

At Uno we also saw one spreading shrub 3 m high with the ground below white with spent flowers. The extremely rough terrain may have contributed to the lack of grazing pressure and hence better specimens in this area, alternatively these were the var. oppositifolia whereas the specimens further west approached var. angustifolia which is described as a small tree with a single trunk by Bob Chinnock in Blacks Flora of S.Aust. edn 4, p. 1334 (1986).

Of interest is the two-tone colour on the corolla lobes of oppositifolia. On investigation it becomes apparent that where the lobes are overlapped in bud, the corolla colour fails to develop in the covered section, hence these portions remain cream when the corolla finally opens and a dappled effect results.

While this species is often unattractive in habit, good colour forms exist and in cultivation these result in very desirable shrubs.

E. alternifolia:

Grazed bare to 1.5 m on a single trunk; top growth dense and healthy but no flowers seen. Widespread and relatively common on plains and foothills.

At Lake Gairdner we found one healthy prostrate plant in a crack of solid rock growing within 20 m of the salt-pan. I considered this was probably due to environmental factors so it will be interesting to see if the habit is retained when the cuttings Tony brought back are established.

E. scoparia:

No beauty this one, not on this trip anyway, with mainly very old, spindly specimens on the plains within 80 km of Iron Knob. It does not extend to the ranges. In cultivation good forms do exist.

E. longifolia:

Widespread on the plains and usually well-shaped small trees. The absence of the usual suckers is probably due to grazing as on fenced roads to Iron Knob suckers were evident. The form seen had relatively narrow, olive-green leaves compared to those around Alice Springs and occurring naturally around Owen.

E. glabra:

Two forms were seen, neither of them common or particularly good. The better form was seen in white sand near Scrubby Peak where it occurs as a large dense round shrub 2.0 m high and appeared to be ungrazed. I have cultivated this form previously but it failed to thrive in my heavier soils.

A smaller leaf form was widespread on the plains and grew to 1.8 m. It was only lightly grazed.

Neither forms were collected.

E. serrulata:

This species was found only on the higher stony hills under very harsh conditions. It had been heavily grazed especially on a hill with strong evidence of goat grazing where nearly all foliage was regrowth. This bird-pollinated species has green flowers with brown overtones and subtle variations in flower colour and foliage made us collect several variants.

In cultivation it makes a well-shaped shrub to 1.5 m and the bright, viscid foliage is a feature. The flowers may be hard for the human eye to pick up but it is a good species for bringing birds to the garden.

E. latrobei var. glabra:

On previous trips I knew this species only from a small hill near Nonning but this time we found it to be far more wide-spread, usually on stony rises and foothills growing in association with mulga. It had been grazed to the point where many plants consisted of sticks and new shoots despite being listed as a toxic plant. The new growth quickly flowered and we found several good colour forms, one in particular where the deep cerise external colour of the corolla was continued to the inner surface of the lobes which, combined with the orange throat, was very striking.

These green leaf forms will grow in cultivation at Owen but the grey leaf forms even when grafted, do not seem to survive our winters.

E. interstans:

This tall, broom-like species was only recently found in the Uno Range and was the purpose of our detour to Uno Station. It was previously only known from around Norseman in W.A. so I wanted to see the S.A. population for myself.

The proprietors kindly allowed us access to the area where we had been told it grew, a very rough track following the foot of the range and no place for my heavily laden city car with its radial tyres. After successfully negotiating stones and washaways we came to an area of dense growth with large numbers of very showy Dodonaea lobulata in full fruit, along with many other shrubs including E. oppositifolia, E. alternifolia and numerous E. interstans.

The tall, yellowish, broom-like plants stood out clearly on the slope. Trunks were bare and black barked but the foliage heads quite dense and heavily in bud. Height varied up to 3.5 m but better cutting material was available on smaller specimens. They appeared somewhat different to the Norseman plants with shorter leaves and yellow colour but if \underline{E} . virgata with its very short leaves is only part of \underline{E} . interstans then these plants certainly fit.

As the 2 forms from W.A. have defied our efforts to propagate them we await with interest the results of our material.

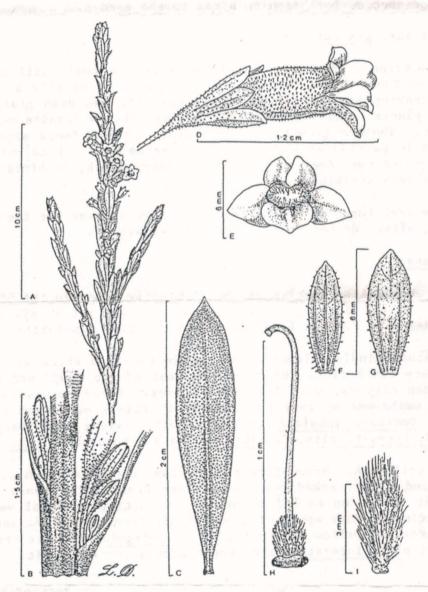
E. desertii:

As we left Uno we saw two specimens of the plant formerly known as Myoporum desertii but now included under Eremophila. Despite being listed as highly toxic in all parts they had been grazed bare to 1.5 m. While the corolla may be that of Eremophila the calyx, fruit and general appearance all scream Myoporum to me. A real fence-sitter botanically if you ask me.

In our area this species is a large sprawling shrub but the inland forms make neat upright specimens.

Before leaving the Ranges I should mention another myoporaceous plant we found at Lake Gairdner. With characteristics of both Myoporum parvifolium and M. refractum. I was relieved to find that it fitted very well into the resurrected species M. brevipes. They make medium sized shrubs of bright green within a few metres of the salt-pan, with dense heads of white flowers.

It was gratifying to notice on our travels the large number of Eremophila planted in the northern towns, particularly Port Augusta. Surprising indeed to find a good specimen of E. tetraptera in the grounds of the Pioneer Museum and Park, a long way from its home in western Queensland.



Eremophila lactea Chinnock.

Articles are now wanted for our next Newsletter. Please write on alternate lines.

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