#### EREMOPHILA STUDY GROUP NEWSLETTER NO. 8. OCTOBER 1977

## AIMS AND OBJECTIVES Geoff Needham

Our aims and objectives were published in the first Newsletter. After five years of activity, now would be an appropriate time to review our achievements.

1. 'To draw attention to the attractiveness of many species of the genus the majority of which are unknown to horticulture.'

This objective has been carried out most effectively, as eremophilas are now sold by many nurseries. Lectures have been given by our members to S.G.A.P. and to other societies. Ken Warnes has presented lectures, together with many slides, in four States; articles have appeared in "Australian Plants", and much has been published in books on Australiana. Specimens have been provided for interstate flower shows as well as for general meetings. No criticism can be made of our achievements in this aspect.

2. 'To ascertain the conditions necessary for the successful cultivation of <u>Eremophila</u> species.'

With the build-up in the number of species in cultivation, plus an increase in membership, we have achieved the first step, of growing the plants, but we are sadly lacking in feedback information on their performance in various conditions. To be more specific, the amount of data sent in by members is almost non-existent. Obviously we need this data to ascertain the best conditions. It has been suggested that printed questionnaires could be sent out for members to fill in. This would also make the compiling of answers easier.

3. 'To select the most suitable species for garden culture.'

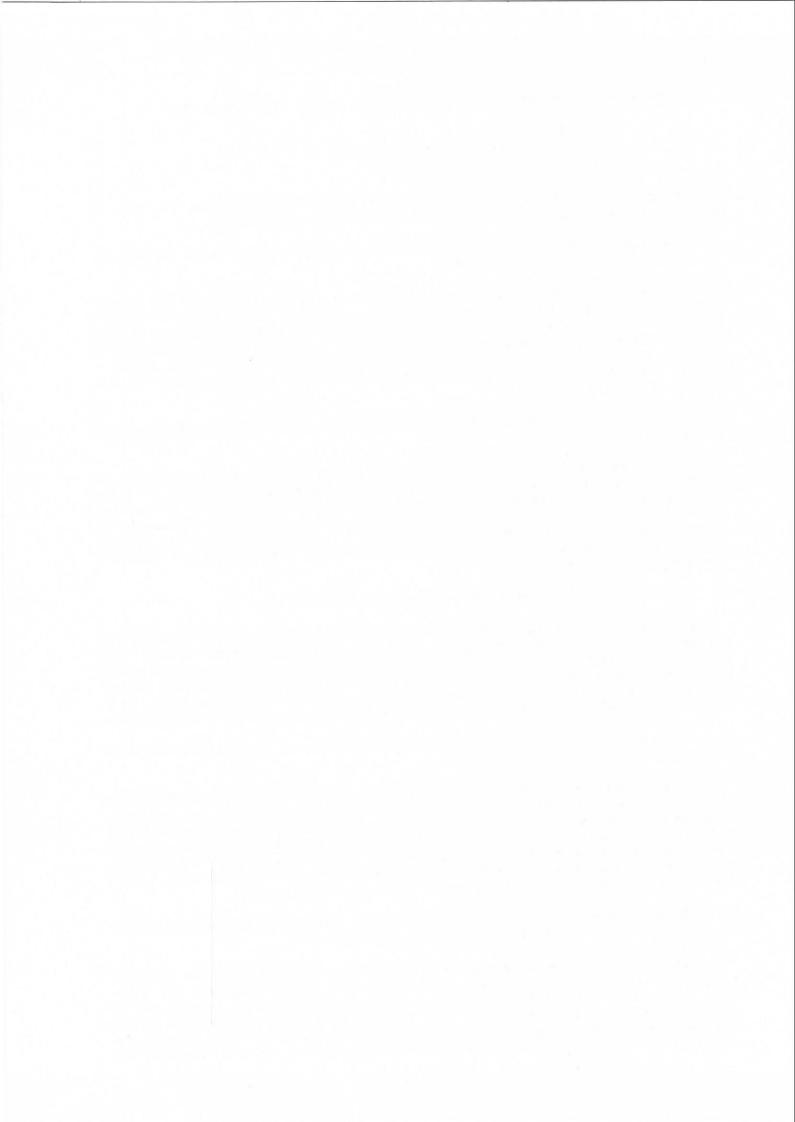
Field trips by our members and other interested people, and those who succeeded in propagating the cuttings, have introduced many more species to culture. Without these people our plantings would still be very limited. If observations of the numerous plants in cultivation were made, and if the information gained was recorded and then forwarded to the Study Group, we would then be in a position to answer this question. As it stands at the present time I feel we know nothing more than our own personal opinions.

4. 'To determine methods of propagation for reliable and easy build-up of stock plants.'

There have been innumerable articles published on general propagating in "Australian Plants", State journals, and just about every newspaper and magazine, as well as in books on gardening, which should give all who are interested an excellent guide to the various methods available. If we are to find the answers for eremophilas, then we must experiment, record the results, and report. There is a small amount of data available on this aspect, mostly from Ken Warnes' observations in previous newsletters. Again the printed questionnaire may be the answer for more information.

5. 'To assist each other by the free exchange of cuttings and seed either directly between members, or via the leader, or his appointed agents.'

I cannot answer for interstate members, but in South Australia there has been free exchange of both plants and cuttings. Cuttings via Ken Warnes have been sent interstate and surplus material from specimens sent to flower shows have been used as cutting material. It has been stated that cuttings from plants acclimatized to that particular locality strike easier and grow better. If this statement is true, collection of cuttings from adjacent members' properties may bring greater success. Certainly the



material is fresher and often there is a choice of cutting material. Of course, new species introduced from field trips must be passed on and that is where an agent could be of use. With our present membership it is obvious that all cannot receive an individual parcel of cuttings as the suppliers' gardens will not stand the strain. Many plants are still small and cutting material scarce.

I have had quite a bit to say for it is essential that if we are to function as a Study Group, then we must obtain information on the various aspects of cultivation. Printed forms will be formulated and it is hoped that you, the members, will find time to assist us in providing sufficient information so that ultimately a report may be published.

### EREMOPHILA CRASSIFOLIA

Joylene Noble

Three years ago we received 50 mm of rain at Arno Bay. This caused the germination of numerous plants of <u>Eremophila crassifolia</u> on newly cleared land. These were lovely plants, mainly prostrate, and in varying shades of mauve with the odd white one. Following that year of above average rainfall, we have been struck by drought, and even our so-called tough ones have not been able to survive it. To our disappointment this land is now bare. <u>Eremophila crassifolia</u> has just disappeared, except for the odd deadlooking plant with just a few green shoots. These plants are possibly the oldest and may have germinated 6 months earlier in autumn. Is this a short-lived plant, or are we seeing nature's way of preventing over-population?

I have grown a few plants of  $\underline{\textbf{E. crassifolia}}$  in the garden, but find they only seem to last about two years. They no sooner reach maturity and attractiveness than they are gone. Maybe someone else could add to this? After losing our patch of  $\underline{\textbf{E. crassifolia}}$ , I started thinking more about this plant, and cannot recall having seen any plants that I would consider to be old plants. Has any one else?

# GENERAL NOTES Geoff Needham

Several members have been away collecting specimens and cuttings since the last newsletter. As a result the "E" numbers have increased from E396 to E633. A lot are new or scarce in cultivation, so with some luck there may be a further increase of species in our gardens. As usual, material sent varied from garden fresh to very dry and a few did not survive the transport. We are improving each year with the collecting and packaging of cuttings and combined with prior knowledge of despatch points, either post or airfreight gives a much better chance of propagation. Use was made of those members who operate commercial nurseries with the possibility of more plants being available than previously.

#### **EREMOPHILAS IN MY PLANTATION**

A. Nitschke

The eremophilas that I have growing in my plantation at Morgan, S.A., are really at their best just now and give me a lot of pleasure. I have the following growing:

<u>Eremophila alternifolia.</u> Large shrub; hard to propagate. Flowers reddish-pink with spots.

Eremophila bignoniiflora. Several tall bushes are thriving. Easy to propagate.

<u>Eremophila calorhabdos.</u> Several tall bushes are in full flower and it is easy to grow from cuttings.

<u>Eremophila crassifolia.</u> This small ground-hugging plant with tiny blue blooms is difficult to propagate.

Eremophila denticulata. A tall shrub with red flowers and it thrives here. I have to keep cutting it back.

Eremophila divaricata. Occurs locally and is doing well in my garden.

<u>Eremophila drummondii.</u> Small delicate-leaved shrub with blue flowers. Easy to propagate.

<u>Eremophila gibbifolia.</u> It is a tiny bush with minute blooms. I have not tried to propagate it.

<u>Eremophila glabra</u>. I have two forms from Western Australia. Two local forms are easy to propagate.

<u>Eremophila glabra</u> (ex Murchison River). Beautiful bush with grey foliage and red flowers. Cuttings fairly easy to strike.

Eremophila glabra (yellow form). Plain yellow flowers. Easy from cuttings.

<u>Eremophila hillii.</u> Low growing bush, orange flowers. Have had no luck with propagation.

<u>Eremophila ionantha</u>. Low growing bush with intense blue flowers. It is a real picture at present. Have not tried cuttings.

Eremophila longifolia. Is doing well, and I propagate from suckers.

<u>Eremophila macdonnellii.</u> I have two forms, narrow and wide-leaved. They are easy to propagate from cuttings.

<u>Eremophila maculata</u>. All bushes have deep green foliage and large red spotted flowers in profusion. Easy to propagate.

Eremophila maculata. Semi prostrate, flowers lighter in colour than above.

Eremophila maculata (yellow form). Flowers yellow with red spots.

<u>Eremophila polyclada.</u> Spiky foliage, white flowers with spots. Easy to strike from cuttings.

<u>Eremophila santalina.</u> Tall shrub with white flowers. Have not had much luck with propagation of cuttings, and what is growing has taken a long time to get established.

Eremophila scoparia. Bushes are in full flower and doing well. I have not tried cuttings as I can pick up young plants on the roadside.

<u>Eremophila subfloccosa.</u> Only a small bush as yet, but thriving and in full flower. Has large grey leaves and big orange flowers.

Eremophila weldii. Similar to E. ionantha, but has finer foliage and smaller flowers. Have not had any luck with cuttings.

Eremophila youngii. This new addition has not yet flowered.

### EREMOPHILA PARVIFOLIA REDISCOVERED

Ken Warnes

For years I have been sceptical about the existence of <u>E. parvifolia</u>; was it or was it not a valid species? My doubts stem from the lack of recent collections and an acceptance of a fair variation within <u>E. weldii</u>, (within which species von Mueller placed it). In the Balladonia—Norseman area of Western Australia there occurs a small ground-hugging plant in the <u>E. weldii</u> group, and I assumed this must refer to <u>E. parvifolia</u>, an assumption that increased my scepticism.

However, quite by chance, while travelling with Flora and Reg Mason to Perth for the 1977 Biennial Conference and Seminar, we camped in a small area of the real <u>E. parvifolia</u>, about 50 km west of Nullarbor Homestead, and later we also saw it 6 km west of Koonalda.

In these situations it is a flat-topped shrub, consisting of a mass of tightly interlocking branches and branchlets, 0.4 m high  $\times$  1 m wide. This may not be the normal habit as it is within the influence of southerly gales at the Head of the Bight and possibly is heavily grazed by rabbits, wombats, or livestock. Bob Chinnock has found it in woodland near Yalata and in this location growth was more open.

The woody nature of the stems, the orbicular and non-tubercular foliage, and the habit, all separate the species from <u>E. weldii</u>. The flowers are similar, but in the specimens we found were much darker. The species would not appear to have a lot of horticultural potential, but who knows?

In solving the <u>E. parvifolia</u> question we have created another, the correct name of the Balladonia plant. Bob Chinnock considers this is a form of <u>E. weldii</u>, possibly worthy of varietal status, and this mirrors my opinion. Whatever its botanical position, this small form is well worthy of development for rockery, border, or even as a pot plant. It is a charming little plant.

# EREMOPHILA DESCRIPTIONS (continued) Bob Chinnock

### 3. Eremophila interstans (S. Moore) Diels

Described as <u>Pholidia interstans</u> by Spencer Moore in the Journal Linnean Society of London, 34:210(1899). Transferred to <u>Eremophila</u> by Diels in 1905.

Shrub or small tree 1-3.5 m high with a rounded crown; branchlets erect, or slightly drooping, viscid, yellowish-green, finely and irregularly etched (glandular depressions), slightly compressed; leaves 1-1.5 cm long, spreading, narrow linear, terete or slightly channelled, recurved near apex, mucronate, finely etched as for branchlets, viscid; flowers 2-3 in axils, cream or very rarely light purple; calyx segments about 5 mm long, oblong-ovate, obtuse, glabrous, margins finely ciliate, surfaces glandular papillate, viscid, corolla small 5-10 mm long, tubular, lobes 5, subequal, finely white pubescent; anthers included; ovary finely pubescent, the hairs appressed, style glabrous; drupe small, 3-4 mm long, crustaceous.

This species is very common around Norseman. It extends west as far as Bullfinch and north to near Kalgoorlie. It is frequently associated with E. dempsteri, but can be easily distinguished from this species by its smaller tubular cream flowers, the smaller non-reticulated calyx-segments, the fine irregular etching on the branchlets and leaves, and the absence of the epidermal bands (see E. dempsteri).

4. Eremophila virgata W.V. Fitzgerald

Published in Proceedings Linnean Society of New South Wales, Series 2, 27:242(1902).

=P. interstans var. parvifolia S. Moore (described with species location cited above).

Viscid shrub 1-2 m tall, with erect stiff branches; leaves small 4-7 mm long, erect and usually appressed to the branchlet; surface of leaves and branchlets irregularly etched as in <u>E. interstans</u>. Flowers cream similar to <u>E. interstans</u>. Ovary usually glabrous but occasionally pubescent.

I have still not decided whether this species should remain distinct from <u>E. interstans</u> or be retained as a variety as Spencer Moore viewed it.

The growth form of this species is quite distinct from <u>E. interstans</u> as is its habitat. <u>E. interstans</u> grows on red clay loams amongst Salmon Gum and other <u>Eucalyptus</u> spp., but <u>E. virgata</u> grows on heavier very stony clay loams where it dominates the landscape and is rarely associated with <u>Eucalyptus</u>. The ovary of <u>E. virgata</u> is described as glabrous but I have found in some instances that it may be pubescent at least in the lower part.

<u>E. virgata</u> is common on stony heavy red brown clay loams from Ora Bandya (nortwest of Kalgoorlie) to at least Gnarlbine Rock (south of Coolgardie).

5. Eremophila brevifolia (Bartl.) F. Muell.

Based on Myoporum brevifolium Bartling in Lehman, Plantae Preissianae 1:350(1845) transferred to <u>Eremophila</u> by F. Mueller in 1859.

Shrub to 2 m high; stem glabrous, striated in younger parts; leaves small, sessile, flabellate to ovate, toothed, thick, glabrous, with a number of raised tubercles on the lower surface; flowers small, solitary; calyx-segments glabrous, 3 mm long, linear-oblong; corolla upper lip 2-lobed, lower lip 3-lobed, white or white tinged pink or purple above, glabrous outside, the lower lip and tube densely hairy within; stamens glabrous; ovary and style glabrous; fruit drupaceous, small, dry, 3 x 1.5 mm, compressed, notched at apex.