

## EREMOPHILA STUDY GROUP NEWSLETTER NO. 19 OCTOBER 1980

The Study Group is now eight years old and during that time we have amassed a whole range of plants, together with a wealth of information. Two questionnaires have supplied specific details on certain aspects and the time has come to put this into print for the benefit of native plant enthusiasts. Whilst I have many notes and some articles extracted from the various newsletters, it is not enough to produce a comprehensive guide to the growing of eremophilas. I have neither the ability or the time to do all the work involved, nor would it be desirable to have only one point of view. Therefore, I will have to enlist the aid of members to produce written works on certain subjects. Your co-operation will be appreciated.

G.N.

### ANNUAL FLOWER SHOW, S.A. REGION

Geoff Needham

Once again the Study Group put on a display. We had 90 botanical specimens in flower as a table display using a large vase of *E. margarethae* as a centre-piece, together with a natural environment display area in which plants in pots, and some large prunings from mature plants, were set into red sand to produce a spectacular effect.

Members should note that, even if growing conditions in the garden are not good, many species will grow well in a 25—30 cm pot, providing a sunny spot with some protection is available.

### PROPAGATING FROM CUTTINGS

Cheryl Moulder

Vegetative propagation produces plants which have identical characteristics (colour form, growth habit) to the parents. This is particularly important when trying to propagate from a hybrid parent.

**Requirements:** The containers to be used for propagation must be clean and free of bacteria, and there must be sufficient room for good root development. I find that 300 ml cream containers with 3 or 4 holes cut into the base are ideal, but other containers which may be used are plastic and earthenware pots. Even jiffy pots or small thumb tubes are suitable for single cuttings. If earthenware pots are used they should be thoroughly scrubbed and washed in disinfectant and then washed again.

**Propagating Medium:** Basically, any medium which is open enough to allow good drainage and aeration is suitable. A medium in common usage is 1:1 sand and humus or peat moss. The sand must be carefully washed to remove any fine particles which are likely to reduce the permeability of the mix and result in the rotting of the cuttings. If available a 1:1 mixture of coke breeze and peat moss is also suitable.

**Cutting Material:** Ideally, the cutting material should be planted as soon as it is taken. It is not always possible to be choosy however, especially when cuttings are sent back from field trips. The cuttings can be any size from small to large, heel or tip cuts, from young to mature wood.

Root suckers are the best type of cutting. Simply pull or dig up a root sucker and plant it into the propagating medium as it is.

**Preparation of Cuttings:** If the cuttings have dehydrated in transit, immerse them in water for 10 minutes. The addition of a fungicide (BENLATE or CAPTAN) can be beneficial. If resin-coated cuttings have stuck together, soak the cuttings in a 1:1 methylated spirits and water solution, and then wash in fungicide or water.

Make a fresh cut at the base of the cutting. Remove leaves and side shoots on the lower 1/3 of the cutting and also remove flowers and fruits which will invariably rot. Take care not to strip the bark. Dip the bottom of the cuttings into rooting hormone (e.g. SERADIX No. 1).

Use a long pointed instrument (e.g. a skewer or a dibber) to make a hole in the potting medium. Place the cutting in the hole and press the medium firmly around it. Do not overcrowd the cuttings in each pot as they need a good circulation of air to prevent rotting.

In each pot, place an identifying label with the name of the plant, its collection number where applicable, and the date when cuttings were put in.

**Location of Potted Cuttings:** If a dry propagating location is required, it is possible to strike the cuttings outdoors, sheltered from the wind. They can also be placed in an enclosed verandah.

To maintain humid conditions, individual pots can be placed in plastic bags which can then be hung from branches of trees, or a propagating frame can be used.

A frame in common use is a wooden structure with a hinged lid. The wood should be treated to prevent rotting by painting with creosote. Strengthened plastic can be attached to the four sides and the lid with drawing pins. Recommended dimensions for the beginner are a height of 30 cm (necessary for adequate humidity), and length and width of 95 cm and 70 cm respectively.

This frame can be placed anywhere in the garden. Level the area first, place a sheet of strong plastic on the ground to prevent weed growth, and sit the frame down. Place a layer of coke, scoria, or gravel, inside the frame and sit the pots on this.

To maintain suitable propagating conditions, it is advisable to keep the frame fairly full. All of these propagating locations can be anywhere from complete shade to full sun. Remember though, that the temperature can get quite high in summer and frequent watering will be necessary. A semi-shaded position is more suitable in hot conditions.

**Hygiene:** Spray the cuttings at least once a week with a fungicide and remove any rotted cuttings to prevent contamination of healthy plants. Check frequently for any pests (slugs, etc.) which will quickly decimate fresh growth.

#### A FEW COMMENTS ON SUBJECTS RAISED IN THE LAST NEWSLETTER

Brian Staker

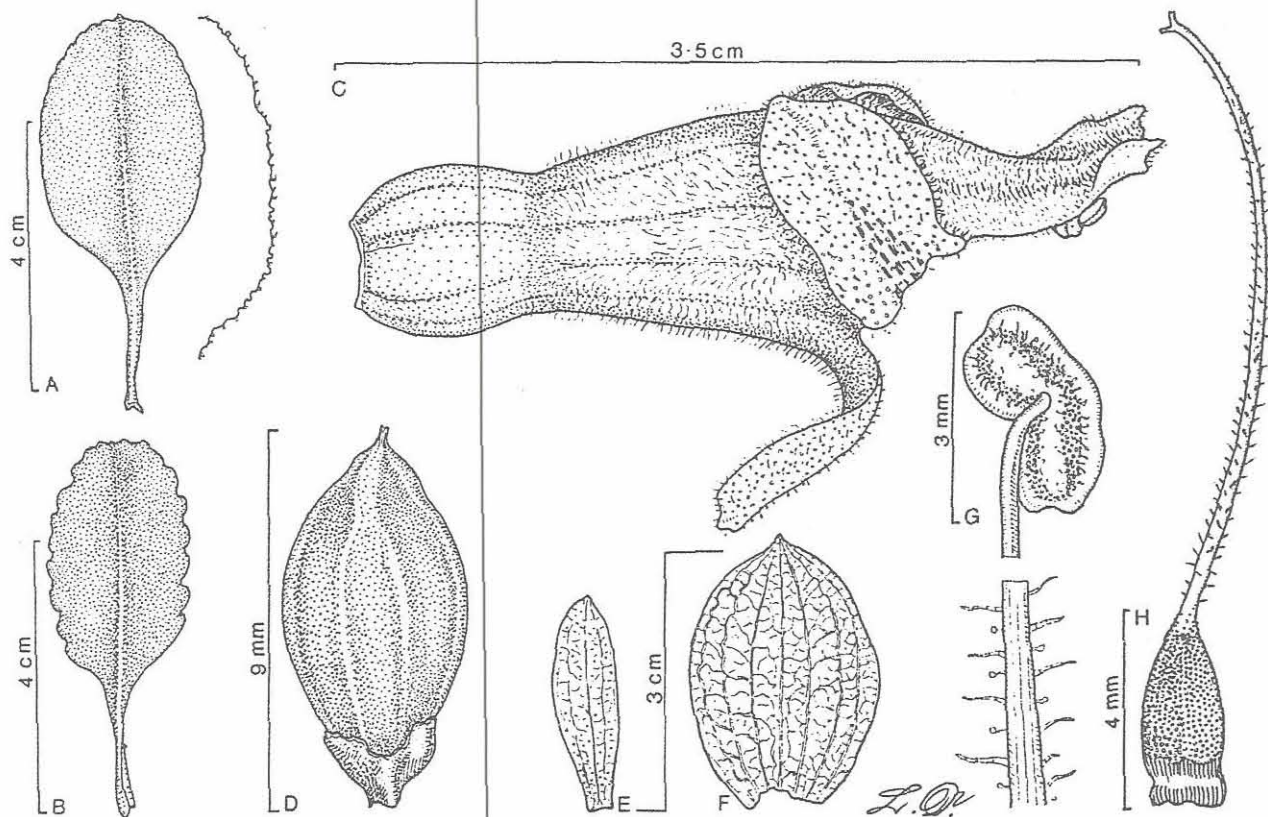
First I.B.A., this is the hormone in SERADIX and it is printed on the label. SERADIX powder is available in three strengths 1, 2, & 3. I have found that hormone treatment improves strike rates, but usually only No. 1 as the others are too strong for soft tip cuttings. I have also had some good results using STRIKE the hormone being in this case Alpha Naphthylacetic Acid (A.N.A.). STRIKE also contains the fungicide CAPTAN and this may account for the good results rather than A.N.A.

The comments on taking cuttings from young plants are quite valid, and I have had good results by following this method; one snag is the small number of cuttings per parent plant. The practice of using non-mature plants (pre-flowering) is well known in nursery work and some nurseries maintain a stock of young plants for propagating material. This method improves rates for olives, etc. and there is one rose stock which will not strike if the parent plant has flowered.

My experiments with budding and grafting are coming along quite well. I am now using Myoporum insulare as stock because of its hardiness, ease of propagation, and rapid growth. It appears that most Eremophila will graft onto M. insulare. I have Eremophila macdonnellii (grey leaf form), E. pterocarpa, E. maitlandii, E. eriocalyx, E. saligna, E. santalina, E. bignoniiflora, E. mitchellii, an unnamed species from Tom Loffler, and E. glabra (prostrate form with yellow flowers), on M. insulare. The prostrate E. glabra is a bud graft of one metre above ground, hopefully to provide a weeping standard.

I tried grafting E. fraseri but it appears that the viscid coating on this species prevents a union taking place; in fact the stock plants died back several centimetres below the graft, and where I tried budding, it died around the bud. I suspect either a toxic affect on the stock plant or an inhibitor which prevents the cambium layer from forming callous tissue. This could account for the lack of success in striking cuttings of E. fraseri as the viscid substance would adhere to any cutting instrument and be smeared across the cut surface. Perhaps carefully broken pieces might strike better?

I have hopes that by grafting Eremophila onto stock plants, some of the short lived ones, and those species susceptible to root disease, may have their lives extended.



Eremophila fraseri

A-B, leaf variants; C, side view of corolla; D, fruit; E-F, inside and posterior sepal; G, stamen showing hairs; H, gynoecium with enlargement of style showing hairs.

