

Association of Societies for Growing Australian Plants
EREMOPHILA STUDY GROUP NEWSLETTER No. 49

March 1993

This issue will be relatively short, due largely to the lack of material received from members of the Study Group. It is somewhat difficult to come up with articles each month, so we do rely on members to contribute; even a brief note or some snippet of information which may be of some value to the others in the group.

Approximately 15 replies have been received from growers, noting their collections of eremophilas. Thank you to those who have replied, but we do need a much more positive response if we are to collect together enough information to make a reliable index of plants in cultivation. Not only an index, but also a record of where some of the more difficult to grow plants are being grown, in case we find that numbers are dangerously low. This is particularly true of the endangered species, of which there are many.

We have had no response to the question of a slide library. I am sure that there are many members who have excellent slides from which we could take duplicates or which are spares and could be donated to the Study Group's collection for all to use in the future.

Colin Jennings

STUDY GROUP BOOKLET

We still have a good supply of these for anyone interested. At a cost of \$6, plus \$2.75 postage anywhere in Australia, they are excellent value. Many have been sold to students of horticulture, needing information for their projects and assignments, and we have distributed a large number to members of ASGAP who are wanting more information about the Myoporaceae generally.

STUDY GROUP MATTERS

Colin and his wife will be away for most of April, May and June enjoying some long service leave. Any matters dealing with the Study Group should be addressed to Bob Chinnock, whose address appears at the end of the newsletter. It is suggested that any matters financial be held over until late June, when subscriptions etc. can be again sent to Colin. The next newsletter should be out in August, so this should give everyone time to think about some item to be used for that issue.

MEMBERSHIP LIST

As a separate inclusion you will find a copy of the membership list. This is accurate to the current time and replaces the list sent to members with No. 41. Phone numbers have not been included; it was thought that if anyone wished to contact another member, a letter would be suitable, or if one is travelling through an area and wishes to contact someone, then they can find the phone number in the directory.

PROPAGATION & AFTER CARE

A few members have asked for assistance with the preparation of cuttings of eremophilas. Here are a few hints which may prove useful; at least I have found them to be suitable to my conditions.

Timing

I have found the best time to take cutting material is in the early to late spring, or towards the end of summer, provided that the plants from which the material is taken has a good flush of new growth which has become slightly hardened. Very soft growth often rots when placed in misting situations, particularly if from the grey-leaved or hairy-leaved species. It is usually recommended to take the cuttings in the early morning, before the effects of the sun have caused water loss and possible stress.

Storage

It is not always convenient to prepare the cuttings immediately after collection; this is particularly so if you have made a visit to a friend or you have received material in the mail.

I have found that the lower part of the refrigerator is ideal, provided that you have a cooperative partner. Fresh plant material will keep under these conditions for up to a week or so. There is available now, from most supermarkets or grocery stores, a food storage bag made of a plastic which absorbs ethylene gas, one of the causes of ripening and aging of plant tissue. These are more expensive than the regular 'fridge' bag but are so much superior. They are generally green in colour. A number of people have used them very successfully in collecting in the field, and then placing the bagged material in an esky or similar container.

Preparation

The most efficient method I have found involves using a very sharp pair of nail scissors or a sharp scalpel, using a laminex topped cutting board as the base. These two methods of cutting the stem each prevents bruising of the area surrounding the cut.

Leaves are trimmed by stripping downwards; this is suitable for those species which do not tear the outer layer of tissue with the leaf petioles. For those that tear, it is often best to strip the leaves upwards, but care must be taken not to bruise or rupture the outer layer. For those species which present problems the best method is to trim the leaf, at its base, using the sharp scissors. This prevents any damage to the stem; in fact if I have time I use this for all cutting preparations, but when you are doing several hundred it does become very time consuming.

The lower end of the trimmed cutting is then dipped into hormone powder. I usually make the bottom cut just below a node, so that the cutting is dipped to the depth of the second node. If internodes are long, I usually dip to about one centimetre. If hormone solutions or gels are used I dip to the same depths.

In all cases I use my own 'brews', although I have found that the usual proprietary lines work just as well.

Dipped cuttings are then placed into prepared holes in trays of sharp sand, lightly pressed into place with the fingers. I have used sand only for some time with good results, but have also found that sand and peat in a ratio of 3:1 is also quite good. Too much peat tends to hold too much water and the lower parts of the stems, which are sitting in the moister part of the mixture, tend to rot more readily, and I prefer to avoid using fungicides if I can avoid them. I have noticed several growers using 100% perlite as their striking medium; I must say that I have not used it. A warning here, some perlite is extremely alkaline — test it first if you intend to use it.

Care & attention

Initially I placed the trays of cuttings in the middle portion of our glasshouse, semi shaded by the overhanging plants. They were watered daily in the morning and received no further treatment.

When I tried to use a propagator with regulated misting I found that I obtained less reliable results, together with a lot of fungus infection, obviously from too much water. Other plants such

as campanulas, violets etc., thrived. On using Fongarid as a soil drench and by lengthening the misting period I was able to reduce the problem. Fongarid and Benlate have been used successfully as a foliar spray also, both as a prophylactic and as a curative measure.

After treatment

Once the root system is well established, usually noted when the roots start to extend through the base of the tray into the moist sand bed, the struck cuttings are then individually planted into 5 cm tubes and then into the bags or pots depending upon whether they are for plant sales at SGAP shows or for my own collection. Although it involves extra handling I have found that the tube stage helps the cuttings to harden off in a relatively confined soil environment, and the roots seem to develop quite well when transferred into the next stage.

Once in the tubes they go into a shaded area initially, a sort of buffer between the glasshouse environment and the 'real world'. When in bags or pots they go into unshaded positions to harden off ready for planting out.

Colin Jennings

FLOWERING OF *EREMOPHILA "ARBUSCULA"*

Eremophila "arbuscula" is an undescribed species restricted to the Grey Range in south-west Queensland. It is common on the slopes and ridges along the range and is one of the tallest species growing to 11 metres. The leaves are greyish-white, soft and somewhat unpleasant smelling when crushed. In the past it has been often mistaken for *E. oppositifolia* subsp. *rubra*.

The flowering of this species appears to be very irregular and although Betty Ballingall and some of her friends have monitored the species over a number of years (during both wet and dry periods) only once have flowers been observed and in this case only one branch on an otherwise non flowering population was found.

As far as I am aware there are only two plants in cultivation one, a seedling I collected in 1983, now 2 m tall and a smaller plant that I gave to Ken Warnes which I obtained from seed. Numerous attempts to establish the plant by grafting and cuttings have failed.

To my surprise I noticed buds developing on the plant in my garden in early January and flowers started opening towards the end of that month and continued through February. The flowers of this species are very small with sepals shaped like *E. oppositifolia* and a small white corolla 5 - 7.5 mm long. The lower lobe has a few large yellow or orange spots and the inside of the tube is finely spotted yellow to orange but the base of the tube around the ovary is a pale carmine colour.

Flowers only developed on a couple of branches on the northern side of the shrub so it will be interesting to see what the pattern of flowering is next year. Whether or not the normal flowering period for this species is late summer will need to be confirmed but it may account for the failure to find flowers through the normal *eremophila* flowering period — August to November.

Bob Chinnock

Leader: Colin Jennings, 4 Kinnaird Crescent, Highbury SA 5089

Editor: Bob Chinnock (c/- Address below)

Typed and printed at the Botanic Gardens, North Terrace, Adelaide SA 5000

