# Association of Societies for Growing Australian Plants EREMOPHILA STUDY GROUP NEWSLETTER NO. 37

February 1988

Best wishes to all members for our bicentenary year and may this be the year when the 200th species of eremophila is named.

Our thanks to the Director and staff of the Botanic Gardens for their assistance in the publication of this Newsletter.

Included with this newsletter is a chart which everyone who has one or more eremophila growing can fill in. The information will be collated to give us the flowering period for each species. Any plant one year or more can be recorded, use dots (...) for a few flowers a dash (-) for more prolific flowering (a few examples are provided to assist you). I recorded flowering periods for several years, surprisingly there was little variation from year to year for any particular plant although different forms of the one species did vary. E. alternifolia was one of those, one form from W.A. threw masses of flowers for 3 weeks whilst a form from the Flinders Ranges always has a few flowers. E. glabra subsp. "tomentosa" flowered continually for 13 years.

In my overgrown and crowded backyard is a specimen of  $\underline{E}$ . longifolia, a species prone to suckering. Suckers appear from time to time usually in the same place and one such patch is 4 metres from the parent. Recently I found a sucker 7 metres from the parent in the opposite direction which was beyond an almond tree,  $\underline{E}$ . oppositifolia and  $\underline{E}$ . alternifolia and two cutting frames to surface in a bare area which indicates a sizable root system.

A reminder for those who have not paid their subs, please do so or let me know if you do not wish to continue.

Geoff. Needham

#### Myoporum cordifolium

by Bob Chinnock

I have recently discovered that  $\underline{\text{M. cordifolium}}$  is the correct name of the plant being called M. salsoloides.

Last century it was common practice for botanists to adopt a new species name for a plant described or transferred in a different genus. Thus Robert Brown used the name Myoporum serratum for the species which had been first described as Pogonia tetrandra. The correct name for this species is Myoporum tetrandrum.

Ferdinand Mueller described <u>Disoon cordifolius</u> in 1859 and in 1863 Turczaninow published his description of <u>Myoporum salsoloides</u>. He makes no reference to Mueller's species and was probably unaware of it. However, as Turczaninow's species was described in <u>Myoporum</u> Mueller automatically adopted this name and used it in his census and in his book of lithographs published in 1886.

As the Mueller name <u>cordifolium</u> was published four years earlier it has priority over <u>salsoloides</u> and therefore must be adopted unless this name has already been applied to another species in the genus to which it is being transferred.

## Notes from Wallalee

#### by Beverley O'Keeffe

Having established a number of native plants in a bushland setting, we find that quite a variety of birdlife (and other animals) are attracted to our garden. There are two eremophila bushes outside our dining room window. This is on the southern side of the house and the plants only get a little sun in the middle of summer. They got off to a very good start because there was a overflowing pipe near them (rain water too) and they really liked this. Unfortunately someone fixed the pipe and now they don't get very much water, but it doesn't seem to matter.

The two plants in question are E. christophori and E. bignoniflora. E. christophori is very well suited to the position. It doesn't seem to try to reach out to the light and is as well grown towards the wall as it is on the side facing the light. It also is nearly always covered with lovely blue flowers. At the moment it is about 1.5 m high and probably 2.5 m across. I keep cutting lots off the front so that it doesn't grow out too far onto the lawn. E. bignoniflora, on the other hand, seems to like more light. It reaches out and leaves a great space near the wall. When it was about 2.5 m high it was so heavy with fruit that I thought it was going to fall over, so I cut off about 1 m all over. It is shooting like mad now and I hope the trunk will be stronger next time. This plant does not flower nearly as prolifically as the E. christophori, but when it does there are always honey eaters present. Strangely, I have never seen birds feasting on the E. christophori. They must not be attracted to the flowers. I wonder why?

Another Eremophila which seems to attract the birds is E. drummondii. This particular bush is low growing with glossy dark green leaves. It didn't seem to be making much headway at all, and then I discovered that the spotted bowerbirds visit it and nip off pieces. They eat it! and possibly use some to decorate their bowers.

Probably the most edible <u>Eremophila</u> in my garden is <u>E. maculata</u>. Small plants have no chance against the rabbits and other small animals which seem to be able to find their way into the garden no matter what I do. Plants of this species out in the bush always seem to be eaten off, too.

## Extracts from letters

"My garden is coming on slowly and alas not much luck with Eremophilas so far but I shall continue to try and may have some luck in due time. The only one that seems happy down here is <a href="E.inflata">E.inflata</a> which has flowered. I call it my Claytons eremophila because I read somewhere that in the proposed revision it will get the flick. Once my windbreak is established I may have better luck but not a lot of eremophilas are available in the Geelong area."

Norm J. Bone

"In September of 1986 we spent some time in the White Cliffs area of NSW. On a rocky hillside east of White Cliffs at Mandalay we found a small plant of Eremophila gilesii with white flowers (all the other plants in the area had mauve flowers). The plant had suffered from goats and had been reduced to a few dry sticks apart from the one flowering branch. A few very small shoots were growing from the base but we were unable to take cuttings. Before we left we covered the plant with some dry Mulga branches to give it some protection in the future.

A few days later, when travelling north of White Cliffs we found several white flowering plants of Eremophila bowmannii in a healthy condition as was the blue flowering plants that were growing beside them. But the cuttings we took failed to strike."

Bruce Wallace

"I have tried a few treatments on eremophila seeds this year. The most novel being soaking them in the pitchers of tropical Nepenthes. Also in a solution of chelated iron. All to no avail, unfortunately in the last week some of the E. polyclada I had soaked in soapy water have germinated but it is too early to attach any significance to this.

Next year I might try to graft eremophilas onto Myoporums."

Mike Burston

"Our home garden has been mulched with 2-3" of coarse river sand. Whilst most plants are growing well including many eremophila's. There are some that don't like these conditions.

E. tomentosa and E. forrestii (leucophylla) are two such plants. These plants are quite healthy on our block without mulching but at home in the winter the coarse sand appears to make it colder,? wetter,? and gradually the plants succumb. Possibly another reason could be that the plants grow so quick in the warmer months they are not tough enough to withstand the winter".

David Shiells

#### The light at the end of the Tunnel

by Bob Chinnock

Many of you will know that I have, over the past decade, been gradually working through the Australasian Myoporaceae and at long last I can say that the end of the revision is in sight (don't hold your breath though as it will be two years before it is in print).

I have now completed descriptions of the 197 species of Eremophila and I am now working through the 18 Myoporum species.

Although Geoff. Needham expressed the wish to see the 200th species of Eremophila published, I am, at this stage unable to prepare the three or four additional species that I am aware of because of inadequate material to work on. Nevertheless when the work is published (hopefully 1989) I will have added 90 new species of Eremophila at least two new genera one of which consists of four new species and 3 new species of Myoporum.

Unfortunately as this research is only a part of my duties at the Herbarium things haven't gone as fast as I would have liked. Field trips too, slow down the work as each time I go into the field either something new or some modification of an earlier treatment results. Perhaps a good example of this is the E. clarkei - E. georgei complex. At first the group made no sense at all. There appeared to be a gradual change from the E. georgei type to the E. clarkei type and to further complicate the issue E. granitica seemed to grade into E. clarkei. As a result I first reduced E. georgei to a form of E. clarkei. E. granitica was sorted out and easily excluded from the complex by its hair type. Following the field trip I did in 1986 I reinvestigated the clarkei - georgei complex and was able to adequately separate the two and isolate an additional three species. An extra three months was taken up to resolve this complex.

Although the field studies slow things down they definitely contribute to a more accurate end result. The more collections of a species that one has to work with the more reliable the description and measurements will be. After having studied over 805 dried collections of E. longifolia not to mention many live populations I feel I have a very clear idea of this species and its variation but what of E. undulata? Originally I had two collections to work with and until I collected material in late 1979 I had no fruit or any idea of flower colour. Although the material I collected was vegetative (drought) Tom Loffler, managed to get a plant established and I have successfully grafted it. Although I believe that my treatment of this species is adequate some modification to measurements might occur when new collections come to hand.

It is aimed to bring the revision out as a scientific/popular book with colour photographs of as many species as possible. So far, I have photographs of all Australian Myoporaceae except for 13 species of Eremophila (93.5% coverage of the genus). Apart from E. hughesii the remaining species are either known only from the original collections or they occur in very remote areas. If anyone has any good sharp focus closeups of E. hughesii please contact me. I will keep members informed of my progress.

### Example of Flowering Records

SPECIES	WINTER			SPRING			SUMMER			AUTUMN		
	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY
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Articles are now wanted for our next Newsletter. Please write on alternate lines.

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