EREMOPHILIA STUDY GROUP NEWSLETTER NO. 31 APRIL 1985

I would like to say thank you to all those members who replied to the question in the last Newsletter about the five most desirable eremophila species. It was a very good response and some went to considerable trouble to arrive at their choice. One member made a chart and allocated points for various features, while another suggested a whole series of combinations for differing situations, i.e. the plantation, garden, and rockery, etc. Quite a few listed forms of some species but for the purpose of this survey no distinction was made between them. Flowers figured in many choices, while growth habit was another major factor.

G.N.

RESULTS OF SURVEY Geoff Needham

Twenty four replies were received. Nine eremophilas received 52% of the vote. They were E. calorhabdos, E. drummondii, E. glabra, E. ionantha, E. mackinlayi, E. maculata, E. "nivea", E. polyclada, and E. racemosa. The clear winner was E. maculata.

Of the twenty four replies, six members had 4 of the top nine in their list, eleven had 3, two had 2, and four had 1.

Most of the top nine eremophilas have been around for some years and should be readily available. This of course may have influenced the result to some degree as some of the new or rare ones, which have good potential, are still fairly restricted.

Selected comments:

- E. calorhabdos: "Spectacular, flowering for most of the year, attracts many honey eaters." "It has an unusual growth habit, long canes which waver in the wind."
- E. drummondii: "Good flowers and rich green foliage." "A small attractive shrub with masses of flowers in spring."
- E. glabra: "Prostrate [form] for sheer hardiness in harsh conditions." "Contrasting attractiveness of red flowers and grey foliage essential to the native garden."
- E. ionantha: "Good foliage plant, doesn't tend to woodiness, tolerates plenty of moisture." "Shapely bush needing minimum of care, reliable grower, attractive flowers."
- E. mackinlayi: "Pleasing effect of light green shading of new growth compared to older foliage plus a big beautiful purple flower." "Attractive foliage and the large size of the purple flowers."
- E. maculata: "Large bright flowers and a profuse flowering habit." "A good hardy shrub, grows well anywhere." "Very popular with my friends, they like the large coloured flowers and massed flowering."
- E. maculata var. brevifolia: This plant needs special mention as many growers referred to it. "A brilliant small plant that is a traffic stopper, complements other small plants." "Neat fast growing green ground covering plant, brilliant massed crimson flowers." "A profusion of deep pink flowers on an attractive compact plant, spectacular in flower."

E. "nivea": Fast growing bush with striking soft grey foliage, beautiful contrast with massed lavender blue flowers." "Beautiful silvery weeping foliage with equally beautiful flowers." "A really beautiful foliage plant, silvery-grey with the added bonus of a profuse flowering of mauve flowers."

E. polyclada: "Unusual foliage good contrast in the garden, lovely large white, spotted flowers." "Fresh appearance in the hottest weather, while the flowers add variety to the garden, and it is hardy."

E. racemosa: "The multi-coloured buds and flowers are most attractive, has always grown well, needs some pruning when young." "An attractive and lush bushy plant which puts on a delightful show of colour for several months."

A LARGE EREMOPHILA Neil Shotton

Growing on a clay ridge on my property at Belmont Park via Rochester, Victoria, is the Grandfather of eremophilas. It is a plant of Eremophila longifolia, and the only one I know of within 65 km. Its base is 1.7 metres in circumference, branching into two trunks and growing to about 5 metres high. The frosts burn the leaves each year but it manages to recover and produce pinkish-maroon flowers almost continuously, but more profuse in the early summer. My father, who would have been 85 if he were alive, told me the tree was the same shape and size when he was a little boy. It has not altered to this day and the only attention given was a pruning of dead wood about 10 years ago. Two seedlings grew near the tree, after I cultivated the paddock, and I transplanted them with success to my shrubbery and they are now about 2 metres high and flowering well.

FIELD TRIP TO SOUTH-WEST QUEENSLAND (continued) Part 2 Bob Chinnock

Eremophila bowmanii is a very common, widespread species in northern New South Wales and Queensland. The typical form has linear leaves with revolute margins and E. bowmanii var. latifolia, described by the late Lindsay Smith, has broader flattened leaves. In addition to these, a third undescribed form occurs in south-west Queensland and adjacent border area of New South Wales. It has broad short leaves, which are often orbicular with thickened margins, but in addition, the flowers droop and the hair covering of the pedicel and sepals is shaggy. I found this form to be particularly common on rocky soils in the Quilpie to Thargomindah area.

Betty Ballingall had had a report from near Yowah of a new red eremophila, which we eventually found on a rocky plateau to the south-east. It turned out to be a delightful dwarf form of <u>E. latrobei</u> which grew 15–30 cm high and 20–40 cm wide, although one large plant growing under a <u>Hakea</u> was 60 x 60 cm. The flowers of this form were pure red.

Although <u>E. linsmithii</u> has been reported as being a rare species I found it to be very common in rocky areas throughout south-west Queensland. It was found growing as far north as Mt. Grey near Emmet. Flower colour varied from white to deep lilac although white forms were rare.

Two hybrids were encountered on the trip. The first, which we found at three locations along the Jundah road north of the road junction on the Windorah to Quilpie road, was E. bowmanii X E. latrobei. At all three sites both parents were common and growing with the hybrid. Vegetative features are like E. latrobei but the corolla is reddish-purple and the stamens are partly exserted. Earlier this year, Harvey Shaw (Qld) sent me down some plants for identification, one of which was this hybrid which

apparently has been known as the Charleville form of E. latrobei. The second hybrid, E. bignoniiflora X E. polyclada, was found 30 km south of Isisford. It looked like a huge E. polyclada on top of a trunk. The solitary plant, again adjacent to a road on disturbed soils, was growing with E. bignoniiflora but no E. polyclada although populations of this latter species occurred further up and down the road. The plant was 4 m high and 6 m wide, had long linear leaves and flowers closest to E. polyclada, but these were pale lilac with a mixture of the coarse and fine spotting found in the two species.

The final eremophila of interest found on the trip was the form of \underline{E} . divaricata on which I requested information in Newsletter no. 29. The Bourke form was found on the river flats between North Bourke and Polygonum Swamp on the Darling river-flats. Unfortunately the road south to Louth was closed due to flooding so I was unable to examine populations further south. Hopefully I can do this later this year on my way to Queensland to study Myoporum.

CULTIVATION OF EREMOPHILA FROM SEED Tom Loffler

During the last 24 months I have been doing some germination trials at Waikerie with eremophila seed. The methods I have used were soaking fruits in varying strengths and combination solutions of potassium nitrate, gibberelic acid, sodium hypochlorite, and water, before planting them. Germinations have resulted from all methods. However, the most effective method appears to be soaking in water before planting.

The method is as follows: Collect mature dry fruits and remove both the dry calyces and the loose fruit coverings. Place fruits in small bags (made from an old cotton sheet), sewing the ends to contain them. Label bags and place bags in a large container of water (I place numerous bags in a plastic netting container which is placed in my river water storage tank). A large volume of water is necessary to leach any inhibitors from the fruit and/or seed coating. The leaching contaminates the water so do not use a rain-water tank. Periods of soaking range from two weeks to two months and all appear to be equally satisfactory. I then place the fruits in a 50 mm high tray, in a mixture of two parts coarse sand:one part peat moss. Trays are placed under mist spray in the glass house. Seedlings have appeared after ten days and have continued to appear sporadically for up to 12 months. If no seedlings appear after two months I allow the tray to dry out for a week and then return it to the misting process. In this way germination usually commences.

My theory is that once the inhibitors are removed, the fruits need a period of dryness and heat to allow the capsules to weather. When moisture is then reapplied, it can reach the seed, thus causing germination. Any initial germinations therefore would be from fruits which had been weathered or damaged. Note: I have found that after about three weeks soaking, the outer layers of some fruits e.g. E. santalina, and E. longifolia, have rotted away or are very easily removed. This may place the fruits in a similar situation as if they had been passed through an emu. Normally these fruits would dry out and then germinate when sufficient moisture was available.

I have been pricking out seedlings as soon as they appear. Even if the stem has been broken off above the seed, there is approximately a 95% survival rate provided they are placed back under the mist. If anyone has any fruits of rare, hard-to-strike, or spectacular forms, would they please contact me and I will send them some pre-paid envelopes for posting of fruits.