EREMOPHILA STUDY GROUP NEWSLETTER NO. 23 MAY 1982

Ray Isaacson suggested after a recent trip that some of the more difficult species we have attempted to cultivate, those that grow in sandy areas, could be grown in a slightly acid soil (pH6.5). Has anyone any thoughts on this?

G.N.

CUTTINGS

Richard Davidson

At Melton near Melbourne, I have done a little more experimentation this season, after some disappointments with the material from Geoff Needham and Ken Warnes in autumn 1981. I collected cuttings from Neil Marriott in Stawell, the last week of November 1981, and also set some of my own during December. The cuttings were put into propagating sand only, in a 1.2 x 0.9 m cold frame under a tree, and they received morning and afternoon sun. They were watered morning noon and night unless the temperature exceeded 35°C, when they were watered five or six times daily. The top was left slightly open in hot weather. Here are the interesting results:

Date Set	Species		rooted	
Nov. 1981	E. macdonnelli (broad green leaves)	(7)	17/1/82 17/2/82	(2) (5)
	E. densifolia	(7)	17/1	(5)
	E. margarethae	(7)	17/1 (3), 2 others rooted, but roots rolled off.	
	E. mackinlayi	(5)	16/2	(2)
	E. glabra (grey woolly leaves, linear)	(6)	16/2 16/2 8/3	(1) (1) (2)
21.12.81	E. eriocalyx	(6)	none yet	
	E. maculata (yellow form)	(4)	30/1 (1); 1 died 7/2; two left	
	E. glabra	(3)	23/1	(3)
25.12.81	E. drummondii	(6)	none yet	
	E. ionantha	(6)	all dead by 17.1.82	

E. margarethae was interesting, in that I think they should have been checked earlier. The strike rate and speed was much quicker than in autumn. Melton has a relatively cold winter, though drier than Melbourne, and if the cuttings do not strike before the weather turns, they are very slow. I hope to try some others in spring and summer this year.

A note on plants in plastic bags: I put my plants away from the watering area because last year I lost some E. decipiens through overwatering. This year I lost the same species due to drying out! E. denticulata also seems to be sensitive to drying out, as is E. racemosa, but that may be peculiar to my soil and other conditions. E. hillii is not looking happy and may be too wet, or may not like the soil.

I have planted out several more species this season, including E. macdonnellii (3 forms), E. glabra (2 forms), E. margarethae, E. subfloccosa (W.A.), E. racemosa, E. biserrata, E. serpens, E. brevifolia, and I have some more planned.

GRAFTING

Bob Chinnock

In 1977, my attempts at grafting various eremophilas onto E. maculata stock were unsuccessful and I discussed this in Newsletter no. 10. I made no further attempts at grafting until I read Brian Staker's article in Newsletter no. 19. He discussed his success using as the stock Myoporum insulare, which is hardy, easy to propagate, and a rapid grower. My first two grafts were made out of necessity. A new species from the Hamersley Range, and which I had recently obtained from Ray Isaacson, looked as if it was desiccating, so I decided to graft the two shoots. Within three days of doing this the parent plant died (the plants being grown by Ray Isaacson and Geoff Needham have subsequently died also). The two grafts, however, have never looked back and they are now growing vigorously and are in flower. Since then I have successfully grafted the following: E. abietina, E. chamaephila, E. cuneifolia, E. duttonii, E. "elliptica", E. inflata, E. interstans, E. "obtusifolia", E. "orbiculata", E. pentaptera, E. pustulata, E. tetraptera, E. virens, E. viscida, Myoporum platycarpum, and Bontia daphnoides (Bontia, consisting of only one species, occurs in the West Indies).

Perhaps at this point we should ask whether there are any advantages in grafting eremophilas?

There are a number of benefits in grafting. Firstly, when species are sent, or brought back from field trips, and especially for species with which we are unfamiliar, grafting provides an alternative method to cuttings to try and establish the species. As you will know species such as E. cuneifolia and E. "obtusifolia" are sent back every year from Western Australia but they are virtually non-existent in cultivation because of the difficulty of striking these species.

Secondly, short-lived species and species susceptible to rotting, such as E. macdonnellii, E. gibbifolia, E. crassifolia, E. punicea, if grafted, may grow for years.

Thirdly, lime induced chlorosis can be overcome by grafting susceptible species onto resistant stock.

In his article in Newsletter no. 19, Brian mentioned his unsuccessful attempt to graft E. fraseri. I do not believe that the resin was the cause of the failure as suggested by Brian as I have been able to graft E. abietina, and equally viscid species, and I have been partially successful in grafting E. fraseri. One graft survived for about three months, and I think its demise was more through my neglect after it had been placed outside than to anything else.

In the initial stages I had a few problems with grafting, in that the stock plant frequently rotted. The rotting of the stock plant was found to be caused by a combination of using rooted cuttings which had not been left long enough to establish a strong root system, and of overwatering in the frame. Unlike cuttings, watering of the plants once a week was found to be sufficient.

I have always treated newly grafted plants as cuttings and placed them in a cutting frame for at least a month. In this way, under conditions of high humidity, stresses on the graft are reduced to a minimum. During this period, new growth will develop if the grafted plant is going to take.