

Hello Everyone,

Rain is falling here today - again and most of Australia has reported unusually high figures this year. Melbourne doubled its usual June total and while my garden overall looks very green I am very anxious about some of the hakeas that are not used to such prolonged cold weather. My land slopes gently and therefore I have little trouble normally but this year my heavy clay loam is sodden and in some parts very difficult to walk on. If your drainage is excellent there should be no worries and even if your land is flat and heavy, provided you have raised your beds a little, the hakeas should survive. Two of my larger hakeas have leaned over to alarming angles, one, *H. francisiana*, has been anchored to a stout fence post but the other, a *H. laurina* with red flowers, is less lucky because the soil is so soft the stakes will not hold. I am going to prune it heavily and see what happens.

Late summer and early autumn we had a very hot extended dry spell. The result was that many of the hose drip systems clogged up with ants and wouldn't work, one enterprising group drowned in my steam and dry iron, gardeners have to be a patient lot!

Some months ago I received a telephone call from Merv. Hodge, President of S.G.A.P. Queensland Region and the former leader of the Grevillea Study Group. He was reporting on the grafting experiments he had been making using hakeas grafted to *Grevillea robusta*. Merv. had watched his friend Harvey Shaw use his knowledge of grafting to work on banksias, eucalypts, prostantheras, eremophilas and grevilleas.

Harvey used fairly soft green tips for scions, grafted onto similarly soft green tips of the rootstocks. He used a wedge graft and covered the grafted material with a small self-sealing plastic bag (those with built-in "zippers") which is sealed just below the graft. The graft is sealed with Nescofilm, a self-sealing, moisture-proof thermoplastic film. It has the advantage of breaking down in sunlight, which means it does not have to be removed after the graft has taken. Nescofilm is fairly expensive, but comes in a roll 40 metres long and 10cm wide. One strip about 1cm by 10cm is used for each graft.

The plastic bags have to be removed after the graft has taken. This is indicated by the growth of the scion. The removal is gradual, by opening it a little more each day to allow the plant to acclimatise to the outside atmosphere. Plants are left in a shadehouse during the operation and are placed outside after the bag has been removed and they are hardened off.

Merv. followed Harvey's lead for some time, but after a few years started to experiment with different methods and different scions and rootstocks. He noticed that sometimes buds bound over with plastic tape, grew and burst through the tape. He reasoned that, if all the foliage was removed from the scion and the whole scion was wrapped in a single layer of tape, then the buds might grow through the tape. This would eliminate the need for the plastic bag and the plant might adjust itself to the outside atmosphere. The method is best in a shadehouse for potted plants but has been successful in full sun in winter.

Merv. varies the system sometimes by leaving a couple of leaves on the tip of the scion. These are either lightly bound or not bound at all. All three variations appear to succeed equally well, depending on the scion material.

Merv. found it difficult to manipulate the Nescofilm strip, so he wound it onto one end of a 65mm nail. He then held the nail and wound the tape onto the graft and up the scion. This gave him better control. He generally winds two layers of tape over the graft and a single layer over the scion, so as to give the buds a "sporting chance" of breaking free. He attaches the tape tightly so as to weaken it to assist the buds. It is best not to tape over buds which have already started to grow, these have some difficulty in breaking the tape.

He uses a whip graft because it is quicker and gives a good match of cambium layers. It is most desirable that the diameter of the scion and rootstock are the same for better matching of cambiums. The only difficulty is in holding the scion and rootstock together whilst starting the tape, but with a little practice, this can be mastered. Be prepared for losses, but persist because you will improve with experience.

Some plants revert back to juvenile foliage when the scion produces its first leaves. Scions taken from plants which normally produce lignotubers sometimes produce lignotubers immediately above the graft.

The foregoing was an extract from the Bill Tulloch Memorial Lecture, December, 1988. I was in touch with Merv. this week for a progress report on the hakeas and he is cautiously optimistic. The grafts on *G. robusta* were made in spring last year and most are 18" to 2' high. *H. multi-lineata*, *francisiana*, *cristata*, *lissocarpha* and *crassinervia* among others are doing very well, although all plants seem to be going through a dormant period at present. He was less successful with *victoria*, *subsulcata*, *fraseri* and *chordophylla*, however there may be several reasons for this. He had a bad potting mix at one stage and he commented that he considers it of paramount importance to keep the root stock vigorous. He does not graft at the cotyledon stage preferring older material. *Hakea* grafts are very strong and Merv. is getting such good results with so many genera that his main method of propagation now is grafting.

At flowering time, you can see *G. robusta* trees flourishing in my area which accounts for all the seedlings that come up. I have been pulling them out like weeds!

LIMESTONE AREAS

Recently I attended a meeting of the S.G.A.P. Mildura Group and was surprised to find that limestone soils are such a problem there. In other ways Mildura seems a perfect place for hakeas, plenty of light, sunshine and good drainage is possible. There are many limestone areas in W.A. where the majority of hakeas occur naturally, so for the benefit of those who suffer from this problem, the following species are recommended:

- Hakea elliptica* thrives on limestone soils, is resistant to strong winds and makes a good wind-break. A large shrub, it develops a variegated appearance with new growth.
- laurina*, all forms.
- nitida*, two forms, tall and a shrubier form, both with toothed leaves, cream flowers.
- nodosa*
- purpurea*, a very attractive Queensland species, divided foliage, red flowers.
- rostrata*, a needle leaved species occurring in S.A., Victoria.
- scoparia*, one of the sulcate group.
- sulcata*, sulcate group and will tolerate wetter conditions than most.
- adnata*, *salicifolia*, *sericea*, *myrtoidea*s and possibly *oleifolia*, are listed as tolerant, and these species are listed as tolerant under certain conditions:
- conchifolia*, a low growing species, provided the area is well drained.
- suaveolens*, in dry areas. This species provides refuge for birds and their nests.

I am sure that we will find many more species lime-tolerant as hakeas generally seem to adapt to quite adverse conditions at times.

FINANCIAL REPORT to 30th JUNE, 1989

Balance b/fwd	30,688	116.96
Membership Fees		43.00
Donation		1.00
Subscriptions - Regions		19.00
" Groups		23.11
Bank Interest		<u>8.70</u>
		211.77
Less Expenditure		
Postage	4.29, FID. .03	<u>4.32</u>
Balance at 30th June, 1989		\$ <u>207.45</u>

SUBSCRIPTIONS ARE NOW DUE - \$3.00 p.a.

HAKEA UNDULATA

This species has been recognised as having two distinct forms relating to the height of the plant, one is about 1m. high and can be found on the outskirts of Wagin, W.A. and other places, the other form is over 2m and widespread. Both have the typical roundish heavily veined, slightly toothed leaves. There is another form with a much narrower leaf but with the characteristics of the broader ones. I have it in my garden about to flower, at present it is about 2m high and makes a welcome addition to the leaf variations nearby. The flowers are cream.

HAKEA CRASSINERVIA put on a lovely winter display this year, and when my daughter was married in my garden last May we were very amused to find out later that some of the bright pink flowers had crept into the best wedding photos. No show without Punch!