

DISCUSSION

Peter Howarth enquired as to whether cuttings were taken from stock plants or saleable crops, the reply indicated that stock plants were to be preferred but at present propagation was multisource, i.e. saleable crop, garden plants, etc.; provided the plants were actively and normally growing, source was not significant. The problem of leaf galls in relation to stock plants was also highlighted by the same questioner, two systems of control emerging, viz: picking off and the use of conventional systemics which also controlled rhododendron bug.

Mrs. Carter spotlighted the current problem of vine weevil control; Mike Clift indicated that he was using a Diazitol drench with DDT dusting of the houses to control the adults at regular intervals. Several speakers commented on the value of DDT, especially in relation to the alleged defoliation of camellias. Arthur Carter pointed out the change in breeding season of the pest and emphasised that most successful control was achieved by incorporating dust (chiefly BHC) in the compost at the mixing stage.

PRODUCTION OF RHODODENDRONS AT REUTHE'S NURSERIES

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At Reuthe's we propagate rhododendrons by seed, cuttings, layering and grafting. Grafting is possibly still the most important method and I would, therefore, like to concentrate on this aspect of our production. However, by way of an introduction I will briefly mention the other methods used.

Seed Seed is considered an essential method of propagation for some of the more difficult species and plants are self-pollinated under controlled conditions for this purpose.

Cuttings As many cultivars as possible are propagated by cuttings, especially *R. griersonianum* hybrids, *R. repens* hybrids, dwarf species, deciduous species, etc. Cuttings are rooted under conventional mist with soil-warming cables and in cold frames. Plants particularly difficult to propagate by this method seem to be *R. campylocarpum*, *R. wardii*, *R. thomsonii* and their various hybrids.

Layering This is still an important method of propagation at Reuthe's, especially where a true plant is essential, where there is uncertainty of seed propagation, or where other methods fail for one reason or another. It is really lack of space (our nursery being only 8 acres) which stops us producing more plants by this method.

Grafting All our grafting is done under cold frames, no heating cables or warm glass being used. The cold frames are constructed of sleepers. They are made as draught-proof as possible and five to six inches of soil is removed from the base of the frame to gain extra headroom for the grafts. Dutch lights are used to cover the grafts throughout their stay in the frame, the lights being 'double glazed' with 500 g. clear polythene to help keep a humid atmosphere within the frame. About a 4" layer of peat is spread on the bottom of the frame and Aldrin dust is incorporated with this as a protection against vine weevil. The young grafts are then plunged into the peat.

Scions (of the previous season's growth) are collected first thing in the morning. These are then grafted mainly onto *R. ponticum* rootstocks, although 'Cunningham's White' is sometimes used with good results. We produce some of the rootstocks ourselves by cuttings and some are bought in. The graft used is a whip graft and this is bound round with Rainbow grafting tape. The completed grafts are then plunged into the frame, syringed with water and covered with the "double glazed" Dutch lights, which are then shaded with Vari-shade.

The frames are checked each morning if possible, particularly during the first 4 to 5 weeks. Syringing is done as necessary, especially during hot weather, and the peat itself is soaked well periodically by hose, using a fine rose head. Routine de-suckering is carried out as soon as suckers appear.

Unless more adequate conditions permit, the grafts are overwintered in these frames. The tapes are left on until the following spring, when they are cut off as the plants are being handled for containerization or for planting out. The plants are also "stopped" at this stage if this has not been necessary before.

If possible grafting commences in March, although most years the bulk of the grafting is done in April/May. Our biggest problem at this time of the year is the extra work involved in the preparation for the Rhododendron and Chelsea Shows and on occasions the grafting has to be postponed until June or July with not too detrimental results. (The choice of later-growing cultivars and knocking-off any of the current year's growth enables quite a good "take", even under these conditions). Generally a success rate varying from 75% to 85% is achieved.

We have had good results with grafting the following rhododendron species:

<i>R. auriculatum</i>	<i>R. fulvum</i>	<i>R. yakusimanum</i>
<i>R. soulei</i>	<i>R. mallotum</i>	<i>R. serotinum</i>
<i>R. bureavii</i>	<i>R. bureavioides</i>	<i>R. gymnocarpum</i>
<i>R. decorum</i>	<i>R. fortunei</i>	

In the autumn of 1973, using the very small amount of propagation space with undersoil heating available to us, we did try producing rhododendrons by side veneer grafting. Scions were grafted onto unrooted cuttings of *R. ponticum* and 'Cunningham's White.' The cuttings were then wounded on both sides, dipped in Seradix No. 2 and inserted into a 50/50 peat/grit mix. They were then covered with a polythene tent. Grafting commenced in October. Unfortunately the results were inadequately recorded so I can only give an approximation of the final results:

Scions grafted onto 'Cunningham's White' seemed the most successful overall. Those on *R. ponticum* were not so good. Ignoring the grafts which callused well, but the root stock was unsuccessful, and vice-versa, the overall success rate was poor under our conditions, being only approximately 20 to 25 percent.

DISCUSSION

In reply to Brian Halliwell, Bob Watson indicated that he used *R. ponticum* as a rootstock when grafting the species. George Thorburn added that when raising *R. ponticum* stocks from cuttings the red-twiggged form showed the highest capacity to root; that this was especially important if scions were grafted onto a cutting of the rootstock which was to be rooted at the same time as the graft union was expected.