

## FOURTH SESSION

### THE PLANT PROPAGATORS' QUESTION BOX

BRIAN HUMPHREY, Chairman

PETER HUTCHINSON: Can you give me details of the propagation of *Mahonia* from leaf-bud cuttings, especially *Mahonia* 'Charity'?

M. G. ADCOCK: Take them at the end of September on last year's growth with just one node with the leaf bud inside. Bottom heat of 65-70°F is desirable. A compost of 3 sand and 1 peat is best and a rooting hormone should be used after slightly wounding at the bottom. The cutting is reduced to 3 or 4 leaflets and the crown bud can be used if required. We root in boxes and pot on later.

CHAIRMAN: Comparing most cuttings under mist with those in a closed case the mist cuttings grow away in the same spring whilst those in the case generally don't grow away until six months later. *Mahonia* 'Charity' and *M. japonica* root readily.

A MEMBER: But not *Mahonia rotundifolia*.

PETE DUMMER: The problem is the ripening of the wood. Cuttings of the last named should be taken earlier, in August, when the wood of these is ripe.

CHAIRMAN: The cuttings should be called "leaf mallet" cuttings rather than leaf bud cuttings.

P. MACMILLAN BROWSE: Is it possible to get a good source of viable seed of *Acer griseum*? We seem to get about 2% viable seeds. Does anybody graft this plant? If so what is the best stock?

ROBERT HARES: We noted when collecting seed of this species that, of the seed which had dropped off, 98% was infertile. Of the seed clinging to the plant about 20% was fertile.

C. A. BOND: At Westonbrit Arboretum fertile seed is rarely found on the same tree more than once in ten years. I have tried rooting from cuttings but the difficulty is getting the plants through the first winter.

PETE DUMMER: Grafting this plant is possible but the only suitable stock is *Acer nikoense* which is too valuable to use as an understock.

PETER HUTCHINSON: What recommendations can be given for the propagation of *Gleditschia tricanthos* 'Sunburst'? Can it be bare root grafted and, if so, what type of graft should I use? Would I get better results by budding in summer?

PETE DUMMER: The Dutch graft in early Spring in propagating cases. The big problem is growing on afterwards.

CHAIRMAN: Possibly budding would be successful in a hot summer with a low rainfall.

A MEMBER: Can the Chairman tell us about the special technique for propagating *Aesculus* which you and Mr. Dummer described recently.

CHAIRMAN: This is a seed grafting technique called "nurse seed grafting" which can be used for *Aesculus*, *Castanea* and similar subjects. It has been carried out successfully though we can hardly describe it as a fully commercial proposition. The seeds are germinated, after which the radicles and plumules were cut off leaving the fleshy cotyledons. Large seed must be chosen with plenty of food reserves in the cotyledons. Next a chisel-shaped peg scion is pushed into the nut. It must be done carefully under sterile conditions; we use sawdust in a closed case. Roots are produced from the cut end of the cotyledons in a few days. Only about one graft in 200 produces roots from the scion. By this method you avoid the great burst of growth you get from the conventional graft which can usually be a disadvantage.

G. B. RAWINSKY: Have any members had experience of rooting clonal forms of *Kalmia latifolia* from cuttings and when should this be tried under mist?

CHAIRMAN: I have tried with disastrous results. It is better propagated by grafting just like *Rhododendrons* on to *Kalmia* seedlings.

PETER HUTCHINSON: What is the best way to propagate *Clematis armandii*?

C. E. SALTER: Cuttings are often troublesome after they have rooted for it is difficult to get the plants to grow away. Grafting in December has given about 60% success.

R. ANDERSON: Would someone comment on the presence or absence of buds on hardwood cuttings?

ROBERT GARNER: Buds do not have to be present on the cuttings to ensure adequate rooting. I can only refer to the interesting work being undertaken at East Malling by Dr. B. H. Howard. Cutting out the buds was found to depress rooting if it allowed drying out of the cuttings at the wounds. If the wounds were covered with vaseline there was actually an upsurge of rooting. Furthermore if wounds were made but the buds were left on there was still an upsurge of rooting.