

cuttings unless it is an occasional break from a previously dormant growth bud. Such breaks occur in late summer and early in the fall. We do not anticipate growth on the liners until the following spring. Our practice now is to take the established potted liners in peat pots and line them out in raised beds of prepared soil mix and grow them under the shade of Saran cloth. The extra shade provided by the Saran allows the plant to grow a little taller with better foliage. We also are planning to take cuttings from the shade grown plants and test their ability to root, as compared with field grown wood. Limited tests made previously with shade grown wood indicate that we will have better success in harvesting a better grade of cutting wood.

Soon we will be starting another lilac season. This year we are going to experiment with lights to determine if this might influence the plant to remain active and not go dormant. We are also going to place some cuttings under a plastic bench shelter and will continue to work with propagation medium of different types that will provide better packing around the inserted stems. We feel perhaps that our medium is too coarse and too much air is allowed to get to the rooting area of the cutting stem.

We are looking forward to our work and hope that someday we will be able to provide more lilacs on their own roots for use in the southern California area.

MODERATOR MOREY: Thank you, Bob. Our next paper is on the grafting of *Acer palmatum* by Bill Omar of Doty & Doerner, Tigard, Oregon. However, Bill was unable to make the trip to southern California so his talk will be given by Bill (Omar) Curtis, Bill.

THE GRAFTING OF ACER PALMATUM¹

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I take one-year seedlings from beds and line them out in field rows, planted one-half inch apart in the row. After two years in the field they are ready for understocks and can be dug when dormant around November 1st to 15th and then graded for size, root pruned and cut back some. The seedlings are then potted in 2½", 3" or 4" pots.

After potting, they are bedded down on a greenhouse bench in damp peat moss to a level just over the top of the pot. This submerging in peat holds moisture for a long period of time and makes an ideal medium for producing a rapid, well developed root system. Greenhouse temperature should be 55-60 degrees F. top heat. I do not use bottom heat — just let them come along slowly. This seems to work best for me, as I don't want to force bud action too soon. On February 1st, or shortly thereafter, depending on the winter, they

¹Paper presented by Mr. William Curtis, Sherwood, Oregon.

will be ready for grafting. This is gauged by root action, and when the buds begin to break, I know they are ready for grafting.

I use a low side graft. By so doing, one does not lose his understock. I have tried other types of grafts, but my best results have been with the use of this low side graft. Care must be taken in matching the cambium, for it is very thin in *Acer palmatum*.

The graft is then tied with a rubber budding strip, and it *must be tight*. It can be waxed if so desired. I have had good results without waxing. However, this method necessitates much greater care of the graft. I would advise a cold wax, such as Treheal. If a hot wax is used, great care must be taken not to injure the cambium and lose the graft by burning. Last year I got a 97% take on *Acer palmatum* varieties.

I grafted *Acer palmatum dissectum*, *dissectum nigra*, and Burgundy Lace. Some of the understocks were quite large and well-branched, so I put them in gallon cans instead of pots and put on three to four grafts on each understock. A perfect take usually results on these heavier plants. When the grafting operation is completed, I again return the plants to the bench, cover with damp peat moss, and let nature take its course.

In about four weeks, I cut back all new growth from the understock only, and in three or four weeks I will cut back again. This second time I cut back some of the old wood, especially if the understock is branched.

By the time of the second cut back, the graft should show some action and should have started to callus. If waxed, the wax should start cracking which is a good indication that the graft has taken. The scion should be in full leaf and making growth.

In about 90 days the grafted plant will be ready for cutting back of all understocks just above the graft. I then take the young Japanese Maples from the bench and can these in gallon containers. They should be placed under partial shade during the first summer, since the plants are very tender and won't take full sun.

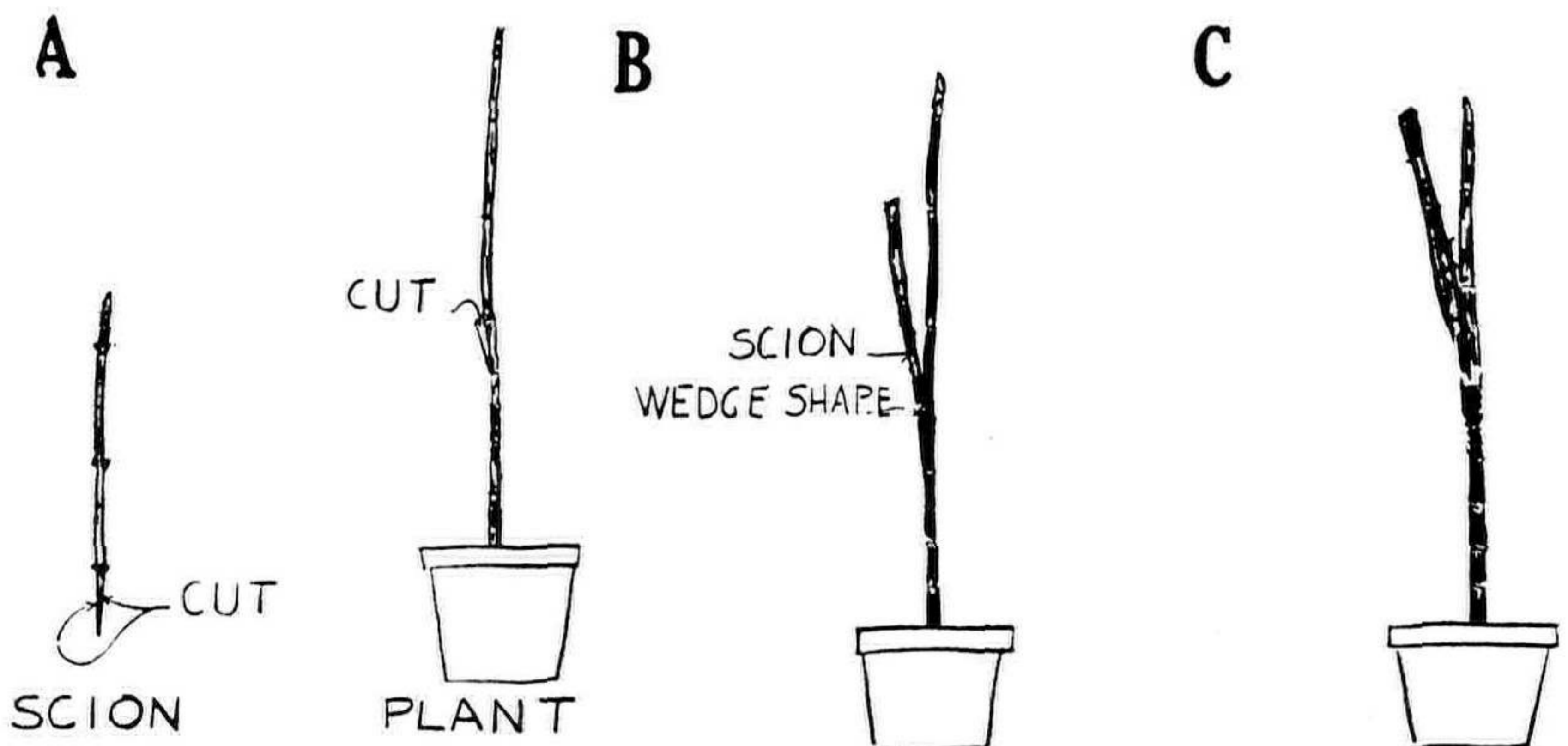


Figure 1. Side grafting *Acer palmatum*. (A). Cuts made in scion and stock plant. (B). Scion inserted into stock. (C). Completed graft after tying.