

## PROPAGATING MAGNOLIAS

W.D. CHRISTIE

*Corbett's Nurseries Ltd.*  
*Aldergrove, B.C., Canada*

We usually start take cuttings about the third week in June and continue off and on during the summer as cutting material is available, up to the third week of August.

We start out with the stock which is being grown in gallon cans in the greenhouse from last year's cuttings, then take a crop of cuttings from our outdoor stock plants, and end up with more material from the greenhouse.

We like to take our cuttings first thing in the morning while it is still cool and, if possible, we try to pick a day when it is overcast. Ideally, when using soft cuttings from the greenhouse it is best to have a period of a few days when the temperatures are not too high.

Cuttings of *Magnolia* × *soulangeana* cultivars are usually 6 to 8, and sometimes 10 inches long, with 3 nodes. We first remove the bottom leaf, then reduce the size of the second leaf, and pinch out the soft tip. The cutting is given a one-inch basal wound and dipped in 0.8% IBA.

The rooting medium is 3 parts coarse sand and one part medium grade perlite. We use 4-inch flats and put ½ to one inch of coarse sawdust in the bottom. It is a mistake to try to crowd too many cuttings into a flat as this greatly increases the losses from *Botrytis* and other pathogens. With *M.* × *soulangeana* we get usually 120 cuttings in a 12" by 18" flat, but with plants having a very large leaf form, such as *M.* × *soulangeana* 'Lennei', we get only 100.

Flats are placed on the heating cables and settled in by hand watering. Bottom heat is kept at 75°F until rooting occurs and is then reduced to 70°F and finally to 60°F before the flats are taken off the bench and placed on the greenhouse floor.

Only enough misting is used to keep the cuttings from wilting. A great deal of attention is given to this part of the cutting management and we will often have the mist on for only an hour or so during the day and perhaps on a very dull day, not at all. The mist is always turned off at night right from the start. Under our conditions we find that a fairly long misting period — 24 seconds — and a fairly long cycle — 12 minutes — seems to be about right.

Within a few days of sticking a thorough Benlate spray is applied and this is repeated as necessary during the time the plants are on the bench and until leaf drop. If decay does show up

in the cuttings — and this is almost certain to happen to a small extent when very soft material is being used — we remove any affected cuttings from the flat.

After the cuttings have been placed on the greenhouse floor and when weather cools down and leaves start to yellow and drop, we go over the flats several times, removing the dropped foliage. If left in place the dropped leaves will mat and keep the base of the cuttings soggy and, if this happens, no amount of spraying will prevent the occurrence of disease.

The cuttings are over-wintered in the greenhouse with only enough heat to keep out the frost. In the spring, as soon as new growth commences to show on the cuttings they are then potted into peat pots. We used to use a 2¼ inch pot but switched to a 3 inch as we found that this gives the cutting a little more room to develop and gives us a better plant.