

Softwood Cutting Propagation

by Kathleen S. Freeland

Cuttings are taken from stock plants that are healthy and in good condition, just as the flower buds are forming. A typical cutting should be about 6 inches long with two or three leaves remaining. A wound is made on the basal end of the cutting ($\frac{3}{4}$ inch) just into the cambium layer, necessary for the cutting to produce a strong, healthy root system.

Most commercial nurseries as well as amateur propagators use a root inducing compound to speed up the rooting. The most commonly used is the chemical IBA (indolebuturac acid) in a talcum powder base. Many brand name products are on the market and easy to obtain.

The magnolia cutting must strike roots before the leaves fall from the cutting and the rooting compound will speed up the rooting process. The cutting is dipped in the rooting compound just to the top of the side wound and any excess shaken off. The cutting is then stuck in a well drained medium (sand, sand and peat moss, Perlite or Vermiculite) just deep enough to again cover the wound. Water the cuttings after they are all stuck. Be sure that they do not stand in water. Commercial nurseries use a 6-second intermittent mist at 15-minute intervals. If the propagating is done without a greenhouse, cover the cuttings with poly/plastic to hold in the moisture and keep the wind off the cuttings. Bottom heat is almost always used commercially and does help to speed up rooting. Heating cables and propagation mats are found in nursery supply catalogs and can be used to advantage by the amateur.

Rooting of the cuttings should take place in 6 to 12 weeks. The roots at this stage will be thick, white and quite brittle, so care must be taken in removing them from the medium. Put

your fingers under the rooted cuttings and gently remove them with your hand. Plant the rooted cutting in a good soil mix (one part peat, one Perlite and one part compost). Plant no deeper in the soil than the cutting was in the propagating bench. Burying the root system too deeply will result in the death of the plant. Be sure to leave $\frac{3}{4}$ of an inch of space at the top of the pot for easy watering. The first watering after potting up should be with a dilute solution of any soluble balanced fertilizer.

Keep the rooted magnolia cuttings in sunlight and cool temperatures, and as the days get shorter the leaves will drop from the cuttings just as they are dropping from the stock plants. Magnolias, just as other trees from the north temperate zones, require about 60 days of dormancy or simulated winter. Put the rooted cuttings in a cool place where they will not freeze for this period: an unheated garage or root cellar is fine, no light is necessary during this period.

Be sure to check on the plants during this time and do not let them dry out. Do not over water either; a good soaking once every week or so should be sufficient. The lengthening days after the vernal equinox will trigger the rooted cutting into growth. Sunlight is essential for the cuttings now as soon as the new growth begins. Put the cutting in a sunny window or greenhouse until ready to be planted outside, as soon as the danger of frost has passed in the north or as soon as the new foliage has hardened off in other regions. The small plants may remain outside for the first winter but will require protection from the winter in the north.

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