

Softwood Cutting Propagation of Wisterias[®]

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About 20 years ago, with no grafting program in place and facing irregular availability of grafted *Wisteria* cultivars from outside sources, we began to experiment with summer softwood cuttings. We have found the process surprisingly easy and productive, though it still seems to surprise many visitors to the nursery. It involves just a few points that require careful attention.

We begin with preparation of our stock material, which consists simply of young 5-gal plants, either shifted up the same season from 1-gal containers or planted the previous season from deep 4-inch pots. Rather than being subjected to the regular regime of frequent clipping and tying, plants are allowed to “grow out” in June and July. Depending on the weather (long sieges of cool, cloudy coastal-summer days can delay the process, hot weather speeds it up) the longer, stronger shoots will become suitable for propagation mostly in late June and July. Occasionally, a particular group is delayed until early August, at which point strong rooting is still likely, but with no initiation of new growth and thickening of stems, the cuttings are more subject to decline during their dormancy over the winter months.

The appropriate material has grown for long enough that several leaves are fully expanded and the stems in this region are firm to the touch. Cuttings are prepared only from this fully expanded portion, each consisting of about four nodes. The two basal nodes are removed and the two upper leaves left intact. Cuttings are given generous spacing (about 80 in a 17 by 18-inch flat), to prevent shading and smothering of lower leaves. Only moderate rooting hormones (Hormex #8 powder or its equivalent) are used. The cuttings are inserted deeply enough so they remain standing when packed and watered. Initial watering must be extremely gentle to avoid knocking them over. The flats are placed on a heated bench in a mild, humid greenhouse. Misting is frequent (averaging every 20 min) and of 4- to 8-sec duration. Perfect coverage is essential, as the leaves are quite large (up to 10 inches long, with 7 or more broad leaflets) and transpiration rates are high.

The cuttings begin to root in a month or less and are heavily rooted within 2 to 3 months. If this stage is achieved before the end of August, they are potted into deep 4-inch pots and root growth continues, often stimulating the initiation of new shoots. Our goal is to arrive at winter dormancy with well-rooted 4-inch pots. Cuttings that finish rooting in September and October are usually left in the cutting flats for the winter, because new root growth tends to be minimal after potting at this time, and many young plants are lost to winter root rots. Those left in the cutting flats are dried out thoroughly between irrigations, for the same reason. We find that use of moderate bottom heat (60–65 °F) through the winter months helps to speed the drying-out process, without causing premature initiation of growth.

Plants carried over in 4-inch pots are planted directly to 5-gal cans after their first flush of strong growth in spring. They grow rapidly and are sometimes ready for sale by fall of the same season or as flowering plants in spring. Those kept as cuttings are potted, also in spring, to either 4-inch pots or 1-gal cans, depending on root mass and vigor. These will be ready by mid- to late-summer for transplanting to 5-gal containers and will reach a salable state the following summer.