

H. paniculata 'Grandiflora'

H. quercifolia (oakleaf hydrangea) (a little more difficult than others listed)

- Rooting: 84% to 99%, 4 to 6 weeks.

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Korean Stewartia Propagation

Robert J. Gouveia

Jackson Nursery, Inc., Norton, Massachusetts

Stewartia pseudocamellia Koreana Group (syn. *S. koreana*), Korean stewartia, is a beautiful, easy-to-grow, small- to medium-sized tree. It has white camellia-like flowers in midsummer, striking autumn foliage, and attractive exfoliating bark. It was recognized with a Styer Award of Garden Merit in 1990.

At Jackson Nursery, we have tried to propagate this plant from seed but have achieved erratic results. The seed is doubly dormant and requires both warm and cold stratification. Thus we prefer to propagate Korean stewartia from cuttings. We have found that the procedure described below also works for other *Stewartia* species that need a dormancy period.

We take three-node cuttings from plants in the nursery, starting around mid-June and finishing in mid-July. Length is not particularly important as long as three nodes are available, but most cuttings average 4 to 6 in. long. We prefer to use terminal shoots.

We collect the cuttings in the morning and keep them in plastic bags until we can process them (usually, the same day). If for some reason we cannot handle the cuttings right away, we refrigerate them until we are ready. We strip the bottom set of leaves but have found wounding, pinching, and disinfection to be unnecessary.

Cuttings are treated with a 5-sec quick dip in about 2000 ppm indole-3-butyric acid [Wood's Rooting Compound : water (1 : 7, v/v)]. We then stick the cuttings into flats filled with two parts perlite and one part sand (2 : 1, v/v).

We have rooted the plants in both a glasshouse and in outdoor propagation frames. We use no shading or bottom heat in either area; the plants do not seem to mind full sun. The cuttings receive intermittent mist, which varies according to the weather.

In general, during midsummer, we provide mist 2 sec per min between 8 AM and 8 PM. As the days get shorter, we reduce the misting schedule.

We do not fertilize the cuttings the season after sticking; nor do we incorporate any fertilizer in the rooting medium.

Rooting is generally complete after 60 to 90 days (mid-August to mid-October, depending on sticking date). We then gradually wean the cuttings from the mist system and water them only by hand. Our rooting percentage is generally quite high (80%).

Now comes the single most important step in successfully growing *Stewartia* from cuttings—overwintering. In November, we move the flats to a cool greenhouse covered with clear poly and leave them undisturbed until bud break the following spring. We water the plants only when monitoring indicates the need for it.

It is most crucial that the cuttings remain undisturbed until bud break. According to some authorities, *Stewartia* requires at least 100 h of temperatures no lower than 32F and no higher than 40F. We simply try to maintain the plants in this temperature range throughout the winter.

When the buds start to swell (usually around the end of February or the first week of March), we apply a soluble 20N-20P-20K fertilizer at 200 ppm. We repeat this application 10 days later. No insecticides or fungicides are necessary.

We then pot the rooted cuttings in 2-1/4-in. containers in a medium of peat and perlite (1 : 1, v/v). Alternately, a commercial medium (such as Pro-Mix) can be used.

Normally, we grow the trees in these pots until Memorial Day, then shift them into 1-gal containers. Plants can be overwintered and repotted into successively larger containers until they are scheduled for sale.

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