

Field Propagation of *Cercis* and *Hamamelis*

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My nursery is a small family operation in middle Tennessee located in U.S.D.A. Zone 6. We produce both common and unusual budded and grafted bareroot liners.

Our production fields consist of a rocky, well-drained soil with a pH of approximately 6. I have always enjoyed the challenge of growing difficult-to-propagate plants, such as *Cercis* and *Hamamelis*, which I will now discuss.

CERCIS

There are several methods for *Cercis*. I start with bench-grafting bareroot understock in February/March. As understock I use seedlings of *C. canadensis* ¼ to ½ inches in diameter. When I can match my scionwood to my understock, I prefer to do a 45° graft. If my scion wood is smaller, I do a side veneer graft. Either graft is tied with a rubber band and sealed with a water-soluble coating such as Treecote. The finished grafts are then stored in damp peatmoss until planting time in the spring. With the side veneer grafts, the stub is removed in July using a slanted cut. The success rate can be from 20% to 80%.

A second method I have good results with is T-budding in the spring. As soon as the bark slips on established understock in the field, I cut a small shallow wood bud and attach the bud with a rubber band. I use dormant scionwood which has been stored under refrigeration.

Even more successful is a graft on established understock in the field. The best method is to make a side veneer graft on understock which I cut back to 10 to 12 inches above the ground and sealing the graft with Treecote. This stub must be removed in July or August above the successful graft. The field grafting method is the most reliable for me.

Because spring is such a busy time, I try to propagate redbud in the summer. Due to the zig-zag growth habit of redbud, it is almost impossible to T-bud using a slip bud. When the bud is pulled off the scion wood, the result is a concave surface that will not match the understock. In summer, the best way to bud is chip budding. The bud must be wrapped with budding tape. In late winter of the following year, the plant is cut off above the bud with a slanted cut.

I have found that *Cercis* is a very unpredictable crop. Using the same procedure at the same time of the year, the results range from 0% to almost 100%. My average of saleable plants is about 50%.

Listed below are the main cultivars we grow with a brief description of each.

<i>Cercis</i> :	'Oklahoma'	Glossy dark green leaves and a deep purple flower (syn. <i>C. reniformis</i> 'Oklahoma').
<i>Cercis canadensis</i> :	'Appalachia Red'	A cold-hardy, true red flowering introduction from Dr. Max Byrkit.

	'Covey' (PP#10328)	A graceful, fast-growing weeper introduced by Tim Brotzman of Ohio and patented by his nursery.
	'Flame'	Sterile with large double flowers.
	'Forest Pansy'	Dark burgundy foliage.
	'Royal'	Somewhat larger flowers at an earlier age than 'Alba', the most winter hardy (syn. 'Royal White').
	'Silver Cloud'	A Theodore Klein introduction with spectacular variegated leaves on a smaller grower.
	'Tennessee Pink'	Our own selection of a true pink flower.
<i>Cercis canadensis</i> var. <i>texensis</i> :	'Texas White'	Glossy wavy leaves, dense growth habit (syn. <i>C. reniformis</i> 'Texas White').

HAMAMELIS

One of my favorite plants has always been *Hamamelis*. The fragrant blooms are a standout in the bare winter landscape. The conventional method of propagation — grafting in the greenhouse on potted understock — did not fit in my operation. So I experimented with other methods. One successful technique is bench grafting in the winter. I use 1-year seedlings of *H. virginiana* which I prefer to grow myself. *Hamamelis vernalis* should not be used due to the stoloniferous nature of this plant. If *H. virginiana* is not available, then *H. mollis* or *H. xintermedia* can be substituted. A side veneer graft should be used but if the scionwood is large, I like to do a 45° top graft tied with a rubber band. Then I do not have a stub to cut back in the summer. After grafting, all exposed cuts are sealed with Treecote. The grafts are stored in damp peatmoss until planting. Some callous will form during this time. The same grafting procedure can be used in early spring on established understock in the field.

T-budding in the summer is also a very good method. The bud is tied in with a rubber band. The following spring, the top of the understock is cut off above the bud. During the growing season, the plants need to have any suckers removed.

Field growing *Hamamelis* cultivars has produced large plants with good root systems. Success rate varies, but I expect to have between 50% to 60% saleable plants.

Cultivars we grow with a brief description of each are listed below.

<i>Hamamelis xintermedia</i> :	'Angelly'	Yellow flowers on a medium-size shrub with good yellow fall color.
	'Arnold Promise'	Dense fragrant clusters of late blooming deep sulfur-yellow flowers on a vase shaped compact grower.

	'Barmstedt Gold'	A new cultivar with fragrant canary-yellow flowers produced in mid-season on an upright bush.
	'Diane'	Carmine-red flowers in mid-season on a slightly spreading bush with good fall color.
	'Feuerzauber'	Red fragrant twisted flowers in mid-season on a strong upright grower with yellow fall color.
	'Jelena'	Fragrant dense clusters of early coppery flowers with wavy petals on a broad and shrubby bush with beautiful bronze, scarlet-red fall color.
	'Pallida'	Large early season fragrant sulfur-yellow flowers on a strong wide-spreading grower. (syn. <i>H. mollis</i> 'Pallida')
	'Primavera'	Scented primrose yellow mid-season flowers with violet centers on a wide upright floriferous shrub.
	'Sunburst'	Very abundant clusters of lemon-yellow mid-season flowers with long petals on an upright bush with good fall color, a striking cultivar.
	'Westerstede'	Primrose-yellow late-season fragrant flowers on a strong upright grower.
<i>Hamamelis vernalis</i> :	'Sandra'	Small fragrant bronze-yellow early flowers on a strong upright shrub with red purple new growth and fabulous red to orange fall color.

There are many new cultivars from Europe under evaluation. We have a few in limited numbers.

Growing *Cercis* and *Hamamelis* in the field has proven to be a challenging undertaking, but I believe the effort has been worthwhile. These plants are beautiful, hardy, easy to care for and pest resistant. They deserve a greater role in the landscape.