

Production of Unique Cultivars Through Budding, Cuttings, and Grafting[®]

Don Shadow

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INTRODUCTION

Shadow nursery is a wholesale nursery located in the southern part of middle Tennessee (Zone 6b) that grows new and useful plants for the industry as well as more common plants. I enjoy obtaining, propagating, and making available to the industry good cultivars of trees, shrubs, vines, perennials, etc. Along with this interest in new cultivars, one must decide the most economical method of propagation.

BUDDING

Both T-budding and chip-budding are used for our field production. Some new and useful cultivars listed below are:

***Cercis chinensis* ‘Don Egolf’.** A very floriferous, dwarf, fruitless Chinese redbud that can be propagated by budding or cuttings.

***Chionanthus virginicus* ‘Emerald Knight’.** A good flowering male fringe tree with exceptional glossy foliage.

***Cornus angustata* ‘Empress of China’ PPAF.** An excellent evergreen dogwood that flowers as a 2-year old plant.

***Cornus florida* ‘Appalachian Spring’.** The first true anthracnose-resistant flowering dogwood available to the industry. A University of Tennessee introduction.

***Cornus florida* ‘Dixie Colonnade’.** A columnar dogwood that flowers at an early age - usually as a 2-year old plant.

***Cornus florida* ‘Pygmy’.** A dwarf, compact dogwood flowering at a very early age. Many times as a 2-year old plant.

***Cornus florida* ‘Red Pygmy’ (PPAF).** The first true dwarf, compact red dogwood. Also flowers as a 2-year old plants.

***Cornus kousa* ‘Lustgarten Weeping’.** A good weeping Kousa dogwood that grows to landscape size quickly. Flowers turn up rather than down.

***Cornus kousa* × *Cornus florida* (PPAF).** Probably the most outstanding of all the *C. kousa* × *C. florida* crosses. Has nice overlapping bracts.

***Cornus kousa* × *Cornus nuttallii* (PPAF).** A strong grower annually producing 0.9 to 1.2 m (3 to 4 ft) of new growth. Flowers in just one growing season with 15 to 18 cm (6 to 7 inch) flowers.

(*Cornus kousa* × *Cornus nuttallii*) × *Cornus florida* (PPAF). A strong grower annually producing 0.9 to 1.2 m (3 to 4 ft) of new growth. Flowers in just one growing season with 10- to 13-cm (4- to 5-inch) flowers. This cross was the first to bloom of these hybrids.

(*Cornus kousa* × *Cornus nuttallii*) × *Cornus kousa* (PPAF). A strong grower annually producing 0.9 to 1.2 m (3 to 4 ft) of new growth. Flowers in just one growing season with 15 to 18 cm (6 to 7 inch) flowers.

Cornus officinalis 'Kintoki'. A glossy-leaved dogwood of exceptional beauty. This dogwood has flowers early with yellow blooms. Has persistent foliage that resists insect damage and leaf scorch.

Liquidambar styraciflua 'Lender Silhouette'. An exceptional slender form of sweetgum.

Liriodendron tulipifera 'Glen Gold'. A new yellow-leaved poplar tulip that leaves-out yellow and changes to light green. Leaves do not scorch.

Nyssa sylvatica 'Red Rage'. A new shiny leaf blackgum with vivid fall color, great grower.

CUTTINGS

Most cuttings are stuck in outside mist beds and left for two growing seasons. These beds are 1.2 m (4 ft) wide and 14.6 m (48 ft) long. The beds are constructed in native soil with 2.5 cm (1 inch) of masonry sand on top for quick drying. The mist beds are covered with white opaque plastic. Holes are cut out over each mist nozzle which allows heat to escape and reduces the frequency required to check the mist nozzles. Some new and useful cultivars are listed below:

Brussonetia papyifera 'Golden Shadow'. A golden-leaf paper mulberry that does not scorch in late summer.

Cotinus obovatus. An outstanding native smoke tree with wonderful color and bark.

Halesia diptera var. *magniflora*. One the very best silverbells for the industry. Very showy and easy to transplant

Hydrangea paniculata 'Daruma'. A very compact hydrangea blooming several weeks before other paniculatas.

Ilex 'Coronet'. National Arboretum introduction, A medium grower that shapes well for landscape use. A good berry producer.

Ilex 'Red Beauty' (PPAF). A compact, pyramidal holly with great berry production. Easy to propagate.

Viburnum dilatatum 'Mount Airy'. A medium grower producing great quantities of bright orange-red fruit. It appears to be hardier than other cultivars.

Viburnum plicatum 'Kern's Pink'. After 30 years of propagation, this plant produces bouquets of multi-colored flowers.

Viburnum rhytidophyllum 'Cree'. A compact leatherleaf with excellent foliage and fruit. It's a U.S. National Arboretum introduction.

Viburnum rhytidophyllum 'Green Trump'. This viburnum is a vigorous grower with wonderful foliage and form. It's a great landscape plant.

GRAFTING

Most of our grafting is done under greenhouse conditions where temperature and moisture are controlled. The grafts are produced by either side veneer or cleft grafts, whichever scions match the understock best. Scions are tied with rubber bud strip and sealed with Treekote™.

Acer palmatum ‘**Tamukeyama**’. Probably the most heat- and frost-resistant cultivar of all Japanese cutleaf maples.

Metasequoia glyptostroboides ‘**Ogon**’. A very good yellow foliage dawn redwood that does not burn as long as it has even moisture.

TIMING

Budding Period. Budding usually starts with redbud in early to mid-August and ends with dogwood in late September.

Grafting Period. Grafting usually done in January in our glass greenhouse.

Rooting Period. The first cuttings are usually stuck in June and ends in late September.

SUPPLIES

- Aglis buddy tape.
- Rubber bud strips – 10 cm × 0.5 cm (4 inch × ³/₁₆ inch).
- Treekote™.

CONCLUSION

The above mentioned cultivars are just a few of the many new and useful cultivars we are evaluating and propagating at Shadow Nursery, Inc. If anyone knows of an outstanding cultivar please contact me and we will be glad to propagate and evaluate it for possible introduction into the nursery trade.