

**University of Arkansas Plant Evaluation Program  
1999 Plants/ 2002 Final Report**

[Program information (data, reports, photographs) can be found on the internet at:  
[http://www.uark.edu/campus-resources/cotinus/arboretum\\_html/planteval.html](http://www.uark.edu/campus-resources/cotinus/arboretum_html/planteval.html)]

December, 2002

**Plants initiated in Spring 1999:**

This completes the fourth year of the statewide plant evaluation program. The current team of cooperators includes Dr. Jim Robbins, Dr. Jon Lindstrom, and Manjula Carter.

The three test sites are the Hope Research Center (USDA cold hardiness zone 8a), the Little Rock/Cammack property (zone 7a), and the Fayetteville Horticulture Research farm (zone 6b). As much as possible the three test sites were prepared in a similar manner. Full sun plants were grown in row-type beds 3' wide with a 7' grass alley. Plant groups are planted together (i.e. trees are planted together). Trees are spaced 10' apart, shrubs 6' apart, and herbaceous perennials 4' apart. For shade requiring plants, separate evaluation sites were established under natural shade at all three test sites. Little Rock site was planted on March 10, 1999; Fayetteville was planted on March 11, 1999; Hope planted on April 13, 1999. Irrigation at all three sites is by a drip system. Plants were fertilized and mulched after planting. Post-emergent herbicides were used at all three test sites. No disease or insect control has been implemented since the initial planting. Every year, the oak and *Styrax* are pruned following final growth measurements to maintain a tree-like habit. Pruning consists of removing the bottom 1/3 of limbs. **Shrubs have never been pruned.** Final growth measurements were taken at Little Rock on October 18; Fayetteville on October 24; and Hope on October 17.

In general, the best growth for the 15 shrubs and 2 trees continues to be the Little Rock site. Plants at the Little Rock site do receive a few hours of shade generally during the morning hours. Fayetteville and Hope are very exposed, full sun sites. The Fayetteville site is characterized by consistent winds.

Weather data at all three test sites is attached (see attached graph). I would summarize 2002 as follows: March cooler than normal (for the first time in the trial, temperatures reached 0 in Fayetteville at the beginning of March); June/July/August reasonable rainfall and below normal temperatures; Sept. very warm and extremely dry. October and November were significantly below normal in Fayetteville.

***Rhododendron Autumn Amethyst*<sup>TM</sup>**

**Flowerwood Nursery** donated 3-gal plants. As discussed in last year's report, the ice storm of 00/01 winter all but destroyed all three Encore<sup>TM</sup> azaleas and the camellia at Hope.

In Little Rock flowering began in early April and continued for one month. Flowering in Fayetteville began in mid-April and continued for two weeks. Significant re-bloom was noted in July and continued until each site had a hard freeze or later (exceptional flowering in Sept. and Oct.). At Little Rock, flowering rebounded first on Autumn Amethyst after the hard freeze. Re-bloom in Fayetteville began in early September and continued for two months. This plant makes a significant, attractive addition to the fall landscape.

The plant appears to be slightly wider (71") than tall (45"). This is the tallest of the three Encore<sup>TM</sup> azaleas being evaluated.

***Rhododendron Autumn Coral*<sup>TM</sup>**

**Flowerwood Nursery** donated 3-gal plants.

Flowering notes indicate that Autumn Coral<sup>TM</sup> started flowering 2 weeks after Amethyst and Embers in the spring but flowered for a longer period of time (into May). Flowering began in late April in Fayetteville and continued for two weeks. Significant re-bloom was noted in early August and continued through until each site had a very hard freeze. There was little fall re-bloom in Fayetteville. Plant habit is clearly wider (48") than tall (23"). Habit of Autumn Coral<sup>TM</sup> is very similar to Autumn Embers<sup>TM</sup>. This cultivar is less-cold hardy than Autumn Amethyst<sup>TM</sup>.

***Rhododendron Autumn Embers*<sup>TM</sup>**

**Flowerwood Nursery** donated 3-gal plants.

Spring flowering period in Little Rock is very similar to Autumn Amethyst<sup>TM</sup> (April 1-April 30). Summer/fall re-bloom appears to begin a similar to Autumn Coral<sup>TM</sup>. Overall shape is similar to Autumn Coral<sup>TM</sup> (55" wide x 31" tall).

***Camellia sasanqua Hot Flash*<sup>TM</sup>**

**Flowerwood Nursery** donated 3-gal plants. Plants flowered in Little Rock in December, 2001. Growth rate at Little Rock has not been that fast. Plant shape is slightly wider (38") than tall (27"). This plant is dead in Fayetteville.

***Ilex x Little Red*<sup>TM</sup>**

**Flowerwood Nursery** donated 5-gal plants. Performance was good at Little Rock and Hope. Based on results from Fayetteville (FV) we would conclude that this is the least cold hardy of the three hollies tested. Zone 6b may be approaching the northern limit for this plant. The plant is slightly taller (85") than it is wide (75"). The habit on this plant is less than desirable. The plant habit does not fit a nice upright pyramidal nor a tight rounded plant. Fruits developed on plants at Hope but not Little Rock or Fayetteville. The emerging foliage displays an attractive burgundy color.

***Ilex x Oakleaf*<sup>TM</sup>**

**Flowerwood Nursery** donated 5-gal plants. Performance was good at all three test sites. The plant is clearly taller (105") than it is wide (54"). A strong pyramidal shape is developing without shearing. This holly lends itself well to a narrow screen or hedge plant. Fruits have not developed on our plants. Growth in Fayetteville is very compact; it does not produce the long shoot extensions seen on plants grown farther south.

***Ilex x Dixie Dream*<sup>TM</sup>**

**Flowerwood Nursery** donated 7-gal plants. Performance was good at all three test sites. Plants have an upright pyramidal shape (83" tall by 58" wide) without pruning and a finer texture than what is seen on Foster's holly. This is shaping up to be a great plant for corner foundations or screening. Plants have fruited well at all three sites. Fruit in Fayetteville began to ripen in mid-October.

***Abelia x grandiflora Sunrise*<sup>TM</sup>**

**Greenleaf Nursery** donated 3-gal plants. In all locations, significant reversion from the variegated form back to a green-leafed form was noted. Performance was good at Little Rock. *Abelia* continues to struggle at Hope. Flowering began in mid June and continued sporadically into fall. Most of the flowering was on these reverted shoots. Peak flowering in Fayetteville is in early August. Here too, most flowering occurs on the numerous reversion shoots. Average plant width (52”) is twice the height (32”). The tallest growth is on reverted shoots. Based on performance and reversion problems the program will likely not recommend this cultivar.

#### ***Ligustrum Green Meatball*<sup>TM</sup>**

**Hines Nurseries** donated 5-gal plants. Performance was good at all three sites. The shape is fairly rounded (82” wide x 80” tall). This plant would also not get an endorsement from our trials since we do not observe any unique qualities relative to other privets in the marketplace.

#### ***Itea virginica ‘Henry’s Garnet’***

**Greenleaf Nursery** donated 1-gal plants. Performance was outstanding at all three sites. Flowering generally began in early to mid May and continued for 3 weeks. A real asset to this plant is the rich maroon fall color that is intense by Thanksgiving. Plants continue to spread quickly by rhizomes. Average plant size is 43” tall by 81” wide.

#### ***Raphiolepis Bay Breeze* ®**

**Hines Nurseries** donated 1-gal plants. Performance was good at LR and Hope. Based on our trial, it would appear that zone 7 is the safe northern limit for this cultivar. All 4 plants are now dead in Fayetteville.

Flowering begins in early April through early May and then again in late summer. The plant develops a very attractive, deep maroon, winter foliage color that makes a nice backdrop for the light pink flowers in early spring. Plant habit is clearly spreading (56”) rather than tall (22”). Foliar leaf spot was noted on the plants.

#### ***Loropetalum Plum Delight* ®**

**Hines Nurseries** donated 1-gal plants. Performance has been mixed. Plants grew vigorously in Little Rock but struggled at Fayetteville and Hope (all dead). We do not have a reasonable explanation why all plants died at Hope.

Flowering began in mid-April and continued through May. No flowering was observed in Fayetteville for the second year in a row. Plants tend to throw late season flowers based on temperatures and precipitation. When in flower this plant is hard to beat. Plants at Little Rock are enormous (137” wide x 98” tall) considering the age and size of the original plant.

#### ***Lagerstroemia x ‘Pocomoke’***

**Morningside Nursery** donated liners. Considering the size of the initial liners this is remarkable growth and performance for small plants planted out in field conditions. Flowers started to appear in early July but peaked toward the end of August. Plants continue to flower into September. Of the two genetic dwarfs being tested, this is clearly the best for Arkansas. Average size statewide is 44” wide by 28” tall.

#### ***Lagerstroemia x ‘Chickasaw’***

**Morningside Nursery** donated liners. Like ‘Pocomoke’, considering the size of the initial liners, it is amazing what growth and survival occurred. Three plants of this cultivar still survive in Fayetteville. This cultivar is routinely killed to the ground in Fayetteville and it is slow to re-grow the following season. Like the plants in Little Rock, the buds barely open. Flowering started in early August.

‘Chickasaw’ has beautiful, glossy, red ceramic flower buds that appear in July but were slow to open until mid August. Buds almost appeared ‘blind’ as the petals barely emerge from the calyx. The overall impact of the flower display was not as good as that seen with ‘Pocomoke’. Of these two genetic dwarfs, we would not recommend this cultivar. Average size statewide is 20” wide by 14” tall.

### ***Lagerstroemia indica* ‘Velma's Royal Delight’**

**Morningside Nursery** donated liners. This crapemyrtle began flowering in mid-June and continued for months (mid-September)! Growth is correlated with location. Best growth occurred in Little Rock and least growth in Fayetteville. Despite claims to more winter hardiness, this cultivar was killed to the ground in Fayetteville in the winter of 2000-2001. Powdery mildew was noted at the Little Rock location. Average size statewide is 61” wide by 55” tall.

### ***Styrax japonicus***

**Greenleaf Nursery** donated 5-gal plants. The thin, gray bark of *Styrax* is very susceptible to damage on the SW quadrant. This resulted in the death of several plants at Hope and Fayetteville. Based on our research we would strongly suggest protecting the trunk with white trunk wrap to minimize trunk sunscald.

Dramatic flowering is from mid-April to early May. The average plant height is 120” with a trunk diameter at 6” of 2.6”.

### **Oak hybrid**

**Pittman Nursery** donated 1-gal plants. A preliminary assessment is that this plant is *Quercus x comptoniae*. Growth was good at all three sites. Since this plant is of seed origin, the plant habit is beginning to fall into two categories. One group is developing a nice open tree canopy, while those in the second group show a strong tendency to produce many recurving lower branches that will make this plant difficult to work with and require more initial pruning maintenance. The average plant height is 163” with a trunk diameter at 6” of 3.5”. Those trees with an open, tree canopy are worthy of additional propagation and more extensive testing.

The Ornamentals team would like to express their sincere appreciation to the cooperating nurseries (**Flowerwood Nurseries, Hines Nurseries, Greenleaf Nursery, Morningside Nursery, and Pittman Nursery**) for donating the plants for this season’s trial and to the **Arkansas Green Industry Association** for financial support.