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New Landscape Plants for the South®

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INTRODUCTION

This report is an update from a previous article in the I.P.P.S. Proceedings (Creech, 2001). The SFA Mast Arboretum in Nacogdoches, Texas is in Zone 8 with an average annual rainfall of 1219 mm (48 inches). June through August is characteristically hot and dry. In recorded history, 1 Sept. 2000 was the record high, 44.4 °C (112 °F), and 23 Dec. 1989 was the record low -17.8 °C (0 °F). Soils are generally well drained, slightly acidic, and the native flora is dominated by pine, oak, river birch, sweetgum, sycamore, Florida maple, hornbeam, elm, hackberry, pecan, and hickory.

RESOURCES

The SFA Mast Arboretum, Ruby M. Mize Azalea Garden, and the Pineywoods Native Plant Center comprise 24 ha (60 acres) of on-campus property with approximately 30% under solid-set irrigation. The mission of the garden is to evaluate a wide range of plant material. Varietal collections also dominate the garden's landscape design. The three garden units employ five full-time staff. To avoid redundancy, site details of the three gardens resources can be reviewed (Creech, 2001).

WOODY PLANT EVALUATION

Ornamental plants recommended in 2001 are not described below. They remain proven performers in the Arboretum with virtues worth repeating, but to avoid redundancy this listing includes only ornamental plants that have emerged as winners in the last few years.

***Acer tataricum* subsp. *ginnala*.** The Amur maple, has been a consistent performer for 15 years in the SFA Mast Arboretum. This multistem tree has a brief

burst of brilliant red fall color. Dwarf and medium-sized selections are in the trade. Mike Arnold of Texas A&M University reports that the species has performed admirably at College Station, Texas, which harbors high pH soils and poor quality irrigation water. In the Aceraceae, the SFA Mast Arboretum has expanded the collection of Asian and native Southern maple species and cultivars. *Acer palmatum* is particularly well represented with over 185 cultivars from 15 years to recently planted. A new *Acer* "species" collection is in place, which includes 13 species planted in a grove. *Acer fabri* and *A. cinnamomifolium* are two evergreen maples that have weathered two winters without damage.

Beschorneria. Also known as the false red agave. SFA Mast Arboretum plants are *B. decosteriana* × *B. septentrionalis*, which have been durable in shade and partial sun. A key feature from this Mexico mountain lily is a red stalk topped with odd red and cream flowers and a showy egg-sized seed pod. Matt Welch, a technician at the Gardens, has backcrossed our plant with *B. decosteriana*. The seedlings appear vigorous and are currently being distributed to nurseries and botanical gardens.

Hydrangea. A 268-m (880-ft) long stretch along the eastern face of the Ruby M. Mize Azalea Garden includes a collection of 203 cultivars of the family Hydrangeaceae. *Hydrangea macrophylla* and *H. serrata* cultivars voted superior in landscape appeal in 2003 include: 'Alpenglühén', 'Taube', 'Libelle White', 'Blaumeise', 'Pia', 'Beauté Vendômoise', 'Möwe' (syn. 'Geoffrey Chadbund'), 'Nikko Blue', 'Altona', 'Nigra', 'Beni-gaku', 'Dooley™', 'Hamburg', 'Merritt's Supreme', 'Badger's Choice', 'Goliath', 'Ayesha', 'Pieta', 'Parzifal', 'Harlequin', 'Shirofugi', 'Bodensee', and 'Jogasaki'. While there was a committee-of-three who evaluated plants for the past 3 years in the landscape, we have data based on plant size, flower number and size, time of bloom, and foliage quality rating in the fall, which includes powdery mildew resistance for east Texas. Flowers were categorized for the purpose of our trials as big, small, cupped, double, and lace cap. Some of the collection now includes Dirr hybrids, which were evaluated in 2003 for the first time as small plants. Their performance in the years ahead will be monitored and reported.

Lagerstroemia. For the purposes of this report, it is important to note that the SFA Mast Arboretum has created the first drive-through crape myrtle arboretum at the university's coliseum parking lot which lies just to the North of the Arboretum. The islands have been planted to over 40 varieties with another planting planned for winter of 2003. The Mast Arboretum is cooperating with Cecil Pounders of Mississippi State in a U.S.D.A. project to evaluate 36 varieties of *Lagerstroemia*, utilizing six plants per variety, across a wide range of the South. In the Arboretum, the oldest *L. fauriei* are particularly impressive and our oldest 'Basham's Party Pink' is a photo opportunity (note: this *L. indica* × *L. fauriei* hybrid should be credited as the first hybrid discovered by legendary plantsman Lynn Lowrey). On the horizon, all of Whitcomb's reds are destined to make an impact in Southern landscapes. Cultivars with burgundy new growth are now in the collection in the SFA Mast Arboretum. Breeding for sterility to enhance bloom display and avoid any invasiveness issues is also a focus.

Loropetalum chinense. The Chinese fringe flower and the advent of its sizzling hot pink blooms and burgundy foliage forms in the early 1990s (f. *rubrum*) has led to a plethora of cultivars and forms. Dirr lists 19 cultivars and the list is growing.

Our count is 27. In the first 7 years, 'Ruby' has lived up to its reputation as dwarfed in one side-by-side comparison (half the size of an adjacent 'Burgundy'). 'Suzanne', while still young, appears to be compact. Two compact selections are "Head's compact form" and 'Snow Muffin'. We have three other dwarf forms. One is via Mr. Ishi of Japan, and the clone can be characterized as small leaved and slow growing. Ted Stephens provided us with a weeping *Loropetalum*, which is now being introduced to Southern U.S.A. landscapes. A clone we obtained as 'B.W. Wallace' from Maarten van der Giessen Nursery appears to be a stable prostrate burgundy-foliaged, hot-pink bloom specimen with little reversion. It's obvious that the diversity in this genus can support many more years of attention to detail.

Manglietia yunnanensis. This is one of 20 species in the genus Magnoliaceae that has proven adapted to gardens. Foliage is dense and attractive, and flowers are simple, solitary, and erect. *Parakmeria lotungensis*, Joy lotus tree, is another Magnolia relative that has performed well in the Arboretum and is narrowly columnar with glossy green foliage.

Michelia maudiae. The smiling lily tree, is the biggest surprise and a major excitement in the Arboretum. *Michelia maudiae* is a fast-growing tree with a stunning flower display from the end of February through most of March. Blooms are in the 8 to 13 cm (3 to 5 inch) range. With three heavy flowering specimens that reach heights of 4.6 m (15 ft), we remain optimistic. Two other interesting Magnolia family members are noted for their performance: *Magnolia lotungensis* (syn. *Parakmeria lotungensis*) is narrowly columnar and dense with foliage. *Michelia figo*, banana shrub, is common across the South with many old specimens across the South. *Michelia skinneriana* introduced in the 1990s is more vigorous, easier to root, appears quite hardy, and is now commercially available in the trade. Blooms are similar in size to *M. figo*. While *M. × foggi* #2 has larger leaves and flowers, it suffers from low temperature damage when temperatures fall below -7°C (20°F). *Michelia yunnanensis* is shrubby, floriferous, and vigorous in the Arboretum. *Michelia foveolata* is a columnar tree sporting large leaves and creamy yellow small fragrant flowers.

Rhododendron. Rhododendrons are primarily evaluated in the Ruby M. Mize Azalea Garden, which includes 53 hybrid groups and 511 cultivars. This includes selections of Southern indicas (18), Kurume (16 cultivars), Satsukis (192), Back Acres (15), Girard (15), Glenn Dale (26), Gartrell numbered hybrids (19), Huang (16), Robin Hill (22), Kaempferi (6), Carla (3), and the Encores (11). Major collections of the deciduous azaleas of the Southern U.S.A. and their hybrids include Confederate (6), Aromi (10), Maid in the Shade (6), and the Pastel series by Woodlanders (7).

In 2003, we observed that *R. 'Koromo Shikibu'* (syn. *R. stentopetalum* 'Koromo Shikibu') provided a bright lavender show, repeated bloom slightly, and seemed less affected by azalea lace bug than other azaleas. *Rhododendron* 'Sun Glow' has been dependable and repeat blooms. *Rhododendron* 'High Tide' is an Aromi hybrid with very large blooms. *Rhododendron* 'Girard's Dwarf Lavender' has dependable blooms with a deep purple color. *Rhododendron* Break of Day Group (syn. 'Break O'Day') via Nuccios is similar to a salmon-flushed 'George Lindley Tabor'. *Rhododendron* 'Frosted Orange' is a Harris hybrid with late bloom into May and is a low-growing form. *Rhododendron* 'Watchet' received high marks for bloom display,

stature, and a tendency to repeat bloom. All the Huang hybrids were impressive in their third year. Huang 1-6-31 has been the most vigorous of the 16 selections and sports healthy foliage and bright red blooms.

Schima wallichii. This close camellia relative is represented in the SFA Mast Arboretum by five taxa, all apparently synonyms for *S. wallichii*. Our clones came to us from various sources as *S. remotoserrata* (syn. *S. remoto*), *S. wallichii*, and *S. wallichii* subsp. *noronhae* var. *superba* (syn. *S. argentea*). In spite of some reports that the genus lacks cold hardiness, the SFA Mast Arboretum's collection has suffered no winter damage in 5 years. Older plants are reported to be quite winter hardy. Don Mahoney of Strybing Arboretum in San Francisco, California, is working with a selection that has red new foliage and a form that looked outstanding in his nursery in the summer 2003.

Calycanthus ×raulstonii. 'Hartlage Wine' is a J.C. Raulston Arboretum release of a hybrid sweetshrub of exceptional vigor and landscape value. 'Venus' is a new cultivar to the Arboretum via the work of Dr. Tom Ranney in Asheville, North Carolina.

Styrax formosanus* var. *formosanus. This is a multistem shrubby snowbell with an exceptionally floriferous nature. *Styrax japonicus* 'Rubra Pendula' is another snowbell that deserves mention. Our specimen is dramatically weeping and features light pink blooms in the spring. We have rooted this clone in good numbers and distributions are underway.

***Taxodium* 'Nanjing Beauty'**. First introduced in 2002, this cultivar was selected in 1988 from a batch of seedlings that were the result of a cross made by Dr. Chen Yong Hui in 1980 between *T. distichum* and *T. mucronatum*. Professor Yin Yunlong currently directs *Taxodium* improvement work at the Nanjing Botanical Garden and the SFA Mast Arboretum has been assisting the project by providing seed from various provenances in the South and Mexico (for *T. mucronatum*). The *Taxodium* project has been intense for many years and this southern U.S.A. native plant is being planted in huge numbers (millions) in southeastern China. Key attributes of 'Nanjing Beauty' include fast growth rate, street tree durability, columnar nature, tolerance to high alkalinity, no knees, and ease of propagation. Propagation is via cuttings in May and June taken from plants grown 1 year and cut back hard in the first winter to provide a good number of upright vigorous shoots, a procedure to avoid topophysis. Distribution of young plants in 2002 and 2003 entails 18 locations that include two locations in New Mexico and Arizona, throughout the Southern U.S.A., and two states in the Midwest for cold tolerance evaluation. Another significant 2002 *Taxodium* acquisition includes seed from *T. mucronatum* trees in New Mexico known to have endured low winter temperatures. Those seedlings have been distributed to interested nurserymen.

HERBACEOUS PERENNIALS

Dawn Parish, Research Associate at the SFA Mast Arboretum, is responsible for assembling and displaying a wide array of herbaceous plant material in our borders and garden beds. Recent projects include: (1) expansion of the "ginger" garden (a cooperative project with Mercer Arboretum), (2) continued development of the perennial borders, and (3) addition of a "tropical" theme garden that features a collection

of hardy bananas, cannas, crinum, lilies, and others grown for color or boldness in the landscape, or both. Dawn's herbaceous "favorites" for the past 2 years includes a mix of sun- and shade-loving standouts:

***Acanthus* 'Summer Beauty'**. This *Acanthus* hybrid performed beyond our expectations. While 'Summer Beauty' is not new to the industry, particularly in the North, this cultivar appears worthy of further trial in Southern gardens, where other *Acanthus* fail. It is grown in partial shade in well-drained soil and produces glossy foliage and bloom spikes that reach heights of 0.6 m (2 ft) or taller.

Alocasia odora. This is a clumping elephant ear with deeply veined leaves that makes an outstanding specimen in full sun. It survives winters well in Zone 8.

Aloysia virgata. The sweet almond verbena produces hundreds of racemes of extremely fragrant flowers from spring until fall frost. It is cultivated as a deciduous shrub and can reach heights of 3 to 4.6 m (10 to 15 ft). It can be vigorously pruned if containment of growth is desired.

***Amsonia* 'Blue Ice'**. This was from a seedling found at White Flower Farm via Plant Delights. The compact nature of this *Amsonia* is more appreciated in a garden setting and the dark blue flowers are persistent.

***Canna* 'Australia'**. This is a very impressive red-foliaged canna that holds its color in the heat of a southern summer when most other red-foliaged cannas turn green. Bright orange-red flowers are a perfect compliment to foliage color.

Curcuma australasica. Hidden ginger is proving to be extremely hardy in Zone 8. Assie plume ginger is strong grower producing healthy clumps in little time. Unique flowers appear throughout the summer.

***Curcuma petiolata* 'Emperor'**. A variegated hidden ginger with complementary white flowers in mid-summer. It is also a prolific grower and is hardy in more northern climates.

***Duranta erecta* 'Sweet Memories'**. This is a Mountain States introduction that has been the best *Duranta* in our trials. Plants returned earlier and more vigorously from the previous winter, and 'Sweet Memories' is currently the only cultivar blooming in the 2nd year of our trials.

***Gaillardia aestivalis* var. *winkleri* 'Grape Sensation'**. When seeding out this endangered Texas native, we noticed a great variation in color combinations of rays and centers of the flowers. We have chosen an eye-catching form with dark purple rays and centers. The species has proven to be exceptionally drought tolerant and will bloom over a long period of the spring, summer, and fall. The plant can be dead-headed with a weedeater to encourage a vigorous return of flowers.

***Manihot esculenta* 'Variegata'**. Variegated tapioca is an outstanding heat- and sun-tolerant annual. Bright green and yellow foliage is held on yellow stems with vivid red petioles. Winter propagation is difficult and spider mites are a problem indoors, but this plant is worthy of production in the Southern U.S.A.

Sarcandra glabra. This is a unique evergreen mounding groundcover for shade. The plant reaches 0.3 m (1 ft) in height and twice that in width. Flowers are white and relatively inconspicuous, but orange berries in the late fall are dramatic and

persist well into the winter. Introduced by Bob McCartney in the mid 1990s, the species is easy to root and numbers can be built quickly by cuttings.

Silene virginica. Maarten Van der Giessen provided the SFA Mast Arboretum with this extraordinary southeastern native perennial. In spring the glowing red flowers that arise from low-growing foliage can be seen from every angle in the garden.

Tricyrtis hirta 'Hotatagisa'. Toad lilies are outstanding performers in the shade garden. A form was acquired from Forest Farm Nursery that supports a unique flower with no spots and a gem-like blue color. 'Hotatagisa' (Bot. Ed. Note: Hotatagisa is the Japanese common name for all *T. hirta*).

Xanthosoma sagittifolium 'Aurea' (syn. *X. maffa* 'Aurea'). This neon lime elephant ear performs admirably with a little shade. Plants divide quickly but do not run and full sun tends to burn the foliage.

CONCLUSIONS

Plant evaluation at the SFA Mast Arboretum continues as a primary focus. Acquisitions during the last 5 years have resulted in many plants that are virtually unknown in the Southern U.S.A. that deserve further evaluation in other locations. Nurserymen are encouraged to visit the Mast Arboretum's website for more detailed information on the ornamental plant evaluation program: <www.arboretum.sfasu.edu>.

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