

Small Flowering Trees Deserving Greater Use[©]

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INTRODUCTION

Small flowering trees are gaining in popularity for several reasons. First, small 3 to 6 m (10 to 20 ft) trees fit modern landscapes where yards are small. Secondly, there is a growing and somewhat justified fear of urban trees that get huge with time. In an age of hurricanes, tornadoes, wild weather, and predictions by climatologists of more of the same, it is only reasonable to embrace a little fear of large trees. Part of climate change is violence. Crushed homes, vehicles, and power lines are becoming nightly fare on our national news. Small flowering trees suddenly look better. Thirdly, there is an ever-expanding list of new species and cultivars entering the market with attributes of tree form, leaf shape and color, and flower size and color. Finally, 5 to 10 gal container-grown plants mesh well with the displays at the mass markets, independent nurseries, and landscape companies.

THE QUESTIONNAIRE

When I was asked to make a presentation on small flowering trees that deserve greater use, I already had the list spinning in my head. However, after some thought, I decided to query a few of my horticulture friends across the south for their opinion. I could table the data, make a graph or two and condense everything down to the winners. Most surveys have trouble with a response rate, so, in developing a query, I knew it had to be simple and casual. My email query read, "I am giving a talk on small flowering trees deserving greater use. Off the top of your head, can you list five to ten flowering trees you think deserve greater use – evergreen or deciduous? I am asking you because I respect you as the leading authority on woody trees in the South." For whatever reason, this survey had a 100% response rate.

RESPONDENTS

For the purposes of this paper, email queries were sent to the following academics and nurserymen who have many years of collective experience working with woody trees.

- Mike Arnold, Texas A & M University, College Station, Texas.
- Bob Brackman, San Antonio Botanical Garden, San Antonio, Texas.
- Matthew Chappell, University of Georgia, Tifton, Georgia.
- Paul Cox, retired, San Antonio Botanical Garden, San Antonio, Texas.
- Dave Creech, Stephen F. Austin State University, Nacogdoches, Texas.
- Mike Dirr, Plant Introductions, Inc., Watkinsville, Georgia, 30677.
- Darren Duling, Mercer Arboretum, Houston, Texas.
- Maarten van der Giessen, Nurseryman, Semmes, Alabama.
- Greg Grant, Stephen F. Austin State University, Nacogdoches, Texas.
- Jason Griffin, Kansas State University, Manhattan, Kansas.
- Richard Harkess, Mississippi State University, Mississippi.
- Gary Knox, University of Florida, Quincy, Florida.
- Todd Lasseigne, Tulsa Botanical Garden, Tulsa, Oklahoma.
- Buddy Lee, PDSI, Loxley, Alabama.
- Bob McCartney, Woodlanders, Aiken, South Carolina.
- Richard Olsen, US National Arboretum, Washington District of Columbia.
- Allen Owings, Louisiana State University, Baton Rouge, Louisiana.
- Jerry Parson, retired TAMU Extension, San Antonio, Texas.
- Cecil Pounders, USDA, Poplarville, Mississippi.
- Skip Richter, Texas A and M University, Houston, Texas.

- Jim Robbins, University of Arkansas, Little Rock, Arkansas.
- Mike Schnelle, Oklahoma State University, Stillwater, Oklahoma.
- Heidi Sheesley, TreeSearch Farms, Houston, Texas.
- Ken Tilt, Auburn University, Auburn, Alabama.
- Jimmy Turner, Dallas Arboretum, Dallas, Texas.
- Mark Weathington, JCR Arboretum, NCSU, Raleigh, North Carolina.
- Bill Welch, TAMU, College Station, Texas.
- Dennis Werner, North Carolina State University, Raleigh, North Carolina.

A few disclaimers are warranted. This is not a random sample. Respondents were chosen because I have their email address and we have communicated about plants for many years. The survey has extra bias to Texas, simply because the author has more friends in Texas. While this might skew results slightly to small flowering trees with exceptional drought and heat tolerance, it is good to know that these are characteristics now much appreciated over a wide range in the southern USA. To be even more transparent with readers, the list includes three respondents in Zone 7 (Arkansas and Washington, District of Columbia) and even one in Zone 6 (Kansas). Still, even with those outliers, the list has value in informing southern nurserymen what a wide swath of horticulturists choose as small flowering trees deserving greater use in the South.

RESULTS OF THE SURVEY

Twenty-seven respondents produced a list of 237 woody plants. All entries were entered into a Microsoft Excel database to provide quick sorting. A document was compiled of all the email responses; about half the respondents provided comments on their choices. The list of top small flowering trees included 74 different genera comprising 126 different species. Sorting by Genus, a “favorites” list was created. Small flowering trees are listed by at least five different respondents as deserving greater use (Fig. 1).

In order of popularity, the following species were:

Magnolia

Twenty respondents listed a *Magnolia* and there was a wide range of deciduous and evergreen choices. Only one respondent listed a *Magnolia grandiflora* (“Teddy Bear”) and four listed *M. virginiana* or a selection of this species. Five found ‘Jon Jon’ on their list. Jim Robbins, University of Arkansas, wrote, “*Magnolia* ‘Jon Jon’ is a superb spring flowering magnolia with huge white flowers, a blush of rose-purple at the base; fragrant; and usually flowers AFTER spring frosts so it does not suffer from mushy-brown-frozen-flower syndrome.” Respondents listed a number of deciduous species, hybrids, and varieties. Two listed some of the uncommon evergreen Asian magnolias that have found favor in the South. Todd Lasseigne wrote, “*Magnolia cavaleriei*, *M. yuyuanensis*, and *M. maudiae* – evergreen former *Manglietia* and *Michelia* species from China. We now know that they are good. No need to say we are still “testing” them. The JC Raulston Arboretum in Raleigh, North Carolina, had them in the early 1990s, and that was 20 years ago. Yes, some bloom early and get nipped by frosts, but not all of them do. They are real performers that need to become more mainstream.” The author agrees and adds *M. platypetala*, *M. skinneriana*, *M. foveolata*, and *M. macclurei* and others as rock solid landscape plants for the far south. Many are destined to outgrow the “small flowering tree” category. At Stephen F. Austin (SFA) Gardens, we have large Asian evergreen magnolias topping 9 m (30 ft) in less than a dozen years. They are well adapted to the high pine canopy forest of SFA Gardens. Two respondents listed *Liriodendron tulipifera* ‘Little Volunteer’ (PP19,581; COPF Open), a recently introduced tulip tree reported to be one-third size and perfect for smaller landscapes. A four-year old specimen at SFA Gardens is 2.4 m (8 ft) tall, but has not flowered.

Lagerstroemia

Some might argue that crape myrtles do not deserve greater use. However, sixteen provided a wide range of favorite cultivars including ‘Sioux’, ‘Tonto’, ‘Basham’s Party

Pink', 'Delta Jazz', 'Fantasy', 'Moonlight Magic', 'Natchez', 'Red Rocket', the new Black Diamond™ cultivars, and indica 'Catawba', – as stellar small flowering trees. Two respondents listed *L. limii*.

Prunus

Tied in popularity with Chinese fringe tree, fourteen respondents listed *Prunus* as one of their favorite small flowering trees. *Prunus mume* was listed by five respondents. Heidi Sheesley wrote, "*Prunus mume* 'Kobai' – flowering almond! This is an extraordinary tree for full sun or understory conditions. It has gorgeous sculptured trunks, blooms fragrant hot pink flowers in early February, and it is very tough!" One respondent listed *P. mume* 'Peggy Clarke' as a favorite. Three listed *P. campanulata*. Two listed *P. mexicana*. The remainders were various crosses and cultivar choices (i.e., 'Okame'). *Prunus* 'Purple Pride' (PP 23,742) is a recent burgundy-foliaged SFA Gardens introduction, a seedling of *P. angustifolia* 'Guthrie', which is a trunk forming Chickasaw plum introduced by Superior Trees in Florida.

Chionanthus retusus

While as popular as *Prunus* in this survey, Chinese fringe tree is still relatively uncommon in the nursery trade. The tree is impressive with showy blooms, drought tolerance, pest resistance, and ages gracefully. Negative attributes include slow growth of seedlings, difficulties in cutting propagation, training young plants in the container, and there are few available improved cultivars. Cecil Pounders wrote, "Does this tree come in any color but white? This is a problem with most of our native flowering trees. Where is a breeder when we need one?"

Cercis

Thirteen respondents chose redbuds (*C. canadensis*) which are popular with a wide range of new cultivars making their mark, including 'Ace of Hearts', 'Ruby Falls', 'Merlot', The Rising Sun™ redbud (JNJ), 'Alley Cat', Solar Eclipse™ (JN 3), 'Hearts of Gold', and var. *texensis* 'Oklahoma'. One respondent enthusiastically asked, "Are redbuds the new crapemyrtle?"

Cornus

Eleven respondents selected an interesting mix of dogwoods, but only four listed *C. florida* or a cultivar of the species. *Cornus angustata*; *C. kousa*; *C. officinalis* 'Kintoki Raulston Form'; *C. alternifolia* 'W.B. Stackman', Golden Shadows® pogoda dogwood; *C. mas* 'Spring Glow'; and *C. hongkongensis* 'Gekkou' made up the remainder. Ken Tilt wrote, "*Cornus florida* 'Welch's Bay Beauty' or 'Alba Plena' – not many nurseries growing this anymore but it is still one of my favorite "up close and personal" trees, one you have to appreciate from a nose distance away. It gets "ooohs aaaahs" from master gardeners every time I show it. I could make a living "Johnny Appleseeding" my way across the south selling this one. 'Welch's Bay Beauty' features huge 10 to 13 cm (4 to 5 in.) white double-form flowers with seven sets of whorled bracts, 10 to 13 cm (4 to 5 in.) in diameter. Three respondents extolled the virtues the Chinese evergreen dogwood, *C. angustata*. The cultivar 'Elsbry', Empress of China™ (Plant Patent #14,537) was described by one respondent as perhaps the "most shamefully underutilized small flowering evergreen tree in the South."

Styrax

Of the snowbells, six respondents listed *S. japonicus* but *S. grandiflorus* was found only on one list. 'Spring Shower' and 'Evening Light' were listed as superior Japanese snowbells. One respondent wrote, "*Styrax japonicus* 'Evening Light' – what could make one of the most elegant trees around even better? Purple foliage! I may be jumping the gun on this one as it is so new, but it is performing well for us so far." At SFA Gardens, *S. japonicus* 'Rubrum Pendula' has become a much admired specimen. Several respondents

recognized other *Styrax* species that deserve promotion, including *S. tonkinensis*, *S. serrulatus*, and *S. formosanus*. In the *Styraceae*, both *Meliodendron* and *Sinojackia* have proven to be durable snowbells at SFA Gardens. With eleven genera and over 160 species, the *Styraceae* remains relatively unexploited with many candidates suitable for landscapes in the southern USA.

Chionanthus virginicus

Six respondents listed the native Grancy gray beard as a top choice for an underutilized small flowering tree. It was touted for the fleecy bloom show, drought tolerance, lack of pests, and lack of utilization in southern landscapes.

***Sophora affinis* (syn. *Styphnolobium affine*)**

Six respondents found favor with Eve's necklace – four in Texas, as did one in Oklahoma and North Carolina. Mike Arnold wrote, “*Sophora affinis* (syn. *Styphnolobium affine*), is my candidate for the most under-utilized native tree. It does have some issues for nurserymen in slow growth in containers, the need to graft good clones, but it can have a fantastic form, dark clean green foliage, light to dark lavender-pink spring flowers, odd fruit, and it's very adaptable to a variety of soils as long as drainage is good.” Paul Cox has provided SFA Gardens with two burgundy-flowered genotypes, ‘Amy’ and ‘Crystal’. Because of difficulties in cutting propagation, SFA Gardens has initiated a long term project. We have planted a population of both of these dark-flowered genotypes in a full sun spot with the goal of purifying the seed lines for superior forms over two or three generations.

Halesia diptera

Silverbell pulled the heart strings of five respondents. Either two-wing or Carolina silverbell was listed. Several respondents listed *H. diptera* var. *magniflora* as a small flowering tree deserving greater use. At SFA Gardens, we have come to appreciate the grace of larger specimens and if given good exposure to sun, the tree can produce quite a stunning spring floral show. At SFA Gardens, we have found the Carolina silverbell, *H. carolina*, to be somewhat slow to establish but worthy of inclusion in the part shade woodland garden. ‘Lady Catherine’ is a weeping form introduced by Ken Tilt that has found a special spot in our garden. We have two pink flowered selections that appear healthy under high canopy pines.

Vitex agnus-castus

The chaste tree found favor with five respondents. Touted for bloom show (blue, white, and pink), ease of growth, fast to flower, and drought tolerance. ‘Flora Ann’, a Greg Grant introduction, is gaining popularity as the best pink flowering variety in the trade. It is most often trained in the southern regions as a small multi-trunk small flowering tree, but it can also be cut back severely each year to a few large trunks near the ground, which results in vigorous growth and larger blooms.

Chilopsis linearis

Desert willow found favor with five recipients for its prolific flowers, drought tolerance, and durability. Mike Arnold wrote, “*Chilopsis linearis* is experiencing a surge in interest and many new improved forms are coming on. It is probably better suited to central Texas and west, has lots of flowers; users just need to tolerate its informal habit.” While east of this tree's natural western range, desert willow appears very well adapted to wetter regions of the south, provided the landscapes are dry, sunny, and well drained. Once well established, it remains healthy through the worst drought and heat spells. ‘Bubba’, a Paul Cox introduction, remains the most popular cultivar in Texas, but other newer cultivars have yet to be evaluated.

OTHER SMALL FLOWERING TREES

Ungnadia speciosa, Mexican buckeye, was a favorite for four Texas respondents. This multi-stemmed small tree is drought tolerant with redbud-like flowers, yellow fall foliage, and fascinating buckeye fruit that persist into the winter on bare stems, definitely a four seasons small tree. *Cordia boissieri*, Mexican olive, was listed by four respondents, three in Texas and one in Florida, as a showcase small flowering tree suitable well-drained soils in Zones 9 and 10. Three *Gordonia* taxa made a list of three different respondents, *G. axillaris*, *G. lasianthus*, and X *Gordlinia grandiflora*, the latter an interesting intergeneric cross between *Franklinia alatamaha* and *G. lasianthus*.

There were others making only one or two lists. Dennis Werner wrote: "*Cyrilla racemiflora* 'Woodlander's Little Leaf'; I have a gorgeous 25 year-old specimen in my yard trained to a 3-trunk tree form. People nearly faint, including me, when it is in full bloom. A few of the respondents stretched the definition of small flowering trees to include trees not often touted for flowering (i.e., *Acer* and *Ilex*). For example, Todd Lasseigne wrote, "*Acer truncatum*, Shantung maple, is every bit as good as you hear from everyone else. It is small-statured and tough, but needs well-drained soil. It will not outgrow its site. The yellow flowers in spring are vivid (for a maple), and so I'm cheating a bit putting it into this category."

Darren Duling recommended *Radermachera sinica*, the serpent tree, a plant I had never heard of, and he wrote, "Dave, we have a 7.6 m (25 ft) specimen here in Houston and it went through the two previous tough winters with only a bit of tip damage. It bloomed beautifully earlier this summer. Foliage is like a fountain." Serpent tree is in the family Bignoniaceae, native to the subtropical mountain regions of southern China and Taiwan, and in prime habitat it can reach 9.1 m (30 ft) tall. However, dwarf versions are available and are often referred to as the Asian bell tree. These smaller statured taxa feature large glossy leaves with white, trumpet-like flowers, about 18 cm (7 in.) long, and resemble a large *Bignonia* flower in shape. Darren Duling suggested that the species be considered in Zones 9 and 10, protected from direct sun and placed in close proximity to warm-in-the-winter buildings.

Heidi Sheesley in Houston, Texas, remarked "*Aloysia virgata*, almond verbena, is an amazing plant. When properly trained and pruned in the first few years, almond verbena becomes a beautiful 4.6 m (15 ft) tree that blooms over and over, spring, summer, and fall, covering itself up with fragrant white flowers. It is an important butterfly nectar plant and it's tough! I don't know how far north it goes as a deciduous tree, but it makes as a fine returning herbaceous perennial in zones with hard winter freezes."

Heidi Sheesley and several other Texas contributors mentioned *Viburnum* 'Lord Byron' as a new small flowering tree with exceptional merit. This Paul Cox introduction is a cross between *V. rufidulum* and *V. obovatum*. Heidi wrote, "*Viburnum* 'Lord Byron' is a great small ornamental tree – it's gorgeous when in bloom, and it has good fall color and showy fruit. It's a great "habitat tree" and it's incredibly tough!"

Ken Tilt provided perhaps the most concise description of the merits and southern charm of sourwood. He remarked that, "*Oxydendrum arboreum* is the first to color in the fall. It traveled with me from Tennessee to Alabama and just kept working. It is a plantsman's signature native plant. Makes you want to get out a corn cob pipe and feast on some sourwood honey and biscuits in a rocking chair overlooking the creek while petting your pet raccoon."

Other small flowering trees on the list of less than three respondents included *Cephalanthus occidentalis*, button bush; *Osmanthus fragrans*, sweet olive; *Sophora secundiflora*, Texas mountain laurel; *Myrcianthes fragrans*, twinberry or Simpson's stopper; and *Clethra pringlei*, Mexican summersweet.

CONCLUSIONS

Small flowering trees are gaining in popularity. There are a plethora of new taxa entering the nursery and landscape trade. While this survey is not conclusive, it does recognize the collective wisdom and opinions of a wide range of professionals. The survey also reflects

a great diversity in choices, a further reflection that preference can be a very personal thing. While most of the top choices are commonly encountered in the South, some are not. *Chionanthus retusus*, and *C. virginicus*, the Chinese and American fringe tree, were frequently selected and many respondents lamented the low availability and promotion of these two species. As for the author, I have my own favorites: *Halesia diptera* Magniflora Group (syn. var. *magniflora*), *M.* ‘Jon Jon’, *Chionanthus retusus*. *Lagerstroemia faurei* ‘Bayou View’, *Cornus florida* var. *pringlei*, *Ungnadia speciosa*, *Osmanthus fragrans*, *C. angustata*, *M.* ‘Butterflies’, and just about any of the new *Cercis* cultivars. Of course, ask me tomorrow and I can generate a brand new list.

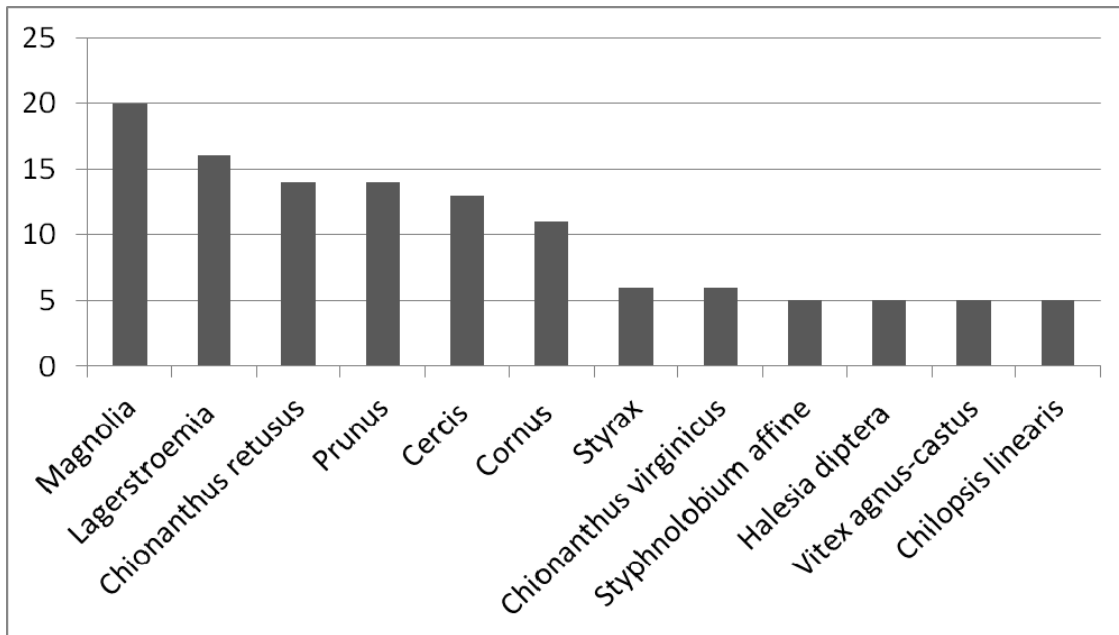


Fig. 1. Small flowering trees listed with greatest frequency by 27 respondents.