



# Report from the Southern Trials, Part I

Florida puts some favorites to the test.

By Rick Schoellhorn  
and Erica Berghauer  
University of Florida

Well it's finally feeling like a normal Florida summer, with half an inch of rain every afternoon and temperature and humidity at around 90. Since we had a relatively dry summer, a lot of plants that traditionally give up the ghost in June have persisted into August. That's good because it tells us a lot about heat tolerance. Oddly enough, powdery mildew was not a problem this year, as it has been in the past. With over 340 entries and 19 basic categories of plants in the 2003 spring/summer trials at the University of Florida, there is a lot to cover.

The trials are planted each year into ground beds amended with mushroom compost at 1 yard per 100 sq. ft.; the pH of the beds ranges from 6.2-6.7; and a thick layer of aged pine bark is applied after the soil is prepared. At planting, 72-cell liners are placed directly into the beds on 12-inch centers and 4 grams of Osmocote 18-6-12 is incorporated around each plant. Plants are then watered-in overhead by hand, and subsequent watering is done through drip tubes similar to commercial vegetable production irrigation systems. Plants are evaluated every other week for initial flowering and peak flowering, using a five-point system; and rated on performance, diseases, pests, etc. We do not apply any fungicides or pesticides, except glyphosate to control weeds. After the first weeks of planting, we also do not deadhead, pinch or trim, unless an entry is so vigorous, it threatens the ratings of entries surrounding it. The trials ran from approximately April 1 to July 31.

To get the full story, with data, check the trial Web site, (<http://hort.ifas.ufl.edu/floriculture/springtrials2003>), so you can compare what is said here with pictures taken every two weeks. Here are the plants in the groups we classified on the Web site to facilitate crossover. Also, due to the number of cultivars presented here, please use the Web site to locate sources for this material.

Rating system used in the University of Florida Trials

0 = Plant has died.

1 = Poor performance, either through pest problems or lack of vigor, and poor growth habit.

2 = Plant is green and growing, but with low color or display.

3 = Plants begin to be of interest; flowering is beginning; growth and foliage are strong; and growth habit is attractive.

4 = A strong display of color and a good growth habit; a gardener would be pleased to have plants of this quality in their landscape.

5 = Plant is at the top of its performance; flowering or growth is peak and without flaws.

In general, any plant above a 3 is performing well, but note that a plant that has a great peak season but low ratings before and after flowering will have a lower overall seasonal rating. Plants with an average season rating of 3-5 have constant interest and color in the landscape.

## ANGELONIA

This year, angelonia was in the field portion of the FlorasStar Elite trials, as well as being one of our focus crops, so there were fewer entries, meaning the trial does not cover the scope of the industry by any means. It was great to have a chance to do some field trialing of these plants, as they have so much potential, and the genetics are there for some incredible advancements in the near future. I hope we will be doing these again once some of the new releases make it on the market.

We trialed from the Angelface (Proven Winners), Angelmist (Ball FloraPlant) and Carita (The Flower Fields) releases, all of which had good performance in the garden. In the entire season, there was only one strong flush of flowering, though it lasted roughly six weeks and garnered a very strong performance. This is partly because we started with liners rather than finished materials. All entries performed very well; however, the amount of time they spent growing and not flowering reduced their overall ratings. The highest marks went to 'Angelface Blue' and 'Angelmist Purple Stripe' for earlier flowering and longer bloom seasons.

Figure 1. Angelonia trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Angelface Blue	4-22-03	6-11-03	2	2	2	5	4	3	2	2.86
Angelmist Purple Stripe	4-16-03	5-16-03	2	3	3	4	4	2	2	2.86
Angelface White	4-16-03	6-11-03	2	2	2	3	5	3	2	2.71
Angelmist Deep Plum	4-16-03	5-28-03	2	2	3	3	4	3	2	2.71
Angelface Bicolor Blue	4-16-03	6-11-03	2	2	2	3	5	2	2	2.57
Caritas Purple	4-16-03	5-28-03	2	2	2	3	4	3	2	2.57

## ANNUALS

There were 81 "annuals" this year, and we lumped all the plants that were not focus crops into this category. There were some star performers here that deserve a lot of credit for exceptional performance. These are plants that had superior performance this year.

**Intensia Phlox.** Top Performance in the garden. Proven Winners really struck gold on these plants. Normally *Phlox drummondii* hybrids are short-lived, cool season annuals, but the Intensia series were far superior to anything we have seen before. The plugs were in bloom when planted and began to show some signs of foliar loss in August, otherwise they stayed at a perfect five rating throughout the entire summer. This is a crop to be looking at for spring and summer sales.

**Doublette Begonias.** These double hybrids of *Begonia sempervirens-cultorum*, by Miracle-Grow, were incredible in full sun throughout the season; through today, they remain in full bloom with no disease or insect problems



vegetative matters

Figure 2. Annual trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
PHLOX										
Intensia Neon Pink	3-31-03	3-31-03	3	5	5	5	5	5	3	4.43
Intensia Lavender Glow	3-31-03	3-31-03	3	5	5	5	5	5	2	4.29
Intensia Lilac Rose	3-31-03	3-31-03	3	5	5	4	4	4	2	3.86
BEGONIA										
Doublette Pink	4-2-03	4-2-03	5	5	5	5	5	5	5	5.00
Doublette Red	4-2-03	4-2-03	5	5	5	5	5	4	5	4.86
Doublette White	4-2-03	4-2-03	4	4	4	4	5	5	5	4.43
ZINNIA										
Dreamland Orange	4-23-03	4-23-03	4	5	5	5	5	5	4	4.71
Dreamland Cream	4-23-03	4-23-03	4	5	4	5	5	5	3	4.43
Dreamland Pink	4-23-03	4-23-03	4	5	5	5	5	4	2	4.29
VINCA										
Dark Purple Diva	3-20-03	3-20-03	3	5	5	5	5	5	4	4.57
Scarlet Diva	3-20-03	3-31-03	3	5	5	5	5	5	4	4.57
Purple Diva	3-20-03	3-20-03	3	5	5	5	4	4	4	4.29
White Diva	3-20-03	3-31-03	3	5	5	5	4	4	4	4.29
White Glory Diva	3-20-03	4-9-03	3	5	5	4	5	4	4	4.29
Light Purple Diva	3-20-03	3-20-03	3	5	5	4	4	4	4	4.14
Pink Diva	3-20-03	3-20-03	3	4	5	4	4	4	4	4.00
Lavender Diva	3-20-03	3-20-03	3	5	5	4	4	3	3	3.86
Salmon Pink Diva	3-20-03	4-9-03	3	4	4	4	4	3	4	3.71



Top, left to right: Phlox ‘Intensia Lilac Rose’, Begonia ‘Doublette Red’; Bottom, left to right: Vinca ‘Diva Dark Purple’, Zinnia ‘Dreamland Orange’.

at any time. In our consumer and student evaluations, these plants also came out as top picks. It was almost boring how consistently great they were!

**Dreamland Zinnia.** Again, this is not a plant we expect to hold up through summer in Florida. Add to this that we did not deadhead spent flowers or clean the plants in any way. Throughout the season, these plants

held up and are only now — in late July and August — starting to succumb to leaf spot, Anthracnose and Botrytis. American Takii has bred a really strong performer for zinnias, definitely heat tolerant and disease resistant.

**Diva Vinca.** This is the second year for trialing this series from Danziger “Dan” Flower Farm, and again, they have performed excellently. There is some variability in the series, with Salmon Pink having the lowest vigor in both seasons, but all are good performers. These plugs went through a record late frost and still performed all season long. There were some losses of lower foliage towards the end of July, with the advent of summer rains, but still a good, strong showing from this series. ♦

vegetative matters

Figure 3. Calibrachoa trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Million Bells Hot Pink	3-20-03	3-31-03	5	5	4	3	4	2	2	3.57
Million Bells Cosmos Pink	3-20-03	3-31-03	4	4	3	3	4	2	3	3.29
MiniFamous Peach	3-20-03	5-1-03	3	5	5	5	3	2	0	3.29
Spring Fling Salmon	3-20-03	3-31-03	3	5	5	3	3	3	1	3.29
Superbells Coral Pink	4-23-03	5-1-03	2	4	4	5	2	4	2	3.29
MiniFamous Cherry Pink	3-20-03	4-9-03	3	5	4	3	2	3	2	3.14
Superbells Blue	4-22-03	5-1-03	2	4	4	4	3	3	2	3.14
Million Bells	3-20-03	4-21-03	2	5	4	3	2	3	2	3.00
Trailing Magenta										
Superbells Cherry Red	3-31-03	3-31-03	3	5	3	3	2	3	2	3.00
Superbells Pink Kiss	4-9-03	4-21-03	3	5	3	3	2	3	2	3.00
Million Bells Red	3-20-03	4-9-03	4	4	3	3	3	2	1	2.86
Superbells Trailing Rose	4-9-03	4-21-03	2	4	4	3	2	3	2	2.86
Superbells White	4-24-03	5-16-03	2	3	3	3	2	3	2	2.57
Million Bells Trailing Blue	4-2-03	4-2-03	2	3	3	3	2	2	2	2.43
Spring Fling Yellow	3-20-03	3-31-03	4	4	3	2	2	2	0	2.43
Superbells Pink	4-22-03	5-1-03	2	3	3	3	2	2	2	2.43
Superbells Red	4-22-03	5-1-03	2	3	3	3	2	2	2	2.43
Superbells Trailing Blue	4-22-03	5-1-03	2	3	3	3	2	2	2	2.43
Sweetheart Lavender	5-15-03	5-15-03	.	2	2	2	2	2	2	2.00

CALIBRACHOA

This crop was part of the FloraStar Elite trials and a field focus crop last year. The results of the greenhouse portion of these trials were in the July issue of *GPN*, and honestly, calibrachoa has a better life as a winter or early spring crop for the Deep South rather than the late season. Any entries planted late, due to shipment, had bad overall ratings because without the benefit of early cool temperatures, the plants could never get up to size and give a good showing in the landscape.

One might argue that calibrachoa is not a landscape crop, but why shouldn't it be? It has the potential to be a very strong, early spring crop and can be winter planted in the Deep South for early spring sales. We trialed 22 cultivars, and there were huge differences in performance based on genetics. The really bad ratings all went to late entries. Note that the period between weeks 20-24 was the peak season for this group.

Figure 4. Double impatiens trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Fiesta Salsa Red	3-20-03	4-21-03	2	3	3	4	4	4	3	3.29
Double Up White	3-20-03	5-16-03	3	3	4	3	3	3	2	3.00
Fiesta Burgundy Rose	3-20-03	4-21-03	3	3	3	3	3	3	3	3.00
Double Diamond	3-20-03	4-21-03	2	4	4	4	3	2	2	3.00
Apple Blossom										
Double Up Red	3-20-03	4-21-03	3	3	4	3	3	2	2	2.86
Cameo Coral	3-20-03	4-21-03	3	4	4	4	2	2	0	2.71
Musica Scarlet	4-16-03	4-21-03	2	3	2	2	3	2	3	2.43
Double Up Salmon	3-20-03	4-21-03	2	2	2	3	3	2	2	2.29
Double Up Passion	3-20-03	5-1-03	2	3	3	3	2	2	0	2.14
Musica Dark Pink	4-22-03	4-22-03	2	2	2	2	3	2	2	2.14
Cameo Scarlet Surprise	4-22-03	5-16-03	2	2	2	2	2	2	2	2.00
Cameo Pink Surprise	3-20-03	4-9-03	2	2	2	3	2	2	0	1.86

DOUBLE IMPATIENS

This crop was also part of the FloraStar Elite trials and a field focus crop. Again, this is not a crop traditionally thought of as landscape material, much less full sun landscape material, but we wanted these plants in the field to look at sun, heat and humidity tolerance. These plants contracted Rhizoctonia fairly early in the season, so we actually looked at Rhizoctonia effects as well. Top ratings for double impatiens went to 'Fiesta Salsa Red' (Ball FloraPlant), 'Double Up White' (Bodger Botanicals) and 'Fiesta Burgundy Rose' (Ball FloraPlant), for surviving the trials and having a better presentation of flowers, as well as a vigorous growth under some pretty tough conditions. Overall, ratings were fairly low in this group due to some insect pressure, as well the presence of Rhizoctonia in that bed.

DOUBLE VEGETATIVE TRAILING PETUNIA

This was a field trial focus crop. Double vegetative petunias are an expanding market with many different genetics available. During early season performance, all entries performed beautifully and had high ratings; the major impact on ratings came in late season. We actually had petunias still blooming in August, which for Florida is nearly unheard of, but this year, disease pressure was lower and entries lasted longer.

continued on page 81

vegetative matters

continued from page 28

Figure 5. Double vegetative petunia trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Supertunia Priscilla	3-20-03	4-21-03	4	5	4	5	5	4	1	4.00
Supertunia Double Pink	3-20-03	4-21-03	3	5	4	4	4	3	2	3.57
Supertunia Double Purple	3-20-03	5-16-03	4	5	5	3	3	3	2	3.57
Double Wave Blue Vein	3-31-03	5-16-03	2	4	4	5	4	3	1	3.29
Double Wave Rose	3-31-03	5-16-03	2	4	4	4	4	3	2	3.29
Double Wave Misty Lilac	4-3-03	5-16-03	2	4	3	3	4	4	3	3.29
Sweetheart Blue	4-24-03	5-16-03	.	3	3	4	4	3	1	3.00
Supertunia Double Pink Veined	3-20-03	4-21-03	3	4	4	4	3	2	1	3.00
Double Wave Pink	4-16-03	5-16-03	.	3	3	3	4	3	2	3.00
Double Wave Purple	3-31-03	5-16-03	2	4	3	3	3	2	1	2.57
Supertunia Double Dark Blue	3-20-03	5-1-03	3	3	4	4	1	0	0	2.14
Double Wave White	3-31-03	5-16-03	2	4	3	3	3	3	1	2.71

Figure 6. Verbena trial result.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Donalena Red	3-20-03	3-31-03	4	5	4	5	3	3	2	3.71
Fuego Cerise	4-24-03	5-16-03	.	3	4	5	4	3	3	3.67
Babylon Deep Pink	3-31-03	4-9-03	4	4	4	4	3	3	3	3.57
Tapestry Lilac Blue	3-31-03	3-31-03	4	4	4	4	3	3	3	3.57
Veralena Lavender	3-20-03	3-31-03	4	5	5	3	2	3	3	3.57
Tapestry Blue Purple	3-31-03	3-31-03	3	4	4	5	3	3	3	3.57
Tapestry Pink	3-31-03	4-9-03	3	5	5	4	3	2	3	3.57
Veralena Soft Lilac	3-20-03	3-20-03	3	5	4	3	3	3	3	3.43
Tapestry Violet	4-3-03	4-3-03	4	4	5	3	3	2	3	3.43
Fuego Scarlet	4-24-03	5-16-03	.	3	3	3	4	3	4	3.33
Flamenco Dark Red	3-20-03	3-31-03	4	5	3	4	2	3	2	3.29
Lascar Lavender	4-24-03	5-16-03	.	3	3	4	3	4	2	3.17
Veralena Lilac	3-20-03	3-31-03	3	5	4	3	2	3	2	3.14
Donalena Pink	3-20-03	4-9-03	2	4	3	4	3	3	3	3.14
Tampa Vervain	3-31-03	3-31-03	3	5	4	3	2	2	2	3.00
Babylon Neon Rose Improved	3-31-03	3-31-03	3	4	4	4	2	2	2	3.00
Fuego Cream	4-24-03	5-16-03	.	3	3	3	2	2	4	2.83

Personally, I was really impressed with the Double Wave series from PanAmerican Seed, which continued to flower into July and August. Remember that a rating over 3.0 for the season is very strong!

VERBENA

This is another group of plants that dodged a bullet this year in our trials, as we had no powdery mildew at all. For verbena in the Deep South, that pathogen is one of the main reasons for late-season performance melt down. This year, many of the entries were still attractive in August; they weren't at peak by any means but still of landscape value, which is very impressive. 'Donalena Red' received the highest ratings although both Donalena and Veralena varieties, both from Danziger "Dan" Flower Farm, got a lot of interest during the industry field days in late May. Many of the Tapestry series, from Proven Selections, were very strong as well and still receiving high marks as we head into August. All in all, it was a very good year for verbenas. GPN

Rick Schoellhorn is extension specialist and Erika Berghauer is trials manager at University of Florida, Gainesville, Fla. They can be reached by phone at (352) 392-1831 or E-mail at rksch@imail.ifas.ufl.edu.

The authors would like to thank all contributing companies and sponsors for their support of the 2003 spring/summer trials. The 2003 winter trials are planted October 15, and spring 2004 trials planted April 1. Our major Floriculture Field Day will be held May 19-20, 2004.

LearnMore

For more information related to this article, go to [www.onhort.com/LM.CFM/gp090302](http://www.onhort.com/LM.CFM/gp090302)