

Report from the Southern Trials, Part II

The University of Florida puts some favorites to the test.

By Rick Schoellhorn and Erika Berghauer



Last month, we covered the results of most of our focus crops for the University of Florida spring/summer 2003 trials. However, there were so many great new plants as single entries in the trials that I really felt we needed to cover them in a separate issue where there would be enough space to focus on both field performance and a little bit of culture information.

In case you didn't get a chance to read it last month...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, evaluated with 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 run from approximately April 1 to July 31.

BANANAS

We only trialed four varieties this year, but I hope in the future we can trial even more of the diversity from this incredible tropical impact group. Again, these plants were planted from 72-cell liners, and most were over 10 feet tall five months later. I was impressed with the overall speed of growth, as leaf size on many cultivars exceeded 7 feet. Flowering would

Figure 1. Banana trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Gran Enano banana	4/3/03	NA	2	2	5	5	5	5	5	4.14
Valery banana	4/3/03	NA	2	3	4	5	5	5	5	4.14
Rojo	4/23/03	NA	2	3	5	4	4	5	5	4.00
Pace banana	4/3/033	NA	2	3	5	3	2	2	3	2.86

occur next year, and so it is not part of our trial.

One of the most interesting bananas we had this year was planted in the landscape and not a part of the formal trials. This species, *Musa velutina* (Boondox Tropical's), has been flowering for three months with brilliant pink bracts and fruit. This particular plant was planted from a 7-gal. pot, so it already had a year of growth behind it; we'll be looking to formally trial this species next year.

Bananas are an underutilized annual for Northern markets. Because of its growth speed, Northern growers could start with liners and avoid a lot of the shipping issues that occur when trying to move larger plants.

Varieties to consider: 'Rojo' (Agristarts) has dark purple markings that really stand out in plantings; the other cultivars were green foliage types. 'Pace' (Agristarts) received lower ratings because it was unable to support its own leaves (7-10 feet in length), and foliage bent at the petiole throughout the season.

NATIVE PLANTS

We are adding a larger component of native plants into our trials for a couple of reasons, and this year gave us some very good mate-



Top: *Musa acuminata* 'Rojo'; bottom: *Colocasia esculenta* 'Rhubarb'. (All photos courtesy of Rick Schoellhorn)

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

rial. Part of the reason for native plants is the obvious connection to lower irrigation, reduced chemical usage and an increasing governmental interest in these plants. However, I wanted natives in our trials to see how they compared to cultivars of similar species and hybrids where there has been a lot of selection in the release process. There were a few real standouts in terms of performance and potential. There were also a few that lack either ornamental qualities or were late summer to fall flowering and therefore did not fit well into the summer timeframe.

Coreopsis leavenworthii (Micanopy Wildflowers) began flowering quickly after planting and continued to hold good color through most of the season.



Coreopsis leavenworthii.

The lanky growth habit will pose some problems for commercial production, but landscape habit and flowering were excellent. The native blanket flower, *Gaillardia pulchella* (University of Florida/IFAS-IRREC Collected) did so well, we are doing a focus trial of gaillardia next year to check out more of the commercial hybrids.

We were lucky enough to get a couple of good native lantana species this year, and I have inserted the ratings for some commercial varieties into Figure 2, bottom, to show how the native species compare. I was very impressed with

Lantana depressa (University of Florida-IFAS-IRREC), which has a flower color similar to 'Gold Mound', but with a more open habit and a lighter green leaf. These species could certainly be adopted immediately into landscape use in the Deep South. *Lantana involucrata* (University of Florida-IFAS-IRREC) has pale pink flowers and a much lower color impact in the landscape, but the

Figure 2. Native plants trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
Thread leaf coreopsis <i>Coreopsis leavenworthii</i>	3/31/03	4/21/03	3	4	4	5	5	5	3	4.14
Blanket flower <i>Gaillardia pulchella</i>	3/31/03	5/28/03	2	3	5	3	5	5	2	3.57
Beach sunflower <i>Helianthus debilis</i>	3/31/03	4/9/03	2	3	3	3	3	4	4	3.14
Tampa Vervain <i>Glandularia tampensis</i>	3/31/03	3/31/03	3	5	4	3	2	2	2	3.00
BloodBerry, butterfly sage <i>Cordia globosa</i>	4/16/03	5/16/03	2	3	3	3	3	3	3	2.86
Wild petunia <i>Ruellia caroliniensis</i>	3/20/03	5/1/03	3	3	3	3	3	3	2	2.86
Scorpion's tail <i>Heliotropum angiospermum</i>	4/16/03	5/1/03	2	3	3	3	3	3	2	2.71
Shoreline seapurslane <i>Sesuvium portulacastrum</i>	4/16/03	6/25/03	NA	2	3	3	2	2	2	2.33
Dotted horsemint <i>Monarda punctata</i>	3/31/03	NA	2	2	3	3	2	2	2	2.29
Native plumbago <i>Plumbago scandens</i>	4/16/03	5/16/03	2	3	2	3	2	2	2	2.29
'Morning Glow Orange' <i>Lantana camara</i>	5/2/03	5/2/03	NA	3	3	4	5	5	5	4.17
Native yellow lantana <i>Lantana depressa</i>	4/16/03	4/16/03	2	3	3	3	4	4	5	3.43
'Morning Glow Pink' <i>Lantana camara</i>	5/2/03	6/11/03	NA	2	2	3	4	3	3	2.83
Native wild sage lantana <i>Lantana involucrata</i>	3/16/03	5/1/03	2	3	2	3	3	3	3	2.71

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Ebony eranthemum.

growth habit was mounding and fairly dense, so it certainly has potential as well. Lantana 'Morning Glow Orange Yellow' and Pink Yellow (Bodger Botanicals) had excellent flowering and color, but the growth habit of Pink Yellow was a bit leggy so ratings were lower.

There is still a big difference in commercial cultivars versus native species. Bodger's two releases have much higher color and impact, but for growers looking to incorporate native species, there is definitely some potential here.

MISCELLANEOUS CROPS

'Gold Flake' mecardonia (Proven Selections) turned out to be much tougher than it looked. (Imagine a dichondra with brilliant yellow flowers.) I was really impressed with the performance and flowering season in full sun. Throughout the summer, the plant remained in bloom, and foliage held up to summer rains. The natural foliage color is a pale green, but the flowers are striking. This would be an excellent component crop in mixed containers for a trailing growth habit. In shade, the plant lost its vigor, so in production, keep light levels high!

'Festival Star' (Proven Winners) baby's breath is a heat-tolerant gypsophila, which as far as I know is a first. This is usually a winter annual in the

South, but the dwarf cultivar has bloomed all summer and is self-heading, so old flowers drop off and new ones take their place — very nice.

'Ebony' Eranthemum (Proven Selections) was also a pleasant surprise. I was thinking all summer, "Why not grow a coleus instead?" as the somewhat glossy black foliage was nice, but the plant was less vigorous than coleus and seemed to fit the same niche. That is, until it began flowering in small spikes of white flowers with pink centers — very

Figure 3. Miscellaneous plants trial results.

Cultivar Name	Date Planted	First Flower	wk 18	wk 20	wk 22	wk 24	wk 26	wk 28	wk 30	Avg.
'Gold Flake' mecardonia	4/9/03	5/16/03	2	3	4	5	5	4	3	3.71
'Festival Star' baby's breath	3/31/03	5/28/03	2	2	3	4	4	4	3	3.14
<i>Ebony Eranthemum</i>	4/3/03	7/7/03	1	2	3	3	4	4	4	3.00
'Rhubarb' colocasia	4/22/03	NA	2	2	3	3	5	5	4	3.43
'Elfers'-Florida city series coleus	4/16/03	NA	3	5	5	5	2	2	5	3.86
'Micanopy'-Florida city series coleus	4/16/03	NA	3	5	5	5	2	2	5	3.86
'Hurricane Louise' coleus	4/16/03	NA	3	5	5	5	2	2	5	3.86
'Stained Glassworks' copper coleus	4/23/03	NA	3	5	4	5	2	2	5	3.71
'Whirlwind White' scaevola	4/9/03	4/21/03	3	4	5	5	4	3	3	3.86
'New Wonder' scaevola	4/24/03	4/24/03	3	4	4	4	3	3	2	3.29
'Brilliant' scaevola	3/20/03	3/31/03	3	4	5	5	5	4	3	4.14

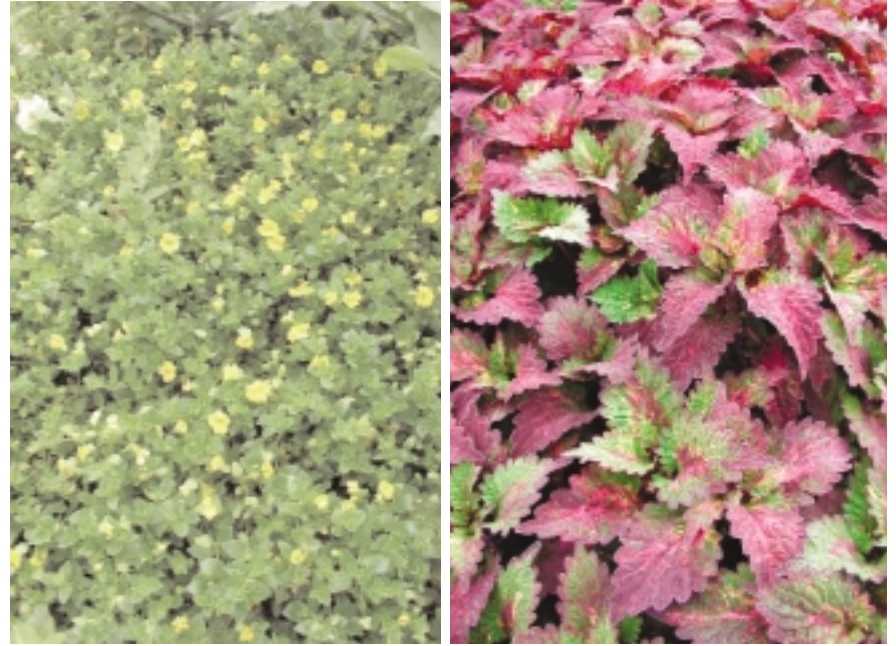
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cool. Plants grew to 3 feet tall and were very uniform. At least for us in the South, the late-summer flowering is really nice! Having seen this plant in the trials one season, I can now see where it would shine. In mixed containers, the high vigor of coleus can overrun other plants. Ebony could provide contrasting foliage color without getting out of control. In production, keep this plant warm, as it did not grow much in the trials until night temperatures were above 65° F.

Colocasia 'Rhubarb' (Proven Selections) predictably grew very well. Like most elephant ears, it loved heat and moisture. The good part is that it doesn't sucker, or at least hasn't yet. In the Deep South, colocasia that produce suckers are on the hit list of every invasive plant movement, so this clumping characteristic, in addition to beautiful rhubarb-colored stalks, makes this a great addition to the landscape or large mixed containers. Leaves are a dusky gray green, but the petioles are, as the name implies, bright red with subtle streaks of deeper colors.

Florida city series coleus (Lake Brantley Plant Corp.) had some great cultivars. As these are selected in Florida, it is no surprise they have heat tolerance, but the bright, clear red tones and the vigorous growth, which should translate into good growth for Northern production, are what I really liked. 'Hurricane Louise' (Hatchett Creek Farms) was last year's best coleus for upright habit, good branching and no flowering. This year, it held its own again, with a strong growth habit, tolerance of low water and only two flower spikes out of 40 plants. Erika really liked 'Stained Glassworks Copper' (The Flower Fields) for color and habit; I preferred 'Gay's Delight' (Proven Selections) because the growth habit was very compact and well branched.

In scaevola, flower size and late season performance really separated culti-



Left to right: 'Gold Flake' *mecardonia*, *Solenostemon scutellarioides* 'Eflers'.

vars, but 'Brilliant' (Horticultural Marketing Associates) and 'Whirlwind White' (Proven Winners) were both excellent and long lasting. I think the unique, somewhat upright habit of Whirlwind really sets it apart from the rest.

To get the full story of the trials, check the trials Web site (<http://hort.ifas.ufl.edu/floriculture/springtrials2003>) so you can compare what I say with data and digital pictures taken every two weeks ▀


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2003 winter trials (planted October 15) will focus on:

Calibrachoa, verbena (vegetative cultivars only), carnation (vegetative cultivars only), nemesia and osteospermum. With selected miscellaneous vegetative crops.

2004 spring trials (planted April 1) will focus on:

Scaevola, agastache (seed and vegetative cultivars), gaillardia (seed and vegetative), calibrachoa, penta (seed and vegetative cultivars), herbs (lavender, rosemary, sage and basil — seed and vegetative cultivars), bacopa, torenia (vegetative cultivars only), vegetative single petunia and verbena (vegetative cultivars only).

throughout the season. Also, due to the number of cultivars presented here, please use the Web site to locate sources for this material, as all entries on the Web site indicate the suppliers. 

Rick Schoellhorn is extension specialist and Erika Berghauer is trials manager at the University of Florida, Gainesville, Fla. They can be reached by phone at (352) 392-9806 and Email at erikamb@ufl.edu.

Author's Note: We would like to thank all contributing companies and sponsors for their support of the 2003 spring/summer trials. The list is long and this type of trialing

can only be effective with the cooperative efforts of our industry. Our main Floriculture Field Day will be held May 19-20, 2004. The field day is held in Gainesville, Fla. and includes two days of educational programs as well as trial garden tours.

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For more information related to this article, go to www.gpnmag.com/LM.CFM/gp100301



'Double Wave Lavender'. (Photo courtesy of Twyford Labs)

Correction

We caught a few mistakes in the past few appearances of Vegetative Matters and wanted to set the record straight: From the August issue, the contact at Gourmet Herbs by Shore Acres is Robyn Bazemore. From the September issue, the breeder for Double Wave petunias is actually Japan-based Kirin. The plants in the trial were supplied by Twyford Labs (www.twyford.com), who co-markets Double Waves with Ball FloraPlant.