

While the pace of new introductions has slowed this year, the performance and quality exhibited at the 2016 trials were strong.

BY JIM BARRETT, JOHN DOLE, GEORGE GRANT, **INGRAM MCCALL AND PAUL FISHER**

oinsettia breeding companies have released dozens of new cultivars in the past few years. A frequent comment heard at this year's trials was that there are many good cultivars and very few "bad ones." The breeders have learned how to develop excellent cultivars with strong structure and improved bract presentations. The National Poinsettia Trials conducted at North Carolina State University and the University of Florida are aimed at giving growers an early independent evaluation of the new cultivars that are being introduced each year.

The pace of new cultivar introductions slowed for 2017. Only six cultivars are being introduced this year that were tested in both the NCSU and UF 2016 trials. All the companies now have good genetics, and the industry will benefit from more thorough evaluations before new cultivars are introduced.

RED

'Aria Red' (Syngenta). This is an attractive cultivar suited for smaller size formats. The bright red bracts are smaller than average and held upright on top of the plant. Centers are smaller than average. Branching is very good and habit is a wide V shape. Plants have low to medium vigor. Compared to 'Titan Red', the plants are shorter and fuller with more leaves and bracts. Although described as an early season cultivar, plants flowered midseason at both trial locations. 'Aria Red' will likely be most useful in 61/2-inch or smaller pots or other formats needing a short attractive plant.

'Bouquet' (Dümmen Orange). The name is designed to evoke the image of a bouquet of flowers — plants are

Table 1. Plant size and flower data for new introductions and selected comparison cultivars. As described in Table 2, UF trial used lights to delay start of short days until Oct. 1, while NCSU used natural days. Note that this group of cultivars flowered over a 13-day period at NCSU and over eight days at UF, which is one of the effects of using photoperiod control. Also note, the plants at UF were treated with PGRs and ones at NCSU were not.

Trial location	Cultivar	First color	Anthesis	Height (in.)	Bract cluster diameter (in.)
Florida	'Aria Red'	Oct. 28	Nov. 28	13.8	13.8
Florida	'Astro Red'	Oct. 29	Nov. 28	13.0	14.4
Florida	'Bouquet'	Oct. 30	Nov. 27	14.1	14.2
Florida	'Christmas Feelings Red'	Oct. 27	Nov. 25	13.5	14.4
Florida	'Grande Italia'	Nov. 1	Nov. 30	12.6	14.1
Florida	'Majoris Red'	Oct. 25	Nov. 24	13.4	14.7
Florida	'Orion Red'	Oct. 25	Nov. 22	13.3	15.3
Florida	'Peppermint Ruffles 2017'	Nov. 6	Nov. 24	10.6	11.1
Florida	'Premium Red'	Oct. 27	Nov. 26	10.8	12.3
Florida	'Prestige Red'	Nov. 3	Nov. 29	11.8	12.2
Florida	'Southern Belle'	Oct. 28	Nov. 28	11.9	12.2
North Carolina	'Aria Red'	Oct. 13	Nov. 19	17.5	11.5
North Carolina	'Astro Red'	Oct. 11	Nov. 15	16.0	11.5
North Carolina	'Bouquet'	Oct. 12	Nov. 15	16.0	13.0
North Carolina	'Christmas Feelings Red'	Oct. 13	Nov. 22	15.5	12.5
North Carolina	'Grande Italia'	Oct. 15	Nov. 22	17.5	15.0
North Carolina	'Majoris Red'	Oct. 12	Nov. 17	16.0	12.0
North Carolina	'Orion Red'	Oct. 9	Nov. 14	14.0	15.0
North Carolina	'Peppermint Ruffles 2017'	Oct. 14	Nov. 9	17.0	13.0
North Carolina	'Premium Red'	Oct. 9	Nov. 14	14.5	15.0
North Carolina	'Prestige Red'	Oct. 19	Nov. 18	16.5	11.5
North Carolina	'Southern Belle'	Oct. 12	Nov. 16	16.5	9.5

upright with a narrow base and numerous bract clusters at the top. Bracts are brighter red than either 'Premium Red' or 'Prestige Red', medium sized and slightly elongated. Centers are tight with distinct cyathia. Stem thickness and strength are similar to 'Prestige Red' and Premium. 'Bouquet' finishes at eight weeks and is similar in vigor to 'Prestige Red'. 'Bouquet' has the potential to be an important cultivar because of its attractive appearance combined with the upright habit. It can be used in a range of pot sizes.

'Grande Italia' (Dümmen Orange). This new cultivar can be used to produce a plant that makes a statement. The plant has large leaves

and big smooth bracts that are held on top of the plant. Stem strength and plant habit are similar to 'Prestige Red', except that 'Grande Italia' is taller. It may be more vigorous than the average cultivar, but height should be easy to control. Finish timing is midseason (eight and a half weeks). 'Grande Italia' may become an important cultivar for use in larger formats.

'Majoris Red' (Syngenta). 'Majoris Red' has potential to be a larger plant with medium or slightly greater vigor. The plants have strong stems and slightly wide growth habit that benefits from using rings. Branching is good and the plant produces enough shoots to fill out larger pots. The medium sized bracts are bright red and presented on top of the plant.

selecta



Strong, well-shaped poinsettias in the greenhouse.

Strong roots
hold up to all
greenhouse
watering
methods,
resulting in
lower shrink and
higher yields.



selectanorthamerica.com

©2016 Ball Horticultural Company 16586-A-GAMS



Table 2. Cultural procedures at each location.

	University of Florida	North Carolina State University		
Potted	Aug. 13 to Sept. 5	Aug. 12		
Pinched	Aug. 29 to Sept. 15	Sept. 1		
Short days	Night lighting used until Oct. 1	Natural days		
PGRs	Amount and timing varied for cultivars based on growth. B-Nine/Cycocel spray at 1,000/1,000 ppm (low rate), or 1,250/1,500 ppm (high rate) initially. Then, Piccolo drenches where applied at 0.1 or 0.2 ppm as needed using a volume of 120 mL per 6½-inch azalea container.	None		
Fertilizer regime	Used 20-10-20 at 200 ppm and on Oct. 15 changed to either 15-5-15 or 17-3-17 with Ca and Mg at 150 ppm. Plants were leached as needed with clear water.	Used 250 ppm 20-10-20 alternating with 15-0-15, based on pourthru testing. Plants were leached as needed with clear water. Sodium molybdate (0.1 ppm) was included in the constant liquid fertilization. Magnesium sulfate (1lb/100gal) drenches were applied on Sept. 23, Oct. 21 and Nov. 1 (2 lbs/100 gal). Applied STEM (4 oz/100 gal) on Sept. 30 and Oct. 27.		
Temperature regime Temperature set points changed as needed to control height and bract expansion. Monthly averages are given in Table 3.		Set temperature at 64/75° F night/day. Reduced temperature to 60/70° F night/day on Nov. 11.		

Majoris flowered midseason at NCSU under natural days and in seven and a half weeks with photoperiod control in the Florida trial. Compared to 'Titan Red', which also is fairly vigorous, 'Majoris Red' will produce a fuller appearance and size will be easier to control. 'Majoris Red' has the characteristics to make very nice plants in 6-inch and larger sizes. It should work also in 4½-inch products with appropriate adjustments to schedules and growth regulator use.

'Southern Belle' (Dümmen Orange). The bright red bracts are held upright on top of the plants. Bract and leaf size is medium to slightly small. Plant habit and stem strength is close to 'Prestige Red', and vigor was similar to 'Premium Red' in Florida but greater than 'Premium Red' in North Carolina. However, with the smaller bract size the plants appeared to be smaller than Premium or Prestige. 'Southern Belle' is well named in that it is supposed to perform well in high temperatures. Finish timing is midseason to slightly later, depending on the location. 'Southern Belle' makes an attractive plant and should be useful in a range of pot sizes.



 Table 3. Temperature data for Florida trial.

Month	Average Day Temp (°F)	Average Night Temp (°F)	24-hr Average Temp (°F)	DIF
September	80	75	77	5
October	80	69	74	11
November	79	66	73	11

NOVELTY

'Peppermint Ruffles 2017' (Dümmen Orange). This cultivar is a significant improvement on the original 'Peppermint Ruffles' with a much more distinctive "peppermint" coloring. The rounded bracts on the 2017 selection are slightly less ruffled than the previous selection. The new selection is also earlier flowering (seven and a half weeks response time). The growth habit is still a wide, rounded plant that benefits from support in 6½-inch pots. 'Peppermint Ruffles 2017', as before, is a high vigor cultivar;

however, the new selection is a stronger plant. This cultivar would be good for growers selling to markets that have strong demand for novelties. GPD

Jim Barrett is Emeritus professor, George Grant is graduate research assistant and Paul Fisher is floriculture professor and Extension specialist at University of Florida. John Dole is floriculture professor and Ingram McCall is research specialist in the department of horticultural science at North Carolina State University. Barrett can be reached at jbarrett@ufl.edu.





Strong, well-shaped poinsettias in the store.

V-shaped habits mean you can sleeve our poinsettias and ship them to stores with less breakage.



selectanorthamerica.com

©2016 Ball Horticultural Company 16586-B-GAMS