# The Cut Flower Seed Trials

Growers and trialers present the latest trial results on some of the best new seed varieties.

# By John Dole

ave you been in an electronics store lately? Recently, I tried to count all the different kinds of digital cameras and couldn't, and don't get me started on the different kinds of cellular phones that are available. Does the world really need a watermelon-colored phone? If you haven't been in an electronic store, then how about a grocery store? The days of six breakfast cereals are long gone. Today, "new" and "different" are used to sell almost everything, and flowers are no different. The challenge with all of the new cut flowers is deciding which ones are best. Just as Consumer Reports evaluates the value of electronics, the Association of Specialty Cut Flower Growers (ASCFG) annually evaluates which new cuts are most likely to succeed.

For the seed trial, there were 57 volunteer trialers from all over the United States (including Hawaii and Canada) — 42 returned results. The trialers are primarily commercial growers of all-sized operations and include a handful of universities and suppliers. In addition, all cultivars are grown and evaluated at North Carolina State University (NC State), Raleigh, N.C., Zone 7. Trialers provide evaluations at the end of the year to NC State. Full details including comments made by trialers about the cultivars — can be found in *The Cut Flower Quarterly*.

#### Ageratum

Ageratum is a cut flower with a mixed reputation — a filler flower with a great color but not always worth the time it takes to pick the stems after the heads and stems get small, which they inevitably seem to do. Thus, we looked forward to seeing how 'High Tide Blue' and 'High Tide White' (PanAmerican Seed) were going to do in the trials. As the film critics say — one thumb up and one thumb down. While both cultivars were prolific, only 'High Tide White' produced long enough stems to be commercially acceptable as a cut flower crop. The heads started out large and staved reasonably sized the entire season. Several trialers noted that the flower heads browned quickly, a common occurrence with white ageratum, indicating the plant has to be picked regularly.

On the other hand, 'High Tide Blue' started out short and stayed short the entire season. As one visitor to the NC State cut flower trials noted: "nice bedding plant," which is not what one wants to hear in a cut flower trial. Interestingly, both cultivars rebounded with long, strong stems and large heads at the very end of the season. At least two other trialers noted the same thing.



#### Participating Seed Companies

American Takii (AT) (831) 443-4901 www.takii.com

Ernst Benary of America (EB) (805) 895-6705 www.benary.com

Fred C. Gloeckner (FG) (800) 345-3787 www.fredgloeckner.com

Goldsmith Seeds (GS) (800) 549-0158 www.goldsmithseeds.com

Kieft Seeds Holland (KS) +31 228 541844 www.kieftseeds.com

PanAmerican Seed (PA) (630) 231-1400 www.panamseed.com

Sakata Seed America (SA) (408) 778-7758 www.sakata.com

SeedSense Ltd. (SS) +44 (0) 1263 722262 www.seedsense.co.uk









*Clockwise from top left*: snapdragon 'Potomac Cherry Rose'; ammi 'Graceland'; delphinium 'Candle Violet Shades'; zinnia 'Uproar Rose'; sunflower 'Pro Cut Yellow Lite'. (Photos: John Dole)

# **EVERYTHING YOU NEED**

Horticultural Marketing & Printing offers a full line of OnSyte<sup>\*</sup> printing supplies that give you everything you need to create your own tags, stakes, signs and labels. Our 2006 Catalog offers the latest in thermal transfer printers, software, printable stocks, and label applicators. Get the latest version of our custom TagFast labeling software that makes creating eye-catching signs and labels simple and affordable. Plus every printer is backed by our exclusive two-year warranty, free setup, and training. So call us today to get everything you need to manage your printing – and your printing costs.

To order, call (800) 221-4843 or visit us online at www.horticulturalprinters.com Don't forget to ask about our Hot Swap Service Agreement!

Horticultural Marketing & Printing

THE LEADER IN HORTICULTURAL MARKETING

Unfortunately, the handful of nice stems at the end of the season was not enough to make 'High Tide Blue' viable as a cut flower.

#### **Delphinium**

Over the last couple of years, we have tested two series of hybrid delphinium - Guardian from PanAmerican Seed and Aurora from American Takii. This year we added a third series to the list, delphinium Candle from Sakata Seed America, and it was a great one. Four colors were included in the trial — Blue Shades, Lavender Shades, Violet Shades and



Top: ageratum 'High Tide Blue'. Middle: aster 'Hulk'. Bottom: trachelium 'Lake Louise Purple'.

White Shades. Candle produced long stems of large, beautiful florets in a short amount of time. Trialers were able to harvest up to six stems per plant, and those growing delphiniums in cooler climates were able to get a return flush of flowers. While the trials focused on field production, these delphinium are fast enough to be profitable in hoop houses and greenhouses.

#### Lisianthus

PanAmerican Seed has reorganized its lisianthus offerings to make them easier to understand and also submitted several new cultivars to the trial this year. The breeder combined its double-flowered types — Avila, Balboa and Catalina - into one series known as ABC and their singleflowered types - Laguna and Malibu - into the Laguna series. The names are followed with a number referring to the optimum season or day and night production temperatures: 62-66° F days and 55-60° F nights for the 1-2 group; 66-70° F days and 64° F nights for the 2-3 group; and 68-71° F days and 65° F nights for the 3-4 group. Obviously, groups 2-3 and 3-4 are best for outdoor, summer, field production. This year, two of the cultivars, 'ABC 3-4 Purple' (formerly 'Catalina Purple') and 'ABC 2-3 Rose' (formerly 'Balboa Rose'), performed well enough to be nominated for ASCFG Cut Flower of the Year due to long stems and beautiful flowers.

#### Pepper

The experimental pepper from Kieft Seeds Holland, labeled 'Cappa Conic White/Red' for now, put on a great show, producing 2-ft.-tall plants covered with large fruit. The fruit started out pale whitish-green, matured to bright orange and finished scarlet. The strong branches were covered with fruit that tended to mature at once, making the stems easy to harvest. Trialers were able to harvest up to 11 stems per plant with an average harvest of four stems per plant.

#### Snapdragon

Snapdragons are another important specialty cut, evidenced by the fact that we had 10 cultivars from four companies in the trials. Two of the highest-scoring cultivars were 'Animation Deep Orange' and 'Animation Yellow Improve' from Ernst Benary of America. Trialers loved both cultivars for their strong colors, high productivity and good return flowering after the first cut. 'Overture Orange' from Goldsmith Seeds and 'Potomac Cherry Rose' from PanAmerican Seed also scored well, the latter having stems up to 30 inches long.

#### Sunflower

Another long-time favorite of specialty cut flower growers is the sunflower, of which we had five cultivars in the trials this year. The toprated cultivar was 'Pro Cut Yellow Lite' from Seed Sense; it has bright-yellow petals and orange-yellow center florets. It produced stems that averaged 40 inches long and received high marks for uniformity and earliness. The other single-stemmed, pollenless Pro Cut cultivars, Peach and Red/Lemon Bicolor, also performed well in the trials. The striking bronze and  $ildsymbol{\flat}$ 



Advertisement



### EPA Grants TriStar<sup>TM</sup> Insecticide Non-Agricultural Use Label Amendment

Dayton, N.J. (February 2006) - Cleary Chemical Corporation announces that the Environmental Protection Agency (EPA) has accepted a label amendment to include the WPS non-agricultural use re-entry instructions for TriStar<sup>™</sup> 70 WSP insecticide. The amendment means that

TriStar can be used by professional lawn and landscape contractors in residential and commercial applications for effective control of a broad range of insects without the 12 hour REL.

Introduced to the ornamental market in 2003, TriStar quickly established itself as the leading neonicotinyl foliar insect spray for the greenhouse, field, nursery and landscape markets. Featuring contact, systemic,



ovicidal and translaminar activity, TriStar provides fast-acting control that lasts for weeks. Precise foliar applications save time and money in the greenhouse, field, nursery, and landscape.

The inclusion of the WPS non-agricultural use re-entry instructions is the latest label expansion for the product. In 2005, the EPA granted TriStar an expanded label that increased its already broad-spectrum control to key, economically important insect categories such as aphids, mealy bugs, caterpillars, sharpshooters, scales, whiteflies, thrips, leaf eating beetles and leaf miners.

"We are extremely pleased with the acceptance that TriStar continues to receive from leading ornamental growers and landscapers", says Don Rossi, Director of Sales and Marketing, Cleary Ornamental Products. "The fact that TriStar is a foliar spray with rapid knockdown that controls a wide variety of insects is a winning combination of benefits for the customer.

Applicators are reminded that in non-agricultural applications, such as residential and commercial landscapes, pets and children must be kept off of treated areas until the product application dries.

For 68 years, the turf and ornamental industries have come to count on Cleary Chemical for superior, quality plant protection products, utilizing the most up-to-date technology. Cleary markets innovate products such as new 3336 Plus<sup>TM</sup> fungicide with ClearTec<sup>TM</sup> Activation Technology<sup>TM</sup>, 26/36 Fungicide<sup>™</sup> and TriStar<sup>™</sup> 70 WSP insecticide; Cleary 3336<sup>™</sup>, Endorse<sup>™</sup>, Spectro<sup>™</sup>, new Protect<sup>™</sup> DF, Spotrete<sup>TM</sup>, and Alude<sup>TM</sup> fungicides; and, Nutri-Grow<sup>TM</sup> Magnum foliar nutrient.

The Cleary logo, 3336 Plus, ClearTec, 26/36 Fungicide, 3336, Spectro, Protect and Alude are trademarks of Cleary Chemical Corporation. Endorse is a trademark of Arysta LifeSciences Nutri-Grow Magnum is a trademark of Biagro-Corporation. Western, Inc. TriStar is a registered trademark of Nippon Soda Co. Ltd. Activation Technology is a trademark of CJB Industries.

# **Solutions That Work**





Count on Cleary

www.clearychemical.com

Write in 526

Read and follow all label directions. The Cleary logo, 3336, Alude, Pro-Pak, Protect, Sentry, Spectro and Spotrete are trademarks of Cleary Chemical Corporation. TriStar is a trademark of Nippon Soda Company, LTD. ©2006 Cleary Chemical Corporation. C1-282

yellow of Red/Lemon Bicolor was especially noted. 'Orange Queen' and 'Orange King' from Fred C. Gloeckner & Company scored well with the trialers, who noted the classic sunflower coloring of orange petals and dark centers, sturdy stems and uniform flowering. 'Orange Queen' was a shade or two lighter than 'Orange King'.

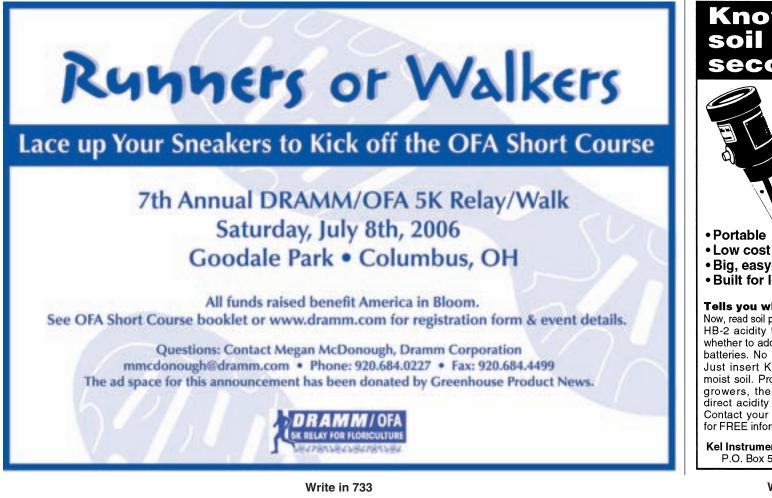
#### **Tracheliums**

I have a confession to make. I love dark-purple tracheliums. At first it may seem like a misguided love. The flower heads are rather unassuming, almost unattractive. However, when they fully open with their large clusters of tiny, deep-purple flowers and richly colored stems, they make great filler flowers. There is one problem — we cannot grow them in the field. In the greenhouse, we get wonderful long-stemmed, large-headed cuts, but in the field we get short stems and small flowers. Year after year, we try to grow tracheliums in the field, and they just do not perform well. Unfortunately, other trialers have been frustrated by this plant also. In our defense, we are getting better at them, and this year we actually had many harvestable stems.

The problem with trachelium is threefold — it has a rather narrow optimum temperature range, resents drying out and is a long-day plant. Trachelium grows best at night temperatures of 55-60° F but is not coldhardy, so it cannot be planted too

	Yield	Seed Trial Ratings						Average	Average
Cultivar	(stems/	length (inches)	Market appreciation rating*			Repeat again	Ease of cultivation	spacing	postharvest
	plant)		Whole.	Retail	Consumer	rating*	rating*	(in. <sup>2</sup> /plant)	life
Ageratum 'High Tide Blue' (PA)	9.1	12.6	2.9	2.6	3.1	2.6	4.1	142	6.4
	1-20	6-18	1-5	1-4	1-5	1-5	2-5	36-576	5-9
Ageratum 'High Tide White' (PA)	20.1	14.9 8-24	3.0 2-4	3.1 2-4	3.3 1-5	2.8 1-5	4.3 3-5	193 36-576	7.6 5-14
Ammi 'Graceland' (KS)	6.9 1-20	23.8	3.3	3.4 2-4	3.8	3.1 1-4	3.8 2-5	147 9-576	6.8 5-9
Antirrhinum 'Animation Deep Orange' (EB)	6.9 0-15	16.9 12-21	3.3 1-5	3.3 1-5	3.3 1-5	3.6 1-5	4.2	164 36-432	6.6 4-9
Antirrhinum 'Animation Pink Imp.' (EB)	7.0	19.0 14-24	3.0	3.0	3.6 3-5	3.1 1-5	4.4	138 36-432	7.6
Antirrhinum 'Animation Rose' (EB)	6.3	16.8	3.0	3.7	4.0	3.4	4.0	206	6.6
	3-9	15-18	3	3-5	3-5	2-5	2-5	48-432	4-9
Antirrhinum 'Animation Velvet Red' (EB)	9.9	17.9	3.0	3.8	4.3	4.3	4.3	179	7.1
	5-19	14-21	2-4	2-5	3-5	2-5	4-5	48-432	4-9
Antirrhinum 'Animation Yellow Imp.' (EB)	8.3	18.3	3.0	3.7	3.6	3.4	4.4	142	7.5
	6-14	15-20	3	3-4	3-4	3-4	2-5	48-432	7-9
Antirrhinum 'Charming White' (FG)	4.9	19.6	3.0	2.8	3.0	2.9	3.6	110	6.9
	1-16	15-32	2-4	2-4	2-4	1-5	2 5	16-432	5-9
Antirrhinum 'Overture Orange' (GS)	7.8	18.1	3.5	3.5	4.0	4.1	4.0	131	7.1
	6-17	16-21	3-4	3-4	3-5	3-5	3-5	36-432	6-9
Antirrhinum 'Potomac Cherry Rose' (PA)	4.0	22.9	4.0	3.7	3.3	3.2	4.3	128	11.3
	1-9	15-30	3-5	3-5	1-5	1-5	3-5	36-432	7-21
Antirrhinum 'Potomac Red Imp.' (PA)	5.8	21.9	3.5	2.7	3.2	3.0	4.3	125	9.5
	1-18	13-27	2-5	2-3	2-4	1-5	3-5	36-432	5-21
Antirrhinum 'Potomac White Imp.' (PA)	5.0	20.1	n/a	3.0	3.2	2.8	4.3	150	6.8
	1-11	14-26	n/a	3	3-4	1-4	3-5	36-432	6-7
Callistephus 'Daylight Blue Frost' (TA)	5.3	20.9	2.0	2.5	3.2	2.1	3.3	126	14.0
	1-16	16-28	1-3	1-4	1-5	1-4	1-4	16-324	14
Callistephus 'Daylight Pink Frost' (TA)	4.4	19.7	2.5	1.7	3.3	2.6	3.2	126	3.0
	1-10	12-28	2-3	1-2	2-5	1-5	1-4	16-324	3
Callistephus 'Hulk' (EB)	3.8	16.1	2.3	2.0	2.5	2.3	3.1	147	7.0
	1-10	12-24	1-5	1-4	1-4	1-5	1-5	36-576	7
Capsicum Exp. (KS)	4.0	18.4	3.0	2.5	3.6	3.8	4.2	161	14.0
	1-11	5-24	2-4	1-4	1-5	2-5	2-5	36-360	14

Figure 1. The first row of data for each cultivar is the average, and the second row is the range of responses. When only one response is listed, either only one person responded for that category or several responded and all gave the same rating. \*Ratings are based on a 1-5 scale, with 5 being the best. Market ratings are based on sales to wholesalers, retailers or final consumers.





#### **Seed Trial Ratings Continued** Yield Stem Repeat Ease of Average Average (stems length Market appreciation rating<sup>3</sup> again cultivation spacing postharvest (inches) Whole. Retail Consume rating\* rating' (in.²/plant) life plant) Delphinium 'Candle Blue Shades' (SA) 2.7 25.6 4.3 3.7 3.8 3.1 3.4 132 6.1 36-324 1-6 16-38 4-5 3-4 3-4 1-5 2-5 5-7 Delphinium 'Candle Lavender Shades' (SA) 2.1 25.4 3.0 3.5 3.7 3.3 3.0 118 6.7 1-4 18-38 1-4 1-4 1-4 1-5 1-5 36-192 4-10 Delphinium 'Candle Violet Shades' (SA) 16 40 40 37 33 60 274 26 142 1-3 21-38 4 4 3-4 1-4 2 - 580-192 5-7 Delphinium 'Candle White Shades' (SA) 2.4 28.8 4.0 4.0 3.8 3.3 3.1 138 6.2 36-324 18-40 1-64 3-4 3-4 2-5 2-55-7 Delphinium 'Guardian Blue' (PA) 3.7 23.8 4.3 4.0 3.9 3.4 130 6.0 n/a 36-324 1-12 18-40 4-5 n/a 3-5 3-5 2-55-7 Dianthus 'Radiant Purple Eye' (FG) 3.1 12.5 1.7 2.0 2.6 2.0 3.7 124 6.0 1-10 6-20 1-5 1-3 1-5 1-4 1-5 16-324 3-8 Dianthus 'Radiant Red Eye' (FG) 4.5 12.1 2.3 3.0 2.3 2.3 3.5 86 8.0 16-288 1-10 7-20 2-3 2-4 1-4 1-4 2-5 7-10 Dianthus 'Radiant Scarlet' (FG) 5.9 11.8 2.8 3.0 2.7 2.0 3.2 102 6.3 1-13 2-4 2-4 1-4 16-324 3-10 7-18 1-4 1-5 Dianthus 'Radiant White' (FG) 54 12.5 2.4 2.1 28 24 39 117 6.0 1-10 6-18 1-4 1-4 1-4 1-5 2-5 16-324 3-10 Dianthus 'Radiant White With Ring' (FG) 127 2.8 2.8 53 25 22 36 106 78 16-288 1-13 7-20 2-42-4 1-4 1-4 2-55-10 Dianthus 'Sweet Exp. Scarlet' (PA) 6.8 13.9 4.0 3.2 3.4 3.4 3.9 8.3 101 1-12 10-19 36-192 7-10 4 1-5 3-4 1 - 53-5 Dianthus 'Sweet Red' (PA) 8.4 4.0 3.9 3.8 3.5 3.8 6.9 13.1 105 1-12 9-288 4-10 6-17 4-5 3-5 1-5 3-5

early. Transplants put out in May or June are subjected to warm temperatures and long days, causing them to flower fast and short. We have had the best luck starting transplants in late January or early February, hardening them off in late March or early April (remember, we are Zone 7) and planting them in early April (avoiding any frosts, if possible). This schedule provides a period of shorter days and cooler temperatures to build up the plant before flowering begins later in the season.

variety information

Why do I bring this up? This year we had three trachelium cultivars in the trials, and one of them was dark purple — 'Lake Louise Purple' (PanAmerican Seed). I loved it, and it performed well for us and a few other trialers. Several trialers have figured this species out - enough so that one trialer wrote that 'Lake Louise Blue' was "My choice for number one new flower of the 18 I trialed this year." Of course, the best way for most of us to avoid the disappointment is to grow them in the greenhouse or cool-season hoop house where temperatures and photoperiod can be controlled.

#### Zinnia

9.7

7-12

9.7

7-11

8.9

2-14

8.9

7-12

8.6

6-11

Zinnias have become one of the staples of the outdoor cut flower industry — and for good reason. Zinnias are productive for a long period of time, available in many beautiful colors and familiar to the general public. Over the years, we have had a number of great zinnia 🕨

Figure 1. The first row of data for each cultivar is the average, and the second row is the range of responses. When only one response is listed, either only one person responded for that category or several responded and all gave the same rating. \*Ratings are based on a 1-5 scale, with 5 being the best. Market ratings are based on sales to wholesalers, retailers or final consumers.

4

3.8

2-5

3.4

1-5

3.0

2-5

3.6

3-4

3.3

2-4

3.4

1-5

3.0

1-5

3.9

2-5

3.7

2-5

4.0

3-5

3.8

2-5

3.6

1-5

3.7

1-5

3.8

1-5

3.9

2-5

4.5

3-5

4.1

1-5

4.4

2-5

4.6

3-5

4.4

3-5

106

36-216

144

9-576

106

36-256

109

9-256

138

9-576

3.9

2-5

3.9

1-5

3.3

1-5

3.7

1-5

4.0

1-5

39.7

18-60

42.9

24-60

40.5

18-48

38.3

22-51

40.7

18-60

1.0

1

1.1

1-3

1.0

1

1.4

1-7

1.0

1





Write in 734

Display Shelving

w and trust for rel the economy of a poly film cover. This is the ou have asked for, great looks, portability, so





Write in 790

sales@irrometer.com

Cultiva

Helianthus 'Orange King' (FG)

Helianthus 'Orange Queen' (FG)

Helianthus 'Pro Cut Peach' (SS)

Helianthus 'Pro Cut Yellow Lite' (SS)

Helianthus 'Pro Cut Red/Lemon Bicolor' (SS)

April 2006 GPI 61

cultivars in the trials including Ernst Benary of America's Giants series and American Takii's Sun series.

This year we had two cultivars from Goldsmith Seeds that are new to most cut flower growers — 'Uproar

Rose' and 'Zowie! Yellow Flame'. Both received great reviews and have been nominated for the ASCFG Cut Flower of the Year. 'Uproar Rose' produced large, fully double flowers on long stems. As with most commercial cultivars, plants were somewhat mildew resistant with problems only occurring late in the season for most growers. The uniformity and productivity appealed to many trialers.

The color of 'Zowie! Yellow Flame'

Seed Trial Ratings											
Cultivar	Yield (stems/ plant)	Stem length (inches)	Market Whole.	appreciat Retail	ion rating* Consumer	Repeat again rating*	Ease of cultivation rating*	Average spacing (in.²/plant)	Average postharvest life		
Lisianthus 'ABC 2-3 Blue' (PA)	3.6	17.1	4.7	3.6	4.0	4.2	3.6	53	11.3		
	1-8	10-21	4-5	1-5	1-5	2-5	2-5	16-96	6-14		
Lisianthus 'ABC 2-3 Blue Blush' (PA)	2.2	17.3	4.0	4.0	4.0	4.0	4.0	45	11.3		
	1-4	12-22	4	4	3-5	3-5	3-5	16-96	10-14		
Lisianthus 'ABC 2-3 Blue Rim' (PA)	3.1	16.2	4.0	3.8	4.3	3.9	3.7	61	11.2		
	1-6	12-20	4	4-5	3-5	2-5	1-5	16-144	6-14		
Lisianthus 'ABC 2-3 Rose' (PA)	2.9	18.6	n/a	5.0	4.6	4.6	4.4	45	11.3		
	1-5	12-22	n/a	5	3-5	3-5	3-5	16-96	10-14		
Lisianthus 'ABC 2-4 Yellow' (PA)	3.6	16.8	4.0	3.8	3.3	3.5	3.6	64	11.7		
	1-8	11-22	4	3-5	3-4	2-5	2-5	16-144	6-14		
Lisianthus 'ABC 3-4 Purple' (PA)	1.8	16.2	4.0	4.0	4.4	4.3	3.8	61	12.0		
	1-3	11-20	4	4	3-5	3-5	3-5	16-144	10-14		
Lisianthus 'ABC 3-4 Rose' (PA)	3.7	18.7	4.0	4.0	4.1	4.0	3.9	86	11.2		
	1-8	12-20	4	4	3-5	3-5	3-5	16-192	5-14		
Lisianthus 'ABC 3-4 White' (PA)	2.4	15.3	4.0	2.7	3.8	3.0	3.3	72	10.0		
	1-3	6-20	4	3-4	3-5	1-5	1-5	16-192	6-10		
Trachelium 'Lake Louise Blue' (PA)	7.9	16.1	4.0	3.6	3.7	3.5	3.4	79	11.3		
	1-14	9-21	4	3-4	1-5	1-5	1-5	16-144	14		
Trachelium 'Lake Louise Purple' (PA)	6.6	12.9	3.0	3.3	3.0	3.1	3.1	98	11.3		
	2-17	9-18	1-4	1-4	1-5	1-5	1-5	16-324	6-14		
Trachelium 'Lake Louise White' (PA)	5.1	14.1	2.3	2.7	2.5	2.3	2.8	125	11.0		
	1-15	8-21	1-3	1-3	1-4	1-4	1-4	16-144	6-14		
Zinnia 'Uproar Rose' (GS)	10.4	18.4	4.5	3.6	4.7	4.7	4.6	99	8.3		
	5-23	12-30	4-5	2-5	3-5	3-5	3-5	9-288	6-11		
Zinnia 'Zowie! Yellow Flame' (GS)	7.6	14.0	4.0	4.0	4.7	4.5	4.4	112	9.3		
	1-22	6-20	3-5	3-5	4-5	3-5	3-5	12-288	7-12		

caught everyone's attention — the petals were a bold combination of cherry red at the base, blending into orange and finally tipped with yellow. The flowers were smaller than 'Uproar Rose', Benary's Giants or Takii's Sun and a bit variable in coloring and doubleness, but they were prolifically produced on strong plants. 'Zowie! Yellow Flame' is an updated cut flower version of the charming species Zinnia haageana and sure to become a hit with cut flower producers. Both cultivars had an excellent vase life. GPN

Author's Note: A hearty thank you to the evaluators who returned their trial reports and to the companies who supplied such great cultivars. Special thanks to Amanda Muller, Paradise Specialty Cut Flowers, for being the first trialer to return evaluations; Chaz Gill, Betsy Hitt, Carolyn Ramsbotham and Vicki Stamback who participated in both the seed and perennial trials and returned evaluations on all their plants; and Ingram McCall and Diane Mays for taking care of the NC State trials, Ingram McCall for data entry and Tina Krug, Aliya Donnell, Brad Holland and Tim Ketchie for assisting with the NC State trials.

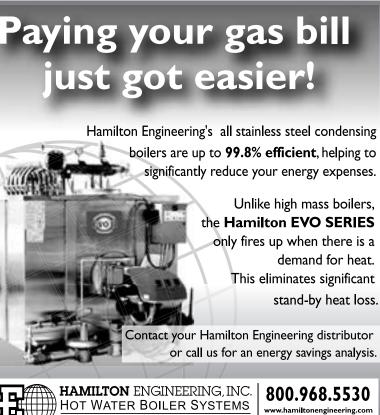
John Dole is professor of floriculture at North Carolina State University. He can be reached at john\_dole@ncsu.edu

Figure 1. The first row of data for each cultivar is the average, and the second row is the range of responses. When only one response is listed, either only one person responded for that category or several responded and all gave the same rating. \*Ratings are based on a 1-5 scale, with 5 being the best. Market ratings are based on sales to wholesalers, retailers or final consumers. LearnMore

For more information related to this article, go to www.gpnmag.com/lm.cfm/gp040607

#### **Our Frames Complete Your Masterpieces!** Gothic shaped greenhouses, conventional cold frames and strong, gothic arch cold frames. Whatever your requirements, VAL-CO manufactures the greenhouse frames and other equipment you need to get started. VAL-CO manufactures complete greenhouse packages, including the greenhouse, ventilation, heating, cooling, benching, controls, lights and more. VAL-CO's complete greenhouse packages save you money and time. Call today! And ask about our other top quality horticultural products! di l

2710 Division Hwy, PO Box 8 • New Holland, PA 17557 Phone: 800.433.1819 • Fax: 717.355.2505 Email: hortna@valcompanies.com Website: www.valcogreenhouse.com



Write in 745

CONDENSING TECHNOLOGY

sales@hamiltonengineering.com