

2005 ASCFG National Perennial and Woody Trials

John Dole, North Carolina State University

Echinacea is a genus that is just beginning to hit its horticultural stride. Anyone reading the plant catalogs knows that many interesting hybrids are now available and more are coming. We haven't forgotten the beautiful of the original species, however, and *Echinacea* 'Ruby Star' (Gro 'N' Sell) is one of the best representatives. This species has large bright purple petals held horizontal from the rich red center. The durable plants flower second year after planting. Apparently enough ASCFG members thought that 'Ruby Star' was among the best to nominate for it as the ASCFG Fresh Cut Flower of the Year.

Heuchera 'Florists Choice' and 'Magic Wand' (both Terra Nova) continue to impress me. These rather unassuming plants were very productive in the second year of trials, producing an average of 15 stems per plant with at least one trialer getting 35 stems/plant for 'Magic Wand'. Both cultivars were easy to grow with few problems. They were not the most impressive cut stems because of their small heads, but the ease of harvest overcomes that problem. The plants produce a dense clump of foliage from which the 18- to 26-inch long flower stems arise.

The well-named *Zantedeschia* 'Edge of Night' (Terra Nova) produced gorgeous deep maroon purple flowers. The foliage was even prettier with large leaves covered in white spots and edged in the same maroon as the flowers. Productivity and stem length were a little low, however, with only 1 to 3 stems/plant and a stem length of only 14 to 18 inches. Colored callas seem to be special enough that customers want them even if the stems are short - one trialer reported getting \$2/stem. Always nice to hear.

One of the highest scoring perennials among the trial plants was *Geum* 'Fireball' (Terra Nova) with its large, striking, orange flowers. This productive plant produced over 9 stems/plant with some growers getting up to 15 stems/plant. The stems ranged in length from 18 to 36 inches, with growers averaging 25 inch stems. Plants perform best with excellent drainage, especially during the winter.

There is nothing quite like the metallic blue purple of *Eryngium* 'Blaukappe' (Gro 'N' Sell). That fact that the thistle-like eryngium has established itself as a specialty cut



'Ruby Star'

flower is a testament to how far the cut flower industry has come from the days of only roses, carnations and chrysanthemums. 'Blaukappe' is another plant that requires good drainage during the winter. Flowers are typically cut fresh but also make long lasting dried flowers.

We had high hopes for three shrubs that produced great results last year even in their first year: *Callicarpa* 'Early Amethyst' (Spring Meadow Nursery), *Hydrangea* 'Limelight' (Spring Meadow Nursery), and *Physocarpus* 'Diabolo' (Bailey Nursery). We were certainly not disappointed in the second year. All three cultivars are fast-growing and productive plants. 'Early Amethyst' produced a multitude of long stems heavily covered in purple berries. Trialers harvested an average of 47 stems/plant and got 23- to 42-inch long stems. Now if only we get a callicarpa that dropped it leaves in early fall or late summer to eliminate the time-consuming leaf removal - well, we can dream can't we?

'Limelight' has only gotten better with age - the large, spectacular flower heads are produced on stems up to 3 feet long. Considering that trialers, including NCSU, were able to harvest marketable stems from plants in the first season, the added

26 stems/plant from this year make it an even better choice for cut flower production. The stems are strong and straight making this a better choice than the species.

'Diabolo' seems to be making more of an impact with cut foliage than as a cut flower. The inflorescences are 2- to 3-inch wide clusters of small white flowers - attractive but not very distinctive. The bronzy foliage, however, makes a great



'Diabolo'



filler for bouquets. Stems averaged around 29 inches long and plants produced anywhere from 2 to 30 stems/plant.

Based on trial results, the top five performers are automatically nominated for the ASCFG Cut Flower of the Year competition. The rankings are based on the combined ratings score: market appreciation + repeat again + ease of cultivation for those cultivars where more than three trialers responded. Thus, from the 2005 trials *Geum* 'Fireball', *Heuchera* 'Florist's Choice', *Heuchera* 'Magic Wand', *Hydrangea* 'Limelight', and *Zantedeschia* 'Edge of Night' are nominated as Cut Flowers of the Year and will join other nominations from ASCFG members.

Interpreting the trial results: The numbers reported are averages of all the respondents and many factors will affect the success of any plant species. Our participants are growing and harvesting the trial plants in a wide variety of ways. For example, with annual asters some people harvest the entire plant as one bunch while others harvest each individual flowering branch, giving very different stem lengths and yield data. After looking at the average, check the range of responses listed below each number to see how the cultivar performed at its best and its worst. If the range of responses in the ratings is narrow and high, i.e., 3-5 or 4-5, the plant was a winner for most of the respondents and is likely to do well for you. The 'Repeat Again Rating' is particularly important because it indicates if the trialer would take the time, money, and space to actually grow the cultivar again. Review the trial results carefully. If a species sounds interesting but did not appear to do well, try it anyway. The cultivar may work well for you.

Acknowledgments: All cut flower growers should thank the perennial and woody plant producers for providing the plant materials and the growers for producing the plants, collecting data and submitting trial reports. The growers paid for shipping expenses and agreed to provide data for at least two years. Plant were donated by perennial producers and shipped as the perennial plugs or dormant roots directly to the trialers. I would like to compliment Chas Gill, Betsy Hitt, Carolyn Ramsbotham, and Vicki Stamback who participated in both the seed and perennials trials and returned evaluations on all of their trial plants. I would also like to thank Amber Stewart and Betty Coleman for laboriously typing in everyone's comments, Ingram McCall and Diane Mays for taking care of the North Carolina State University portion of the trials, Ingram McCall for data entry, and Leslie Tichner, Aliya Donnell, Brad Holland, and Tim Ketchie for assisting with the NCSU trials. In preparing the report I have edited the participants' comments for space and clarity; my apologies if I've altered the tone or content of anyone's comments. Thanks to everyone for making this service of the ASCFG possible.

Participating Perennial Suppliers

Gro 'N' Sell/Benary (GS)

320 Lower State Rd.
Chalfont, PA 18914
(215) 822-1276
fax (215) 997-1770
www.gro-n-sell.com
www.sunfarm.com

Terra Nova (TN)

P.O. Box 23938
Tigard, OR 97281-3938
(800) 215-9450 x305
(503) 263-3150 x305
fax (503) 263-3152
sales@terranovanurseries.com
www.waltersgardens.com

Participating Perennial Trial Growers

Sam Barkley (2004 and 2005)

Barkley's Woodstock Floral
Portland, OR

Chas Gill (2004 and 2005)

Kennebec Flower Farm
Bowdoinham, ME

Carolyn Ramsbotham (2004 and 2005)

Riverview Farm
Madbury, NH

Betsy Hitt (2004 and 2005)

Peregrine Farms
Graham, NC

Ingram McCall, Diane Mays, and John Dole

(2004 and 2005)
North Carolina State University
Raleigh, NC

Suzy Neessen (2005)

The Flower Farm
Cedar Falls, IA

Brenda Smith (2005)

Smith & Smith Farms
Dayton, NV

Vicki Stamback (2004 and 2005)

Bear Creek Farm
Stillwater, OK

Participating Woody Plant Suppliers

Bailey Nursery (BA)

1325 Bailey Rd.
St. Paul, MN 55119
(651) 459-9744
(800) 829-8898
fax (651) 459-5100
www.baileynursery.com

United States National Arboretum (NA)

3501 New York Avenue, NE
Washington, D. C. 20002-1958
(202) 245-2726
fax (202) 245-4575
www.usna.usda.gov

Spring Meadow Nursery (SM)

12601 120th Ave.
Grand Haven, MI 49417-9621
(800) 633-8859
fax (800) 224-1628
www.springmeadownursery.com

Participating Woody Trial Growers

Sandy Della Villa

Patch of Paradise
Dansville, NY

Jill Felder

Bright Branches
Niskayuna, NY

Betsy Hitt

Peregrine Farms
Graham, NC

Ingram McCall, Diane Mays, and John Dole

North Carolina State University
Raleigh, NC

Ed Pincus

Third Branch Flowers
Roxbury, VT

Susan Wright

Shady Grove Gardens

Summary of comments

The number in parenthesis refers to the number of respondents who made the comment. If no number is present, only one person made the comment. Comments by each individual are separated with a semicolon (;) Note: many respondents did not make specific comments on each cultivar and in some cases, comments have been shortened because of limited space.

2005 Perennial Cut Flower Trial Cultivar List - Year 1

Echinacea 'Primadonna'

Good qualities: The plants look very good, robust after planting on July 10, 2005 - a couple even have some buds, but it is too late for them to bloom, they arrived in great condition.

Problems: Too hot when planted 6/30/05; We got these late and they didn't do much this year.

Additional comments: Plants looked good.

Echinacea 'Comet'

Good qualities:

Problems: We got these late and they didn't do much this year; Nice strong stems, large flower size, good strong color.

Additional comments: Didn't get planted in ground until September.

Lobelia 'Fan Salmon'

Good qualities: All plants arrived in great condition, they were transplanted to the field on 7/10/05; Bloomed in flats in greenhouse - liked the color; They stayed alive.

Problems: The transplants did not take to the hot July as well as the *Echinacea*, though I am seeing some resprouts now that it has cooled off - it will be interesting to see this spring how many plants regrow, death loss may not be as high; Plants arrived too late in season

Additional comments: Didn't get in ground until September.

2004 Perennial Cut Flower Trial Cultivar List - Year 2

Agastache 'Golden Jubilee'

Good qualities: I liked gold/ chartreuse color; Nice scent and good foliage color.

Problems: No comments; Weaker growing than other agastache, no appreciable customer acceptance.

Additional comments: One trialer reported the postharvest life as 7 days.

Campanula 'Bernice'

Good qualities: Early, great color, tall.

Problems: Flower fades; Customer appreciation moderate.

Additional comments: One trialer reported postharvest life as 9 to 10 days.

Echinacea 'Ruby Star'

Good Qualities: Nice seed pod.

Additional comments: One trialer reported the postharvest life as 6 days.

Eryngium planum 'Blaukappe'

Problems: Lost plants by end of summer 2004; Needs to be staked.

Additional comments: Nothing outstanding.

Euphorbia dulcis 'Chameleon'

Problems: No harvestable stems; Lost plants did not survive winter (zone 7); I just didn't get enough growth off this plant to cut it. I think that we may be on the edge of desirable climate for this plant.

Geum 'Fireball'

Good qualities: Blooms all summer; My favorite of all the trials- great early color; Flowers very early in the season, not much geum on the market, nice stem length and color.

Problems: To maintain the flower after harvest, you have to pick off faded blooms, which is a pain, but it prolongs shelf life; Flower is small; Small flower size of this genus.

Additional comments: Three trialers reported the postharvest life as 8.5, 9, and 14 days, respectively; Retail florists ask for this flower weekly; Looks like anemone.

Heuchera 'Florist's Choice'

Good qualities: A lot of stems, easy to harvest; Excellent for a heuchera - tall inflorescence; large bloom window

Problems: None.

Heuchera 'Magic Wand'

Good qualities: Great stem count, easy to harvest; Similar to 'Florist's Choice'; Nice vigorous plants, best results ever had with heuchera, great stem strength and length.

Problems: Small flowers of this genus takes a very sophisticated consumer.

Additional comments: One trialer reported the postharvest life as 10 days.

Lobelia 'Ruby Slippers'

Good qualities: Beautiful color; Bees like the flower; This is a very nice cultivar, I just get too much damage on the flowers to sell them - insects love these things.

Problems: Needs to have support; Weak plant; Time consuming to harvest; Did not overwinter

Additional comments: One trialer reported the postharvest life as 10 days; This plant did not perform like it did last year. I had great expectations for 'Ruby Slippers'.

Persicaria 'Brush Strokes'

Good qualities: I really like this one, nice big bold foliage, good stems, good enough stem length, EASY to grow; Strong healthy plant, good vegetative growth.

Problems: Did not overwinter; Does not flower.

Persicaria 'Silver Dragon'

Good qualities: I like these plants as a group, vigorous nice foliage, interesting and there aren't a lot of these sold as cut flowers around yet.

Problems: I was surprised by the mortality over the winter - I was actually more afraid that these would escape and become a weed problem.

Zantedeschia 'Edge of Night'

Good qualities: Great color! - foliage also has nice color; Long vase life; Nice foliage and striking stems with red/bronze color; Great color and nice form and stem strength.

Problems: Lack of vigor, this just really didn't thrive for me.

Additional comments: Two trialers reported the postharvest life as 7 and 14 days, respectively; Very nice plant and flower; \$2.00 per stem no problem.

2005 Woody Cut Flower Trial Cultivar List - Year 2

Aronia arbutifolia 'Brilliant'

Good Qualities: Easy to grow; pretty good fruit set.

Problems: None

Additional Comments: Plants are still too small to harvest from; It is still a "new" planting to me, but I would like to see more vigorous growth from this plant.

Callicarpa 'Early Amethyst'

Good Qualities: Colors early, nice color; nice fruit set and color; easy.

Problems: Fades in sun; Berries often don't color in time for market sales, freeze before full color, leaves still a time-consuming issue.

Additional Comments: Two trialers reported the postharvest life as 10 and 14 days, respectively; I can't really distinguish between this cultivar and other callicarpa I already have; We are covering row with heavy 'remay'; florists don't know what to do with it.

Cotinus 'Young Lady'

Problems: All plants either died or

were eaten by deer.

Additional Comments: It is still a "new" planting to me, but I would like to see more vigorous growth from this plant.

Heptacodium miconiodes

Good Qualities: Lots of stems.

Problems: None.

Additional Comments: This has not yet flowered for me; It will be interesting to see how this matures in size, shape, etc.



Hydrangea paniculata 'Limelight'

Good qualities: Large flower heads (2); Beautiful color when cut fresh at the exact right stage, much nicer form to heads than species PG; Beautiful!; Stronger stems than species; Very tolerant of southern climates, vigorous, great plant and flower; Nice color, tight sepals, nice shape.

Problems: Variable head size and 1-3 flowers per stem, so hard to make standard bunch; Very late blossoming in Vermont (weeks later than PG) so some blossoms can be lost to frost.

Additional Comments: One trialer reported the postharvest life as 7 days; Cut in the green stage it is different from other PG's - in the semi-hard stage, its color is similar to PG but the flower form is better - fuller and in the huge size has a conical head vs the "sheep's head" form of PG; I think when we learn best cutting stage/pruning routine, this will be a total winner - good return/area planted; A big hit with wedding florists.



Ilex 'Berry Nice'

Good Qualities: Reds may hold out until winter Xmas sales, Nov 15th and later.

Problems: In general I have trouble getting *Ilex* to grow well for me. This cultivar is no exception. It is still a "new" planting to me, but I would like to see more vigorous growth from this plant. I didn't get enough growth to do any cutting this year.; No fruit set, Leaves. Poor pollination? Some leaf spot.

Additional Comments: Similar to 'Winter Red' or 'Berry Heavy'; I'm going to try 'Southern Gentlemen' and 'Jim Dandy' males next year. I may have 'Early Male' and it's not working.

Physocarpus opulifolius 'Diabolo'

Good qualities: Vigorous growth, easy to grow, nice dark clean foliage, foliage is useful in design to add height and structure; Vigorous grower, great foliage color, easy size leaf to use; Foliage is better than flowers, easy to grow, foliage - 1 week if hydrated well.

Problems: None; Bugs late, when burgundy color is "in"; No market.

Additional Comments: Three trialers reported the postharvest life as 5, 7, and 14 days, respectively; I did not get to them in time to cut flowers, only the foliage; Bird poop shows, Stem length on mature bushes for foliage 3-4 feet, Will try cutting back in mid-summer for cleaner smaller stems of foliage in fall.

Prunus mume 'Double red'

Additional Comments: Not enough plant yet to get any stems.

Prunus mume 'Kobai'

Problems: Just not big enough to get stems off this plant yet.

Prunus mume 'Virgin'

Good qualities: Vigorous growth.

Problems: Plant suffered from severe winter dieback, the portion of the plant that lived was beneath the snow line, the plant grew vigorously in the spring and became quite large again but I suspect that the portion above the snow line will die back each year, I will try wrapping the plant with burlap to see if this offers enough winter protection for the plant to bloom, I knew that I was probably in a zone that was too cold for this plant but I had to try anyways.

Sambucus edulis

Problems: Invasive - they take over; I lost a lot of the plants I don't know why, I could not get this thing to hold but I didn't really have a lot of material to play with; This is a weed, appearing 2 beds over, but not flowering.

Additional Comments: Suckers fast.

Syringa x hyacinthiflora 'Assissippi'

Problems: Not big enough to really flower, some vole problems; Mildew late.

Additional Comments: One trialers reported the postharvest life as 4 days; Produced several blooms but the plant is still too small to harvest from; I lost a lot of the syringa this summer, I think it was a soil-borne issue, plants at one end of the row started dying and the problem spread up the row from one cultivar to another; Looking forward to seeing these bloom well.

Syringa vulgaris 'Beauty of Moscow'

Problems: Not big enough to really flower, some vole problems; Mildew late.

Additional Comments: Two trialers reported the postharvest life as 7 and 10 days, respectively; Produced several blooms but the plant is still too small to harvest; I lost a lot of the syringa this summer, I think it was a soil-borne issue, plants at one row started dying and the problem spread up the row from one cultivar to another; Looking forward to seeing these bloom well.

Syringa 'Edith Cavel'

Additional Comments: I lost a lot of the syringa this summer, I think it was a soil-borne issue, plants at one row started dying and the problem spread up the row from one cultivar to another.

Viburnum dentatum 'Blue Muffin'

Good Qualities: Good heavy fruit set, matures at good time of year.

Problems: Fruit is more black than blue; Still too small to produce berries, few flowers and no berries, maybe the freeze?

Additional Comments: One trialers reported the postharvest life as 10 days; Florists are asking for blue berries.

Trial Results for Year 1 of Perennial Cultivars Planted in 2005. The first row of data for each cultivar is the average and the second row is the range of responses. Note when only one response is listed in the range line, either only one person responded for that category or several responded and all gave the same rating.

Cultivar	Plants flowering (%)	Plants dead at end of summer (%)	Yield (stems/plant) ^①	Stem length (inches) ^①	Market appreciation rating ^②	Repeat again rating ^②	Ease of cultivation rating ^②
<i>Echinacea</i> 'Primadonna' (GS)	0	18.3 0-50	-	-	-	1.0 1.0	2.5 1-4
<i>Echinacea</i> 'Comet' (TN)	0	50 50	-	-	-	-	-
<i>Lobelia</i> 'Fan Salmon' (GS)	0	2.5 0-5	-	-	1.0	1.0 1.0	2.0 1-3

Trial Results for Year 2 of Perennial Cultivars Planted in 2004. The first row of data for each cultivar is the average and the second row is the range of responses. Note when only one response is listed in the range line, either only one person responded for that category or several responded and all gave the same rating.

Cultivar	Plants Surviving (%)	Yield (stems/plant) ^①	Stem length (inches) ^①	Market appreciation rating ^②	Repeat again rating ^②	Ease of cultivation rating ^②
<i>Agastache</i> 'Golden Jubilee' (GS)	76.3 30-100	18.6 13-24	23.4 16-36	2.2 1-3	2.3 2-3	3.8 2-5
<i>Campanula</i> 'Bernice' (TN)	49.5 0-100	4.8 3-7	22.7 17-27	2.3 1-4	2.3 1-4	3.3 2-4
<i>Echinacea purpurea</i> 'Ruby Star' (GS)	100.0 100.0	14.7 4-30	25.3 20-36	3.5 3-5	3.7 3-5	5.0 5.0
<i>Eryngium planum</i> 'Blaukappe' (GS)	66.7 0-100	5.8 4-8	23.8 16-32	4.0 3-5	3.0 2-4	3.5 3-4
<i>Euphorbia dulcis</i> 'Chameleon' (GS)	75.0 0-100	1.5 1.5	13.0 13.0	2.0 2.0	1.0 1.0	2.0 2.0
<i>Geum</i> 'Fireball' (TN)	73.8 0-100	9.3 6-15	25.0 18-36	4.3 3-5	4.0 2-5	4.7 4-5
<i>Heuchera</i> 'Florist's Choice' (TN)	98.3 95-100	15.0 7-23	23.7 20-27	4.0 3-5	4.3 4-5	4.7 4-5
<i>Heuchera</i> 'Magic Wand' (TN)	96.8 87-100	14.3 5-35	22.4 18-26	3.6 2-5	4.3 4-5	4.5 4-5
<i>Lobelia</i> 'Ruby Slippers' (TN)	48.0 0-85	9.5 9.5	27.2 26-30	1.7 1-3	2.5 2-3	2.5 2-3
<i>Persicaria</i> 'Brush Strokes' (TN)	68.0 0-100	19.5 9-30	20.6 15-26	2.3 1-4	2.7 1-5	4.3 3-5
<i>Persicaria</i> 'Silver Dragon' (TN)	41.0 0-100	51.3 15-89	26.3 19-40	2.3 1-4	3.0 1-5	4.3 3-5
<i>Zantedeschia</i> 'Edge of Night' (TN)	98.8 95-100	1.3 1-2	16.0 14-18	5.0 5.0	5.0 5.0	4.5 5.0

① Data shown are from those respondents who harvested stems. Some respondents may not have harvested stems because stems were too short. Flowering stems may be longer next year after plants are established. See comments section for more details.

② 1 to 5 scale, with 5 being the best. Market ratings are based on sales to wholesalers, retailers, or final consumers direct.

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Cultivar	Plants flowering (%)	Plants dead at end of summer (%)	Yield (stems/plant) ^⓪	Stem length (inches) ^⓪	Market appreciation rating ^⓪	Repeat again rating ^⓪	Ease of cultivation rating ^⓪
<i>Aronia arbutifolia</i> 'Brilliant'	100.0 100.0	0 0	3.0 3.0	36.0 36.0	4.0 4.0	-	5.0 5.0
<i>Callicarpa dichotoma</i> 'Early Amethyst'	100.0 100.0	0 0	46.7 6-109	33.5 23-42	3.5 2-5	3.5 2-5	5.0 5.0
<i>Cotinus coggygria</i> 'Young Lady'	50.0 0-100	15.0 30.0	-	-	-	-	-
<i>Heptacodium miconioides</i>	50.0 0-100	15.0 30.0	12.5 25.0	24.0 24.0	4.0 4.0	4.0 4.0	4.0 4.0
<i>Hydrangea paniculata</i> 'Limelight'	100.0 100.0	0 0	26.3 7-62	27.8 20-36	4.3 3-5	4.7 4-5	4.7 4-5
<i>Ilex verticillata</i> 'Berry Nice'	50.0 0-100	0 0	-	-	3.0 3.0	4.0 4.0	3.0 3.0
<i>Physocarpus opulifolius</i> 'Diablo'	100.0 100.0	0 0	14 2-30	28.7 14-36	3.0 1-5	3.5 2-5	5.0 5.0
<i>Prunus mume</i> 'Double Red'	100.0 100.0	0 0	-	-	-	-	-
<i>Prunus mume</i> 'Kobai'	100.0 100.0	0 0	-	-	-	-	-
<i>Sambucus edulis</i>	66.7 0-100	20.0 60.0	3.0 3.0	26.25 17-36	1.0 1.0	1.5 1-2	3.0 3.0
<i>Syringa x hyacinthiflora</i> 'Assesippi'	50.0 50-100	0 0	2.0 2.0	16.0 16.0	4.0 4.0	4.0 4.0	3.5 3-4
<i>Syringa vulgaris</i> 'Beauty of Moscow'	50.0 50-100	0 0	-	-	-	4.0 4.0	3.5 3-4
<i>Syringa vulgaris</i> 'Edith Cavell'	0 0	0 0	-	-	-	-	-
<i>Viburnum dentatum</i> 'Blue Muffin'	100.0 100.0	0 0	10.0 10.0	16.0 16.0	4.0 4.0	3.0 3.0	4.0 4.0

⓪Data shown are from those respondents who harvested stems. Some respondents may not have harvested stems because stems were too short. Flowering stems may be longer next year after plants are established. See comments section for more details.

⓫1 to 5 scale, with 5 being the best.