

2001 ASCFG National Perennial Trials

John Dole
North Carolina State University

While we evaluate perennials for two years, it is always nice to have the plants produce harvestable stems in the first year. *Eupatorium candidum* and *Penstemon digitalis* ‘**Glacier**’ both flowered well this summer. *Eupatorium candidum* established quickly and produced stems up to 3 feet long topped with interestingly-colored silvery pink flower clusters. The flowers scored well with customers as shown by the great marketing rates. Another *Eupatorium* from the year 2000 trials, *E. maculatum* ‘**Carin**’, also performed well. This tall plant produced stems averaging 51 inches long with large clusters of reddish purple fuzzy flowers on dark purple stems. Eupatoriums are durable plants and many are typically very tall and vigorous. *Eupatorium candidum* is thought to be a more manageable size, reaching only 3 - 4 feet when mature.

Two outstanding plants from the 2000 plantings included *Helenium kanaria* and *Phlox paniculata* ‘**Purple Haze**’. *Helenium kanaria* was tall, producing an average of 46-inch stems and heavily branched. Plants should be netted or otherwise supported for best results. The clear yellow flowers have excellent vase life but may shed pollen. ‘Purple Haze’ was noted last year for its lack of powdery mildew. This year respondents liked the large flower heads, good postharvest life and long 35 inch stems. Color is always in the eye of the beholder; a couple trialer liked the color, while others thought it appeared washed out. Of course, the customers always make the final decisions on cultivars.

This year we included the range of responses in the tables to give you an idea of what individual trialers reported for each cultivar. We thought the additional information would allow you to better interpret the tables.

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 (average of wholesale, florist, and consumer) + repeat again + ease of cultivation for those cultivars where more than two trialers responded. Thus, from the 2001 trials *Eupatorium candidum*, *Eupatorium maculatum* ‘**Carin**’, *Helenium kanaria*, *Penstemon digitalis* ‘**Glacier**’ and *Phlox paniculata* ‘**Purple Haze**’ are nominated as Cut Flowers of the Year and will join other nominations from ASCFG members and from the Cut Flower of the Year Panel. Experimental varieties are eligible for nomination if they are named and released.

Disclaimer: 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 lengths and yield data. If a plant does well for most of the respondents, it is likely to do well for you. On the other hand, if a cultivar didn’t appear to do well in the trial, it may still be a great cultivar for you. Thus, we have included summaries of the respondents comments to help interpret the data. 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 producers for providing the plant materials and the growers for producing the plants, collecting data and submitting trial reports. Each of the growers paid \$100 for shipping expenses and agreed to provide data for at least two years. Plant were donated by five perennial producers and shipped the perennial plugs or dormant roots directly to the trialers. I would especially like to compliment Betsy Hitt 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 Betty Coleman for typing in everyone's comments, Ingram McCall for data analysis and for taking care of the North Carolina State University portion of the trials, and Diane Mays, Lane Greer, and Megan Weddington 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 ASCFG possible.

Participating Perennial Suppliers

Cramers' Posie Patch (CR)

116 Trial Rd. N.
Elizabethtown, PA 17022
717-367-9494
FAX 717-367-8666

Here & Now Gardens (HN)

P.O. Box 6
Gales Creek, OR 97117
503-357-5774
FAX 503-357-3858

Green Leaf Enterprises/Benary (GL)

17 West Main St.
Leola, PA 17540
800-233-0285
FAX 717-656-0465

North Creek Nursery (NC)

388 North Creek Rd.
Landenberg, PA 19350
610-255-0100
FAX 610-255-4762

Grow & Sell (GS)

320 Lower State Rd.
Chalfont, PA 18914
215-822-1276
FAX 215-997-1770

Participating Growers

Region 2 (2001)

Bob Wollam
Wollam Gardens
Jeffersonton, VA

Peregrine Farms
Graham NC

Region 3 (2000 and 2001)

Betsy Hitt

Region 5 (2000 and 2001)

Christina Wager
Christie's Plantmart and Greenhouse
Coronation Alberta

Region 6 (2000 and 2001)
Vicki Stamback
Bear Creek Farm
Stillwater, OK

Region 7 (2001)
Steve Popp
Jim Rider Flowers
Watsonville, CA

Region 8 (2000 and 2001)
Sam Barkley

Barkley's Woodstock Floral
Portland, OR

Region 8 (2000 and 2001)
Paul Sansone
Here and Now Garden
Gales Creek, OR

Ingram McCall/John Dole (2001)
North Carolina State University
Raleigh, NC

Trial Results for Year 1 of Cultivars Planted in 2001. First row a data for each cultivar is the average and the second row is the range of responses. Note when only one response is listed, either only one person responded for that category or several responded and all gave the same rating.

Cultivar	Plants flowering (%)	Plants alive at end of summer (%)	Yield (stems/plant) ^Ø	Stem length (inches) ^Ø	Market appreciation rating ^U			Repeat again rating ^U	Ease of cultivation rating ^U
					W	R	C		
<i>Achillea millifolium</i>	74	31	4.9	16.5	3.0	4.0	2.3	3.7	4.7
‘Weiss Wonder’ (HN)	0-100	0-100	0-8	14-24	3	3-5	1-3	1-5	4-5
<i>Acontinum arendsii</i> (HN)	43	54	1.8	28.8	4.0	4.5	3.5	4.0	3.5
	0-100	0-100	0-7	14-48	4	4-5	3-4	3-5	2-4
<i>Eupatorium candidum</i> (HN)	83	28	5.7	25.3	3.5	4.0	4.5	5.0	4.8
	0-100	0-100	3-10	10-42	3-4	4	4-5	4-5	5
<i>Inula grandiflora</i> (GL)	20	29	0.5	4.5	2.0	2.0	-	2.5	3.7
	0-100	0-95	0-2	0-9	2	2	-	2-3	3
<i>Iris siberica</i> ‘Caesars Brother’ (GL)	0	36	0	-	-	-	-	3	5
	0	0-100	0	-	-	-	-	3	5
<i>Leucanthemum</i> ‘Polaris’ (GL)	0	1.5	0	0	-	-	-	1.5	5
	0	0-6	0	0	-	-	-	1-2	5
<i>Penstemon digitalis</i> ‘Glacier’ (HN)	34	38	2.5	26	4.0	4.5	4.0	5.0	4.5
	0-100	0-100	0-10	0-48	4	4-5	4	5	4-5
<i>Physostegia</i> ‘Summer Spires’ (HN)	77	2	4.4	27	3.0	4.0	3.0	3.8	4.5
	0-100	0-7	1-9	18-36	3	4	2-4	3-5	4-5
<i>Stipa</i> ‘Brautschleier’ (HN)	0	6.8	0	0	1	1	-	2.5	5
	0	0-34	0	0	1	1	-	1-4	5

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

U1 to 5 scale, with 5 being the best. Market ratings are based on sales to wholesaler (W), retailers (R), or final consumers (C) direct.

Trial Results for Year 2 of Cultivars Planted in 2000. First row a data for each cultivar is the average and the second row is the range of responses. Note when only one response is listed, either only one person responded for that category or several responded and all gave the same rating.

Cultivar	Plants	Yield (stems/plant) ^Ø	Stem length (inches) ^Ø	Market appreciation			Repeat again rating ^U	Ease of cultivation rating ^U
	Surviving (%)			rating ^U	Whole.	Retail		
<i>Artemisia ludoviciana</i> 'Cramers' Silver' (CR)	67 0-100	11.7 5-20	29.3 20-40	3.5 3-4	4.0 4	3.5 3-4	3.3 3-4	4.7 4-5
<i>Campanula persicifolia</i> 'Blue Bell' (GL) ^U	67 0-100	4.0 0-7	24.5 0-36	5.0 5	5.0 5	5.0 5	2.5 1-4	4.0 4
<i>Campanula persicifolia</i> 'White Bell' (GL) ^U	75 0-100	2.5 0-7	18.0 0-36	5.0 5	5.0 5	5.0 5	2.5 1-4	4.0 4
<i>Centaurea dealbata</i> (GS)	50 0-100	13.3 7-20	17.0 10-24	2.5 1-4	4.0 4	4.0 4	2.5 1-4	4.0 4
<i>Centranthus ruber</i> 'White' (GL)	67 0-100	10.0 10	24.0 6-36	2.5 2-3	3.0 3	2.0 2	1.5 1-2	5.0 5
<i>Digitalis mertonensis</i> (GS)	67 0-100	4.3 4-5	20.0 16-24	3.0 3	3.0 3	3.0 3	3.5 3-4	4.5 4-5
<i>Echinops</i> 'Arctic Glow' (GS)	75 0-100	9.3 4-16	46.0 30-60	2.7 2-3	4.0 3-5	3.0 3	2.7 1-5	4.3 4-5
<i>Eupatorium maculatum</i> 'Carin' (NC)	67 0-100	7.5 7-8	51.0 42-60	4.0 4	4.0 4	4.0 4	4.5 4-5	5.0 5
<i>Helenium kanaria</i> (HN)	75 0-100	9.3 3-15	46.0 30-60	4.0 4	3.5 3-4	3.5 3-4	4.3 3-5	4.7 4-5
<i>Hypericum androsaemum</i> (HN)	79 0-100	10.5 5-20	34.5 28-44	4.5 4-5	4.5 4-5	4.0 4	4.0 2-5	4.3 3-5
<i>Hypericum</i> 'Albury Purple' (HN)	93 80-100	17.5 0-20	29.3 18-40	3.5 3-4	4.0 4	5.0 4-5	4.3 4-5	4.0 4
<i>Origanum rotundifolium</i> 'Light Green Oregano' (CR)	67 0-100	12.0 0-20	12.7 0-22	1.0 1	3.0 1-5	1.0 1	3.0 1-5	3.3 1-5

<i>Phlox paniculata</i> 'Purple Haze' (HN)	67	9.0	35.0	5.0	5.0	3.5	3.5	5.0
	0-100	3-15	26-44	5	5	2-5	2-5	5
<i>Pycnanthemum muticum</i>	100	11.8	37.3	2.5	4.0	3.5	3.7	4.7
'Mountain Mint' (CR)	100	8-18	30-42	1-4	4	3-4	2-5	4-5
<i>Scabiosa</i> 'Pink Mist' (GS)	95	20.6	13.0	2.0	2.7	1	2.0	4.3
	80-100	5-30	12-15	1-3	1-4	1	1-4	3-5
<i>Schizachyrium scoparium</i>	50	27.5	18	1	-	-	1	5
'The Blues' (NC) ^U	0-100	27.5	18	1	-	-	1	5
<i>Silene orientalis</i> (GL)	98	8.0	19.3	2.7	3.3	2.5	3.0	4.0
	90-100	0-15	0-24	1-4	1-5	1-4	1-5	3-5
<i>Solidago</i> 'Prairie Gold'	25	3.3	13.3	3.5	3.5	3.5	3.5	5.0
Experimental (GL)	0-100	7-10	24-40	3-4	3-4	3-4	3-4	5
<i>Thalictrum aquilegifolium</i>	48	12.0	22.5	2.5	4.0	3.0	2.7	4.0
'Hybridum' (GL)	0-100	0-16	21-24	1-4	4	2-4	1-5	3-5
<i>Veronica longifolia</i>	50	20.0	40.0	5.0	5.0	5.0	5.0	5.0
'Cloudy' (HN) ^U	0-100	20	40	5	5	5	5	5
<i>Weigelia</i> 'Alexandra' (NC) ^U	67	8.5	30.0	3.5	4.0	4.0	5.0	5.0
	0-100	7-10	20-40	3-4	4	4	5	5

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

U 1 to 5 scale, with 5 being the best. Market ratings are based on sales to wholesaler (Whole.), retailers, or final consumers (Cons.) direct.

URatings for this species should be viewed with caution as only one or two participants had enough information to provide ratings.

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 ‘;’. Note: many respondents did not make specific comments on each cultivar and in some cases, comments have been shortened because of limited space.

2001 Perennial Cut Flower Trial Cultivars - Year 1

Achillea millifolium ‘Weiss Wonder’

Good qualities: Pure white (2); Color held - did not turn brown - ‘showed’ dye nicely; Good filler - easy to blend with other flowers; It is a nice yarrow but it is white – Not the most desirable color for yarrow; Good vase life; Fairly easy to grow, cut and bunch.

Problems: Less than half of plants flowered, uninteresting flower; Still early - best yield next year; Bare roots were just strings - if there was a crown, it was negligible – All plants were planted - none survived; Can get rust, and infestations of red ambrosia aphids on lower parts of plants.

Additional comments: Similar to wild achillea – Have to be creative in sales, as looks -- wild; Plants arrived in poor condition – They were a tangled mess – Size of division was very erratic, some were large others were tiny; Best white yarrow; This color (white) represents about 5% of our *A. millifolium* program.

Aconitum arendsii

Good Qualities: The flower size was good (despite the fact that they struggled) and they have a nice fragrance; Excellent fall color - stiff stems; Nice tall, dark blue flowers, pest free.

Problems: This was rotten on arrival - apparently is a poor shipper; I’m not sure that these will grow well enough here to be used as a cut flower (zone 7a); Blooms very late (zone 6) – Corms do not store well - must be shipped soon after digging; None of the roots came up – They were planted in perfect conditions immediately, upon arrival; Blooms over very short period, 3-4 weeks, July-August – Completely dormant in winter time so it can get lost.

Additional comments: We had a cooler than normal summer and I had them in about 50% shade – They survived the summer – I didn’t think that they would live here, I’m still not sure that they will; Similar to other aconitum and to *A. carmichaelii*; Plants (tubers) evaluated here are from earlier planting of purchased material.

Eupatorium candidum

Good Qualities: Great color, productive; Productive, vigorous, nice “filler” type flower; Nice pink color - good stem length; Very different type of eupatorium – Soft pink flower and gorgeous foliage – A real hit; Vigorous, easy grower, pest free – Very nice flower color, which is different from the two other eupatoriums we grow.

Problems: Too short in first year, secondary stems short, hard to tell when to cut; Must be picked open for good vase life; Hope that next year I get longer stems; A number of stems were somewhat

thin, blooms over a fairly short period, need to see if plantings can be staggered by cutting back early in season.

Additional comments: This one did really well – All plants arrived in good shape and survived – Might benefit from partial shade; *Eupatorium maculatum* – Nice pink color; I really think this is the hit of the 2001 trials.

Inula grandiflora

Good Qualities:

Problems: They were growing very well until they died, so I hate to say that they were difficult to grow – I really have no idea what happened to them – They looked like they “mugged out”.

Additional comments: None

Iris siberica ‘Caesars Brother’

Good Qualities: It’s a really great iris, I have grown it for years – I don’t think of it as a “cut flower”, maybe I’m missing something.

Problems: Very slow, never took off, maybe next year.

Additional comments: None

Leucanthemum ‘Polaris’

Good Qualities: Plants were in good shape but small – Cultivar seems vigorous and durable; Vigorous; Good strong plant.

Problems: Very common flower; Shasta’s attract things!

Additional comments: Similar to shasta daisy.

Penstemon digitalis ‘Glacier’

Good Qualities: Very vigorous - nice tall plant - green stems; Need to see how this does next year.

Problems: Poor plant condition on arrival; Similar to *Penstemon digitalis* ‘Husker’s Red’; Absolutely no sign of life – Like *Achillea* and *Physostegia* - just root hairs and no plant!

Additional comments: Good from seed or division.

Stipa ‘Brautschleier’

Good Qualities: Attractive fine leaved grass – I’m more excited about using the foliage than the flower; Good growth.

Problems: This grass just sat in the field and did not grow (Zone 7).

Additional comments: Plants from this supplier were quite small.

Physostegia ‘Summer Spires’

Good Qualities: Full heads, uniform; Flowered first year from tiny divisions; Grows like a weed, easy, pest free.

Problems: Should be taller next year; Plants arrived in very poor condition – It was difficult to tell exactly what the supplier intended us to consider a “division”; Many stems were thin with some side branching.

Additional comments: I couldn’t tell the difference between this “named cultivar” and the old one that

my neighbor gave me 20 years ago.

2000 Perennial Cut Flower Trial Cultivars - Year 2

Artemesia ludoviciana 'Cramers' Silver'

Good Qualities: Seemed to tolerate our summer well (zone 7a) – Artemesias don't generally like it here; Vigor, good gray color, filler; This one surprised us – We thought the gophers had killed these but it has returned as a “patch” – Good silver color, holds well.

Problems: Low market demand; Some rust on undersides of leaves.

Additional comments: Good filler.

Campanula persicifolia 'Blue Bell'

Good Qualities: Excellent local sale at flower.

Problems: Hard to ship - spoils easily in box – Must be picked tight - with only one bloom open; Very low flower production – May need a colder winter than we get here in Watsonville, CA.

Additional comments: Does not ship well as a bare root plant, best from seeded plugs; *C. latifolia* is close with only slightly better production.

Campanula persicifolia 'White Bell'

Good Qualities: Excellent vase life 7-10 days.

Problems: Too hot, too dry - A scorcher of a year; Same as 'Weisse Glocke'; Poor shipper dry - spoils in boxes easily; flushes all at once; browns easily; Very low flower production – May need a colder winter than we get here in Watsonville, CA.

Additional comments: Similar to straight species *Campanula perses*; *C. latifolia* is close with only slightly better production.

Centaurea dealbata

Good Qualities: Good local cut flower, vigor!; Productive, though less so than last year.

Problems: Poor shipper; a bit like a thistle; Short stems, no demand or interest.

Additional comments: Good landscape plant?

Centranthus ruber 'White'

Good Qualities: Vigorous, good stem length; Can be very productive, with return cuts 2-3 per year.

Problems: Too hot, too dry - only the tough can bloom on long stems this year; White flower browns easily; Some aphids in spring, little market demand.

Additional comments: White form of species, just O.K. as cut flower; We sell more red, though sales are sporadic.

Digitalis mertonensis

Good Qualities: Nice vigor, interesting color; Good color, uniform.

Problems: Low stem yield; Aphids, shorter stems than other varieties.

Additional comments: Poor production numbers; The longer the spikes can be held on plants the

taller they will get, need to clean a few spent florets.

Echinops 'Arctic Glow'

Good Qualities: Interesting flower - more gray than species; Tall stems, good white thistle color.

Problems: Not very vigorous; Very large plant, needs some support, difficult to cut, spiny.

Additional comments: Well received by retail florist; Similar to *Echinops retro* – Nothing special here, just a little more gray.

Eupatorium maculatum 'Carin'

Good Qualities: Stem length, OK color; good production; As per this years selection, flower color varies enough to distinguish from other varieties, nice dark stem color, nearly all stems are useable.

Problems: Too tall, might respond to early pinching, slightly faded purple color; Seems to be pest free – Plant is spreading, may be invasive?

Additional comments: Similar to *Eupatorium maculatum purpureum* which has a nicer color - darker, Good cut flower when picked slightly open.

Helenium kanaria

Good Qualities: Heavy branching; Yellow, tall; Excellent vase life, very productive.

Problems: Seemed to have more trouble with lodging than some other heleniums; Very tall, cut back at 12" to keep below 4', cut back immediately after first bloom, 2nd bloom in September at 29" possible.

Additional comments: The best cutting helenium - very little droop; Better vase life than *Helenium manifoldium*.

Hypericum androsaemum

Good Qualities: No insect pests, foliage stayed very attractive all summer and fall – Pretty vigorous – Doesn't need support; Nice pink berry.

Problems: Some plants were killed by late freeze; Must have rust control program, imported product; Some rust but not as bad as some of the other var.

Additional comments: Very nice berry color, must be shipped as a rooted cuttings or bare root after dormancy; Too much hypericum being grown in Southern California at present to be able to grow cost effective here under less than optimum conditions.

Hypericum 'Albury Purple'

Good Qualities: Easy to make cuttings; Great foliage and pretty tough plant – I will keep trying; Nice foliage, ok berry; Seems to be rust free! – Flowered and berried nicely – Very attractive maroon(ish) foliage color – If we wanted to compete in *Hypericum* market, this would be one to grow.

Problems:

Additional comments: Not nearly as vigorous as the *H. androsaemum* but foliage is quite beautiful; Good cut foliage.

Origanum rotundifolium 'Light Green Oregano'

Good Qualities: Its a tough plant and the flowers are nice but for the foliage.

Problems: All plants died.

Additional comments: I'm not too excited about this one – It was floppy and the stems weren't very thick – The plants were quite small when they arrived and so I think that these need another year to see what they will do; This plant does not ship well as a division - best as a rooted cutting in a cell tray.

Phlox paniculata 'Purple Haze'

Good Qualities: Large head size and nice flower form – vigorous; Very popular color, good productivity, ships well when picked tight.

Problems: I thought that the flower color was “muddy” and therefore unattractive – It looked “washed out” rather than “hazy”; Some florists prefer darker violet; Did not seem to be as hardy as the other cultivars/varieties we grow - surprised by this.

Additional comments: Similar to garden phlox; Very good vase life.

Pycnanthemum muticum 'Mountain Mint'

Good Qualities: Very vigorous, nice fragrance, long harvest period; Nice minty fragrance, nice light green filler; This one came back to life, we have 5 plants alive and its 36" tall, we did not cut any of it so it would become better established but it will be nice; This one looks like it should work, smells good, tall strong stems, green color.

Problems: Flowers turn brown rapidly, never looks ready to cut.

Additional comments: Good new foliage/filler; Perhaps attempt to market as green without flower.

Scabiosa 'Pink Mist'

Good Qualities: Good color; Attractive pink flowers.

Problems: Too small of stems to make a nice bunch for wholesalers; Too short, small flowers; Really short; Powdery mildew, downy mildew, stems are multi branched, wirery/twisted, too short.

Additional comments: Good hardy plant, not a cut flower; Nice landscape plant?

Schizachyrium scoparium 'The Blues'

Good Qualities: No pests, nice ornamental grass for landscape.

Problems: Stems too thin and few to make a bunch (100+).

Additional comments: None

Silene orientalis

Good Qualities: Vigorous; Very nice bright rose pink, very productive over a fairly long (3 month) period, good stem length, strong stems.

Problems: Haven't see yet, but will keep and try again; too hot - too dry. A 2 year crop - have tried before, had problems; Short lived, resows itself, almost a biannual; This one has to sit for 1 year and blooms the following year, not sure it's worth it yet; Takes time to come into flower, may require vernalization.

Additional comments: No interest could be found for cut flowers; Similar to original species; Great color; Could be a very productive winner.

Solidago 'Prairie Gold' Experimental

Good Qualities: Tall, late, great filler; Good stem length, yellow/red contrast.

Problems: Not enough of it, am propagating; Bit 'wild looking'.

Additional comments: It was later than 'Tara' which is great; Nice red stems.

Thalictrum aquilegifolium 'Hybridum'

Good Qualities: Better color - rich dark purple; good vase life; Grows well in shade.

Problems: Fussy, gets old too fast; A little short, may improve length with age; Some powdery mildew, flowers shatter, foliage does not hold up for shipping.

Additional comments: Great color; Nice landscape plant.

Veronica longifolia 'Cloudy'

Good Qualities: Taller than other cultivars; flushes 3 week earlier than 'Blauriesen'.

Problems: Color is paler than 'Blauriesen'.

Additional comments: Similar to *Veronica* 'Blauriesen'; Very good cut flower with long vase life; forces well.

Weigelia 'Alexandra'

Good Qualities: Excellent leaf color; Tall strong stems with attractive dark maroon foliage – Nice red flowers.

Problems: A little short in 2nd year; probably requires 3 or more years – Weigelia are slow growing; Flowers do not hold well when cut.

Additional comments: Similar to *Weigelia florida* – Good fall foliage; We think this will be a good "greens" foliage item.