

2016 Perennial Trial Report, Year 2

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Filipendula 'Venusta'



Heucherella 'Art Nouveau'



Stokesia 'Mel's Blue'

Occasionally, the second year of the Perennial Trial can produce very different results from the first as the plants become established and productive. In 2017, however, the best performing species were virtually the same as in 2016. Interestingly, all of the highest-ranked species also happened to be native to North America.

The top performer was *Stokesia* 'Mel's Blue', appreciated for its large, striking purplish-blue flowers on durable plants. Stem length was on the short side, averaging a little over 15 inches, but at least one Trialer had 24- to 36-inch stems. Trialers averaged about 10 stems per plant. Officially, the native form of this species, *Stokesia laevis*, is cold hardy in zones 5 to 10. Not surprisingly, all plants died over the winter in Zone 3, but a few plants also died in other zones. *Stokesia* is known to be sensitive to wet feet during the winter, so be sure to plant in well-drained soils and raised beds, if possible. Vase life was a respectable 10 days, but at least one grower noted that it could be variable. We should also note that *Stokesia* flowers will close at night.

Eupatorium 'Baby Joe' was the standout flower in the first year and continued to do very well in its second. 'Baby Joe' produced long stems topped with small fuzzy, purplish pink flowers that add great texture to bouquets and arrangements. At least a couple of the Trialers used the stems in bud before the flowers opened. Plants produced an average of 8 stems that were 40 inches long. The cultivar name Baby Joe refers to the fact that this plant is a shorter version of the native species, which occurs in the eastern United States and Canada. While this seemed to be the situation for most Trialers, one reported stems up to 80 inches long! Productivity ranged from 1 to 18 stems/plant. Vase life was just long enough at 7 days, with some reporting 10 days. Plants were durable, with only two Trialers reporting plant loss over the winter (10 and 15%) and both were in Zone 7. Thus, 'Baby Joe' was hardy from Zones 3 to 9, which matches the reported hardiness range for the original species. All plants flowered in the second year, which was not surprising since most plants flowered in the first year anyway. For the record, this species has undergone a name change: *Eupatorium* 'Baby Joe' is now known as *Eutrochium dubium* 'Baby Joe' and you might find it under either name.

Physostegia is known as obedient plant—if you move the individual florets on the short spikes in various directions they will stay in place. Not sure that is a particularly useful trait to have in a cut flower, but it does give you something to do during slow times at the market. *Physostegia* 'Pink Manners' was apparently named for the fact that it is more of a clump-former ("manners") than a runner. At least one Trialer confirmed this trait, saying that it was a good plant to use with black plastic production. Most growers will be happy to know that 'Pink Manners' won't become invasive. Plants produced an average of 11 stems of pink flowers that were 26 inches long. Productivity ranged from 4 to 36 stems/plant and length from 16 to 48 inches. Plants were quite durable as only few died in the second year and most of those were in Zone 9b.

Filipendula rubra's common name is queen of the prairie, due its tall stems topped with large clusters of beautiful soft pink flowers. Sounds great, except for the fact that the flowers lasted up to three days at most. Cut flowers growers, being a resourceful group, made the best of it by either harvesting in the bud stage, or more commonly, in the seed stage after the petals dropped: "Dried in fall as brown seed heads, it was amazing". Trialers harvested an average of only two stems per plant; however, at least one cut 5 to 10 stems/plant. Stem length ranged from 24 to 72 inches, with a respectable average of 46. Plants were quite hardy with only two reports of some plant loss over the winter (10 and 15%). Thus, the reported cold hardiness range of Zones 3 to 8 matches our data, except that it also did fine in Zone 9.

Results for *Astrantia* 'Roma' and *Heucherella* 'Art Nouveau' illustrate the importance of having a broad range of Trialers. *Astrantia* did well in Zone 3, but struggled elsewhere. *Heucherella* plants performed fairly well for most growers (except in Zone 9). However, differences existed: at least one participant thought "Leaves were excellent in bouquets, boutonnieres, corsages", while another stated "Our florists and customers did not have a use for this plant".

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 grow and harvest the trial plants using several methods. 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 cultivar sounds interesting, but did not appear to do well, try it anyway. The cultivar may work well for you.

Acknowledgments: A major thank you to each of the 11 evaluators who returned their Trial reports. Congratulations to Jeanie McKewan for being the first to submit her data again this year! We also want to thank Pioneer Garden for providing such great cultivars, as well as Nathan Jahnke, Cristian Loyola, and Ben Bergmann for assisting with the NCSU trials. In preparing the report we did a bit of editing of the comments for space and clarity; our apologies if we've altered the tone or content of anyone's comments.

Supplier

Pioneer Gardens
Deerfield, Massachusetts
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Trialers

Steve and Gretel Adams Sunny Meadows Flower Farm Columbus, Ohio Zone 6a	Lennie Larkin B-Side Farm Sebastopol, California Zone 9b
Renee Clayton Wild Scallions Farm Timberlake, North Carolina Zone 7b	Jeanie McKewan Brightflower Farm Stockton, Illinois Zone 5
Tanis Clifton Happy Trails Cut Flower Farm Dennis, Mississippi Zone 7b	Rebecca Perry Sabatia Flower Farm Centerville, Massachusetts Zone 6.5
John Dole/Ingram McCall NCSU Raleigh, North Carolina Zone 7	Richard Uva Seaberry Farm Federalsburg, Maryland Zone 7a
Michelle Elston Roots Cut Flower Farm Carlisle, Pennsylvania Zone 6	Emily Watson Stems Cut Flowers Milwaukee, Wisconsin Zone 5b
Bailey Hale Ardelia Farm & Co. Irasburg, Vermont Zone 3b	

Summary of Comments

The number in a 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.

Astrantia ‘Roma’

Good qualities: Gorgeous color (2); Quite easy and carefree; Not grown locally in my market, designers all love it, great accent flower; Beautiful form, very long lasting, great for boutonnieres, personal flowers—holds up well out of water; The flowers are tough and last really well in our farm bunches; Pretty, after the first flush it produced random stems until frost. *Problems:* Heavy winter kill (3); These did not survive the first summer; Astrantia simply couldn’t handle the summer here, and basically all plants died the first year; Yield per plant was quite low given the time and space used to produce them; None (mine decimated by gophers); A little short but not too short.

Notable insects/diseases: None (5).

Similar Cultivars: None (2).

Additional comments: I have purchased astrantia from Holland a few times as an accent flower for bridal work, I do like them as a cut, but will probably forgo producing my own as they were shy producers in our setting; We were very disappointed with astrantia’s second year performance, we had also planted a full flat in addition to the Trial plants last spring, all were beautiful, with very promising blooms (still short and only 6-8 stems per plant), I had imagined them coming back stronger the second year, like most perennials do, however, what very few made it through the winter flowered sparsely and even shorter than the first season; Plants were very small and instead of growing them on prior to planting, I planted them out, they were overcome with weeds, then weeded and kept weed-free for the remainder of the year, but never gained

sufficient size to make it through the winter; I really liked this one.

Postharvest handling: I seemed to need to harvest when the first flower had faded.

Eryngium ‘Big Blue’

Good qualities: Beautiful blue color (4); Holds up very well out of water, exotic/wildflower form that is in demand; More tall slender stems rather than the thick huge stems in other varieties.

Problems: ‘Big Blue’ is exceptionally sharp (2) - we worried about using them in bridal bouquets for fear of injury!!!; Very few come through our winters or summers, we’ve grown ‘Big Blue’ before, we often lose many of them through the summer (especially during times of wet), and then even more during the winter; Plants just never seemed to grow; Stinks when it gets mature; Not easy to handle and process; Only a few made it to the end of 2016, and the remainder died over winter, not hardy to zone 3.

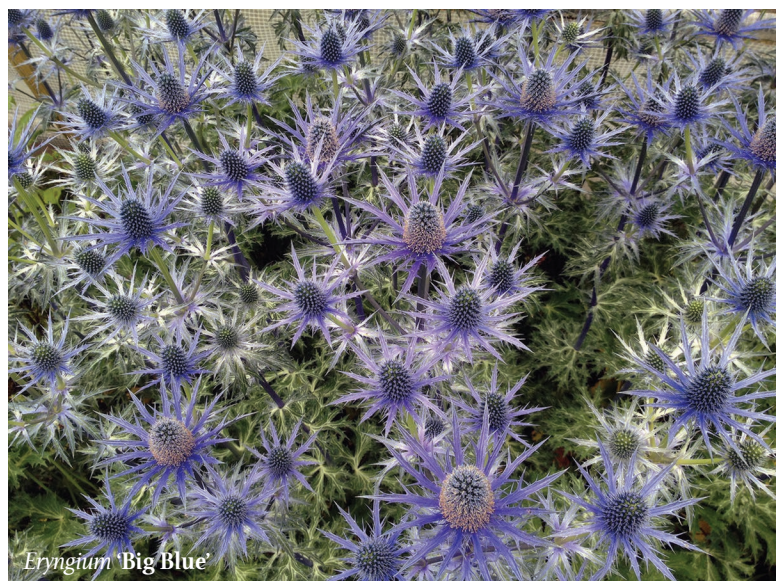
Notable insects/diseases: None (2).

Similar Cultivars: No; I have grown eryngium ‘Blue Glitter’ and ‘White Glitter’ with decent results, I am not sure why these plants just seemed to stagnate, there are a few still alive, I might put them in pots and give intensive care for a while to see if they could do better next year; eryngium ‘Blue Glitter’.

Additional comments: After 3-4 times of trying the larger-flowered eryngiums, we’ve decided they are not suited to our mid-Atlantic climate; Nicer looking than ‘Blue Glitter’, but too spiny to use, plant was slow to establish; I had only one alive still last fall, it was pretty enough but it didn’t make through the winter.

Postharvest handling: We use a CVBN pill and Chrysal Prof 2.

Good qualities: Gorgeous form and texture (3); Easy to grow (2); Great filler for soft color palette, easy to harvest and clean,



does not need staking; SUPER drought tolerant, prolific; Manageable height; Very vigorous! grew to over 7 feet tall; We cut flowers in bud; Does well in wet ground where other plants might suffer; Nice large flower; Long harvest window, big blooms.

Problems: A few plants looked a bit chlorotic, these were grown in fertile soil with no other nutritional issues in other perennials; When flowers open, looks messy, hard to hydrate; Very prone to mildew and insect damage, much more so than the native *Eupatorium* growing in the adjacent swamp, it bloomed a little later than the native; Open flowers browned quickly and were quickly chewed by the “corn beetle”; Kind of temperamental, flowers drooped easily if not cut at right time or handled properly.

Notable insects/diseases: None (3); The leaves were hit by mildew (we don’t see mildew on any other crop), snail and some other unspecified insect holes; *Diabrotica barberi* is an omnivorous pest we are plagued with here in corn country!; Lots of room for corn root worm beetles to hide in the flower heads.

Similar Cultivars: No, but useful in a similar manner to green sedum, trachelium, ammi or other umbel-shaped flowers; This is similar to the wild type; No; It’s a less useful version of the native *Eupatorium*.

Additional comments: Love ‘Little Joe!’ already ordered more plants!; We used

the flower heads in a tight bud state for the texture and dark pink color, they can also be used open; A really nice complementary flower with easy care.

Postharvest handling: There seems to be a definitive window for harvest—if harvested too immature, it does not last in a vase, if harvested when the florets are all the way open, it shatters and also does not last, we harvested when florets were in bud, but closer to opening/more mature, and obtained good vase life; Requires more postharvest experimentation than I did, I heard it was useful in bud form so I tried to harvest it in bud form, only to have it wilt; Harvest and hold in water.

Filipendula ‘Venusta’

Good qualities: Easy to grow (2); Dried in fall as brown seed heads, it was amazing, created a great little hedge in my field; Pretty pink color and fluffy shape; Color and form are desirable, the size of the flower is a nice feature in a bunch; Tall, vigorous, and gorgeous dainty flower; Long harvest window, unique ‘seed head’.

Problems: I had trouble hydrating it while fresh; Plant spread under plastic mulch and did not come up through last year’s holes, not suitable for plastic mulch production; A questionable cut stem due to short vase life; It sheds from the moment it opens, might be useful for outdoor event work only, it’s too messy to bring inside; During the fluffy pink stage I couldn’t really get this one to hydrate, once the flowers were spent, they were a pretty bronze color which I liked.

Notable insects/diseases: No (2); Crop was completely destroyed by deer, leaving adjacent species untouched.

Similar Cultivars: Same color and texture as astilbe (3), but it lacks definition in flower head shape.

Additional comments: I don’t think that it can be used as a main flower, because of the flower head shape; The filipendula did make a nice dried flower, dried easily and kept its color, I was able to use and sell more as dried material than fresh; After initial trials I gave up cutting it at all, the dried seed heads were more useful than the flower, but not worth the space, perhaps it could be cut in tight bud for a better result, but as soon as flowers open they shed.

Postharvest handling: I had trouble hydrating it while fresh, dried in fall as brown seed heads, it was amazing; Flowers and buds wilt after 2 or 3 days, if you re-cut stems they will revive.

Heucherella ‘Art Nouveau’

Good qualities: Winter hardy, drought tolerant; Leaves were excellent in bouquets, boutonnières, corsages, long lasting, good color, good size and petiole length for wedding work, robust grower in shady, moist conditions; Long harvest window, as flowers and buds held well on plant and were pretty for nearly a month, good event flower; Foliage is a winner; Easy to grow and nice color; If you need some small-ish leaves and can deal with the shorter stems they are pretty.

Problems: Way too short to use, leaves are pretty, however they are not tough/thick enough to use in boutonniere work; Plants thrived at a shady site but not in the sun; Flowers insignificant, need many plants for any significant statement; Delicate flower, plants didn’t bloom till second year; The “flowers” are not very attractive; Leaves can wilt if picked at the wrong stage, only mature leaves hold well, only the biggest leaves are marketable, and have a limited range of usefulness in design work; No flowers but the leaves are pretty, but too short to be able to harvest and transport very efficiently.

Notable insects/diseases: None (4).

Similar cultivars: None listed.

Additional comments: Is not a useful cut flower/plant; We lost a lot of plants the first summer, and the plants don’t look great this summer; Our florists and customers did not have a use for this plant; Leaves were beautiful and performed well for wedding work; Died quickly in my field due to irrigation leak and too sunny of spot; An excellent delicate flower for event work, but would get lost in a market bouquet, the leaves are also lovely, but only suited to an alternative palette, a bit lime-tinged for my taste; A fun little accent plant, but not a money-maker on our farm.

Postharvest handling: Quick dip leaves and hydrate overnight prior to use, Crowning Glory used in boutonnières

and corsages, long-lasting in water or foam; New growth is wiltly, so pick large mature leaves only.

Physostegia ‘Pink Manners’

Good qualities: Vigorous (2); Very nice flower form (2); Nice clear pink color (2); Does not need staking; This cultivar formed clumps, this was good in the plastic mulch system, in the past I have had the wild type spread and not come back through the holes in the plastic film; Nice glossy leaves, good upright form; Complements other summer flowers well, easy care and grows in partial shade; When the ugly flowers fell off the burgundy seed pods and bracts were quite attractive, not attractive enough to grow again though; Unique, new spike flower; Unique texture, also harvestable later in the summer as a pretty seed pod/spike thing.

Problems: Too early to tell if it is invasive; None, except a small amount of shattering/petal drop (not a significant amount); Difficult to determine when the stems are ready, florets quickly brown, needs to be cut when half or fewer florets are open; Didn’t grow much bigger than last year, might need more space; They looked bedraggled from the moment the flower opened until they fell off, perhaps my situation was unfavorable but others in the same row and same soil were excellent, plants seemed healthy and vigorous but flowers were just unattractive; Short harvest window in flowering stage, it all comes on at once, color is not quite pink, not quite purple which can be hard to sell.

Notable insects/diseases: None (5).

Similar Cultivars: Physostegia ‘Vivid’; No.

Additional comments: The color is a bit pale, I like the late flowering and brighter color of the ‘Vivid’ more than this one, time will tell if this one is more manageable as its name implies; After first flush was cut, stems grew back a lot shorter; A very pretty soft pink flower that looked great in airy/soft bouquets.

NC State conducted vase life testing of this cultivar; see article in this issue for details.

Stokesia ‘Mel’s Blue’

Good qualities: Beautiful blue color and form (4); Pretty easy to grow (2); Many stems produced; Large cluster of flowers, similar look/feel to asters in a bouquet, very tough, hardy plants; Strong growth in moderate soil, lots of customer appreciation, especially from those interested in native plants; Vigor; Unique; Unusual spidery flower, wonderful spray form so great for bouquets.

Problems: None—maybe wish it had more stems per plant, but the flower clusters were so large that I can’t imagine the plant producing more!; Not hardy in

zone 3, all died; Short and not a vigorous grower so it got weedy, flowers are too short for netting and flopped in the wind, we live in a wind tunnel basically and most everything needs netting; Not too popular for me; Did not produce much in year one, but year 2 was great!

Notable insects/diseases: None (5).

Similar Cultivars: Just in appearance to ‘Matsumoto’ asters, when used in a bouquet; No.

Additional comments: Produced many small stems, would be better if grown with fewer but taller stems; Love these!; The flowers close at night, but even

closed they are still pretty, here they bloomed with a lovely mid blue color just in time for July 4th, very useful for patriotic bouquets; We like this stokesia very much, it keeps flowering and flowering, triggering more stems after harvesting the first flush, have had flowers still in October; Even produced little shorties in the late summer/fall, wish I had a whole row of these.

Postharvest handling: Vase life varied from good to very poor, not sure why, this flower closes at night; Cut and hold in water; We used Quick Dip in the field for hydration just to be sure; Chrysal Pro 2.

Trial Results for Year 2 of perennial cultivars. 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, several trialers responded and all gave the same rating.

Species Cultivar	Plants died during winter (%)	Plants flowering (%)	Yield (stems/plant)	Stem length (inches)	Market appreciation	Ratings ¹		Average vaselife (days)
						Ease of cultivation	Grow again	
Astrantia Roma	35.0 0-90	50.0 0-100	3.1 0-9	13 6-28	4.2 3-5	2.7 1-5	2.6 1-5	8.7 6-10
Eryngium Big Blue	36.9 0-100	50.7 0-100	1.2 0-3	21 16-30	3.0 1-5	2.7 1-5	2.3 1-5	12.5 10-14
Eupatorium Baby Joe	2.8 0-100	100 0-100	7.9 1-18	41 24-80	3.7 2-5	4.8 4-5	3.4 1-5	7.4 5-10
Filipendula Venusta	3.6 0-15	83.8 10-100	2.4 0-10	46 24-72	3.2 1-5	3.9 1-5	2.9 1-5	1.8 1-3
Heucherella Art Nouveau	29.9 0-100	50.0 0-100	6.2 0-11	30.0 4-24	2.0 1-3	3.8 2-5	2.0 1-4	6.0 5-7
Physostegia Pink Manners	4.6 0-7	100 100	9.8 0-36	26 16-48	3.6 1-5	4.4 4-5	3.4 1-5	7.5 6-7
Stokesia Mel’s Blue	27.1 0-100	97.1 0-100	10.4 0-20	16 10-36	4.5 3-5	4.1 3-5	4.3 2-4	10.3 10-11

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