# 2018 ASCFG Dahlia Cut Flower Trial Report

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With their luscious colors and myriad forms, dahlias are hard to resist. Our customers apparently agree, as dahlias continue to be one of today's trendiest cut flowers. Yet choosing which cultivars to grow can be challenging as hundreds are available, most of which are destined for home gardens, and don't have the productivity, stem length or vase life needed by commercial cut flower growers. With that in mind we established the first ASCFG Dahlia Cut Flower Trial in 2018. Thanks to the generosity of Ednie Flower Bulbs, a division of Fred C Gloeckner & Co, Inc., and Tall Grass Farm, our Trialers had eight cultivars to evaluate.

The clear favorite in the Trial was 'Beaucon White', which scored with beautiful, full, white flowers, a desirable vase life, and long stems. While its natural niche was wedding designs, it also worked well in bouquets. Stem length averaged a little over 20 inches, with at least one Trialer harvesting 30-inch stems. One Trialer strongly encouraged pinching the plants to produce longer stems, and another suggested providing support due to the large, heavy flowers. Bugs and bruising were issues on the white petals.

'Baron Katie' was the next highest ranked. Its peachy mango hues are ideal for blending colors in bouquets and arrangements. Trialers harvested close to 10 stems per plant, which averaged around 18 inches long. Some harvested up to 30 stems per plant. Plants were steady producers of flowers most of the season.

'Face of Summer' is an eye-catching red and yellow cactus-type dahlia, or, as one Trialer put it: "I LOVED this fiery cactus!" Stems averaged about 17 inches long, with close to 10 harvested from each plant. While 'Beaucon White' may have garnered the top scores, 'Face of Summer' seemed to get the most exclamation points and "loves" in the comments.

Of the eight cultivars from two companies, based on the combined ratings score (market appreciation + repeat again + ease of cultivation), the top-ranked cultivars were 'Baron Katie', 'Beaucon White', and 'Face of Summer'. These cultivars will be nominated for the ASCFG Cut Flower of the Year.

Interpreting the Trial results: The numbers reported are averages of all the respondents. Many factors will affect the success of any cultivar. Our participants grow and harvest plants using several methods. After noting 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 variety sounds interesting, but did not appear to do well, try it anyway; it may work well for you.

Acknowledgments: Thank you to each of the 8 evaluators who returned their Trial evaluations! We very much appreciate the time it takes to grow and score the plants, and submit data. We want to especially thank Liz Cardella for being the first Trialer to return her ratings. Thank you to Ednie/Gloeckner and Tall Grass Farms for providing the plant materials. We would also like to thank Cristian Loyola 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.

#### Summary of Comments

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

#### 'Baron Katie'

*Good Qualities:* Loved the color (4), Orange yellow salmon color—WOW an orange sherbet to deep peach; A great complement to the "bright" colors I had requests for; Great producer of flowers throughout the season, fun color to work with in bouquets and at farmers' markets, customers at farmers' markets loved the color and the form, strong, healthy plants; Prolific, great size for market and CSA bunches, packs well in the buckets/ cooler, nice strong stems in early season, seemed unfazed by wet season—not much mildew, botrytis.

*Problems:* No cultivation problems, it was a medium height, steady producer, I'm slow to warm to this form, it was nice but not amazing; Stems were not very long, and it was a low producer; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain; Slightly weak stems, not a wholesale/designer color, not as long of a vase life as other flower forms; Some later-season stems got spindly.

*Similar Cultivars:* Similar to 'Karma Naomi' in how prolific and how long and



#### **Participating Companies**

Ednie/Gloeckner Fredon, NJ ednieflowerbulb.com

Tall Grass Farms Medical Lake, WA tallgrass-farms.com

#### **Participating Trialers**

Liz Cardella Collie Flower Farm Woodstock, IL Zone 5

Laura Dison

Green Door Gourmet Nashville, TN Zone 7a

> Julio Freitas The Flower Hat Bozeman, MT Zone 4

#### Nathan Jahnke/John Dole

NC State University Raleigh, NC Zone 7a

> Erin McMullen Rain Drop Farm Philomath, OR Zone 8b

Marina Michahelles Shoving Leopard Farm Red Hook, NY Zone 5b

Adam and Jennifer O'Neal Pepper Harrow Farm Winterset, IA Zone 5

Tom and Deni Peterson Blue Door Garden Abingdon, VA Zone 6b

The Cut Flower Quarterly



strong the stems are (very different color). Postharvest Recommendations: Cut early in day, fully open into warm water, when water cooled, it went into cooler at 40 degrees.

Comments: Kept blooming until the end, steady harvest from end of June to October; So prolific! worth growing for grocery/market sales for sure; Got lots of tubers, will grow again!

#### 'Beaucon White'

Good Qualities: Beautiful full white blooms (4); Long vase life!!!; A very nice productive white, a decorative form makes it easy to use in bouquets and wedding work, grew tall quickly and was a steady producer, stems were very long, disbudding produced nice 5-inch blooms; Vigorous grower, long stems, production continued even in the middle of summer into October; Heavy bloom in October, long, arm's-length stems, late to bloom, but when it came in-AMAZING, nice size!; Very much in demand for weddings and design work, good stem length and strength; Incredible 6-inch wide, blooms that are perfect for weddings, the plants were not as prolific as other white varieties, but the larger blooms made for a nice focal flower, so it's a good tradeoff, plants were healthy with strong, tall stems, we missed pinching a couple of plants, and the stems weren't as long, but the ones that we did pinch deep came out with nice long stems; Tiniest hint of blush, like the up-facing habit-nice for bouquets, market bunches.

Problems: Bugs seemed to be more attracted to the white dahlias (2), they had to be monitored and cut early; Japanese beetles love light colors and white must be very delicious, spraying helps, as well as deadheading any spent blooms, clean rows don't attract as many bugs; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain; Late to bloom; May need staking in areas with wind, sustained a lot of insect damage, due to color and size of bloom, made overall production drop significantly; The problem isn't this cultivar alone, but as any white flower, they bruise easily and it shows, the pinching is also not a problem per se, but the plant definitely benefits from pinching to encourage longer stems; Had to cover the buds, stems a bit on the thick side, even after pinching.

Similar Cultivars: None that I'm aware of. (2); 'White Alva' would be pretty similar, 'Beaucon White' was the second largest white bloom we grew, after 'White Alva', but 'Beaucon White' had a more defined petal shape.

Postharvest Recommendations: CVBN tablet as well as t-bag, this one can go straight to water, though; Early in the day harvest 3/4 to fully open into warm water, when water cools they go into Coolbot at 40 degrees; Can pick slightly closed and they will still open; We place stems in clean buckets with clean water and the Chrysal t-bags, we don't burn stems or treat them with boiling water, I harvested when the outer petals were just perpendicular to the stem and the center petals still unfurling, which extended the vase life.

Comments: We love the long stems and long-lasting blooms, we just wish it would pump out more blooms per plant!; I will add some of these to my hoophouse dahlias next season along with burgundy varieties and the ever-popular CAL, all requested wedding colors!; Really nice larger white option; Love it!!; Got lots of tubers, will grow again!

#### 'Face of Summer'

Good Qualities: I LOVED this fiery cactus (4)! flaming orange with inner yellow, HOT COLOR; Every time I harvested a stem, "Bamboleo" got stuck in my head, and I really DID feel like it was summer in the 1980s :), bunches with this one in it were the first to sell, especially in late September, early October; They are very showy and eye-catching, and it would make a perfect garden plant, especially if clumped together for more color-blocking effect, it's also a very tall plant! we planted 5, but only one successfully grew and bloomed, towering at 52 inches; This was my favorite of the Trial! it shot up out of the ground becoming taller than me (5 foot 6), very productive with a nice form and the color reminded me of flames, the red/ yellow combo was great all summer into fall, I suggested this variety to my florists several times for funeral arrangements for men, I thought it was a masculine bloom, lol!; Very sturdy, upright, dependable cultivar, mixed well in bouquets, strong head; Perfect for summer and fall work, very long stems, awesome! very productive.



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*Problems:* The bright colors can be offputting to some, while others may love it, it may be a great focal flower for a market bouquet, but not a wedding flower; None, a real winner!; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain; Needs to be trellised, long, roaming stems; A bit of insect damage.

*Similar Cultivars:* Not that I know of; Nope, it is unique, singular, one-of-a-kind. *Postharvest Recommendations:* I used clean water with a Chrysal t-bag; I left one side bud develop on this variety, it looks charming with another bud, I always use the Swan Island warm water method; We sear stem ends by placing into 160-180° water and allow to cool for 1 hour, then we store dahlias in 40° cooler; It seemed to do fine in the cooler once it had taken up water.

*Comments:* Love this one! (2); Only one plant grew and bloomed out of the 5 tubers, the others grew, but didn't bloom; Got lots of tubers, will grow again!

#### 'Hapet Duo'

*Good Qualities:* A nice color (4), soft yellow in the center with hot pink tips; Stems were strong (2); Very sturdy, upright, dependable cultivar, mixed well in bouquets, strong head; Front-facing bloom; Straight stems.

*Problems:* Very slow to produce, disappointing since it was a nice color combo, at the end of the season it is full of buds, not sure they have the conditions to develop before we get a frost, an underachiever; One of the tubers was NOT like the other, producing bright cosmo pink blooms which were very nice, no idea what it was, 'Hapet Duo' was very pale,



bug magnet, mixed colors hard to work with, too pale for fall work, only 3 out of 25 late October blooms usable due to bug damage; Short stems (again, wet season, and it was in the wettest part of the field), slow production; We got only 2 of what I think this was supposed to be, the other 3 were random tubers, the stems were short and the flowers were hard to harvest before they discolored on the back side; Thrips, aphids, caterpillars, die out from too much rain, needs staking.

*Similar Cultivars:* 'Miss Molly'; Similar color to 'Zingaro', but much stronger stems, slightly tighter petals.

Postharvest Recommendations: We sear stem ends by placing into  $160-180^{\circ}$  water and allow to cool for 1 hour, then we store dahlias in  $40^{\circ}$  cooler.

*Comments:* I'll give it a second chance hoping to get it planted earlier, we had a challenging season, too cold, too wet, then blazing hot; I did not get any usable tubers, again because of the wet season; Not overly impressed, but really didn't have a lot to base that on, since I'm not 100% sure we got any of the right one.

#### 'Jowey Martina'

*Good Qualities:* A nice bright yellow ball type (3), cute!; Very sturdy, upright, dependable cultivar, mixed well in bouquets, strong head; Large ball shaped;

Nice in grocery/market bouquets, great form and strong stems, good vase life; Smaller flower.

*Problems:* Very late to start blooms, not very productive, yellowing leaves in late July possibly due to drought stress, but other cultivars growing around them didn't show the same stress; Lost all but one plant because of a very wet spring, these were at the end of the row and the remaining plant seemed slow all season, we had more rain for each storm than is usual, I think the plant was stressed; Not a very in-demand color for our main sales, worked for us in grocery and farmers' market; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain.

*Similar Cultivars:* 'Yellow Symphony', The bright yellow is similar in color to 'Sparkle' but not in shape.

*Postharvest Recommendations:* I use the warm water method from Swan Island, my cooler is set to 40 degrees; We sear stem ends by placing into  $160-180^\circ$  water and allow to cool for 1 hour, then we store dahlias in  $40^\circ$  cooler.

*Comments:* I'll try to increase these and try again, I'll plant them in a different spot since it seems more sensitive to flooding; Bright yellow, large, ball-shaped type attracted customers, especially in fall bouquets—the yellow really popped.



#### 'Karma Gold'

Good Qualities: Excellent buttery golden yellow color (5); Nice size and form; Strong stems; Very sturdy, upright cultivar, mixed well in bouquets; Large flower, stocky stem, pale peach with orange edges-amazing color; Nice full blooms, good stem length and strength, we liked this one for market sales, and bouquet work, it was just gold enough to blend well with lots of color palettes; Strong stem, nice size bloom for market bunches. *Problems:* Slow grower (3); Short stems (2); I lost some with heavy rain but the remaining plants never took off, they put out a nice flower here and there but the stem was so short to be unusable; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain; Never enough stems; Bug damage early in season; Need to cut deep to produce longer stems; None outstanding, it was a very WET season, and all the dahlias suffered.

*Similar Cultivars:* Looks great with 'Nicholas'!; None that I currently grow. *Postharvest Recommendations:* We sear stem ends by placing into 160-180° water

and allow to cool for 1 hour, then we store dahlias in 40° cooler; I did use clean, room temp water, changed daily for each of the Trial cultivars and had 4-8 days vase life, CSA members reported having success with 1 tsp. white vinegar and 1/2tsp. sugar per quart of water, resulting in extended vase life.

*Comments:* I wonder if this variety was affected by the crazy weather, it just never earned its keep; I will grow it again.

#### 'Red Cap'

*Good Qualities:* Loved the clear red color (5); Great size and shape, straight stems; Smaller flower size; Good bloom shape, good for farmers' market; Easy for market harvest, marketable, stores easily, stink bugs and Japanese beetles did not go for it.

*Problems:* Weak stems (2); Flower heads were perpendicular to stem, so positioning them in a vase with other flowers was difficult; Thrips, aphids, caterpillars, needs staking and early pinching; Not a very popular color, inconsistent flowering week to week, heads were smaller than other red cultivars such as 'Cornell'; Short stems, two tubers didn't grow, late to start blooming; Only marketable for us through grocery and farmers markets,



not a hot color for designers or florists; It was a wet, wet season, and this did not perform as well as it could have.

Similar Cultivars: 'Cornell' but better!; Similar habit to 'Cornell', but true red color. *Postharvest Recommendations:* We sear stem ends by placing into 160-180° water and allow to cool for 1 hour, then we store dahlias in 40° cooler; Harvesting before the centers popped, which it did a little more quickly than we like; I did use clean, room temp water, changed daily for each of the Trial cultivars and had 4-8 day vase life, CSA members reported having success with 1 tsp. white vinegar and 1/2 tsp. sugar per quart of water in extending vase life.

Comments: I will grow it again.

#### 'Selina'

*Good Qualities:* Nice color (2); Very unique, spidery petals tinged with deep pink, loved the shape. Looked like a sunset!; Sorry, none, this one was a real stinker!

Problems: Flowers were deformed (3) and not pretty; Bug magnet! (2), lost more than half the blooms to bug damage, as you can tell, this was my least favorite of the Trial, it's an unusual-looking flower, they did not look like the pictures online, I don't know if it was the plant itself or if it was the weather, I did sell 2 blooms at the end of the season as "weird" flowers that fit a certain color scheme, I will not save these for next year; Too short; Thrips, aphids, caterpillars, needs staking and early pinching, die out from too much rain; Low number of harvestable stems; two of five tubers didn't grow; We got only two of these true to name; The stems weren't very long or strong.

#### Similar Cultivars: None listed.

Postharvest Recommendations: We sear stem ends by placing into  $160-180^{\circ}$  water and allow to cool for 1 hour, then we store dahlias in  $40^{\circ}$  cooler.

*Comments:* Thumbs down on this one for me; This dahlia needs protection, may consider netting blooms next year, spectacular when they bloomed unblemished, but it was rare; We just couldn't get this cultivar to work for us, in grocery, farmers' market or wholesale.

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Cultivar	Plant survival and flowering (%)	Yield (stems/plant)	Stem length (inches) <sup>1</sup>	Market appreciation rating <sup>2</sup>	Ease of cultivation rating <sup>2</sup>	Grow again rating <sup>2</sup>	Postharvest life (days)
Baron Katie	72	9.6	17.8	4.0	4.4	3.6	5.7
	0-100	2-30	12-24	3-5	2-5	1-5	4-7
Beaucon White	78	7.4	20.6	5.0	4.6	5.0	6.5
	0-100	3-33	15-30	5	3-5	5	3-12
Face of Summer	70	9.9	16.7	3.8	4.0	4.0	6.0
	20-100	5-20	10-20	1-5	3-5	1-5	5-7
Hapet Duo	71	7.6	15.2	3.4	3.5	3.0	5.0
	40-100	3-25	10-20	3-4	2-5	2-5	4-7
Jowey Martina	45	8.1	15.4	3.8	3.6	3.2	7.3
	13-80	5-15	10-24	3-5	3-4	2-5	6-9
Karma Gold	68	6.1	13.1	3.6	3.3	3.8	6.0
	30-100	5-12	8-24	1-5	1-4	1-5	5-7
Red Cap	61	9.2	15.3	3.5	4.0	3.6	5.5
	19-100	6-20	8-24	2-5	3-5	2-5	4-7
Selina	43 0-100	4.1 0-13	16.0 6-24	2.5 1-5	2.0 1-3	1.6 1-4	-

**Table 1.** 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 shown in the range line, all respondents gave the same rating.

<sup>1</sup>Data shown are from the respondents who harvested stems. Some Trialers may have not harvested stems because they were too short. The stems, not the Trialers.

<sup>2</sup>1 to 5 scale with 5 being the best; market appreciation ratings are based on sales to wholesalers, retailers and/or final consumers.



## **NC STATE UNIVERSITY** College of Agriculture and Life Sciences

### NCSU Leads the Way in Cut Flower Research

Did you know that *Helianthus salicifolius* 'First Light' makes a great cut flower? Have you ever wondered how many species and cultivars NCSU and the ASCG have trialed since the program began? Which lily varieties were evaluated in 2016? The place to find the answers to these questions and many more is https://cutflowers.ces.ncsu.edu/. You may read all the Seed Trial results since 1993, and the Perennial and Woody Trial results since we started those in 1998 and 2003, respectively. For each cultivar, you will find the trial data, participants' comments, supplier information, and in some cases, photos. Beside Trial information, the website also includes our postharvest reports, a brief history of specialty cut flower production, links to other sites, and much more.

Ben Bergmann and John Dole