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# *The* **Cut Flower**

Q U A R T E R L Y

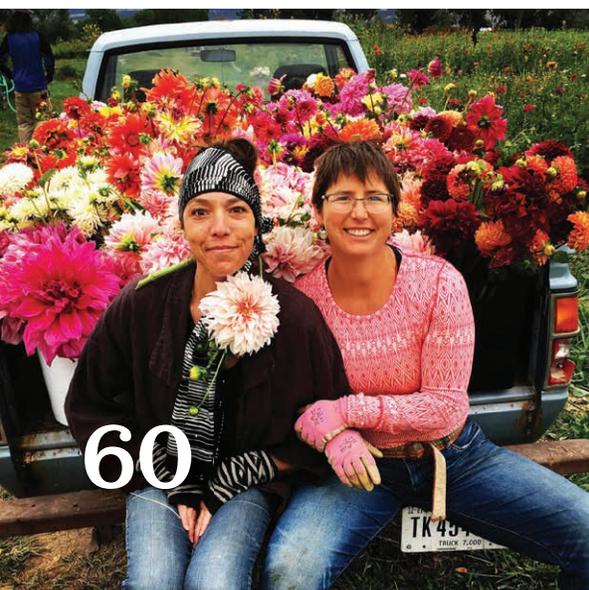
Association of Specialty Cut Flower Growers Inc.

for growers of field and greenhouse specialty cuts



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## Farming with Curiosity at the Forefront

Jennie Love



2020 has *finally* come to an end. Of course, the uncertainty of 2021 still lies ahead, but let's just focus on the positives for now. The "COVID Chapter" (as I call it around here) will be long remembered for its many challenges and dark moments. There are also decided benefits that have come out of it, though! For starters, many ASCFG members have reported that their businesses boomed as the demand for blooms surged during periods of quarantine lockdown. Some long-established farmers have even reported tripling their annual sales when it was all said and done!



At my farm, with a lot of pivoting and extra work, sales held steady despite losing 35 large weddings we had on the books for 2020. We made up for it with several new sales channels, including a home delivery service I swore I would never start but now is here to stay! The big-picture lesson COVID taught me over the many months of uncertainty was to be ever-open to change; to be constantly curious about what could happen if I stopped dogmatically hoeing the same old es-

tablished row (be it sales channel, crop plan, or transplanting method) and tried something new.

Instead of rushing through the growing season this year, eye on the typical prize of fulfilling all my standing wedding contracts and teaching a typically robust series of on- and-off-farm workshops, I actually had some time to just stand in my fields and look around. Week-to-week retail sales are kind of nice in that way: there is no contracted amount that must be met. What you have is what you sell. So, without the usual pressure (albeit there was lots of

*new* pressure), I was able to "play" a bit. I tried some new crops (hello, alstroemeria!) that would be better suited for daily deliveries than wedding centerpieces. And I tried some new methods of restoring and nurturing my soil web.

One rabbit hole I dove into deeply in 2020 was exploring

the concepts behind and methods of Korean Natural Farming (KNF). My interest in farming through a holistic ecological lens began because of a super wet year in 2018 and has been expanding ever since. After studying up on the intricacies of the soil web for a year or two, this past season was the first time I had an opportunity to really research KNF and try experimenting with the associated homemade bio stimulant applications. From there, I learned about JADAM (which, I believe, in Korean means "people that



resemble nature") and have been letting my curiosity run wild ever since. I also gobbled up all I could find about approaching weed management with the tool of soil nutrient balance rather than with a hoe or herbicide.

Can I say for sure yet if adopting any of these new (to me) approaches at my farm will be a silver bullet for all that might afflict it? No. We all know there is no silver bullet in farming! But what I can say for sure is that there have been decided small victories in long-waged wars. Namely, the health of my overwintering ranunculus and larkspur have never been better after making applications of what is known as "LAB" and "WCA" from the KNF handbook. And my once-dense and tired soil is now fluffy and full of life. So, I will continue with my curious experiments and witchy

brews with the likes of leaf mold, eggshells, rice, milk, molasses, vinegar, and nettles. Perhaps there is fodder there for a future article in *The Cut Flower Quarterly*.

The rollercoaster of 2020 was damn hard. But what brought me real joy and excitement this year was letting my curiosity run wild. I questioned everything I ever thought about farming, including if I really wanted to keep going with my farm. And in the end, it was that curiosity that brought me out to the other side and makes me incredibly eager to get rolling with 2021!

In the meantime, in these quieter days of winter, I will be doing lots of reading on the topics of soil life, nutrient balancing, ways elders farmed centuries ago before commercial fertilizers and pesticides became the norm, recipes for DIY farm inputs, and generally learning from personal observation out in the field and forest.

For anyone who wants to tickle their curiosity too, here is a list of books I have read and generally would recommend (some better than others but all worth flipping their pages):



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*The Regenerative Grower's Guide to Garden Amendments* by Nigel Palmer

*Teaming with Fungi: The Organic Grower's Guide to Mycorrhizae* by Jeff Lowenfels

*Dirt to Soil* by Gabe Brown

*No-Till Intensive Vegetable Culture* by Bryan O'Hara

*When Weeds Talk* by Jay L. McCaman

*Gathering Moss* by Robin Wall Kimmerer

*Braiding Sweetgrass* by Robin Wall Kimmerer

*JADAM Organic Farming: The Way to Ultra-Low-Cost Agriculture* by Youngsang Cho

*The Organic No-Till Farming Revolution* by Andrew Mefferd

And here is a list of books currently on my desk for further winter reading:

*Farming the Woods* by Ken Mudge and Steve Gabriel

*Reclaiming the Commons: Biodiversity, Traditional Knowledge, and the Rights of Mother Earth* by Vandana Shiva

*Native American Gardening: Buffalobird-Woman's Guide to Traditional Methods* by Gilbert Wilson

*Indian Agriculture in America: Prehistory to the Present* by R. Douglas Hurt

*Biodynamic Gardening* by Monty Waldin

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## It was the Best of Times, it was the Worst of Times

Ellen Frost and Laura Beth Resnick



No one describes 2020 better than Charles Dickens: “It was the best of times, it was the worst of times, it was the age of wisdom, it was the age of foolishness, it was the epoch of belief, it was the epoch of incredulity, it was the season of light, it was the season of darkness, it was the spring of hope, it was the winter of despair.”

We are thankful and lucky that our dear ones are healthy—and that’s all that really matters. Our businesses are secondary, and in the face of the storm that was this year, it seems a little silly to rant about how our governor mishandled the shutdown in the spring, or how stressful the election season felt. Never mind all that!

Instead, we’ll share some anecdotes from the year, with hopes that our experiences might resonate with you. Enjoy!

### **LB: The time we really, really, really had to go while on delivery.**

Back in March, when everything was shut down, we decided to switch our on-farm spring plant sale to delivery only. We created an online store, and felt some pressure to offer free delivery since so many others seemed to be doing that. We charged \$5 per plant (for little 2” plants) to compensate.

Despite the priciness of our plants, our online store was sold out by May. We had to deliver about 160 orders in less than a week to DC, Baltimore, and Alexandria. That’s a wide radius, if you’re not familiar with the area. We had really long deliveries in store.

What we didn’t anticipate was how urgently we’d need to find a restroom during six-hour deliveries all over Maryland—and that no one would let us use their restrooms. Liz stopped at a gas station and they turned her away. Jascha pulled over

and used the beautiful outdoors by the highway a couple of times. I squirmed all the way home; this pandemic was not good for my bladder. A few kind souls did let us use their bathrooms, and we’ll always remember them for it.

Lesson learned: we will charge for delivery in the future, and have a no-contact pickup option at the farm. Hopefully that will mean fewer deliveries come the spring plant sale, and no more squirming around. We’ll cut the deliveries into smaller routes, even though it means spending a little more on labor. No one needs to get a UTI because of a silly spring plant sale!

### **Ellen: That time we hired a new team member one day before the COVID shutdowns.**

We decided early on that we would not have our team work together once the COVID shutdowns began. That meant that rather than everyone work 9-5 together, someone would work 7 a.m. to 10 a.m. and someone else would work 10 a.m. to 4 p.m. and someone else would work 4 to 8 p.m. This was not ideal for lots of reasons but it seemed like the safest plan for our team and our customers. Two of our three team members have been with us for many years so working on their own with

little direction and no supervision was not a problem. One of our team members began her new job at LoCoFlo one day before COVID shutdowns went into place. It was strange, to put it mildly, to ask a new employee who had been to the shop only a handful of times and had worked only one shift, to now work on their own with only video and audio instruction. There was no time for hands-on training or team building or anything. But our new employee Monica was a star. She had design experience, which was super helpful. She jumped right in and tried to do everything we asked her to do. Have you ever made a dried wreath? No? Okay, well try it out. Here’s an example of one. Have you ever made boutonnieres? YES? Okay great, make 10 in this color palette. And on it goes. And continues to go with each new season





and each new set of tasks. Monica and the rest of our team are resilient and flexible and committed to our work. We couldn't ask for more.

**LB: That time we took off in July.**

Because I'm the only person on the farm who makes the availability list for our florists, I feel like I can never go on long vacations. Until I figure out how to train someone else to make the list, a vacation that lasts a week or more is impossible. That is, unless I tell florists we're closed.

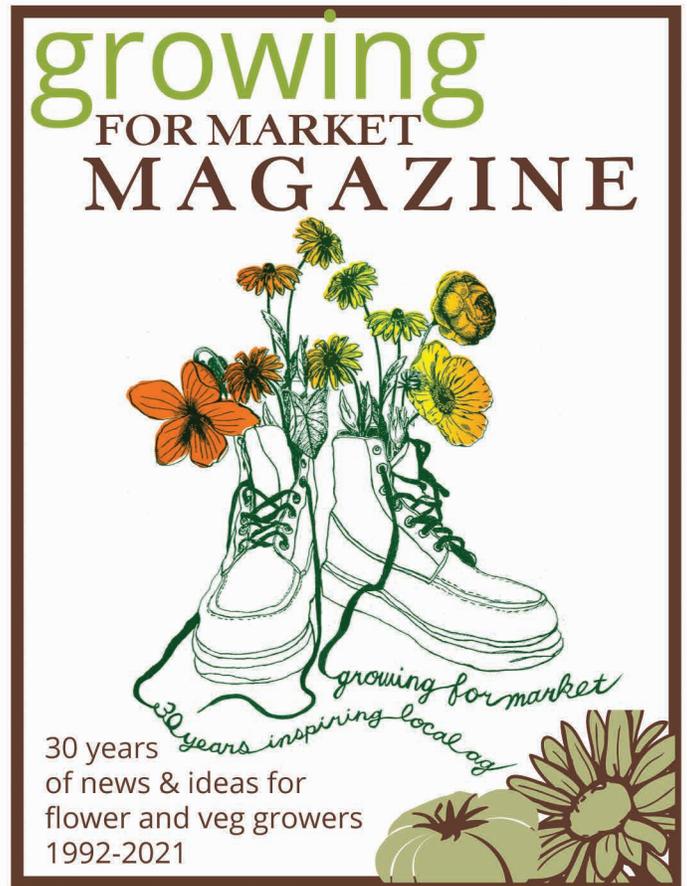
It scares me to close even for a few days because we pride ourselves on consistency at Butterbee. We deliver on the same days and at the same times all year long. I don't want to mess with our reputation for reliability.

But this year, just to test it out, we did close for just three days during 4th of July week. People could get flowers Monday and Tuesday, but not Wednesday through Friday. We still worked on the farm, but without harvesting and delivery we got a lot done. In the future, it would be nice to go on vacation myself, and let the team at home focus on farm work without the distraction of florist sales.

Next year, I'd like to plan a longer break—the whole 4th of July week! I'm tossing around the idea of creating a little calendar to email our florists that shows when we'll be off in the summer, as well as when product will start in the spring and end in the fall. So long as I communicate well and manage their expectations, I should be able to take some vacation in the summer.

**Ellen: That time we pivoted to a new business model overnight.**

Back in March, the governor of Maryland, like so many across the country, shut down non-essential businesses as COVID cases were rising. In a matter of hours, we launched a new product called the LoCoFlo Bucket. It is a DIY bucket of local flowers a customer could arrange at home. It was



accompanied by a short weekly video that showed the customer how to make a small arrangement with the flowers in their bucket that week. This was not a revolutionary concept by any means. But it was new for us and it was an offering that was right for the time and circumstance. Everyone was stuck at home and stressed and wanted a fun, beautiful distraction. As 90% of our work disappeared (weddings, in-person retail, in-person classes) we were quickly able to establish a bucket delivery business overnight that continues today. This made it possible for our team to keep working, and allows us to continue buying local flowers from our growers. Our other business will come back eventually, but for now, the Bucket continues to keep us afloat.



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### Roadside Renegades

Jodi Helmer



*The Flower Lady and Gent ignored all the rules and turned a roadside stand into a fixture in their Ontario community.*



Paul Mailloux and Susan Glasgow

It all started with sunflowers.

Paul Mailloux remembers seeing a florist near his London, Ontario home selling sunflowers for \$10 a stem and thinking, “I could grow those.”

Mailloux was an avid gardener who loved tending to annuals and perennials at home. Both he and his wife, Suzanne Glasgow, grew up on vegetable farms, and starting a farm of their own felt like a natural progression. In 1994, the couple rented two acres of land and started The Flower Lady and Gent.

Back then, there were just a handful of varieties of sunflowers and the couple planted all of them, ignoring expert advice about growing on speculation.

When the sunflowers—and a few other varieties of cut flowers growing on the fledgling farm—started blooming, Mailloux remembers thinking, “I guess we need to figure out where to sell them.”

The couple purchased a buggy from a local Mennonite village and set up a flower cart at a busy intersection in London. Their plan: Fill maple syrup buckets with colorful cut flowers and let customers make their own bouquets.

“It took us about one hour to figure out it wasn’t going to work,” Mailloux recalls. “People had no idea how to make a bouquets; within an hour, we started making bouquets for them.”

Assuming customers would make their own bouquets was just one of the mistakes Mailloux and Glasgow made in the early days of their cut flower farming adventures: They failed to plant any fillers, grew two acres of flowers with no cooler for preservation; and hauled buckets of fresh flowers from the farm to the roadside stand in their cars, sometimes making three trips to stock their flower cart.

“There was a learning curve,” Mailloux says.

Despite the challenges, which included balancing farming with off-farm jobs, the couple fell in love with flower farming and their customers were drawn to their bouquets.

“People like fresh, local, and flowers,” Glasgow says. “Our bouquets are identifiable by the color, the vibrancy and the unique flowers. There’s a lot of thought and creativity in the way they’re put together.”

#### Growing Knowledge

Not long after they started The Flower Lady and Gent, Mailloux learned about the Association of Specialty Cut Flower Growers and attended his first conference in Baltimore in 1994.

The annual conferences became a tradition, and the couple has made countless invaluable connections through the Association.

“When we started we were the only ones in Ontario [growing cut flowers]; it wasn’t cool to do it back then like it is now,” he says. “It was neat to go to the conference and talk to people who were doing what we were doing. I got hooked right off the bat.”

Even after 23 years of growing cut flowers, Mailloux still loves attending ASCFG Growers’ Schools, explaining, “I learn something in every session; I don’t think there’s an end point to the knowledge part [of farming].” He also regularly flips through old issues of the *The Cut Flower Quarterly* as a reminder of best practices.

Their ever-expanding knowledge, coupled with a passion for growing, allowed Mailloux and Glasgow to significantly expand The Flower Lady and Gent. They purchased a farm in 2000, added a greenhouse, expanded production to eight acres, and even built their first cooler.

Sunflowers remained a staple on the farm but, with more acreage, the number of varieties increased, too. The Flower Lady and Gent currently produces up to 100 different varieties of perennials and 40

different varieties of annuals. Glasgow highlights zinnias, snapdragons, and celosia as some of her favorites—and the brighter, the better.

After the first growing season, the couple also planted a wide selection of fillers.

Mailloux is always on the lookout for new varieties to try (or try again), adding, “It’s always important to have something new—a new crop, a new variety—it could be something you grew eight years ago and decided to grow again; the industry thrives on those new things.”

The Flower Lady and Gent became a staple in the community. Regular customers stopped in for “just because” bouquets and ordered arrangements for new babies, funerals, and other special occasions. Mailloux and Glasgow also expanded their business to include weddings.

The couple continued setting up their pop-up flower shop at the intersection until 2015.

Now, they sell from their farm. Mailloux admits that leaving their location at a busy intersection affected sales but inviting customers to the farm provided unexpected benefits.

“We lost some customers who don’t want to drive out to the farm but the ones we kept are true flower lovers,” he says. “Even though our sales are down, our expenses are also down. It made us more efficient.”

Inviting customers to the farm—even when cars pull up after hours or while the couple are in the middle of field work—offers a glimpse

of what goes into producing each colorful stem.

“People love to see the farm; they all take pictures,” Glasgow says. “We’ve met a ton of great people; some of them have been our customers for 26 years and they are still coming.”

Both have retired from their off-farm jobs (Glasgow retired from teaching in 2017 and Mailloux retired from his job as a civil servant this spring) but their desire to continue farming remains strong.

“For every 10 jobs that needed to get done, only 6.5 of them got done while I was working. I’m hoping to increase that to at least seven now that I’m retired,” he quips. “I’ll have more time to stand around and talk to our customers. I don’t want to get bigger, I want to get better.”



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# 2020 ASCFG Seed Trial Report

John Dole, Nathan Jahnke, and Judy Laushman

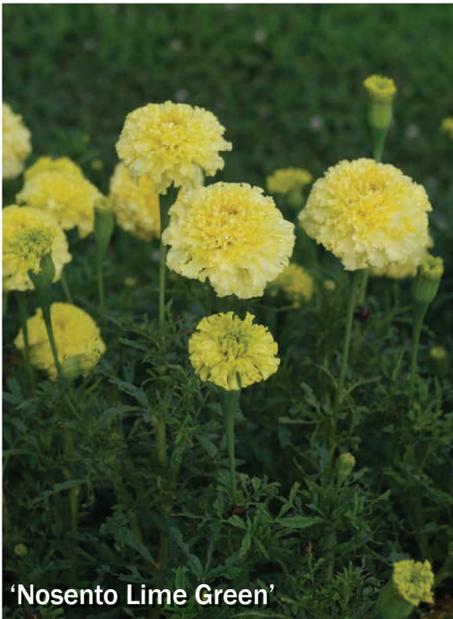
Photo Nathan Jahnke

This is an anniversary year...of what, you ask? Marigolds. It was ten years ago that marigolds first appeared in the ASCFG Trials. At the time, they were met with a great deal of skepticism. While the marigold has been a major cut flower in some parts of the world, it had been thought of primarily as a bedding plant here in the United States and Canada. Their fragrance—some may say “odor”—was not loved by all. But ten years later it’s clear that cut flower marigolds are here to stay. Their productivity, reliability, and bright colors have made them an important product on many farms. Cut flower marigolds have long been part of the cultures of India, Pakistan, and Mexico, and have become increasingly popular with American and Canadian consumers as well.

This year we had nine **marigolds** in the trials (see great photos of all nine from Rachel Lord and Nathan Jahnke), including one billed as lime green with no odor. The quest for an odorless marigold has been long running, but maybe not on the order of the 50+ year quest by Burpee to find a white marigold. ‘**Nosento Lime Green**’ fit the bill with very little smell to the foliage. By the way, if you are wondering about the unusual name, say it slowly: “No sent Oh!” Not sure if there was a correlation but a number of the trialers noticed that Japanese beetles loved this cultivar. Here at NC State ‘Nosento Lime Green’ was the beetles’ favorite by far. While the billing of the cultivar as odorless was accurate, the color was not quite as advertised. Flowers started out a greenish yellow but quickly opened to a pale yellow. The color was unique in the trials, and many trialers liked it, but it was not lime green.



Photo Rachel Lord



'Nosento Lime Green'

Photo John Dole

The top performing marigold in this year's trial was **'Xochi Orange'**, with its vivid orange flowers, long, strong stems that averaged 22 inches (longest of all the marigolds in the trial), and high productivity of close to 10 stems per plant. One trialer said it most directly: "KEEPER!" Several noted that **'Xochi Orange'** was the tallest marigold in the trials, with one simply stating that it had "ridiculously tall plants". It appears that the days of trying to make short bedding cultivars work for cut flower production are over!



'Xochi Orange'

Photo Rachael Ackerman

If you are considering growing marigolds or are looking for a new cultivar or two, check out the other seven entries. All did well, although **'Bindi Gold'** and **'Royal Bali Gold'** tended to be too short. On the other hand, **'Bengal Orange'** was among the tallest at NC State, and for many others as well. It was special for at least one trialer: "This was my favorite cultivar! Tall sturdy stems. Nice orange color. Very prolific. I cut so many flowers from this plant. It also dried nicely too! I can't say enough good things about this one."

Each year we marvel at the photographs of flowering kale with large, lush heads adorned with white, pink, green, and sometimes red. The production images show tall, uniform, beautiful plants. Others show flowering kale as the striking focal point of a stunning arrangement. Alas, each year our hopes are dashed here in NC State: we germinate the seed, grow the plants, transplant them to the field, and then, watch them either die of heat exhaustion or be eaten by any of one of the many pests that love kale.

But ornamental kale is a prime example of why we do trials. While we can't grow a decent crop in our Zone 8a climate, growers in other areas can and they certainly loved the cultivar in this year's trials. **'Crane Ruffle Bicolor'** was the top-ranked cultivar in the trial. The ruffled, creamy white leaves were a "unique novelty to add to the selection of brassicas now available". The heads were a nice size, large enough to stand out but not so big as to limit their use. Stem length ranged from 12 to 30 inches with an average of 22 inches. Ornamental kale usually has a great vase life and this one is no different with trialers reporting an average of 12 days. Unfortunately, not all were enamored of it. All the top scores came from those in Zones 4 and 5. Certainly, we think there was some self selection going on; those who traditionally can't grow ornamental kale well in the spring may have passed on evaluating it.



'Jolly III Pink'

Photo Misty Moman

As more and more growers have learned to produce the temperamental **lisianthus**, cultivars have been doing better in the trials. This year **'Jolly III Pink'** was one of the highest scoring cuts in the trials for its long, sturdy stems topped with fully double flowers. Stem length averaged 21 inches, with growers getting anywhere from 12- to 36-inch stems (check out the stems that Misty Moman grew). Folks harvested about 3 stems per plant. As with most lisis, vase life was great, with flowers lasting over two weeks. One trialer wrote "Totally obsessed with this variety—perfect for wearable work". The other two, **'Echo Purple'** and **'Echo Pure White Improved'**, also did well (see the photo from Joy Longfellow); **'Echo Purple'** was especially beautiful with its dark velvety purple flowers that open from striking buds, striped with purple and lavender (check out photos of the buds). Both cultivars produced about 2 flowers per plant that averaged about 19 inches long.



**'Echo Purple'**

Photo John Dole



**'Echo Pure White Improved'**

Photo Joy Longfellow

Sunflowers generally do well in the trials and this year was no different with both **'Marley'** and **'Ziggy'** receiving high scores. Fast to flower, stems lengths averaged about three feet, and while most trialers treated them as one cut and done, a few harvested multiple stems. Here at NC State we got a good return crop from **'Marley'** of stems that were perfect for bouquets. The colors of **'Marley'** and **'Ziggy'** were very different from the typical orange sunflowers. **'Marley'** was described as having an "eggplant center fading to a cream" or "plum-red ray petals which lighten to lemon yellow at the tips of the petals". **'Ziggy'** was similar but darker with more red tones, although as with most bicolored sunflowers, there was quite a bit of variability in the colors. One trialer noted that the colors allowed the flowers to be used all season long, and another said "I like the bicolors. In a design, they are much more versatile". One surprise from the trialers' comments—no problems were listed for **'Marley'** and only one for **'Ziggy'**; not something we see very often!



**'Ziggy'**

Photo Jolea Gress



**'Marley'**

Photo Barbara Lamborne

Interestingly, the three nigellas, **'African Bride'**, **'Delft Blue'**, and **'Midnight Dark Blue'** (evaluated as a mix of the three cultivars) scored well on the trials, also likely due to the fact that nigella does well for only some growers and they evaluated them. Regardless, nigella is a great cut to try with its charming flowers and striking pods. Trialers especially loved the colors of **'Delft Blue'** and **'Midnight Dark Blue'** flowers, with one referring to **'Midnight Dark Blue'** as "stunning". The pods were mentioned by many as well. Some trialers harvested the entire plant while others harvested individual stems, resulting in an average of 4 stems per plant that averaged 17.5 inches long. Divisions Cut Flower Farm reported plant heights of 24 to 30 inches for **'African Bride'**, 18 to 24 for **'Delft Blue'**, and 28 to 32 inches for **'Midnight Dark Blue'**, when sown in fall under 4-foot poly tunnels. We had problems getting the nigellas to germinate, as did others, yet some had "great germination" with direct seeding.

One of the best things about reading the trial results is seeing how differently some cultivars perform for all of us. Of the three **celosias** here at NC State, **'Red Ace'** was very tall, with stems over 3 feet (see Jamie Sammons' photo of **'Red Ace'** next to her dog!), and **'Act Rima'** and **'Cristi Purple'** stems were a little over a foot tall. While a couple other trialers had results similar to ours, the majority had long or relatively long stems for all three, averaging 23 inches for **'Act Rima'**, 22 for **'Cristi Purple'**, and 26 for **'Red Ace'**. One reason could be photoperiod; celosia tends to be a facultative short day plant. It is possible that **'Act Rima'** and **'Cristi Purple'** are more sensitive to short day photoperiods than **'Red Ace'**. We started our plants in late winter when days were still fairly short and others may have started them later under longer days. However, there was a lot more agreement on other traits: all three were strongly single stemmed, although some side shoots were produced for **'Act Rima'**, with large, beautiful heads in rich colors.



Photo Jamie Sammons

23-24 inches, and both produced a good second and even third harvest for a number of trialers, including here at NC State. One trialer wrote that ‘Chantilly Deep Orange’ flowers “opened red/magenta and faded to a dark orange/brick red with purple throat”. Several reported that ‘Purple Peloric’ flowers were vibrant and fantastic!

The ASCFG seed trials are generally limited to annuals, but occasionally fast-flowering perennials, such as **verbena ‘Purple Haze’**, also do well. ‘Purple Haze’ is hardy in Zones 7 to 11 and hard to be beat for sheer productivity. The reported average was about 15 stems/plant, but some harvested up to fifty. Here in North Carolina they were so productive we got tired of harvesting them. Stems were a respectable 26 inches long. The downside was the small heads that tended to drop florets. This is not a species for straight bunches as it takes a long time to make a substantial bunch, but it works well for bouquets.



Photo Joy Longfellow

**Campanula** is another species for which planting time can affect performance. Generally, it also does best in tunnels or greenhouses with a period of cool temperatures and short days to get the plants up to size. Then, flowering is initiated by long days. Thus, this species does best when started early enough to bulk the plants up, unless it is grown where the photoperiod can be controlled. Plants averaged 18 to 19 inches tall with around three stems per plant. Here at NC State, ‘**Champion II Deep Blue**’ was the first to flower, followed by ‘**Rose**’, then ‘**Lilac**’.

For a couple fun fillers, check out **nicotiana ‘Bronze Queen’** and **lepidium ‘Green Dragon’**. ‘Bronze Queen’ produces open sprays of tubular brown flowers. Beauty is in the eye of the beholder: some loved the color and others not so much. Indeed, one trialer wrote “I like the color, definitely a great muddy tone to play with burgundy and fall colors”. Never before have we seen the word “muddy” used with “I like” and “great”—one of the many reasons specialty cut growers are the most creative! The productive plants yielded around 10 stems that averaged a little

over 20 inches long. Vase life was on the short side, and the leaves and stems are sticky, making it a bit hard to strip the lower foliage.

‘Green Dragon’ is grown for its short spikes of small green flowers and seeds. This versatile filler can be used fresh or dried. Many commented about it being too short, with stems only about 14 inches long. It was short here at NC State as well—this one may benefit from close spacing to get more height. ‘Green Dragon’ found its niche, however, as one trialer commented that “It gave my bouquets just the perfect touch of texture.” and another said “love it for corsage and personal event work bouquets”.

We tested two **snapdragons** this year, both of which were open-faced types. ‘**Chantilly Deep Orange**’ is part of a series, and ‘**Purple Peloric Expt.**’ was an experimental variety. As many of you know, botanists love to name plants, and in this case “peloric” refers to the mutation in snapdragons that causes normally asymmetric flower to become radially symmetric, or open face, as we horticulturists call them. Regardless of their names, both scored well for their attractive colors. Stems averaged about



'Purple Haze'

Photo James Martin



'Expt Purple'

Photo Jamie Sammons



Photo Jamie Sammons

In fact, one trialer commented that it was a “vibrant purple that lights up the bouquets”. They went on to say that “Verbena was my gateway flower when I first starting in design school.” How cool is that? ‘Purple Haze’ is billed as being 20% shorter than the original species, which seemed to be the case in our trials. Another trait we and others noticed is that the stems are scabrous and can scratch the skin. Wear gloves when harvesting this one.

**Zinnias** are the most commonly-grown cut flower in the United States and Canada. Consequently, we had high hopes for two experimental varieties: ‘Orange’ and ‘Purple’. They started promisingly, with disease-free foliage; uniform, fully double flowers; and stunning (“saturated”) orange and purple colors (is the breeder a Clemson fan?). Alas, the plants were way too short for most uses—many trialers described them as great bedding plants. Ouch, not what you want to hear in a cut flower trial! At NC State we were able to get some height on the plants late in the season after they were overshadowed by the marigolds, which caused them to stretch. We can hope breeders continue to work on this, one as one trialer said: “Get it taller and it’s a star!” Not to be deterred, Jamie Sammons dried the flowers and noted that they held their colors very well (see her photos). Talk about “making lemonade out of lemons”; the folks in our industry are always resourceful!

Based on the combined ratings score (market appreciation + repeat again + ease of cultivation), the top ten cultivars will be nominated for the ASCFG Cut Flower of the Year: ‘Jolly III Pink’ lisianthus; ‘African Bride’, ‘Delft Blue’, and ‘Midnight Dark Blue’ Mix nigella; ‘Crane Ruffle Bicolor’ ornamental kale, and ‘Marley’ and ‘Ziggy’ sunflowers.

**Interpreting the trial results:** The numbers reported are averages of all the respondents, and many factors will affect the success of any cultivar. Our participants grow and harvest 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 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 18 evaluators who returned their trial reports! We very much appreciate the time it takes to do the trials. We want to especially thank **Jason Funkhouser** from Divisions Cut Flower Farm for being the first trialer to return his evaluations! Thank you to the seed companies for providing the plant materials. 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.

**Photos:** This year a number of our trialers sent photos, including **Rachael Ackerman, Jolea Gress, Morgan Hopkins, Barbara Lamborne, Rachel Lord, Joy Longfellow, James Martin, Andrew Moman, and Jamie Sammons. Some were just spectacular, and we included as many as possible in this report. Thank you, thank you!**

## Participating Trialers

**Rachael Ackerman**  
Blue Sky Farm  
Lakeville, MN  
Zone 4

**Jolea Gress**  
Green Earth Growers  
Prior Lake, MN  
Zone 4

**Barb Jewell**  
Island Meadow Farms  
York, PEI  
Zone 5b

**Andrew and Misty Moman**  
Twin Rose Farm  
Murfreesboro, TN  
Zone 7

**Mackenze Burkhart**  
**Michelle Elston**  
Roots Cut Flower Farm  
Carlisle, PA  
Zone 6b

**Drew Groezinger**  
Clara Joyce Flowers  
Stockton, IL  
Zone 5

**Barbara Lamborne**  
Greenstone Fields  
Purcellville, VA  
Zone 7a

**Lacey Russell**  
Alice Creek Specialty  
Cut Flowers  
Whitehouse, TX  
Zone 8b

**Connie Dam-Byl**  
William Dam Seeds  
Dundas, ON  
Zone 5

**Janis Harris**  
Harris Flower Farm  
St. Thomas, ON  
Zone 6a

**Joy Longfellow**  
Johnny's Selected Seeds  
Fairfield, ME  
Zone 5a

**Jamie Sammons**  
Jayflora Designs  
Fonda, NY  
Zone 5

**Dave Delbo**  
Dave's Flowers  
Catawissa, PA  
Zone 6a

**Morgan Hopkins**  
Urban Buds: City  
Grown Flowers  
St. Louis, MO  
Zone 6b/7a

**Rachel Lord**  
Alaska Stems  
Homer, AK  
Zone 4/5

**Jason Funkhouser**  
Divisions Cut Flower Farm  
Darlington, WI  
Zone 5a

**Nathan Jahnke**  
**John Dole**  
NC State University  
Raleigh, NC  
Zone 7b

**Jim Martin**  
Compost in my Shoe  
Charleston, SC  
Zone 9a

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**Summary of Comments.** The number in the parenthesis is the number of trialers who made the same comment. Comments from different individuals are separated by a “;”. Note: many respondents did not make specific comments on each cultivar and in a few cases, comments have been shortened because of limited space.

**Brassica ‘Crane Ruffle Bicolor’**

(American Takii)

*Good Qualities:* Beautiful texture and color (5); Beautiful ruffle (2) unique novelty to add to the selection of brassicas now available; The head size is nice and stays a smaller size when spaced tightly, we have experienced that other ornamental cabbages can become too large; Long vase life—nice and bulky; Once the frost came, always a hit in the fall at the market; A big favorite with our customers; Tall vigorous plants, slightly taller than ‘Crane White’, ‘Crane Red’, creamy white, ruffled leaves contrast with dark green outer leaves, the ruffled leaves provide contrast and interest compared to the others in the Crane series.

*Problems:* Flops if support is too high—needs to be pinched; There were none; Some rosetting (?), with small whorls coming up the sides and some stems (~10%) bolting; Coloured later than some others (Feathers), susceptible to cabbage worm damage; The trial suffered from heat and drought during the

summer and was hit hard by aphids—evaluation and harvests were limited on this crop as a result.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:*

Chlorine tablets help with the smell.

*Comments:* This was a solid variety, we will likely grow it again; We grow ours in 6” spacing, we do have some moth pressure; Just was not worth growing, there was nothing other than the ruffle, which isn’t that phenomenal a trait to grow this, I also think the scale is too big, they always remind me of giant aliens getting ready to strike when the elongation occurs, sorry, give me one with smaller demeanor and some fantastic color changes in the foliage and I’m in; Outside, fall harvest; Needs staking and insecticides/netting for good outcome.

**Campanula ‘Champion II Deep Blue’** (Sakata Seed America)

*Good Qualities:* Beautiful deep blue color (5); Super loved! the stem length and colours were amazing! customers had never seen before as a cut; Uniform growing for tunnels; Uprturned bells are pleasing, lots of buds on each stem, good hoophouse item; Sometimes had an artificial grape-like fragrance that was pleasant; A lot of blooms per plant; Tall, sturdy vigorous plants, blooms are slightly smaller than ‘Champion Blue Improved’, a little more slender and delicate.

*Problems:* Stems are fragile and break easily; Grew some in hoophouse and some in field with no irrigation, dry hot summer, the field grown were very short, however, they had colour all season; Not overly impressed—not heat tolerant at all; Significantly shorter than the ‘Rose’ & ‘Lilac’, I always struggle with netting and straight stems with these campanulas, and this was the hardest to get marketable lengths from.

*Similar Cultivars:* ‘Champion Pro’; This cultivar is very similar to ‘Champion Blue Improved’, the color is identical, although ‘Champion II Deep Blue’ was earlier to bloom by about 5 days, had slightly more slender, delicate bells, and plants were slightly taller than

**Participating Companies**

**AmeriSeed**

Lompoc, California  
www.ameriseed.net

**BloomStudios**

West Chicago, Illinois  
www.bloomstudios.com/en-us

**East-West Seed**

Sacatepequez, Guatemala  
lat.eastwestseed.com

**Evanthia Seeds & Plants**

Monster, Netherlands  
www.evanthia.nl/en

**Fred C. Gloeckner & Company**

Harrison, New York  
www.fredgloeckner.com

**Sakata Seed America**

Morgan Hill, California  
www.sakata.com

**American Takii**

Salinas, California  
www.takii.com



‘Crane Ruffle Bicolor’

Photo Rachel Lord



Champion Series

Photo Nathan Jahnke

‘Champion Blue Improved’.

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

*Comments:* High tunnel; We had low germination in this planting, due to higher-than-intended temperatures during germination, only 3 plants were planted and evaluated; It was a nice color, but just too short, I also planted it late spring, I would definitely try it again and plant it 4 weeks earlier in the tunnel, no usable cuts were harvested.

### **Campanula ‘Champion II Lilac’**

(Sakata Seed America)

*Good Qualities:* Beautiful color (4), the color is slightly lighter lilac and with more pink tones compared to ‘Champion Lavender Improved’; The color was vibrant and soft at the same time; Super loved! the stem length and colours were amazing! customers had never seen before as a cut; Easy to germinate, no insect issues; Good uniform growing for tunnels; Very tall plants—the tallest in our trial at 35-38”, thick sturdy stems with large lilac bells, healthy plants; Both the lilac and rose were taller and straighter, with stronger stems.

*Problems:* Not overly impressed, not heat tolerant at all; Stems were fragile; Trouble netting and keeping straight enough for marketable stems.

*Similar Cultivars:* This entry is comparable to ‘Champion Lavender Improved’, but bloomed about 5 days earlier, on taller plants. ‘Champion II Lilac’ is also more pink-toned than ‘Champion Lavender Improved’. Both varieties are comparable in stem and bloom quality—both very good.

*Postharvest Recommendations:* Harvest when at least 2-3 blooms open. Holds well in cooler. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* Side shoots were definitely usable too; Watch for botrytis especially in cold, dark weather, plant where it will receive good air circulation, another year I would try some succession planting as a hoop house crop, wonder how an early

pinch would affect the numbers of stems and stem length, will experiment another year, would not recommend for field unless irrigated; Greenhouse grown, need support netting; They germinated nicely for us; Due to higher-than-planned temperatures during germination, only 4 plants germinated; High tunnel.

### **Campanula ‘Champion II Rose’**

(Sakata Seed America)

*Good Qualities:* Unique dusty rose color (3), a little darker compared to ‘Champion Pink Improved’; Super loved! the stem length and colours were amazing! customers had never seen before as a cut; Useful for bouquets and design work, upward-facing blooms, easy to germinate, no insect issues; Both the lilac and rose were taller and straighter, with stronger stems; Good uniform plants for tunnel growing; Plants are shorter and bells are wider compared to ‘Champion II Deep Blue’ and ‘Champion II Lilac’.

*Problems:* Not overly impressed—not heat tolerant at all; Trouble netting and keeping straight enough for marketable stems; Stems are fragile; The plants were a little shorter than the other two campanula entries, and were shorter in general compared to other varieties in our trial, however, because of germination issues we had a small sample size and it’s possible the height we saw was not representative.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* Cut with 2-3 blooms open, holds well in cooler. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* Side shoots were definitely usable too; Customers enjoyed these, all colours in the series were popular, I will try starting these earlier, grow in hoop house with ample ventilation, try pinching to encourage more stems, have been trying the Champion series for years, finally successful with this series for stem length; High tunnel; Greenhouse grown, need support netting; I really liked this variety of campanula, they were more uniform than other



‘Act Rima’

Photo Joy Longfellow

varieties of campanula we have grown, making for easier, faster harvest; They germinated nicely for us; I loved the rose color on this variety, even though it was just a few shades darker than the ‘Champion Pink Improved’, it stood out from the other pink varieties in trial.

### **Celosia ‘Act Rima’**

(Evanthia Seeds & Plants)

*Good Qualities:* Unique color (10), vibrant pink with hints of gold at edges; Has side shoots which make it useful as a continuous cut flower (3); We cut multi stems for bouquet use; Strong stems—dries well; Great head size that formed quickly, very uniform harvest; Good vase life; Nice plume shapes; Tall uniform plants with wide, full uniform combs, uniform stand and sturdy stems; Shape, very strong tall stem.

*Problems:* Head is very heavy (2); Needs netting; One and done plant, no side shoots; Not a clean smooth bloom, also not that it mattered with us, the height was inconsistent, 10 inches or more varied height; Single stem type, so the following stems are very lackluster; Not sure if this was because of the cultivar or because of some condition we put them through, but nearly

every stem of this was fasciated, this made them difficult to use in design and quite prone to bending and breaking, especially because of their large heads; Too many of the heads were too tiny to be usable, many had odd shapes, not at all consistent; We do not typically grow single-stem cockscomb; Slower heads did not form properly.

*Similar Cultivars:* Bombay; Similar to 'Neo Pink' or 'Neo Rose'.

*Postharvest Recommendations:* Would use some chlorine in the water to help keep water clean and avoid stem breakdown. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* I would definitely pinch this variety once established in the field to encourage multi stems, the large single head is not useful for our bouquet work and we would have very limited florist demand for large blooms, our summer weather was well suited to celosia production, not always the case; These were transplanted June 8 into an unheated tunnel with 6"x 6" spacing.

### **Celosia 'Cristi Purple'**

(Evanthia Seeds & Plants)

*Good Qualities:* Vibrant magenta color (11); Strong stems (2); Nice plume shapes; Attractive shape; Uniform heads; The bloom was pleasingly ruffled; Dries well; Very early to form flowers, nice stem length, heads did not break easily; Good vase life; Very uniform bloom time; Shape was fantastic! customers loved them!; Toughness, this was a beautiful flower; The combs have a rich velvety look which is attractive, most plants have a single-layered wavy comb, 4-6" long; Very early to bloom, good fan shape, uniform growth and plant habit.

*Problems:* Plants were short (3), we left half to see if it would get more height and it didn't; Didn't retain its color as well as others we grow; We typically do not grow cockscomb varieties where we will only get one stem per plant, perhaps this variety could have been pinched?; Needs netting; Did not love this plant, very heavy flimsy heads, heads broke



Photo Morgan Hopkins

most of the time, one and done cut; Stem could be thick, grew really large and heavy, I could have harvested earlier, but the thick stem seemed too large for the bloom; Single stem type, so the following stems are very lackluster; None; Most stems were fasciated, making them prone to breaking and difficult to use in arrangements; Some variation in bloom form and depth of folds on the comb; Plants are short compared to most other varieties in the trial (20-26") and stems are thinner and weaker compared to other varieties.

*Similar Cultivars:* Bombay (2); Chief; Neo; Not really.



Photo Morgan Hopkins

*Postharvest Recommendations:* The foliage comes off very easily, so if you are wanting to have foliage on your flower, be careful; Plain water. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* My favorite trial variety, definitely growing it next year; I love celosia so I am biased but this one is fantastic; We did not know this was a cockscomb variety when we planted it, so we did not net it, for the most part it stood on its own, which is impressive; There were no side shoots with this one, I did not end up with many plants, I lost some in the seedling tray.

### **Celosia 'Red Ace'**

(Evanthia Seeds & Plants)

*Good Qualities:* Unique dark red/dark terra cotta color (11); SUPER TALL! (4); Nice plume shapes; We did not net this because we did not know it was a cockscomb and it stood well on its own, this color is very "in" right now with bohemian weddings looking for rusty-orange colors; Sturdy stems, heads didn't seem to break like the other varieties; Pleasing shape, easy to grow; This one was not as heavy a bloom as 'Act Rima', a lot cleaner head, field grown without insect or disease issues; Strong stems, dries well; Early to form flowers; Good vase life; Uniform bloom time; The large fan shape; The size of the flower; Uniform combs, very uniform stand, thick, sturdy stems, combs are very uniform and deeply frilled—good quality blooms.

*Problems:* Many stems too short (2); One and done cut (2); The color was nice, however, we seeded it for midsummer harvest and it was a tough color to incorporate with our bright summer colors, we tried drying it but it ended up a brown; We do not typically grow cockscomb varieties that are single stem, it would be hard to justify the space; None; Many fasciated stems, making them prone to breakage and difficult to use in arrangements; My only hesitation with this variety is that the rusty red color can look a little dingy, more of an autumn tone than a high summer color—would

probably pair well with sunflowers later in the season if growing again.

*Similar Cultivars:* Chief; Don't know of one that has similar shape and that color.  
*Postharvest Recommendations:* Keep water clean and add small amount of chlorine, keep stems recut; Plain water; We cut celosia into water with chlorine tabs and do not hold it long in the cooler, this cultivar was fine being left on the plant until we harvested for market on Friday. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* My florists loved them, super tall stems, they were as long as our dog (see photo showing just that!); This one did not produce even one side shoot, would definitely recommend pinching to see if they would produce more stems instead of one large unusable one.



Photo Jamie Sammons

### **Delphinium 'Jenny's Pearl Blue'**

(American Takii)

*Good Qualities:* Beautiful truest dark blue I've ever seen (6). People raved about the color (3); The florists loved it! I would grow again just for its true blue color; The stems are great to use as soft filler in bouquets; Good vase life, interesting florets and branching; Striking, delicate 1-2" florets on branching stems give an airy, whimsical look to bouquets, because of the short stem length, probably best suited to design work.

*Problems:* Very short (3); Slow growing (2), especially compared to other delphiniums (Magic Fountain, etc.); Like 'Diamonds Blue', the branching can be an issue with number of usable stems (enough height) per plant; I transplanted some into my tunnels to overwinter,

maybe it will be taller as a second year plant?; Flops if support is too high; Failed to grow after transplant; Didn't have great germination luck with the seeds; Would consider growing again but main concern is the short stems and low vigor plants; Super short, but it's a first-year perennial, so will know better next year.

*Similar Cultivars:* 'Diamonds Blue'.

*Postharvest Recommendations:* None listed.

*Comments:* Our drought was not great for any of the delphiniums, however, 'Jenny's Pearl' had great vigor in germination and in the ground, hopefully it overwinters well for productive flowering next season; Again, I love this plant, it's just short; High tunnel, I'm hoping that the plants overwinter well and they can put out some stronger growth in their second year, we love delphiniums here under cover, and this color was fantastic!; Feel like we need to wait till next year to have a better opinion, just let them flower—they did flower all summer.

### **Delphinium 'Jenny's Pearl Pink'**

(American Takii)

*Good Qualities:* Beautiful pale pink blush color (7) that stayed pink even in summer heat; Glistened in the field, customers loved the color; Especially good for weddings, strong stems; Interesting floret and branching habit.

*Problems:* Too short (5); Unusable unless in a short centerpiece; Flops if support is too high, very slow growing; Failed to grow after transplant; Weak growth in its first year, insects loved it; Would consider growing again for the color but main concern is the short stems and low vigor plants; It's a first-year perennial, so will know better next year.

*Similar Cultivars:* 'Planet Light Pink'.

*Postharvest Recommendations:* None listed.

*Comments:* Perhaps try in a hoop house; Our drought was not great for any of the delphiniums, however, 'Jenny's Pearl' had great vigor in germination and in the ground, hopefully it overwinters well for productive flowering next season; Feel like we need to wait till next year to have a better opinion.



Photo Jamie Sammons

### **Dianthus Expt. Pink Magic**

(BloomStudios)

*Good Qualities:* Attractive mix of white, light pink, and dark pink florets (5); Blend of shades was easy use in mixed bouquets and designs (3); Variety is still producing after mild frost; Great germination, 2-5" wide spray-type blooms, the stand is highly uniform; Long vase life, Nice that it was a smaller head for a dianthus but I rarely saw all the flowers on it open at once, they seemed to age quickly, it kept flowering for quite a while, we eventually stopped harvesting it due to the fact we didn't really use it, but even ignored, it kept throwing up blooms; Good stem length, strong stems; They are pretty tough plants; Bloom timing was similar across the four colours in the series, good for a bedding plant; Nice long stems—great succession cuttings.

*Problems:* Too short for most uses (4), suitable for masons, but too short in comparison to other dianthus varieties; I don't love dianthus as a cut because it never seems to get tall enough for me, we transplanted some to overwinter in our tunnel to see if it will make a difference in height; Thin-stemmed, small flower heads; Plants typically produced 1-2 taller stalks with several shorter side

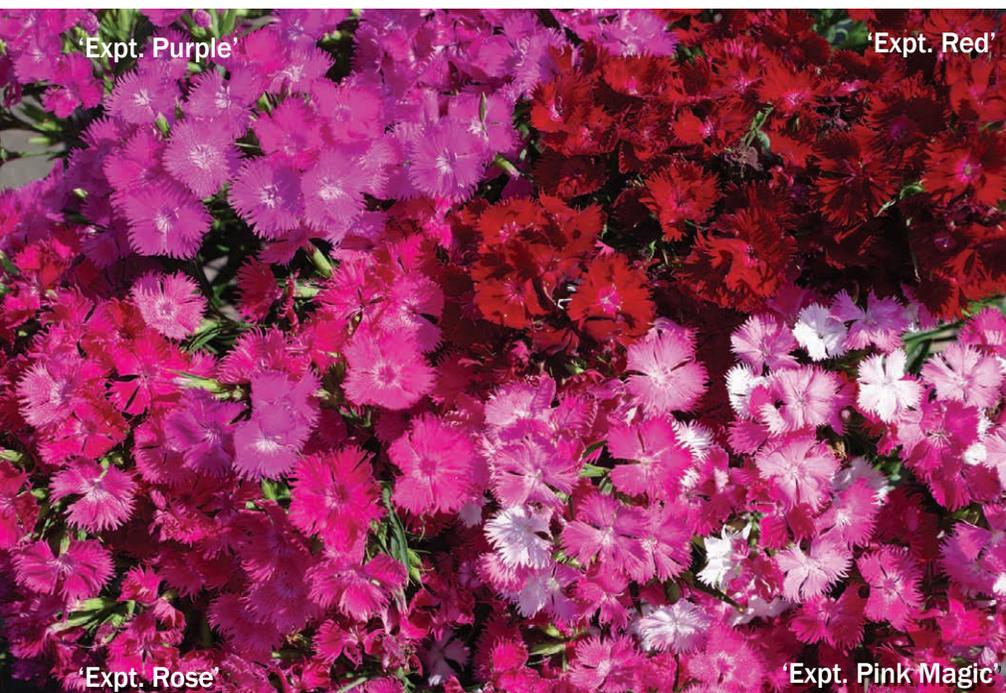


Photo John Dole

shoots. We found the side shoots were more challenging to clean and harvest and at typically between 8-12" were a little shorter than ideal; I noticed that I had to harvest right when they started to open, if I waited until more of the blooms were open, the first one was starting to brown; The flowers were small, it possibly would have been taller with irrigation, drought and high temps may have been a factor in performance, also the single bloom does not entice; Consistent water is a must—could perform better in a greenhouse setting.

*Similar Cultivars:* Dianthus 'Sweet Pink Magic'; Colors are comparable to the Sweet series, although bloom form is different, more of a spray type and less globe-shaped; Amazon series, 'Rose Magic'; 'Amazon Pink' dianthus.

*Postharvest Recommendations:* I noticed that I had to harvest right when they started to open, if I waited until more of the blooms were open, the first one was starting to brown; Plain water. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* The plant height may be shorter than normal due to our drought and lack of irrigation, spray type flower is easy to use as filler; Other dianthus per-

form much better in the field; Larger floret size than Sweet series, but otherwise unremarkable; We grew these varieties alongside the Sweet series and preferred the rounded, globe-shaped and more compact blooms of the Sweet series to these spray-type blooms, while the colors are bright and the stands are uniform, the Sweet series was a little easier overall to harvest; We planted these as a fall succession, they came on in September, they were a little more robust than the purple ones we did in the spring planting; These were sent a bit late for us in Texas to plant dianthus, I think that is why they were so short for me; These dianthus were affected with thrips early in the season, I noticed them doing poorly and treated them, they recovered but never grew tall enough to bother cutting.

### **Dianthus Expt. Purple** (BloomStudios)

*Good Qualities:* Dazzling colour! (4); Loved the cut and grow again nature of the plant (3); Long vase life (2); Bloom timing was similar across the four colours in the series, good for a bedding plant; Spray-type flower is great as filler; Plays well with other colors in design; Uniform blooms and sturdy stems, tallest of these experimental dianthus vari-

eties; Super tall, large number of flowers per stem, long bloom time; Nice that it was a smaller head for a dianthus but I rarely saw all the flowers on it open at once, they seemed to age quickly, it kept flowering for quite a while, we eventually stopped harvesting it due to the fact we didn't really use it but even ignored it kept throwing up blooms.

*Problems:* This one did not grow tall enough for me to harvest (5); The flowers were small., it possibly would have been taller with irrigation, drought and high temps may have been a factor in performance, also the single bloom does not entice; Short in comparison to other dianthus varieties; Very thin stemmed, small flower heads; Consistent water is a must—could perform better in a greenhouse setting—processing is slow due to the thick leaves; The neon purple color is not as versatile in mixed bouquets as the rose and red; Super saturated color, similar to many dianthus; I noticed that I had to harvest right when they started to open, if I waited till more of the blooms were open, the first one was starting to brown.

*Similar Cultivars:* Colors are comparable to the Sweet series, although bloom form is different—more of a spray type and less globe-shaped; All the EXP Dianthus did the same for us.

*Postharvest Recommendations:* Water; I noticed that I had to harvest right when they started to open. If I waited till more of the blooms were open, the first one was starting to brown. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* These dianthus were affected with thrips early in the season. I noticed them doing poorly and treated them, they recovered but never grew tall enough to bother cutting; The plant height may be shorter than normal due to our drought and lack of irrigation; Individual flowers turned brown quickly in the field before other flowers opened; Larger floret size, but smaller overall head size than Sweet series; We grew these varieties alongside the Sweet series and preferred the rounded, globe-shaped and more compact blooms

of the Sweet series to these spray-type blooms, while the colors are bright and the stands are uniform, the Sweet series was a little easier overall to harvest; All the dianthus in the trial were grown in a high tunnel, had a long bloom time, which is awesome, also very long vase life; We planted these in the spring, they did seem to get a little taller after the first few blooms, while they got taller the flower heads seem to get a little smaller.

### **Dianthus Expt. Red**

(BloomStudios)

*Good Qualities:* I love the velvety deep red color (7); Bloom timing was similar across the four colours in the series, good for a bedding plant; Easy to use as a colourful filler, produces blooms all summer long, and into fall; Straight stems; Nice long stems, great succession cuttings; Healthy, uniform plants and uniform blooms; Long vase life; Nice that it was a smaller head for a dianthus but I rarely saw all the flowers on it open at once, they seemed to age quickly, it kept flowering for quite a while, we eventually stopped harvesting it due to the fact we didn't really use it but even ignored it kept throwing up blooms; I loved it—slightly shorter than the other dianthus; Open flower, it is a little more airy.

*Problems:* Too short for bouquets (4); Shorter in comparison to other dianthus varieties (3); The flowers were small, it possibly would have been taller with irrigation, drought and high temps may have been a factor in performance, also the single bloom does not entice; It can be hard to incorporate in with other colors but the red definitely has its place, I personally loved the color but others didn't care for it; Thin-stemmed, small flower heads, individual florets turn brown quickly before other florets open; Consistent water is a must—could perform better in a greenhouse setting—processing is slow due to the thick leaves; I noticed that I had to harvest right when they started to open, if I waited till more of the blooms were open, the first one was starting to brown; When are they going to breed for some-



'Expt. Red'

Photo Rachel Lord

thing more than what is already out there colorwise in the marketplace?

*Similar Cultivars:* Colors are comparable to the Sweet series, although bloom form is different—more of a spray type and less globe-shaped; All the EXP Dianthus did the same for us.

*Postharvest Recommendations:* I noticed that I had to harvest right when they started to open, if I waited till more of the blooms were open, the first one was starting to brown. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* These dianthus were affected with thrips early in the season, I noticed them doing poorly and treated them, they recovered but never grew tall enough to bother cutting; The plant height may be shorter than normal due to our drought and lack of irrigation; Harvested very few stems, larger floret size, but smaller overall head size than Sweet series, otherwise unremarkable; We grew these varieties alongside the Sweet series and preferred the rounded, globe-shaped and more compact blooms of the Sweet series to these spray-type blooms, while the colors are bright and the stands are uniform, the Sweet series was a little easier overall to harvest; We planted these in the fall, we don't grow a lot of red flowers so that was nice for a change; Retail customers and florists really liked the color, the stems were

way too short for me to use it more than a few times, I think if I plant in the fall here in Texas it would have been taller; Amazon still has them all beat.

### **Dianthus Expt. Rose**

(BloomStudios)

*Good Qualities:* Bright cherry-pink color, very vibrant (5); Bloom timing was similar across the four colours in the series, good for a bedding plant; Spray-type is easy to use, vigorous plant growth; Kept re-blooming all season, a better dianthus variety but I am not in love with dianthus due to their shortness, first cuts as always the tallest but not quite tall enough for bouquets, fine for centerpieces; Great germination; Nice long stems, great succession cuttings; Blooms on sturdy stems, uniform blooms and stand; Long vase life; Nice that it was a smaller head for a dianthus but I rarely saw all the flowers on it open at once, they seemed to age quickly, it kept flowering for quite a while, we eventually stopped harvesting it due to the fact we didn't really use it but even ignored it kept throwing up blooms; It is more open than Amazon cultivars which I actually like, it isn't such a mass of color, a little more translucent in arrangement work; I really liked the fringed edges.



'Expt Rose'

Photo Morgan Hopkins

*Problems:* Too short for most uses (6); The flowers were small, it possibly would have been taller with irrigation, drought and high temps may have been a factor in performance, also, the single bloom does not entice; Thin stemmed, small flower heads; Consistent water is a must, could perform better in a greenhouse setting, processing is slow due to the thick leaves; I noticed that I had to harvest right when they started to open, if I waited till more of the blooms were open, the first one was starting to brown; Like many dianthus, the color is a little too saturated.

*Similar Cultivars:* Colors are comparable to the Sweet series, although bloom form is different—more of a spray type and less globe-shaped; All the EXP Dianthus did the same for us; Amazon. *Postharvest Recommendations:* Plain water; I noticed that I had to harvest right when they started to open. If I waited till more of the blooms were open the first one was starting to brown. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* These dianthus were affected with thrips early in the season, I noticed them doing poorly and treated them, they recovered but never grew tall enough to bother cutting; The plant height may be shorter than normal due to our drought and lack of irrigation, all of the EXP Dianthus were quick to bloom from May seeding and end June transplant: first buds end July; Other dianthus perform much better in the field; Larger floret size, but smaller overall head size than Sweet series, otherwise unremarkable; We grew these varieties alongside the Sweet series and preferred the rounded, globe-shape and more compact blooms of the Sweet series to these spray-type blooms, while the colors are bright and the stands are uniform, the Sweet series was a little easier overall to harvest; We planted these in the spring, started shorter than got taller, most likely won't grow any of the EXP ones again.



**'Green Dragon'**  
Photo Nathan Jahnke

### **Lepidium 'Green Dragon'**

(Fred C. Gloeckner)

*Good Qualities:* Love this dainty cress, it gave my bouquets just the perfect touch of texture, dries green, and I can't wait to use it in wreaths, lasts a super long time; Attractive in bouquets and design work, held up well out of water when mature, used in wedding bouquets, useful green, dries really well, good for wreaths, crowns, dried bouquets, shorter side shoots useful in table centres, when mature and before seed drop the stems take on a pleasing rosy glow; Fun texture; We went crazy for it and so did our florist customers; Uniform growth, love the tiny little seed heads versus the regular pennycress.

*Problems:* Short, but could be due to when I planted it; Requires adequate moisture for stem length, would suggest succession sowing to ensure supply; Does not withstand heat—bolts very quickly; It didn't germ very well for us, we got just a handful.

*Similar Cultivars:* 'Emerald Beads', I would consider 'Green Dragon' an improved cultivar; Native pennycress.

*Postharvest Recommendations:* Make sure it is mature before cutting.

*Comments:* I have grown a similar variety, 'Emerald Beads', for several seasons with mixed results, with 'Emerald Beads' short stems can be expected early in the season, I feel this could be overcome with irrigation, hoophouse

I would expect to yield taller stems, was pleased with the stem length from 'Green Dragon', field grown no irrigation, we are cutting it now after several frosts and 0C temp, field grown Oct 21, frost hardy late season, valuable green, recommended, expect some self-seeding; Poor germination—unable to evaluate; Had never used pennycress before as a cut because it is a "weed" for us, this is much better than our native pennycress; Love it for corsage and personal event work bouquets, etc., great dried also; Short, but might benefit from closer spacing to get better stem length.

### **Lisianthus 'Echo Pure White Imp.'**

(Sakata Seed America)

*Good Qualities:* Crisp white colour (6); Earlier blooming; Good germination, customers love all lisi; Nice height; Huge, full, semi-double heads, awesome stems; Early to bloom; Reliable, uniform bloom time, good stem length even after being started and planted late and outside, nice top-blooming cultivar, centers don't detract from the rest of the bloom by being too dark or too yellow or too green like some other varieties can; 2-4" wide blooms on sturdy stems, uniform, healthy plants, good quality blooms—a strong white variety.

*Problems:* None; The bloom is large and didn't hold up well in the field, hoop-house was better, however, it did not appreciate the condensation drip from hoop roof, I was late sowing these and feel there would be a much better result from an earlier (Feb.) sowing, did not get as tall as 'Echo Champagne', even with pinching it did not offer many stems; Make them grow faster (hahaha); Flops if support is too high; Not as vigorous as other types in our trial, blooms not as full as other doubles in our trial; Not as resistant to rain damage (brown and melty petals) as our other field-grown standard cultivars like 'ABC White' and 'Arena White'.

*Similar Cultivars:* 'Borealis White'.

*Postharvest Recommendations:* Harvest when at least 2 blooms are open; Plain water.

*Comments:* Dry summer probably shortened the stem length; The ‘Echo White’ did not perform well in the field; We grow our lisianthus in a greenhouse, nice height, pure white color, designers loved for weddings; This trial was seeded a little later than ideal for a Group I—transplanted to the tunnel 6/25/20, so plants were potentially shorter in this planting than if they had been seeded and transplanted earlier in the season.

### **Lisianthus ‘Echo Purple’**

(Sakata Seed America)

*Good Qualities:* Dark velvety colour (4); Early blooming; Huge, full, semi-double heads, awesome stems; Loved this lisi, good stem length despite being started/planted late, and field grown, hard to “wow” me with yet another purple lisianthus but this one does stand out, flowers are a deep, dark purple that stands out among the more standard purple lisianthus, buds have interesting dark purple striping on them, a fun additional visual element in bouquets and wearable designs; Darkest blue variety in trial, the buds are striking—striated with purple and lavender, overall a very attractive variety that stood out for the dark, velvety color.

*Problems:* None; Less than double flowers, compared to the other doubles in trial, stems were falling over without support; The purple colour showed up blemishes on the blossom, typical of all dark-coloured lisi especially later in the season; Flops if support is too high; The Echo series is a “softer” lisianthus that must be handled, and specially packed, delicately, petals bruise very easily if sleeved or packed too tightly in a bucket; They seem to blow open a little quicker than others we grow.

*Similar Cultivars:* This variety was grown alongside ‘ABC 2 Purple’ and ‘ABC 2 Blue’, and while bloom time was comparable, the dark blue of the ‘Echo Purple’ stood out as darker, compared to both ‘ABC 2 Purple’ and ‘ABC 2 Blue’.

*Postharvest Recommendations:* Plain water. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*



**Echo Series**

Photo Morgan Hopkins

*Comments:* Dry summer probably shortened stem length; Would recommend starting seed in February and pinching, plant for an early to mid-season bloom to avoid blemishes caused by insects and condensation; We grow our lisianthus in a greenhouse, nice height.

### **Lisianthus ‘Jolly Type III Pink’**

(American Takii)

*Good Qualities:* Soft pink color (7) that is very popular now; Sturdy stem (5); Great vase life (2); Loved that it came on a little after our Champions and Corelli, nice height; Very vigorous growth, kept its pink colour even in the heat, very double flowers; Beautiful rose-like blooms; Hard not to love a lisianthus, had lots of blooms per stem, bloom heads were smaller but a nice size; This lisi did well for us, it was late and planted in the hoop house, grew tall and had a nice growth habit; Amazing stems and bud count; Totally obsessed with this variety, tall, VERY STRONG stems despite being started/planted late, and field grown, smaller, rose-shaped blooms perfect for wearable work, not as small as Doublini, very hardy blooms that can withstand some abuse without bruising; Petals are scalloped, giving a delicate, lightly ruffled look to the multi-layered blooms.

*Problems:* None; Did not have a lot of plants, lost some seedlings in production; Flops if support is too high; Not knowing about it sooner/not being able to find other colors!

*Similar Cultivars:* ‘Corelli Pink’; The color and timing are comparable to ‘ABC 3 Rose’, but the bloom form is different, ‘Jolly Type III’ has shorter, more scalloped blooms.

*Postharvest Recommendations:* Harvest when at least 2 blooms are open; Plain water.

*Comments:* This was one of our favorite flowers out of all the flowers grown on



**‘Jolly Type III Pink’**

Photo Jolea Gress



Photo Jamie Sammons

the farm this year; This cultivar stood out for vigor in a trial of 22 varieties; Dry summer probably shortened stem length; a nice pink, was pleased with the stem length and colour; This gem made all those marigolds worth it!

**Marigolds—All Cultivars.** Four trialers made comments on all or almost all of the cultivars so we are combining them here, rather than repeating for all cultivars. They provide valuable recommendations for those thinking about growing marigolds.

- I over-planted and under-staked all of our marigolds in the trial (all were planted in a high tunnel)! It was a crazy mess, leading to significant challenges in harvesting and disease management. I was still able to harvest a decent number of stems from each variety. Next time I will plant on 24" spacing with two layers of netting.
- Intense pest pressure (Japanese beetle, tarnished plant bug) and unseasonable heat limited production on the entire marigold planting this year: many varieties failed to fully flower, and yield was unable to be evaluated on many varieties as a result.
- This is an overall observation for all 9 of the marigolds trialed. I planted all the marigolds through compostable plastic mulch. Spaced 18" apart, alternating 12" across. Sowed them 2 weeks later than 2019. Previous years the marigolds grew too heavy to support with netting and I gave

them more space. Also, the necks were weak, unable to support the large blooms at harvest. Upon suggestions from Dr. Dole last fall, I planted them in zero fertilizer-amended soil, same as the sunflowers. With less available nitrogen combined with the hot dry summer, the marigolds were overall much improved

for stem strength. Going forward I will use this method. Spider mites, despite the hot dry season, did not seem to be a problem. The summer events that typically required marigolds were cancelled due to COVID. I still find it difficult to get employees to use marigolds in bouquets. Foliage fragrance would be the main drawback. However, I have tried to strip stems in the field, which seemed to help. The orange marigolds seemed especially useful in autumnal bouquets.

- The marigolds were all nice, I don't sell very many as people strongly dislike the smell in mixed bouquets (which is my primary focus). I did get one cut off a few varieties and then the Japanese beetles came in and destroyed them for the remainder of the season. They had nice strong stems and my favorite was the light yellow 'Nosento Lime Green'.

### **Marigold 'Bengal Orange'**

(East-West Seed)

*Good Qualities:* Beautiful light orange color (4), lighter orange than 'Coco', 'Jedi', 'Xochi', etc. but not gold; Tall plants and long stems (4); This was my favorite cultivar! sturdy stems, very prolific, I cut so many flowers from this plant, it also dried nicely too! I can't say enough good things about this one; Nice ball shape for bouquets; Fairly strong and productive; Long stems with branching for bunching, flower has good doubleness; Strong stems, early flower-

ing, dries well; 1.5 - 2.5" wide blooms, good quality—dense, full blooms, vigorous, productive plants, given the hot, dry season, comparable to 'Xochi Orange' with respect to height, bloom time, habit but blooms are a lighter orange; This was a close second favourite for orange marigold in the trial, the blooms were smaller with an average 2.5" overall plant height 100 cm, excellent natural branching; Good medium to large heads; Long vase life.

*Problems:* Would not necessarily call it an orange; Plants flop in the late season, support is needed if not consistently harvesting; Smaller bloom size.

*Similar Cultivars:* Comparable to 'Xochi Orange' in plant habit and bloom time, but blooms are slightly lighter orange. Also comparable to 'Giant Gold' with respect to bloom time and habit.

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

*Comments:* See general comments above.

### **Marigold 'Bindi Gold'**

(AmeriSeed)

*Good Qualities:* The color is a standout (8), easier to use in mixed bouquets than the bright yellow or orange; Large flow-



'Bengal Orange'

Photo John Dole



'Bindi Gold'

Photo James Martin

ers (3); Super long lasting (2), holds well out of water; Doubleness of the bloom is good; I grew very fond of marigolds this year; Nice long stems, low fragrance; Dark green foliage, vigorous and dense plants, full, attractive 2.5 - 4" wide flowers; Long stems, able to harvest with good branching; Continuous bloom, 3.5 - 4" bloom size.

**Problems:** Very short (7); Very large heads (2), which cause them to break easier; Slow to bloom; Not prolific; Flop in wind; Plants were 25-29" tall and did not yield usable stems; Very branched; The brassy gold colour was not a favourite; Stem length and stem strength—same story, different marigold; For marigolds in the fall in Texas, the demand was for the bright orange.

**Similar Cultivars:** Most other cut flower marigolds.

**Postharvest Recommendations:** Cut before heads are fully developed and fluffy, they look nicer and hold up better, the heads don't get as large and heavy, breaking the stems. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

**Comments:** Reminded me that I love marigolds; There are taller gold varieties with longer stems that we would grow instead of this variety; Would not grow again; The blooms were high quality—wide, dense and uniform—and could possibly be useful for garlands or as bedding plants but stems were too short for cuts; This would make a good bedding plant where gold colour is required; See also general comments above.

### Marigold 'Chedi Yellow'

(AmeriSeed)

**Good Qualities:** Great yellow color (5); Tall plants/long stems (5), 36-45"; Long vase life (2); Low fragrance; Strong plants, stems, productive; Large flowers, good double blooms; Lasts well out of water; Yielded sturdy stems; Able to harvest with good branching, filled out market bouquets nicely; Smaller blooms; None; After removing the leaves, it has a nice fragrance.

**Problems:** Flop in wind; Much higher pest pressure for Japanese beetles than orange varieties, browns quickly at maturity; Tall, but flimsy, it grew big heavy puffy heads that break easily, stems were not as thick and strong as other cultivars; Blooms are slightly looser and lightly ruffled—less dense compared to 'Bindi Gold' or 'Giant Gold'; This was a massive grower reaching a height of 4-5' before even going into flower, it has to be supported, mine completely broke apart in a rain storm from the branches just breaking off, it acted like it was on steroids until it completely fell apart.

**Similar Cultivars:** 'Coco Yellow'; Compared this variety to 'Giant Gold', the color and plant height is comparable, while 'Chedi Yellow' blooms slightly later in our planting and blooms were not



'Chedi Yellow'

Photo John Dole



'Hermant Deep Gold'

Photo Rachael Ackerman

quite as full compared to 'Giant Gold'; Other cut flower marigolds.

**Postharvest Recommendations:** Cut before head fully matures. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

**Comments:** Reminded me that I love marigolds; See also general comments above.

### Marigold 'Hermant Deep Gold'

(East-West Seed)

**Good Qualities:** Vibrant gold colour (4); Strong stems (2), the strongest marigold we grew, least likely to have snapped stems and popped off heads, despite large bloom size; Good doubleness; Early flowering, dries well; 2-4" wide blooms on tall stems, dense, uniform blooms; Blooms averaged 3.5-3.75 inches, our summer was very dry and hot it did not seem to affect the quality of bloom, plant height 35.5"; Super dense stem count per plant; Long vase life; Early and strong, less browning than some other gold varieties.

**Problems:** Plants flop in the late season, support is needed if not consistently harvesting; Edges browned quickly; Shortest of all of the marigold trials, got buried among the other cultivars, a lot

of botrytis; Short, less prolific.

*Similar Cultivars:* ‘Coco Gold’; Color is comparable to ‘Coco Gold’ but plants bloomed 4-5 days earlier than ‘Coco Gold’ in our trial, and were slightly shorter and less vigorous.

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

*Comments:* See general comments above.

### Marigold ‘Janthra Yellow’

(East-West Seed)

*Good Qualities:* Bright yellow blooms (4); Strong plants (3); Tall stems (3); Great stem length, I loved this yellow; Less susceptible to browning, seemed to blow out more slowly than ‘Chedi Yellow’; Did not topple over in strong winds, good flower shape and size; Another keeper for sure! Sturdy heads and prolific, best producer!; Early flowering—dries well; Attractive 2-4” wide blooms on vigorous, plants 36-48”, color is comparable to ‘Giant Gold’ but plants are taller and blooms are later; Good vase life.

*Problems:* Plants flop in the late season, support is needed if not consistently harvesting; Did not produce enough blooms to fully evaluate.

*Similar Cultivars:* ‘Chedi Yellow’; Color is comparable to ‘Giant Gold’ but plants are taller and blooms are later.

*Postharvest Recommendations:* Cut before heads are fully bloomed. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* I would say that for a yellow marigold this is a strong option; See also general comments above.

### Marigold ‘Mayan Orange’

(AmeriSeed)

*Good Qualities:* Bright orange color (5); Uniform plant growth; Nice long stems—low fragrance; Could have potential for garland use; Long stems, able to harvest with good branching, full blooms; The flower size is 1/3 the size of most marigolds in this class and the scale of the flower is a good one for arrangement work, this is the favorite of



Photo Rachael Ackerman



Photo Rachael Ackerman

all those trialed this year; The flowers were a bit smaller than the other marigolds tested but that made it easier to put in mixed bouquets; Very long vase life. *Problems:* Small heads and short plants (5); Weak and not productive to begin with, did gain some height later in the season, overall not a competitive variety compared to ‘Coco’, ‘Jedi’, and ‘Chedi’; Japanese beetles love marigolds; We didn’t cut it, the orange colour is quite pale; Flop in wind; None, other than nobody buys cut marigolds in my area; Did not yield usable stems, would grow again only if considering for garland

production; Some petal-less plants?; Nothing special; Stem length and stem strength, marigolds would be so much more useful as a cut if someone would breed strong stems into this plant, this is the same story over, and over and over; The plants were smaller in this variety. *Similar Cultivars:* ‘Bindi Gold’; Other cut flower marigolds.

*Postharvest Recommendations:* Plain water. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* We will not grow this variety again; Reminded me that I love marigolds; Breed for stronger stems and the marigold would become a cut flower favorite.

### Marigold ‘Nosento Lime Green’

(Evanthia Seeds & Plants)

*Good Qualities:* Unique pale yellow/green blooms (8); Minimal marigold scent was a plus, the light, almost neutral bloom colour was helpful in summer bouquets; Great size blooms for mixed bouquets; Great trap crop! no matter how many times we sprayed this variety, they were consistently coated with Japanese beetles all summer; Nosento... no...sent...o.....NO SCENT, OH! this marigold smells like nothing! if you’ve been checking to make sure you can still smell, these marigolds make a terrible at-home COVID test, they would give you a false positive for sure! I’ve been led astray before by other varieties purported to have low or no scent; this is the first one I can truly say does not smell like a marigold; There were none; Good vase life; Attractive.

*Problems:* Japanese beetles loved this cultivar (4), much more so than the other cultivars; The stems were skinnier and not very sturdy (2); Odd color, definitely not what I’d call lime green, but definitely yellow headed in a green direction (2); Not very vigorous, was overshadowed by other varieties on either side; Slow, short; Plants flop in the late season; Flowers were small, best used in small jar/vase arrangements; Short plants, harvested for use in mason jars only, petals browned quickly so not

good to harvest; Seems to have more insect damage on leaves than the other cultivars in the trial, especially spittle bugs; The flowers on this did not stay firm, meaning the petals parted, giving the flower an open look, as though it was coming apart, I have never seen this before in a cultivar, not sure what the terminology for this is, but it made them unusable; Plants succumbed early to pest pressure and drought stress, very few blooms over the course of the season—could not harvest/evaluate.

*Similar Cultivars:* None listed.

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

*Comments:* The colour of this marigold would make it easier to include in summer bouquets, the stems were more difficult to cut, to avoid this I would recommend cutting the centre stem in early August to encourage more usable stems, average bloom size was 2", overall height was 26-28", the typical marigold odour was minimal, we have so many other flower choices for August and early September that we did not use it much in our bouquets; Would not say that this is a very reliable or prolific variety, doesn't contribute as much vibrancy or bright color to a bou-



'Royal Bali Gold'

Photo John Dole

quet either, lack of scent might actually contribute to beetle pressure?; We do not usually pinch our marigolds, but these may have been better with a pinch; We liked the color, it was a magnet for the beetles, they seemed to love this one the most!; I loved this marigold, I grew in early summer and it worked well with 'White Lite' suns, I will try also it again in the fall with other marigolds next year.

### Marigold 'Royal Bali Gold'

(East-West Seed)

*Good Qualities:* Great color (3); Early to bloom, strong plants, better height and stem length than other gold varieties, still not as tall our favorite orange varieties like 'Coco' & 'Jedi'; Another great marigold; Strong stems—early flowering—dries well; Attractive 1.5-2.5" orange blooms, uniform plants and blooms, tidy, neat appearance; Big blooms/balls.

*Problems:* Shortest cultivar (3), no reason to grow a short marigold; Colour was more of a pale orange than gold; Not as prolific as other cut marigolds, heads tend to break a little easier than others; Plants flop in the late season, support is needed if not consistently harvesting; Weak attachment of bloom to pedicel; Susceptible to botrytis.

*Similar Cultivars:* None listed.

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

*Comments:* For a variety named 'Royal Ball', the flower was rather flat, especially when compared to 'Hemant Gold'.

### Marigold 'Xochi Orange'

(BloomStudios)

*Good Qualities:* Loved the deep orange color of this variety (7); Long stems (6); Long-lasting flowers (2); KEEPER! sturdy heads, kept blooming even after a frost, very prolific and make a great dried flower too; Comparable height to other tall orange varieties, strong plants, productive, good doubleness in each bloom; Great succession cuttings; A top performer in trial, blooms sit high above foliage on sturdy stems, one of



'Xochi Orange'

Photo Rachael Ackerman

the few varieties in our trial to keep blooming through a hot, dry pest-ridden summer, productive, full, dense blooms, 1-2 shades darker orange compared to 'Bengal Orange'; The tallest of the marigolds that we grew, flower seemed like a normal orange marigold; This marigold had the best natural stem length making it easy to harvest, desirable for fall bouquets, bloom size was 3.5", I liked this marigold, it was the tallest of the marigolds in the trial, the stems especially the necks seemed to hold well; Stood out among the other marigolds, relatively strong plants; Giant heads, ridiculously tall plants.

*Problems:* Plants flop in the late season without support.

*Similar Cultivars:* 'Garland'—very similar; Comparable to 'Giant Orange' and 'Bengal Orange' in height, vigor and timing, slightly darker color than 'Bengal Orange'.

*Postharvest Recommendations:* Plain water. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* We really liked the height of this one, we have Japanese beetles so marigolds are hard to harvest with all the damage; I would grow this marigold again, would plant for late season bloom with minimal nitrogen, I did not net the trial marigolds this year but used support string on each side of the row, our



**'Bronze Queen'**  
Photo James Martin

growing season was very dry and with no field irrigation the marigolds were off to a slow start, the height overall was 110 cm, this was my favourite orange marigold in the trial; See also general comments above.

### **Nicotiana 'Bronze Queen'**

(Fred C. Gloeckner)

*Good Qualities:* The color is exceptional (7), this color goes so well with all the antique, browns, bronzes, and coral colors; Darker than 'Tinkerbelle'; Dark filler, has cut and grow again habit, good floret size; Long stems, I loved this nicotiana, strong plants, my customers loved it, good vase life, bloomed over a very long period; I love nicotiana, unique for sure and definitely has its place in those moody, antique-themed bouquets; Easy to grow, excellent germination, no insect damage, no disease, bloomed all season, has had a few frosts and seems unaffected, the unusual colour would be a possible specialty designer item; Fun texture—very productive; Productive plants yielded multiple cuts of tall, straight stems, easy to germinate and quick to flower in the field, transplanted to field on 5/21, first harvest was 7/6 and plants were still producing quality cuts 8/31, powered through the hot, dry summer, bronze color and nodding blooms are an interesting addition to mixed bouquets.

*Problems:* It is loved by hornworms, but still vigorous to grow back, seed pods become unattractive, so extra cleaning is needed; Flowers were not

impressive, no interest from florists; We never quite got the height we do with 'Tinkerbelle', it didn't seem to throw up as many blooms either; The aphids LOVED this nicotiana and preferred it to the other few varieties growing in the same area; Customers thought it was past its prime because of color; Not a favorite with all customers; This plant was not attractive or eye-catching in the least, the blooms were sparse and made it difficult to incorporate in a bouquet or design; Doesn't hold well once cut, very small harvesting window; Some variability in plant height/vigor—most plants were 28-36" tall but a few plants were shorter, with fewer usable stems, stems are easy to strip and bunch but leave a sticky residue on hands and harvest tools; Messy, flower drop can be a problem if going out for anything other than party/event work.

*Similar Cultivars:* 'Starlight Dancer' for plant habit; Closest thing we grow is 'Tinkerbelle'.

*Postharvest Recommendations:* Cut when stems have hardened. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* Would be willing to try again; High tunnel; I like the color, definitely a great muddy tone to play with burgundy and fall colors; The airy qualities of this make for a good filler cut.

### **Nigella 'African Bride', 'Delft Blue' and 'Midnight Dark Blue' Mix**

(Fred C. Gloeckner)

*Good Qualities:*

- All three cultivars: Beautiful color mix—striking range of dark blue, purple, and light blue flowers on healthy, sturdy plants; We direct seeded with great germination, consistent height and bloom time, was able to harvest the whole row in blocks, very good producer, usually harvested the whole plant as the main stem.
- 'African Bride': I grow for pods, not the flower, great blackish-purple large seed pods; Sold really with our designers.
- 'Delft Blue': We have grown this one before and we like it, both for the flowers and the pods; the blue color.

- 'Midnight Dark Blue': The blue purple color, the pods; the color in this one is stunning; Fun texture, color holds well, dries beautifully.

*Problems:*

- All three cultivars: The seed was sent as a mix of all 3, unfortunately the germination was 0, I do grow several nigella and had no germ issues; We grow from transplants, would love a little more height but wonder if we could direct sow if that would make a difference (we have heavy clay and it's hard to direct sow); They really hate the South and just as they are flowering, it gets hot, shortening their ability to keep flowering, they melt to fast in the field with too much rain and humidity; Does not withstand heat—bolts very quickly.
- 'Delft Blue': Of all varieties I grow, this is by far the shortest.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* None listed.

*Comments:* Love it for corsage and personal event work bouquets etc. great dried also; We have never pinched our nigella, might try and see if that makes any difference in height too; Very prolific self-seeders, if left to mature; It wasn't always noticed but our customers that did notice the flowers in bouquets really liked them, we all love them; Very pretty, I had it in the tunnel and didn't get netting on it right away and it was like "Jack and the Beanstalk", it really needs a strong netting, I would grow this again and I got a decent amount of cuts off of it.

### **Snapdragon 'Chantilly Deep Orange'** (American Takii)

*Good Qualities:* Great rusty color (8), good contender for autumnal bouquets; Blooms open red/magenta and fade to a dark orange/brick red with purple throat; Long vase life—plants held up to four rounds of cutting; Worked well with the 'Bronze Queen' nicotiana, customers liked it; Plants recovered well after a very hot dry summer, which is not the best for any snaps, plant height today (Oct. 18) from 26-33 inches; Open floret style is trendy; Tall bloom column,



**'Chantilly Deep Orange'**

Photo Rachael Ackerman

lightly fragrant; Long vase life; Nice deep orange color that fits in well with the others in the Chantilly series, adding a nice color between the “bronze” and “velvet” colors; Grew a great second flush of blooms that were taller; We have grown Chantilly before, always a hit, the color was pretty but would move to fall plantings in the future; Nice thick stems, large flower head.

**Problems:** Flops if support is too high; Didn't rebloom well; Plant had less resistance to heat and drought than the other snaps in our garden; Planted this in the spring field planting (transplanted 5/15/20) for early summer blooms, plants were weak—tall, thin, with little vegetative growth, the color got varying reviews—some people loved it, some did not like the brick red tones; Chantillys do best for us in the early spring, and this color is not a good spring color, if we are able to figure out how to get quality Chantilly snapdragons in the fall in our area, this color will be a welcome addition; The first flush of blooms was short (18”) and much brighter reddish than I was expecting; None.

**Similar Cultivars:** None listed.

**Postharvest Recommendations:** Harvest early when blossoms are half open. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

**Comments:** Great orange texture in arrangements; If I was to grow again I would plant for fall only, too dark for summer, I would describe the colour as deep rust, it seemed to have more vigour than the rest of the Chantilly series, this might be a good variety to trial for late season hoop house; All of our orange colours were odd in the heat and drought, so we may not have seen the true colour this season; Never quite as tall as our Potomacs, but love the open face, we grow our snaps in a 4x4 spacing, one and done, nice color, deeper orange than expected, but overall we liked it; Greenhouse grown; Was the winner of the seed trials, beautiful color, beautiful stems, I would 100% grow this every year, I harvested it multiple times, just beautiful.

### **Snapdragon 'Purple Peloric'**

(BloomStudios)

**Good Qualities:** Vibrant colour (8); Customers raved about it, nice stem length and overall decent snapdragon; This was a perky snap, in the field the colour was bright, it was reblooming here for the past couple of weeks, in October the stems were much taller than in the spring (it was dry and hot), no irrigation, nearly all the stems were ready to harvest the same day; Nice long stems—great succession cuttings; Large flower head, tall plants; Large florets; Very tall plants with sturdy, thick stems, uniform and high quality blooms, grew alongside the Chantilly series in a field planting, transplanted 5/15/20; This variety was a high-quality open-faced snapdragon variety, stems were much sturdier and higher quality compared to the Chantilly series.

**Problems:** Needs to be netted, died out after spring harvest, most of my other varieties of snaps will keep reblooming into the summer, this one did not quickly rebloom; Support is a must—greenhouse performance is superior to field; None; The florets are loosely spaced on the stem; The bright magenta color is not very versatile—would love to see this stem/bloom quality in a range of colors.

**Similar Cultivars:** Chantilly; Comparable to the Chantilly series in the open bloom form, but more vigorous plants and better stem quality compared to the Chantillys. **Postharvest Recommendations:** Use a tall bucket to support and encourage straight stems, cut early morning. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

**Comments:** I liked this one, the colour is different than the normal open snaps, the bright purple colour would be usable year round, actually was one of my top favourites in the trial this season, (Oct. 18) it is reblooming, lots of buds coming and the plants look very healthy and vigorous, the stems today are up to 35 inches in the field, no irrigation, with proper irrigation I'm sure this will be a promising snap to grow for bouquet work; Greenhouse grown; Perhaps this snapdragon isn't meant for outdoor growing in summer in the North; This snapdragon was somewhere between a standard snapdragon and a fully open-faced Chantilly snapdragon, was not particularly striking, no standout features.



**'Purple Peloric'**

Photo Rachael Ackerman



'Milla Salmon'

Photo Misty Moman

**Stock 'Milla Salmon'**

(Evanthia Seeds & Plants)

*Good Qualities:* Beautiful color—peachy pink (6); Mostly all were doubles (2); We have not seen the bloom of this variety yet, but compared to the JADS we also planted for the fall, it seems to be stronger; Open florets, softer leaves and strong stem than Iron series; Vigorous plants, the plants observed today in the field are very lush height of 17 inches, they seem to be enjoying the cooler temps and short days, no sign of rebloom as yet Oct. 18; 1.5-2" wide florets on sturdy stems, the outer edges of the florets darken slightly to rose, 'Iron Apricot' is more gold-toned, with slightly more ruffled florets, and 'Katz Apricot' is earlier, with longer internodes on the bloom column.

*Problems:* None (2); Slow, high aphid pressure; I had a small percentage of stems with quickly wilting lower florets, but never figured out what was causing it, of all the stock we grew, this was the only variety where I experienced the issue; Poor heat tolerance; Due to timing of receiving seed, this stock was planted in our very last succession of stock, which generally does struggle a bit in the warmer temperatures, planted among other varieties in the Katz, Iron,

and Cheerful series, this variety was unable to overcome the conditions and never grew well or bloomed, while all others did.

*Similar Cultivars:* 'Iron Apricot' is very similar, with a more ruffled/tight floret; Plant habit and color are comparable to 'Iron Apricot', although the 'Iron Apricot' is more gold-toned, with slightly more ruffled florets, 'Katz Apricot' was a similar color but earlier in our planting, with longer internodes on the bloom column; 'Katz Apricot'; 'Iron Stock Apricot'.

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

*Comments:* Designers adored this flower for its color, it was one of my favorite flowers that we grew all year on our farm!; High tunnel, spring grown; Greenhouse grown, need support netting; Great colour, would try in the hoophouse also might be a late-season contender, very popular colour, will be trying this one next year, if available; Oddly they were not bothered by insects as were the other varieties we grew; We had only foliar growth, perhaps due to summer heat, or maybe this stock isn't meant for summer growth in the North; This crop was grown in an unheated

tunnel, transplanted 4/15/2020; I planted in the spring in the tunnel and because of time constraints, It never got out of the tunnel so they stayed all season, the 'Milla Salmon' never flowered for me. I waited all year and zero blooms?

**Stock 'Sahin Anytime' Mix**

(Gloeckner)

*Good Qualities:* Fun color mix (6), especially the burgundy; The earliest of our stock to bloom; Strong stems; Nearly all were doubles; Really is an anytime mix—good spikes in early fall, fragrant; Densely packed blooms on short stems, good quality blooms and very uniform plants; Very full blooms, good vase life.

*Problems:* Very short (4); None; If growing again, I would sow it earlier and grow in the hoophouse; White colour were singles and stunted; We aren't fans of mixed colors, not heat tolerant at all; Plants are short and this is true in both the spring tunnel (transplanted 4/15/20) and spring field planting (transplanted 5/15/20), although bloom quality was good and bloom columns were compact and dense, the plants were shorter than the Iron series in multiple environments.



'Sahin Anytime Mix'

Photo Barbara Lamborne

*Similar Cultivars:* Glory series; Habit is comparable to the Iron series—sturdy stems, compact and dense blooms columns—but plants are shorter.

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

*Comments:* Greenhouse grown, need support netting; If I were to grow again, I would plant into the hoop house early and would try it again for late fall, stock does not do well in the heat of summer, also insects flea beetles daily seemed very fond of all our stock varieties, customers love stock; Super short, but we did have a warm spring; I planted in the spring in the tunnel and because of time constraints, it never got out of the tunnel so they stayed all season, the ‘Sahin Anytime’ mix was okay, I don’t like using mixes, but there were a few in there that had nice long stems and nice color and some that were just too short, I harvested a handful of stems, but nothing significant.

### Sunflower ‘Marley’

(Takii)

*Good Qualities:* Great color eggplant center fading to a cream (7), it was an all-season colour rather than just for fall; This is a strong sunflower for a multi-colored sunflower, arguably stronger than ‘ProCut Red’, a good option for a specialty sunflower, although light, we did not have pest issues with this variety, although we planted it later than the light sunflowers we had pest issues with, with ‘ProCut White Nite’ and ‘White Lite’ we tend to have cucumber beetle damage; Lots of side shoots; A nice bloom size and the petals seemed to overlap nicely almost like a double row, did not notice any loss of petals as in similar colours; Early to bloom, good size flower that stayed small as it aged instead of becoming monstrous; Nice branching habit; Healthy, sturdy plants, a strong variety; Loved the double overlapping petals, had a nice full appearance; Did well as transplants, had a fairly staggered bloom time, even within the same planting.

*Problems:* None listed.

*Similar Cultivars:* This variety is com-



Photo Joy Longfellow

parable in appearance to ‘ProCut Red/Lemon Bicolor’, the red coloring on the ray petals is more diffuse and the distinction between the red/lemon is less pronounced on this variety compared to ‘ProCut Red/Lemon Bicolor’, plants were taller and 2-3 days later than ‘ProCut Red/Lemon Bicolor’ with slightly smaller blooms at harvest stage; Was really similar to ‘Ziggy’, just a little bit of difference; Similar to ‘ProCut Plum’, but more variation in color.

*Postharvest Recommendations:* Cut in early morning when petals are starting to lift. NC State conducted vase life testing of this cultivar; see article in this issue for details.

*Comments:* Our customers like traditional sunflowers, so we don’t typically grow specialty sunflowers, however, this was a strong option if we were to do so; Great bicolor as one cut 42” but also had at least 4-6 usable 10-12” side shoots; This is a good bicoloured sun, I would recommend it, not typically a fan of bicoloured suns, however, I really liked this one, creamy colour and the plum highlights are very attractive, I planted the same as ‘Ziggy’, bloom time, height, and bloom size were similar, from a July 30 sowing ‘Marley’ we started cutting 68 days later (October 8); We planted in our fall sunflowers, everyone liked it!; Planted late which likely resulted in a short stem length; Flowered fast but the

first flower was too short and surrounded by side shoots that were longer, hard to cut—should have either pinched or removed the first flower and waited for the side shoots to be harvestable.

### Sunflower ‘Ziggy’

(BloomStudios)

*Good Qualities:* Attractive gold and copper bicolor blooms (7), similar to ‘Marley, with more red tones; For a specialty sunflower this was a good quality variety, nice and strong, lots of specialty options feel very fall, but this one was unique in that it still felt like a summer option; Great side shoots for masons and shorter bouquets; Seemed to keep its petals well, 8 of 50 blooms cut August 10 and the remainder through the rest of the week, bloom size 4.5 inches, nice clean stems no extra buds, they did develop some decent sides, I sowed these twice, June 12 direct seeded to a 50 cell plug tray, started cutting August 10, and again July 30, they were cut October 8, these developed good side shoots ranged from 12-16 inches, they held up well; Nice



Photo John Dole

long stems—great succession cuttings and branching habit; Tall plants (70-80”) and sturdy stems, blooms 5-7” wide, with narrow, tapering ray petals; Nice sturdy stems, loved it, was in our later plantings for fall bouquets; Did well as transplants, had a fairly staggered bloom time, even within the same planting.

*Problems:* I wouldn’t say that the light orange center was very visible until the flower was fully open; None.

*Similar Cultivars:* Had similar growth and bloom time as ‘Marley’; Colors are comparable to ‘ProCut Bicolor’ but plants are taller and 3-4 days later to bloom in our trial; Similar to ‘The Joker’ and ‘ProCut Bicolor’ varieties, but lighter red than the ‘Joker’ and more color variation than ‘ProCut’.

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

*Comments:* We liked this a lot, will grow again, no naughty heads (droopy); Planted late which likely resulted in a short stem length; Outside; I like the bicolors, in a design, they are much more versatile, nice long petals on this one with the color distributed throughout the petals; We likely wouldn’t grow this again because the effect isn’t that different from a traditional sunflower and our customers are mostly interested in the traditional vs. specialty; Would plant this for fall, not a great summer colour, our summer was extremely hot and dry, once they are transplanted in the field they are not irrigated, the second transplants may have been delayed a bit waiting for some rainfall, all our suns are grown without any fertilizer, soil was amended with cow manure in late fall.

### **Tanacetum ‘White Crown’**

(Evanthia Seeds & Plants)

*Good Qualities:* Best germination success of all my matricaria, strong plants, did well both in the high tunnel and outside, many stems per plant; Uniform growth; Nice sturdy stems, cute button blooms; Unusually tiny blooms, good germination, plants are looking vigorous today (October 18); Dainty white filler with fresh green foliage, good for repeat

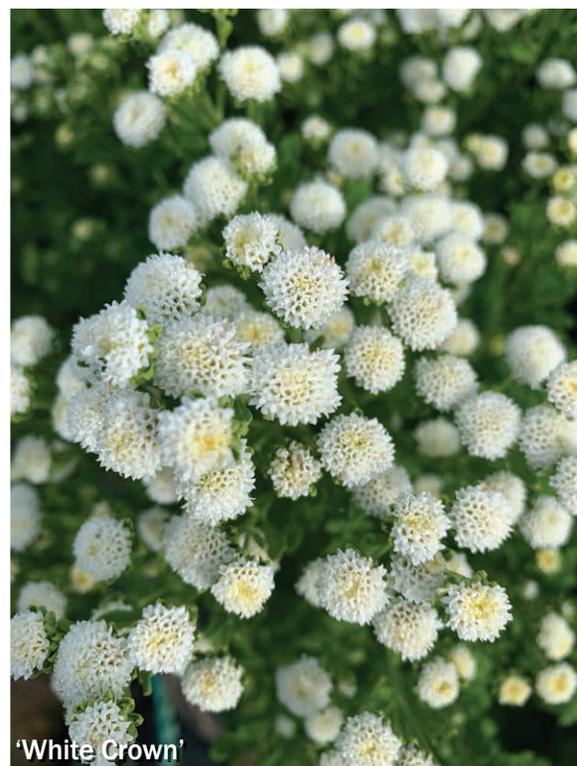
cutting; Lovely color, very prolific, performs great in a hoop, greens and blooms hold in vase, can rebound from spider mites; Easy to grow, had potential for a reasonable second flush in the fall if plants are cut back; Good vase life; Really loved the height.

*Problems:* All ready at once and turns brown if you wait for it to look its best; I didn’t love this variety compared to other feverfew that we grow, the white flowers browned really easily making them unsalable, would not recommend; Short stems, very branchy and hard to get a decent stem, turned brown quickly but could have been due to hot, dry summer and no irrigation; Did not like the way these formed a “clump” of flowers, difficult to use in design work, flowers did not ever really look fully open before they began to brown; This plant was very slow and late compared with other varieties in the trial (‘Tetra White’, ‘Virgo’ were also in my trial), the entire trial was hit by tarnished plant bug and unseasonable heat, so there were some significant environmental stresses at work, this crop did not produce and was not able to be evaluated; Super cute buttons but they seemed to brown fast on us before we could harvest, it could have been us, since we didn’t know exactly what they were going to look like, but we would wait a little for them to open and some would be brown; Destroyed by spittle bugs, most plants did not flower; Plant grew well but flowers never fully developed; Difficulties with browning, simply not as attractive of a bloom as other feverfew varieties, we will not grow again.

*Similar Cultivars:* More ruffled than ‘Vegmo’ and ‘Virgo’; Other white matricaria like ‘Ball’s Ultra Double Tetra White’ and ‘Vegmo Snow Ball Extra’ have an airier habit, with more stems per plant without pinching.

*Postharvest Recommendations:* None listed.

*Comments:* High tunnel and outside—taller and nicer blooms inside; This variety may really benefit from an early pinch, might help to make more usable stems rather than one large ‘club’ of



**‘White Crown’**

Photo Jolea Gress

a stem; Prefer ‘Vegmo Snowball’ or ‘Virgo’ for a white; This was not what I expected when the blooms were so very tiny, it did come in handy doing corsage work and as a filler, I think it would be worth a try in a hoop house where it could be irrigated, I would expect it would potentially grow much taller inside, it wasn’t very impressive growing here this hot/dry summer, I will be checking to see if any winter over and if so how they fare compared to this year, sown the same time as our main crop of ‘Magic Single’, ‘Vegmo Yellow’ and ‘Double White’ and ‘Tetra’, it was at least 2 weeks later to bloom than the other varieties; We should have staked this item to keep the growth upright; Nice height, they seemed to be 2-3 weeks behind other matricaria that were in the same seeding week, would try again just to see if we were harvesting at the proper time with the browning; Could have had many stems if insect damage had not been so severe.

## Verbena 'Purple Haze'

(Gloeckner)

*Good Qualities:* It seemed to never stop producing! (4); Fun airy texture (3); Beautiful color (3); Very productive (3); Easy to grow (2); Healthy foliage in cool weather when verbenas can get mildew, floriferous compared to the generic version; Long stems; Good yield, good filler, super long and strong stems, very hardy, I had only a few plants and they were mostly forgotten, but they grew strong and were cold hardy into the late fall; We love *Verbena bonariensis*, adds just the right pop, and so delicate, and it keeps giving; I love verbena, verbena was my gateway flower when I first starting in design school; Excellent germination, sometimes the *bonariensis* can be irregular but these were good, the burgundy coloured seedlings turned green after a couple of weeks, they started blooming early and stayed all season, did not require netting, stayed upright without support; Vigorous, stems are sturdy and square and easy to harvest, yielded 18-24" primary stems with many shorter, thinner (12-18") side shoots, all usable; Compared to the straight species, it is a good, clean substitute, it stayed in bloom 3 times longer than the species; Vase life, could harvest long, branching stems as well as shorter stems for use in small arrangements.



'Purple Haze'

Photo John Dole

*Problems:* Petals shatter (3), I use it in event work, but for bouquet work it drops too much for a good client experience; Takes many stems to make a large bunch; Very wiry stems; Stems are scabrous and will damage skin, seeds were a little difficult to start; Terrible germination—I ended up with only 5 plants, the stems were incredibly long and widely branching, with very small florets at the top, not interesting enough to use the space to grow; I did not see any difference between this cultivar and the original *bonariensis*.

*Similar Cultivars:* Couldn't tell the difference from the general *Verbena bonariensis* that we grow.

*Postharvest Recommendations:* Nothing special needed. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*

*Comments:* Verbena has a tendency to shatter after a few days; High tunnel; Great purple texture but not a huge impact, better suited for flower bed or potted annual; With the consistent bloom even if not deadheaded, they continued to show colour all season and are still blooming despite some frost damage today (October 18), would think it would make a good tall landscape plant, grown without irrigation; survived the extreme heat/drought; I like the cultivar and the way it performed in our southern humidity, it did act as an annual, unlike our species which is a perennial in our landscape; The verbena was great, to be honest, I don't think I could tell it apart from the other *Verbena bonariensis* I grow, I would try it again possibly side by side.

## Zinnia Expt. Orange

(BloomStudios)

*Good Qualities:* Very vibrant orange color (14), that held in the field for a long time; Love, loved that every flower was a double! (3); Would make a great bedding plant; Makes a nice dried flower; Nice size bloom—would possibly make a good bedding plant, it grew very dense and I would be concerned with disease in a normal summer, we had record drought and heat; Flower form was amazing!



'Expt. Orange'

Photo James Martin

colour was more vibrant than 'Benary Orange', mildew tolerance outlasted frost; Amazingly uniform bloom time, long vase life; did not experience any of the usual "zinnia meltdown" with these, however, I don't know that we harvested enough of these to determine if they really are any better than Benarys, etc. in that respect; Clean foliage; Very large blooms! Prolific—a lot of stems per plant; No other orange zinnia like it that I know; Size of the flowers; Extremely uniform orange blooms on dense, mounding plants, bloom quality are excellent, comparable to the Benary series.

*Problems:* Way too short (15); Better as a garden plant or potted plant (6); Not usable as a cut flower (6); We even tried cutting them for a bit to see if we could get some height but it just got bushier; Used short stems in mason jar arrangements because the colour made the stem length forgivable; Branched; Too saturated orange for our markets. started off blooming very short, but put on good stem length within a few weeks; Plants have a low, mounding habit and did not produce stems long enough for cuts.

*Similar Cultivars:* Color similar to Benary; 'Benary Orange'.

*Postharvest Recommendations:* Chlorine tabs in harvest water, refresh with Chrysal 2 and chlorine, use that day; Plain water. *NC State conducted vase life testing of this cultivar; see article in this issue for details.*



'Expt. Purple'

Photo Rachael Ackerman

*Comments:* I hated this zinnia for most of the season, it was so vibrant and grew in a nice mass (it would make a great landscape planting) but it was so terribly short! it wasn't until the end of the season when I cut a few of those vibrant heads and stuck them in a box of silica to dry, they came out amazing, the orange dried to more of a reddish coral color but still vibrant and stunning; Not a cut flower contender due to very short/unusable stems, made a nice show in the field for colour but was significantly shorter; Started to bloom at 10 inches, like a bedding plant, we had a severe drought, so I thought this might be part of the issue, comparisons (Benary Giants & Takii Sunshine) put on more height before blooming, EXP's never achieved the same height, but did have better plant health and quality of blooms; Would make a good bedding/pot plant; Get it taller and it's a star! we loved the flowers, just not the height; If it had longer stems, I'd grow it, the flower size was a medium which is more useful sometimes than the large Benary size flower in arrangement work; We did all we could to use them because their color was so gorgeous, just too short;

I grew the orange zinnia in the tunnel and it was really short, I pinched it hard twice and by the end of the season, I was able to get one cut of 8-12" stems, really branchy, it was hard to get a nice single stem cut, I would not grow them again.

### Zinnia Expt. Purple

(BloomStudios)

*Good Qualities:* Colour was SO purple!! (14), that held for a very long time in the field; Love loved that every flower was a double! (3); Would make a great bedding plant; Dries nice; Nice size bloom; Productive long stems, great disease tolerance; Amazingly uniform bloom time, long vase life; did not experience any of the usual "zinnia meltdown" with these, however, I don't know that we harvested enough of these to determine if they really are any better than Benarys, etc. in that respect; When blooms were mature, they had great petal count/full heads; None; Large blooms, lots of stems per plant; Long lasting; Vigorous plants and highly uniform blooms, color and bloom quality are excellent—comparable to the Benary series.

*Problems:* Very, very short (14); Unusable as a cut flower (5); Better as a garden plant or potted plant (4); "Marketable" stems for this and the other zinnia variety is a loose term—they are usable only in super short arrangements like jelly jars, in past years we would not have spent the time to harvest these, but due to weird ways COVID has shifted our markets, we have been selling everything, super short stuff included; We even tried cutting them for a bit to see if we could get some height but it just got bushier; Used short stems in mason jar arrangements because the colour made the stem length forgivable; Branched; Not a good clean purple; Not a popular color for our markets, started off blooming very short, but put on good stem length within a few weeks; I may have planted them too early, I'll be interested to see what other growers thought; Plants have a low, mounding habit, later in the season these plants started to stretch a little, yielding a few short harvestable stems but overall not well-suited for cuts.

*Similar Cultivars:* Color similar to Benary; Not that I know.

*Postharvest Recommendations:* Chlorine tabs in harvest water, refresh with Chrysal 2 and chlorine, use that day; Plain water.

*Comments:* Recommend as a bedding plant (2); The purple dried really nice, too, again hated these zinnias until I saw how well they dried, but other than drying them, they really make a terrible cut flower; Started to bloom at 10-inch height—like a bedding plant, we had a severe drought, so I thought this might be part of the issue, comparisons (Benary Giants and Takii Sunshine) put on more height before blooming, EXP's never achieved the same height, but did have better plant health and quality of blooms; Designers really enjoyed this this zinnia for its color, they had no problem using them in arrangements, but for market bouquets, they were too short; Get it taller and it's a star! we loved the flowers, just not the height, I would say the purple was a tiny bit taller than orange, but still short; Zinnias all grown in a high tunnel; Like the orange, we wanted to use them, every flower was perfect, just too short; The purple I field grew and it never got above 3-6", really branchy, it was hard to get a nice single stem cut, I would not grow them again.



'Expt. Purple'

Photo Jamie Sammons

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.

Species and cultivar	Yield (stems/plant)	Stem length (in.) <sup>1</sup>	Market appreciation rating <sup>2</sup>	Ease of cultivation rating <sup>2</sup>	Grow again rating <sup>2</sup>	Average postharvest life (days)
<b>Brassica Crane Ruffle Bicolor</b>	<b>1.4</b> 1-4	<b>21.5</b> 12-30	<b>5.0</b> 5	<b>4.3</b> 1-5	<b>4.8</b> 4-5	<b>12.0</b> 5-21
<b>Campanula Champion II Deep Blue</b>	<b>2.8</b> 1-8	<b>17.8</b> 12-30	<b>3.9</b> 1-5	<b>3.9</b> 1-5	<b>3.1</b> 1-5	<b>7.7</b> 5-10
<b>Campanula Champion II Lilac</b>	<b>2.9</b> 1-8	<b>19.0</b> 12-33	<b>3.6</b> 1-5	<b>4.0</b> 1-5	<b>3.3</b> 1-5	<b>7.5</b> 5-10
<b>Campanula Champion II Rose</b>	<b>3.0</b> 1-8	<b>19.0</b> 12-36	<b>3.7</b> 1-5	<b>4.0</b> 1-5	<b>3.3</b> 1-5	<b>7.5</b> 5-10
<b>Celosia Act Rima</b>	<b>2.0</b> 1-6	<b>22.7</b> 8-42	<b>4.4</b> 3-5	<b>3.3</b> 1-5	<b>4.5</b> 4-5	<b>8.7</b> 7-14
<b>Celosia Cristi Purple</b>	<b>1.4</b> 1-5	<b>21.8</b> 4-42	<b>4.1</b> 1-5	<b>3.6</b> 1-5	<b>4.6</b> 3-5	<b>10.6</b> 7-14
<b>Celosia Red Ace</b>	<b>1.4</b> 1-5	<b>25.8</b> 8-48	<b>4.2</b> 2-5	<b>3.6</b> 1-5	<b>4.5</b> 3-5	<b>10.1</b> 7-14
<b>Delphinium Jenny's Pearl Blue</b>	<b>3.5</b> 1-10	<b>15.6</b> 9-24	<b>3.5</b> 1-5	<b>3.3</b> 1-5	<b>3.6</b> 1-5	<b>7.0</b> 7
<b>Delphinium Jenny's Pearl Pink</b>	<b>2.4</b> 1-6	<b>14.5</b> 8-24	<b>3.4</b> 1-5	<b>2.9</b> 1-5	<b>3.6</b> 2-5	<b>7.0</b> 7
<b>Dianthus Expt. Pink Magic</b>	<b>7.2</b> 3-20	<b>14.2</b> 10-24	<b>2.8</b> 1-5	<b>2.6</b> 1-5	<b>4.5</b> 3-5	<b>8.6</b> 5-14
<b>Dianthus Expt. Purple</b>	<b>7.3</b> 3-20	<b>15.6</b> 3-36	<b>2.6</b> 1-4	<b>2.6</b> 1-4	<b>4.3</b> 3-5	<b>7.4</b> 5-10
<b>Dianthus Expt. Red</b>	<b>6.9</b> 3-20	<b>14.2</b> 10-24	<b>2.6</b> 1-5	<b>2.6</b> 1-4	<b>4.4</b> 3-5	<b>7.9</b> 5-10
<b>Dianthus Expt. Rose</b>	<b>7.7</b> 3-20	<b>14.3</b> 10-24	<b>2.6</b> 1-4	<b>2.5</b> 1-4	<b>4.4</b> 3-5	<b>7.9</b> 5-10
<b>Lepidium Green Dragon</b>	<b>3.8</b> 1-10	<b>14.3</b> 6-24	<b>3.8</b> 1-5	<b>4.0</b> 1-5	<b>3.7</b> 1-5	<b>9.5</b> 5-"forever"
<b>Lisianthus Echo Pure White Imp.</b>	<b>2.1</b> 1-6	<b>19.3</b> 10-36	<b>4.4</b> 3-5	<b>4.0</b> 2-5	<b>3.9</b> 3-5	<b>12.7</b> 9-14
<b>Lisianthus Echo Purple</b>	<b>1.9</b> 1-4	<b>19.1</b> 10-36	<b>4.8</b> 4-5	<b>4.0</b> 2-5	<b>3.8</b> 3-5	<b>13.5</b> 12-14
<b>Lisianthus Jolly Type III Pink</b>	<b>2.6</b> 1-5	<b>20.6</b> 12-36	<b>5.0</b> 5	<b>4.7</b> 4-5	<b>4.3</b> 3-5	<b>15.0</b> 12-21
<b>Marigold Bengal Orange</b>	<b>9.8</b> 1-50	<b>21.4</b> 12-36	<b>3.5</b> 2-5	<b>3.5</b> 1-5	<b>4.5</b> 3-5	<b>11.0</b> 7-21
<b>Marigold Bindi Gold</b>	<b>9.6</b> 2-35	<b>15.8</b> 6-24	<b>3.4</b> 2-4	<b>2.3</b> 1-4	<b>4.6</b> 3-5	<b>11.3</b> 7-21

Species and cultivar	Yield (stems/plant)	Stem length (in.) <sup>1</sup>	Market appreciation rating <sup>2</sup>	Ease of cultivation rating <sup>2</sup>	Grow again rating <sup>2</sup>	Average postharvest life (days)
<b>Marigold</b> Chedi Yellow	<b>9.0</b> 4-20	<b>20.6</b> 12-30	<b>3.4</b> 2-4	<b>3.1</b> 1-5	<b>4.4</b> 3-5	<b>12.9</b> 7-21
<b>Marigold</b> Hermant Deep Gold	<b>6.1</b> 2-9	<b>18.8</b> 12-30	<b>3.2</b> 2-4	<b>2.8</b> 1-4	<b>4.1</b> 2-5	<b>8.5</b> 7-10
<b>Marigold</b> Janthra Yellow	<b>9.8</b> 5-30	<b>19.0</b> 12-30	<b>3.2</b> 2-4	<b>3.5</b> 2-5	<b>4.3</b> 3-5	<b>11.3</b> 7-21
<b>Marigold</b> Mayan Orange	<b>9.3</b> 1-35	<b>16.7</b> 6-36	<b>3.1</b> 2-4	<b>2.7</b> 1-4	<b>4.7</b> 4-5	<b>13.3</b> 7-21
<b>Marigold</b> Nosento Lime Green	<b>4.6</b> 2-15	<b>16.6</b> 6-36	<b>3.3</b> 1-5	<b>2.6</b> 1-5	<b>4.1</b> 3-5	<b>9.8</b> 7-15
<b>Marigold</b> Royal Bali Gold	<b>8.5</b> 2-20	<b>17.8</b> 12-24	<b>3.4</b> 2-4	<b>2.3</b> 1-4	<b>4.3</b> 3-5	<b>11.7</b> 7-21
<b>Marigold</b> Xochi Orange	<b>9.6</b> 3-30	<b>22.3</b> 12-48	<b>3.9</b> 2-5	<b>4.1</b> 2-5	<b>4.5</b> 3-5	<b>11.4</b> 7-21
<b>Nicotiana</b> Bronze Queen	<b>9.8</b> 1-30	<b>21.1</b> 12-36	<b>2.4</b> 1-5	<b>3.2</b> 1-5	<b>4.5</b> 3-5	<b>4.8</b> 3-7
<b>Nigella</b> African Bride, Delft Blue, and Midnight Dark Blue Mix	<b>4.0</b> 1-8	<b>17.5</b> 7-32	<b>4.3</b> 4-5	<b>4.3</b> 3-5	<b>5.0</b> 5	<b>6.3</b> 5-7
<b>Snapdragon</b> Chantilly Deep Orange	<b>3.6</b> 1-8	<b>22.5</b> 10-36	<b>4.3</b> 3-5	<b>3.8</b> 3-5	<b>4.3</b> 3-5	<b>8.8</b> 7-14
<b>Snapdragon</b> Purple Peloric	<b>5.1</b> 1-10	<b>23.6</b> 12-36	<b>4.3</b> 3-5	<b>4.2</b> 3-5	<b>4.4</b> 3-5	<b>7.8</b> 7-10
<b>Stock</b> Milla Salmon	<b>1.0</b> 1	<b>17.8</b> 12-24	<b>4.1</b> 1-5	<b>4.2</b> 1-5	<b>4.1</b> 1-5	<b>9.3</b> 7-14
<b>Stock</b> Sahin Anytime Mix	<b>1.3</b> 1-3	<b>13.9</b> 8-22	<b>3.2</b> 1-4	<b>2.2</b> 1-4	<b>4.2</b> 1-5	<b>7.0</b> 5-10
<b>Sunflower</b> Marley	<b>1.5</b> 1-6	<b>36.7</b> 10-60	<b>4.2</b> 2-5	<b>4.4</b> 3-5	<b>4.8</b> 4-5	<b>8.4</b> 5-14
<b>Sunflower</b> Ziggy	<b>1.5</b> 1-5	<b>36.8</b> 12-60	<b>4.3</b> 2-5	<b>4.1</b> 3-5	<b>4.9</b> 4-5	<b>8.1</b> 5-10
<b>Tanacetum</b> White Crown	<b>4.4</b> 1-10	<b>18.1</b> 11-36	<b>3.1</b> 1-5	<b>2.6</b> 1-5	<b>4.3</b> 3-5	<b>7.8</b> 7-10
<b>Verbena</b> Purple Haze	<b>15.1</b> 4-50	<b>25.8</b> 12-48	<b>3.6</b> 2-5	<b>3.6</b> 1-5	<b>4.4</b> 2-5	<b>7.3</b> 5-14
<b>Zinnia</b> Expt. Orange	<b>5.2</b> 2-15	<b>10.3</b> 5-18	<b>3.1</b> 1-5	<b>1.4</b> 1-5	<b>4.4</b> 1-5	<b>8.6</b> 5-20
<b>Zinnia</b> Expt. Purple	<b>5.1</b> 2-10	<b>10.1</b> 4-28	<b>3.5</b> 1-5	<b>1.5</b> 1-5	<b>4.4</b> 1-5	<b>8.6</b> 5-20

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

<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.



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# 2020 ASCFG Perennial Trial Report



John Dole, Nathan Jahnke, and Judy Laushman

Photo Nathan Jahnke

With two cycles of Perennial Trials, we have a lot to talk about. In 2020, we evaluated 13 varieties in their second year, and it was the first year for twelve. Next year, we'll report on how those twelve performed in their second season.

**Yarrows** are great plants: they grow fast, spread quickly without being invasive, and are easy to manage. Of the five cultivars in the trials, **'Sassy Summer Sangria'** (year 2) and **'Sassy Summer Lemon'** (year 1) scored highest for their long, strong stems and productivity. **'Sassy Summer Sangria'** produced the longest stems, around 17 inches, and about 13 stems per plant in the second year. In the first year, the same plants produced 8 stems/plant that averaged about 14 inches long. **'Sassy Summer Lemon'** also produced long stems, around 16 inches, and about 7 stems/plant in the first year. Trialers loved the colors and noted that they held up well.

**Astilbe 'Purple Candles'** (year 1) did well in the first year, with 16+ inch stems and around 3 stems per plant. The soft plumes add wonderful texture and color to bouquets and designs. At least one grower noted that they use the dark green foliage as well. The flower color stood out, with one trialer commenting "I have several different astilbe varieties and the color on this one is special!"



Photo Morgan Hopkins



Photo John Dole

The iconic clematis are known for their intensely colored flowers and wonderfully fuzzy seed heads. However, most clematis are vines, making production a bit complicated, and the flowers and seed heads are produced on short stems, making them difficult to use. With that in mind we were excited to try clematis ‘**Stand by Me**’ (year 2) which is billed as an upright, non-vining plant. Last year the stems were on the short side, around 10 inches, but this year they averaged around 19 inches long, with over 8 stems/plant. This cultivar did so well that it is one of the top-ranked entries. One trialer wrote that it had “The most darling bell-shaped blue flowers. I had a second flush of flowers in September which were so perfect. I have been needing more blue flowers in the fall!” As with many other clematis, the white seed heads were also well received.

**Kniphofias** make dramatic statements in bouquets and arrangements with their bright yellow to orange colors. Of the four in the trials, ‘**Backdraft**’ (year 2) scored the highest for its vivid reddish orange that ages to yellow, and strong, pest-free growth. In its second year, stems averaged 15 inches long, with some getting up to 24 inches, while yield averaged 15 stems per plant. One problem with all kniphofias is that the lower florets turn brown as they age, making it tricky to harvest when the spikes are well colored but before the lower florets turn brown. If flowers get a little old, a quick shake of stems while harvesting can dislodge some of the brown ones.

Both veronica ‘**Blue Skywalker**’ and ‘**Lavender Lightsaber**’ (year 2) scored well again. In their first year, these cultivars produced 3-4 stems/plant that averaged 10-13 inches long, while in 2020 the



‘Backdraft’

Photo Rachael Ackerman



‘Stand by Me’

Photo Rachael Ackerman

mature plants produced 10 to 12 stems/plant (at least one trialer harvested 20-25 stems/plant!) that averaged 13 to 17 inches long. As in the previous cycle, trialers commented on the lovely colors and unique texture they bring to designs.

Stay tuned to *The Cut Flower Quarterly* for next year’s report on year two of the new cultivars in the trials.

Based on the combined ratings score (market appreciation + repeat again + ease of cultivation), the following top-ranked cultivars will be nominated for the ASCFG Cut Flower of the Year: *Achillea* ‘Sassy Summer Lemon’ and ‘Sassy Summer Sangria’; *Astilbe* ‘Purple Candles’; *Clematis* ‘Stand by Me’; *Kniphofia* ‘Backdraft’; and *Veronica* ‘Blue Skywalker’ and ‘Lavender Lightsaber’.

**Interpreting the trial results:** The numbers reported are averages of all the respondents, and many factors will affect the success of any cultivar. Our participants grow and harvest 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 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 13 evaluators who returned their trial reports! We very much appreciate the time it takes to do the trials. We want to especially thank **Laura Beth Resnick** from Butterbee Farm for being the first trialer to return evaluations for Year One, and **Janet Foss** from J. Foss Garden Flowers for being the first for Year Two. Thank you to Walters Gardens for providing the plant materials. 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.

**Photos:** This year trialers Rachael Ackerman and Renee Clayton sent us photos. We included as many as possible in this report. Some of them were just spectacular—thank you, thank you!



Photo Renee Clayton

### Participating Company

Walters Gardens  
Zeeland, MI  
www.WaltersGardens.com

### Participating Trialers—Year One

Rachael Ackerman Blue Sky Flower Farm Lakeville, MN Zone 4	Jennie Love Love 'n Fresh Flowers Philadelphia, PA Zone 7
Shannon Algieri Stone Barns Center for Food and Agriculture Tarrytown, NY Zone 7a	Jeanie McKewan Brightflower Farm Stockton, IL Zone 5a
Renee Clayton Wild Scallions Farm Timberlake, NC Zone 7	Erin McMullen Rain Drop Farms Philomath, OR Zone 8b
Mackenze Burkhart Michelle Elston Roots Cut Flower Farm Carlisle, PA Zone 6b	Rebecca Perry Sabatia Flower Farm West Barnstable, MA Zone 6b
Morgan Hopkins Urban Buds St. Louis, MO Zone 5	Laura Beth Resnick Butterbee Farm Pikesville, MD Zone 7
Nathan Jahnke/John Dole NC State University Raleigh, NC Zone 7b	Jamie Rohda Harvest Home Flowers Waverly, NE Zone 5
	Teresa Tibbets Dandelion Farm Lander, WY Zone 4

### Participating Trialers—Year Two

Rachael Ackerman Blue Sky Farm Lakeville, MN Zone 4	Jeanie McKewan Brightflower Farm Stockton, IL Zone 5a
Hedda Brorstrom Full Bloom Flower Farm Sebastopol, CA Zone 9b	Rebecca Perry Sabatia Flower Farm West Barnstable, MA Zone 6.5
Renee Clayton Wild Scallions Farm Timberlake, NC Zone 7	Teresa Tibbets Dandelion Farm Lander, WY Zone 4
Mackenze Burkhart Michelle Elston Roots Cut Flower Farm Carlisle, PA Zone 6b	
Janet Foss J. Foss Garden Flowers Chehalis, WA Zone 7	
Nathan Jahnke John Dole NC State University Raleigh, NC Zone 7b	



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**Summary of Comments.** The number in the parenthesis is the number of trialers who made the same comment. Comments from different individuals are separated by a “;”. Note: many respondents did not make specific comments on each cultivar, and in a few cases, comments have been shortened because of limited space.

## Year 1 Results

### **Achillea ‘Firefly Diamond’**

**Good Qualities:** Beautiful bright white (2); Nice strong stems; Robust, fast-growing plant, minimal weeding and no staking needed; Holds color, no browning; We liked that this cultivar had a thicker stem than most other white yarrows, it gave us a longer vase life comparatively; This cultivar is extremely cute, and very useful being a dainty white variety, I found it in year one to be very short, I have grown similar types and they bloom with more stems and stem length year two; Robust, drought-tolerant plant; Large flower heads.

**Problems:** Short (4); Ivory white color, not popular with the farmers’ market crowd and a little on the short side, might work better with weddings; Weak grower, not much bloom; It is annoying to harvest; Not convinced this white is better than the wild yarrow varieties I grow, second year yield will be informative.

**Notable Insects and Diseases:** None (5); Gophers.

**Similar Cultivars:** ‘Moonshine’ yarrow; Yes, similar to the “wild” yarrow that comes up naturally in Wyoming.

**Postharvest Recommendations:** Chill for 1 hour after cut and before use; Plain water; Be sure to cut when the pollen has begun to show, strip all leaves, use holding solution and a bleach tab.

**Comments:** I’d like to see it produce a second year, maybe it would be taller and produce more stems; We really liked this yarrow and were impressed that it held its color and did not brown, it would be a great asset for wedding design work; Planted in a high exposed field row, hoping to see better performance in year 2; I really wanted to like this one as it was similar to

another I had grown some years back, perhaps I didn’t give it enough water and I was so surprised the gophers ate it, I’ve never seen them eat yarrow before.



Photo John Dole

### **Achillea ‘Peter Cottontail’**

**Good Qualities:** Bright white flowers (2), similar to a feverfew; Robust, heavily-branched grower, with a most unusual flower for an achillea, looks more like a baby’s breath, holds out of water, could be great for wedding work; No browning, timing was different than feverfew, so could be used to extend availability of small white flowers for spring; Great vigorous grower, incredibly prolific bloomer all season long, low maintenance needs (no trellising, etc.), drought resistant, pest resistant; Unique flowers, large flowers for a yarrow, drought tol-



Photo John Dole

erant, dries well; Clean dark green foliage.

**Problems:** Short stems (3) - hoping they will gain length next season, looks a lot like feverfew, but not as prolific; Short in comparison to *Achillea* ‘Firefly Diamond’ and ‘Firefly Amethyst’, though not unexpected for first-year growth; Wasn’t visited by pollinators; Stems were floppy, needs support.

**Notable Insects and Diseases:** None (5).

**Similar Cultivars:** Baby’s breath (2); Similar look to feverfew or achillea ‘The Pearl’; feverfew ‘Tetra White’; feverfew ‘Ball’s Ultra’.

**Postharvest Recommendations:** Chill for at least 1 hour before use; Plain water; We used Chrysal #2 and a gerbera tablet at harvest.

**Comments:** Could be a very useful little flower to have around, also has a long harvest window, stems keep blooming (and steadily getting taller), for later harvest, just pinch out the faded center bloom; We liked it for design; Our favorite! we found that it also makes a great dry flower; Plants are very new, but I think these will be really useful and productive next season!

### **Achillea ‘Sassy Summer Lemon’**

**Good Qualities:** Strong, sturdy stems (6); Soft yellow color (5), paler than the ‘Moonshine’ cultivar that we grow, holds color and does not brown, had great length for a first-year yarrow; More productive and hearty in the same vein as ‘Moonshine’; Robust, strong grower, minimal weeding needed; Consistent-sized heads; Clean foliage, upright stems; Useful in market bouquets.

**Problems:** None! (2); We liked this one; Pale cool yellow color, not terribly popular at farmers’ market, could be good for pastel weddings; Not an easy color to sell in our market, used



Photo Morgan Hopkins

pollen is showing, we cut into Chrysal #2 and use a Gerb pill; Harvest like other yarrow, once all the blooms are open. *Comments:* We liked this variety. We grow 'Moonshine' because it holds its color so well, but would consider growing this in the future as well; If only yellow was more popular with our customers!; Unlike the muted yarrows, this one is stiff and sturdy, a good replacement in work that needs a neon pop for billy balls, I am sure some florists around here would think it is too bright, but it's a lovely plant; Quick to flower, vigorous plants.

### Astilbe 'Maggie Daley'

*Good Qualities:* It held up well in less than ideal conditions for astilbe, exceptionally hot and dry this summer; Very fond of the color and the spired shape is valuable; I am in love with Astilbes! the foliage is useful as greenery, the stems were short, but the dark pink color was nice.

*Problems:* Short stems (2), but this is its first year so probably taller next year; Growth was not vigorous.

*Notable Insects and Diseases:* None.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* Chill in the cooler for at least 1 hour before using.

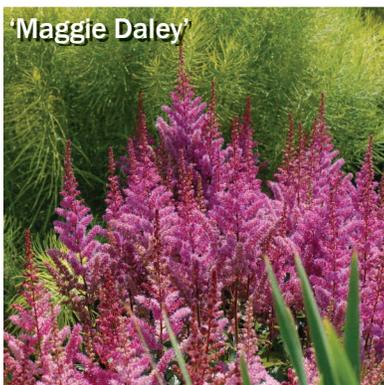


Photo Walters Gardens

*Comments:* They REALLY struggled during the drought, some of the plants produced one to two short flowers, but many of them appeared to die before producing anything, it will be interesting to see how many come back next year; We didn't actually harvest/sell any of this since it was its first year and the

number of stems ready at any one time was so low; Definitely need shade in arid west.

### Astilbe 'Purple Candles'

*Good Qualities:* Beautiful lavender color! (6); A nice plumed flower shape, favored by the pollinators; I have several different astilbe varieties and the color on this one is special!; Texture and spired shape of astilbe were appreciated by our floral team; Very tall; Nice, dark green foliage can be used as greenery, nice to use in event work; All of the florists love astilbes, very floriferous even in the first year.

*Problems:* Not a vigorous grower; Small stage of harvest range; Not all the plants bloomed, stems on the short side, the browning on the bottom of the flower over time takes away from its beauty in arrangements, less tolerant than 'Maggie Daley' to dry conditions—wilted a lot in our dry summer climate; Other than the cultural requirements, if those are met, the plants are beautiful.

*Notable Insects and Diseases:* None (6).

*Similar Cultivars:* All astilbe.

*Postharvest Recommendations:* Chill in refrigeration for at least 1 hour before use; We cut when the flower spikes were 1/3 to 1/2 open and buds were colored; Tips tended to wilt.

*Comments:* Also hoping they establish and take off next year, I would love to have more stems to work with!; They REALLY struggled during the drought, some of the plants produced one to two short flowers, but many of them appeared to die before producing anything, it will be interesting to see how many come back next year; We didn't cut or sell any of these since there were so few stems ready to cut at any given time; Very uniform in color, somewhat outrageous and florists loved it; Definitely need shade in arid west; Astilbes are always tricky unless they have their exact cultural requirements; Similar color as 'Maggie Daley', but much longer stems and flowered later.



Photo Walters Gardens

### Baptisia 'Plum Rosy'

*Good Qualities:* Grew a nice amount of foliage, rather low to the ground, but a good sign for next year; The plants survived a very hot, dry summer without irrigation or attention; Not sure! the plants took a long time to establish, foliage really filled out by the end of the season.

*Problems:* Slow to establish—no flowers first year; Wasn't happy as a row crop.

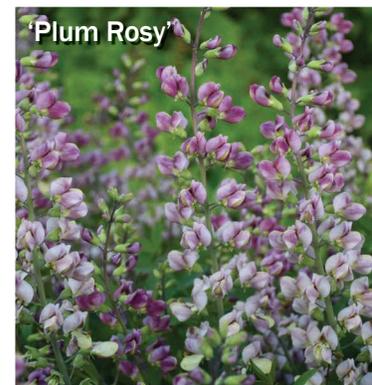


Photo Walters Gardens

*Notable Insects and Diseases:* Grasshoppers; None.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* None listed.

*Comments:* This one didn't flower in year one (5), which is normal for us with baptisia, we'll wait to see what happens in the spring of year 2!; It takes about three years in our zone for baptisia to establish; Plants arrived in June and it was really too late to plant them and get much data this year; We will give baptisia more time in the nursery before planting out next time, we will be moving these plants into ornamental spaces for better growth and use in 2021.

### **Kniphofia 'Lucky Lemons'**

*Good Qualities:* Robust grower, minimal weeding needed; We barely looked at it all season, and it still flowered, so pretty easy to grow!; Drought tolerant; Clean foliage, no specific pest or disease issues; Love the yellow color!

*Problems:* This is just not a popular flower with our customers—the yellow color and the shape of the flower are maybe novelty but not things that our customers will buy weekly; Pale lemon yellow not easy to work into farmers' market bouquets, and works only for weddings with a compatible palette, bloomed rather short this year; Lower petals degraded before the flower was in its prime; Color is nothing special, not a lot of call for pale yellow this season; Only



Photo John Dole

one stem per plant first year—likely won't survive the winter.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* Very similar to Kniphofia 'Flashpoint'.

*Postharvest Recommendations:* For best vase life pick when flowers are just starting to open; We cut when flowers are 1/3-1/2 open, we use Chrysal #2 and a gerb pill.

*Comments:* Not highly productive in our zone its first year, doesn't fit our style, can't trust the bloom with degrading lower petals.

### **Kniphofia PYROMANIA 'Flashpoint'**

*Good Qualities:* Unique ivory and light yellow color (2); Vigorous grower, sturdy stems, foliage looked good all year; Clean specimens, no insect pressure; It is yet to bloom, but folks love it in design work, it gives things a tropical feel

and is easy to grow in a border and takes little water; Smaller flower heads were easy to design with, drought tolerant, of all the kniphofias I have tried, this is the first I felt might be worth growing and overwintering because the color and smaller flowers were easier to design with, used every stem even though they were short, flowers last out of water; Really flourished despite drought, strong plants.

*Problems:* Just didn't grow that much; This variety had a shorter stem length compared to 'Lucky Lemons'; Color is nothing to write home about, especially since there were no weddings this year, so no call for pale colors; Slow to grow; On the short side, wish they had more stems; We find that by the time the flower is fully developed the lower level of petals have browned, the plants also do not produce very many blooms their first year.

*Notable Insects and Diseases:* None (6).

*Similar Cultivars:* Kniphofia 'Lucky Lemons' (2).

*Postharvest Recommendations:* Chill in cooler for one hour before use; We cut when flowers are at least 1/3 to 1/2 open; I've grown many other varieties of this and my florists love it! from this size plant, though, it normally takes 3-4 years before we have any blooms, once they do bloom, we get about a week of vase life, fragile stems for transport as some varieties snap.

*Comments:* These plants arrived 2 months after all the others, and they grew and some flowered, but significantly smaller than the other variety of kniphofia...though strangely the same color...is that right?; Very pleased with the plant and will expand into our ornamental gardens; We find that kniphofia are just not conducive to our style and type of production, in this zone they are not productive their first year, and aren't worth the space.



Photo Walters Gardens

### **Penstemon 'Onyx and Pearls'**

*Good Qualities:* Unique dark burgundy foliage (4); Loved the color, super dramatic; Robust grower with gorgeous foliage, minimal weeding, pollinator favorite when in bloom; Understated, but complex colored flowers, beautiful in bouquets; Huge florets and many on each stem; Very useful color in wedding work, unique flowers perfect for the "wildflower" look, very drought tolerant; Really cool seed heads too!

*Problems:* Didn't get tall or many stems from it year one; Not a terribly long vase life, maybe best as an event flower, but great for the wildflower wedding look; Not productive in its first year; Petal shed can be an issue, as the florets open over a period of time, so it can be necessary to remove spent flowers as newer ones are harvested; First year was not very

floriferous; Not all plants flowered, stems on short side, however, this is typical for first-year penstemon in our climate. *Notable Insects and Diseases:* None (5); Japanese beetles. *Similar Cultivars:* Similar to ‘Huskers Red’ but flowers are much larger and more showy. *Postharvest Recommendations:* We cut when flowers were 1/3 to 1/2 open.



Photo John Dole

*Comments:* Also, used the seeds heads as cuts (3), they last forever, and are a gorgeous burgundy cluster of seed pods, especially nice in arrangements; This one was a surprise for us, the dark foliage was gorgeous and our customers loved it, the few stems that didn’t get sold for flowers were sold at the end of the season for the seed pods, which were really cool!; It was difficult for us to judge this plant’s performance as a first-year perennial, they

really only produced a single stem and didn’t get very large, it was also a difficult drought year; <12 inches; Hoping for a great show next year; They produced only a few stems this season.

**Phlox LUMINARY ‘Opalescence’**

*Good Qualities:* Nice full focal flower for the summer, pale pink flower; No mildew; Long, strong stems, nice color and scent.

*Problems:* Bloomed too short to be very useful (2).

*Notable Insects and Diseases:* Cucumber beetles; 15% of plants died, or seemed to, others just didn’t grow much.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* We used Chrysal t-bags in the water.

*Comments:* Phlox is not productive during its first year in our growing zone.

**Phlox ‘Fashionably Early Crystal’**

*Good Qualities:* Gorgeous white/blush color (4); Nice large flower head fills out an arrangement (2); The plants that did bloom bloomed early, and did not get mildew; Clean foliage; Easy to use in design work, lovely scent.

*Problems:* Pretty short the first year (4), flower heads dwarfed the stems; I would use only in event work, as the petals shatter easily, harvest window is short; Not very strong, does not compare to the vigor of ‘Fashionably Early Flamingo’; Worth it for the color.



Photo John Dole

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* Flower heads look a bit like a large sweet William.

*Postharvest Recommendations:* We cut when flowers were 1/2 open.

*Comments:* I am very interested to see what it will do next year, I was a little disappointed it didn’t grow more, especially since it was planted in March; I like the color of the short blooms that the plants produced this year, looking forward to harvesting next year!



Photo John Dole

**Phlox ‘Glamour Girl’**

*Good Qualities:* Fabulous saturated coral color (3), I loved this color!; Long, strong stems, nice scent; Clean foliage, strong upright stems.

*Problems:* Plants didn’t seem to grow much, and those that did flower bloomed very short; The color is hard to move in the market, used mostly for grocery and farmers’ market bouquets, which was great especially for the scent; First year all plants did not flower, flowers were huge for the length of the stem; The majority of the trial plants have died, plants remain short, with not many useable stems; First-year yield was low and the color is a super saturated pink that it hard to incorporate in arrangements.

*Notable Insects and Diseases:* 15% of the plants seem to have died—maybe a leaf rust, they just fizzled up, other plants seemingly unaffected; Cucumber beetles; Clean foliage, no problems to speak of; None.

*Similar Cultivars:* ‘Flamingo’.

*Postharvest Recommendations:* We cut when flowers were 1/3 to 1/2 open.

*Comments:* I am very interested in what this does next year as well, they had a long growing season this year, but just didn’t grow much; The plants did produce a few short stems of blooms and the color was absolutely amazing! looking forward to seeing this one produce next year!

## Year 2 Results

### *Achillea* ‘Sassy Summer Sangria’

*Good Qualities:* Strong red color (5); Sturdy stem (2); Very tall, productive, holds color well; Uniform height and bloom time, Nice flower shape, good shelf life; Easy to grow, large flower heads, drought tolerant, and useable stems to dry.

*Problems:* None (2); No rebloom; Stems ended up requiring staking, they bloomed taller this year, but the stems were rather spindly, the plants produced up to 20 stems per plant, but many were unharvestable after flopping over; Stems on the short side for yarrows, not as robust of a plant compared to other varieties.

*Notable Insects and Diseases:* None (5).

*Similar Cultivars:* Strongest true red color that I have seen in the trade; ‘Moonshine’ yarrow.

*Postharvest Recommendations:* We cut when pollen was showing, color a bit dull, and removed all of the foliage, flowers held up well in bouquets, we did not store in the cooler more than a few days for preparation to assemble bouquets; Plain water.

*Comments:* We love this variety, we typically do not grow colored yarrow besides yellow, but this particular variety is very worthwhile, customers love the color, the stem length is great, and the way it holds its color vs. other yarrows is impressive; We liked the color of this yarrow and the reblooming nature; I will trellis these next year.

### *Achillea* ‘Sassy Summer Sunset’

*Good Qualities:* Bright orange/terra cotta color (2); Strong stems (2), did not need support; Plants all bloom over a period of 2 weeks, good drought tolerance; Dries nicely, easy to grow in dry conditions; Vase life was good, flower shape and ease of growing and reblooming were desirable.

*Problems:* No rebloom; Tend to be consistently shorter than

our other yarrow, the color was not great, flower seemed never fully open, wish the stem length was longer.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* Very similar to other Sassy cultivars, stronger color than other terra cotta cultivars; ‘Moonshine’ yarrow.

*Postharvest Recommendations:* We remove all foliage, harvest when pollen is showing and the flower color is beginning to dull; Plain water.

*Comments:* Bloomed over a month, and the stems rather trickled in—based on how robust the basal growth appeared, I rather hoped for more stems.

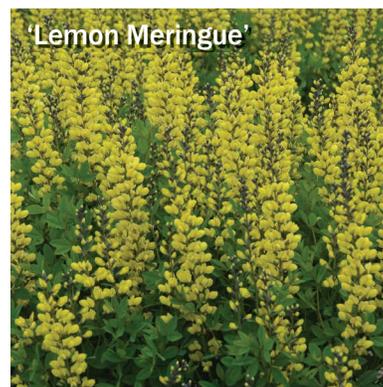


Photo Walters Gardens

### *Baptisia* ‘Lemon Meringue’

*Good Qualities:* Lovely easy spike flower in May, the plants didn’t have that many shoots, but each shoot branched and ended up quite bushy, these really grew into a little hedge, and grew robustly enough to need little maintenance; Nothing to report.

*Problems:* Length of time to produce blooms; Small, difficult to establish; Not that many flowers, but based on the rate of increase over last year, there could be lots next year.

*Notable Insects and Diseases:* None (2); Plants appear to have less disease than ‘Pink Lemonade’.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* None listed.

*Comments:* None of these survived their first season; Baptisia takes a minimum of three years to establish in our zone, we have lost nearly all of this variety, we have two plants remaining, compared to 8 plants of ‘Pink Lemonade’, they are much smaller than ‘Pink Lemonade’ and did not flower this year; I have tried to grow the wild type before, and was really shocked and pleased at how much more robust this selected and improved variety was!

### *Baptisia* ‘Pink Lemonade’

*Good Qualities:* Higher survival rate than baptisia ‘Lemon Meringue’; The flowers age to a superb antique pink.

*Problems:* Long time in the field to wait for production.

*Notable Insects and Diseases:* None to speak of other than the voles love it; It does show signs of disease at the end of the season, but an amount that is to be expected.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* None listed.

*Comments:* I am still impressed how it went from a delicate little plant the first year, to this robust hip-high hedge this year,

I am excited to see what year 3 brings; None of these plants survived their first season; While the plants are alive, they aren't wonderful or vigorous and they haven't flowered; Baptisia takes a minimum of three years for us to establish, we did not harvest any of this variety this year, but the fact that we have lost only 4 plants is impressive, even with the most reliable varieties that we grow ('Twilight Prairie Blues', *B. australis*) are difficult to establish and have required several re-plantings.

### **Clematis 'Stand By Me'**

**Good Qualities:** White seed pod puffs (3); Fabulous blue color (2) so difficult to come by in the Midwest region; The most darling bell-shaped blue flower, I had a second flush of flowers in September which were so perfect, I have been needing more blue flowers in the fall!; Easy to grow (with support), quite drought tolerant in part shade, long vase life, unique blooms; Stems are very long and branched—we sold them as

one long stem with multiple branches or we cut the smaller stems and sold larger bunches with shorter stems; People liked it, nice straight stems.

**Problems:** Even though it is a "bush" clematis, the plants still require staking or trellis to support the stems (4); The flowers are downward facing and difficult to use for our purposes (2); None, some powdery mildew late season.



Photo Rachael Ackerman

**Notable Insects and Diseases:** None (4); A foliage disease, maybe a bacterial leaf spot, wiped out the foliage of the first round of flowers, the plants almost died back in the summer, but resprouted in fall with a much better crop of flowers!

**Similar Cultivars:** Platycodon is a better choice for this color; No, very unique; Yes, some species of clematis are similar.

**Postharvest Recommendations:** Plain water; Pick flowers when they are only half open, buds open in the vase nicely, but petals fall off easily from fully open blooms, foliage lasts much longer and was beautiful!; Holds well in cooler for up to 2 weeks with preservative; We use Chrysal Prof #2 and a CVBN tablet.

**Comments:** A very fun design element, even if it has some trouble with disease, it is worth babying this one some; It is a little short for me, but I still ended up using almost every stem, I was surprised how well it did with only weekly watering in our arid climate.

### **Echinacea 'Coral Craze'**

**Good Qualities:** Nice hot pink color (6); Large bright cone; The shape and stem length were desirable; Perfect for farmers' market bouquets, harvested stems for a month in June; Very large globe-like cones, thick stems, drought tolerant, bright color of cones and petals.

**Problems:** Much shorter stems than most cut flower varieties (2); None to speak of; Not many stems per plant, like many echinacea, hard to keep alive for us; Japanese beetles love it; Wish more of them survived; Difficult to establish, not very productive, blooms tend to brown out quickly.

**Notable Insects and Diseases:** None (3).

**Similar Cultivars:** We grow several echinaceas which we like very much.

**Postharvest Recommendations:** We used Chrysal #2; We removed most of the leaves, held in water with Chrysal #2 and CVBN tablet; Chrysal holding solution and gerbera tablet.

**Comments:** Customers liked it, I liked it too, but I'm not sure it liked our growing conditions; Still my favorite from this trial!; I would grow this for the glowing gold cone, even though it is one the short side.



Photo John Dole

### **Kniphofia 'Backdraft'**

**Good Qualities:** Vivid color (2) stood out, was eye catching, and sold quickly; Bright, productive, bloomed early in the season when product is needed; Clean plants, strong bloomers, strong stems; The length of the flower was great; Bloomed



Photo John Dole

over the month of June, and the stems just kept coming, when combined with other bright colors, made for fun bouquets, basal growth also very robust, minimal weeding required; Extremely drought tolerant.

**Problems:** Could have been taller (2); Need to really check them each day for ready product; None to speak of; The color and shape make it a little challenging to integrate with other

flowers; Blooms are best for event work, don't look that great as the flower ages in the vase.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* We used Chrysal #2; We harvested when flowers were at least 1/2 open with a strong bright color, we usually harvested once per week so some flowers were fully open; Plain water; Harvest stems young.

*Comments:* I didn't think they would sell, but customers liked them; We liked these very much; I really ended up loving these flowers way more than I expected; These plants survived the winter in our unheated, very dry, hoophouse in Zone 4b, where they received winter moisture, the survival was very low, I would definitely treat these as an annual in our zone.

### ***Kniphofia* 'Orange Blaze'**

*Good Qualities:* The bright orange color with almost purple undertones is stunning! (4); Productive blooms before most annuals, customers like it; Strong stems, good form; As with other kniphofias, we like the shape of the flower; Drought tolerant.



Photo John Dole

*Problems:* Blooms fast and can get past prime age fast, must carefully monitor; None to speak of; We were less happy with this color, think another year in the ground might produce longer stems as they were short this year; Plants in general smaller and less robust than the other variety of kniphofia; Color is more of a hunter orange and hard to use in designs, did not overwinter well for us.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* The two kniphofias were very similar.

*Postharvest Recommendations:* We used Chrysal #2; We use Chrysal #2 and a CVBN tablet; Harvest the flowers young.

*Comments:* Bloomed over the month of June and combined well with bright colors. We overwintered some in our unheated, very dry hoophouse, would treat as an annual in Zone 4b.

### ***Panicum* 'Apache Rose'**

*Good Qualities:* Unique blush color (3); Very easy to grow, low maintenance, drought tolerant; It can be picked while green with nice rosy panicles, or later when the seed heads and grass are golden, nice long harvest window, and adds a nice airy look to any arrangement; Long straight stems; Easy to grow, drought tolerant, dries well.

*Problems:* Nothing special, weak stems, not a particularly noteworthy flower; Stems are slender, and it takes A LOT to make a nice-sized bunch, I didn't always have the patience to pick it; I wish the seed heads were a little bigger, stems thicker, and stem length longer.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* Harvest before stems dry or else they fall apart; As with any grasses, change water frequently.

*Comments:* We use this primarily for wedding DIY bulk buckets, it would be a pain to use in wholesale bouquets; These did not survive the first season so never produced any results for me to observe; Nice material to have around; Plants were much more robust in year 2.

### ***Pennisetum* 'Puppy Love'**

*Good Qualities:* Gorgeous fluffy blooms of black and bright green (2); Very low maintenance, we haven't lost a single plant, drought tolerant; People like ornamental grasses, it adds interesting texture to our bunches.

*Problems:* None to speak of; Still has not produced great stem lengths the second year; The flowers are weak, short, and not particularly pretty on this variety of pennisetum, much prefer straight *P. alopecuroides*;

All the plants died over the winter!; Was not very robust in year 1, very few survived winter, didn't bloom for me either year.

*Notable Insects and Diseases:* None (2).

*Similar Cultivars:* *Pennisetum rubrum*, 'Hamlin', *P. alopecuroides*.

*Postharvest Recommendations:* We use CVBN tablets in the water, we harvested when fully open and bushy; Plain water.

*Comments:* We like this grass, but typically use it only for design work, or wedding DIY bulk buckets, it has a nice unique texture and burgundy color, which has fit well with wedding trends of the past few years.



Photo Rachael Ackerman

### ***Phlox* 'Fashionably Early Flamingo'**

*Good Qualities:* Beautiful bright color (4); Tall, sturdy, large head size, vigorous plants, conveniently early in the spring, would say this is the best phlox we have attempted to grow;



Photo John Dole

We like phlox but are always hesitant to deal with powdery mildew issues; Nice large focal flower in a bright color in mid May and a pollinator favorite; The florets were a nice size and of substantial thickness.

*Problems:* While it was convenient in the spring, I would not necessarily say it was worth the space that it takes up as a perennial, we cannot grow phlox as an annual here and get any serious yields; Spent florets need to be shaken off or are ugly; Super saturated, almost fluorescent pink color was hard to design with (we tend to get saturated color in the Rocky Mountains), flowers shatter easily; Still somewhat short.

*Notable Insects and Diseases:* None (4); It was impressive that it had no mildew issues.

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* Plain water; Would use a flower food to help the buds that continue to open to keep some color, otherwise the new buds open very pale.

*Comments:* These bloomed just after the peonies and were just what I wanted for mixed bouquets.



Photo John Dole

**Veronica 'Blue Skywalker'**

*Good Qualities:* Lovely blue purple color (4); Unique texture and shape for design work; Strong stems, good rebloom; We like veronica very much, so the long flower spike is desirable, these veronica did not display the typical diseases so common in the species; Bumblebees loved the blossoms! for me, they bloomed

for Mother's Day, I can never have enough material for Mother's Day!; Grows well in part shade, bloomed all summer into fall and takes a light frost.

*Problems:* Still fairly small plants, it seems like it will take several years to fully establish; None so far; We wish the stems were longer.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* We grow veronicastrum, which is very prolific and a great spike-shaped flower.

*Postharvest Recommendations:* We cut when flowers were 1/3 to 1/2 open; Plain water.

*Comments:* We liked this color better than the lavender, and these plants achieved a usable stem length on the first cutting that the lavender did not; There was also a small flush of flowers in the fall—very useful; Loved this variety for event work, it's hard to find flowers with blues in them.

**Veronica 'Lavender Lightsaber'**

*Good Qualities:* Lovely lavender color (4); All of our plants have survived; Clean foliage, bees love it; The spike flower shape very desirable; Also bloomed in May in time for Mother's Day, another bumblebee favorite; Bloomed all summer into fall, good for event work.

*Problems:* Very short for a second year (4), not many stems were of a useful length; Perhaps with time the flower stems will become longer, the plant is advertised as 28-30" tall.

*Notable Insects and Diseases:* None (4).

*Similar Cultivars:* None listed.

*Postharvest Recommendations:* We cut when flowers were 1/3 to 1/2 open; Plain water.

*Comments:* If the plant does not improve in terms of stem length next year, we would not keep growing it; Also had a small flush of flowers in the fall.



Photo Rachael Ackerman

Table 1. Year one results for plants received 2020. 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.

Species Cultivar	Plant survival and flowering (%)	Yield (stems/ plant)	Stem length (in.) <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)
<b>Achillea</b>	<b>93</b>	<b>5.1</b>	<b>12.4</b>	<b>3.2</b>	<b>3.4</b>	<b>4.7</b>	<b>6.3</b>
Firefly Diamond	60-100	1-15	4-18	2-5	2-5	3-5	3-10
<b>Achillea</b>	<b>97</b>	<b>5.1</b>	<b>11.9</b>	<b>3.3</b>	<b>4.0</b>	<b>4.5</b>	<b>7.7</b>
Peter Cottontail	80-100	1-15	6-18	3-4	3-5	3-5	3-10
<b>Achillea</b>	<b>100</b>	<b>7.1</b>	<b>15.8</b>	<b>3.8</b>	<b>4.2</b>	<b>5.0</b>	<b>8.0</b>
Sassy Summer Lemon	100	1-15	12-20	2-5	3-5	5	3-11
<b>Astilbe</b>	<b>74</b>	<b>1.9</b>	<b>12.3</b>	<b>4.5</b>	<b>4.0</b>	<b>4.0</b>	<b>7.0</b>
Maggie Daley	20-100	1-3	10-16	4-5	3-5	2-5	7
<b>Astilbe</b>	<b>81</b>	<b>3.2</b>	<b>16.3</b>	<b>4.8</b>	<b>4.2</b>	<b>4.0</b>	<b>6.0</b>
Purple Candles	20-100	1-8	10-27	4-5	3-5	2-5	4-7
<b>Baptisia</b>	<b>17</b>	<b>-</b>	<b>13.5</b>	<b>-</b>	<b>5.0</b>	<b>4.0</b>	<b>-</b>
Plum Rosy	0-100		4-20		5	3-5	
<b>Kniphofia</b>	<b>93</b>	<b>2.6</b>	<b>15.0</b>	<b>3.7</b>	<b>2.7</b>	<b>4.8</b>	<b>7.0</b>
Lucky Lemons	80-100	1-8	10-18	3-5	1-4	4-5	7
<b>Kniphofia</b>	<b>86</b>	<b>2.1</b>	<b>15.8</b>	<b>4.7</b>	<b>3.2</b>	<b>4.8</b>	<b>6.8</b>
PYROMANIA Flashpoint	50-100	1-5	10-29	4-5	1-5	4-5	5-7
<b>Phlox Fashionably</b>	<b>92</b>	<b>2.2</b>	<b>11.8</b>	<b>3.0</b>	<b>3.0</b>	<b>4.0</b>	<b>6.5</b>
Early Crystal	50-100	1-6	8-18	3	3	3-5	5-7
<b>Phlox</b>	<b>86</b>	<b>2.3</b>	<b>11.8</b>	<b>3.0</b>	<b>2.4</b>	<b>3.8</b>	<b>7.0</b>
Glamour Girl	50-100	1-8	8-22	2-4	1-3	3-5	7
<b>Phlox</b>	<b>88</b>	<b>2.8</b>	<b>12.3</b>	<b>3.0</b>	<b>2.3</b>	<b>3.5</b>	<b>6.0</b>
LUMINARY Opalescence	50-100	1-6	6-24	3	1-3	2-5	6
<b>Penstemon</b>	<b>78</b>	<b>3.0</b>	<b>15.2</b>	<b>4.0</b>	<b>3.8</b>	<b>4.5</b>	<b>5.5</b>
Onyx and Pearls	20-100	1-8	5-36	3-5	2-5	4-5	4-7

<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.

Table 2. Year two results for plants received 2019. 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.

Species Cultivar	Plant survival after winter (%)	Plant flowering (%)	Yield (stems/ plant)	Stem length (in.) <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)
<b>Achillea</b> Sassy Summer Sangria	<b>40</b> 0-100	<b>100</b> 100	<b>12.9</b> 8-25	<b>17.1</b> 9-25	<b>4.75</b> 4-5	<b>4.6</b> 3-5	<b>4.6</b> 3-5	<b>8.2</b> 7-10
<b>Achillea</b> Sassy Summer Sunset	<b>28</b> 0-100	<b>100</b> 100	<b>10.8</b> 6-15	<b>13.9</b> 6-18	<b>4.0</b> 3-5	<b>3.3</b> 1-5	<b>4.8</b> 4-5	<b>6.8</b> 3-10
<b>Baptisia</b> Lemon Meringue	<b>4</b> 0-10	<b>25</b> 0-100	<b>3.0</b> 3	<b>17.0</b> 10-24	<b>2.0</b> 1-3	<b>3.0</b> 1-5	<b>3.7</b> 2-5	<b>8.0</b> 8
<b>Baptisia</b> Pink Lemonade	<b>37</b> 0-100	<b>38</b> 0-100	<b>3.0</b> 3	<b>22.0</b> 20-24	<b>2.5</b> 1-4	<b>3.0</b> 1-5	<b>4.5</b> 4-5	<b>5.0</b> 5
<b>Clematis</b> Stand by Me	<b>40</b> 0-100	<b>97</b> 85-100	<b>8.4</b> 4-12	<b>18.8</b> 12-24	<b>4.4</b> 3-5	<b>4.0</b> 4-5	<b>4.6</b> 3-5	<b>6.7</b> 5-10
<b>Echinacea</b> Coral Craze	<b>24</b> 0-100	<b>83</b> 50-100	<b>5.8</b> 1-12	<b>12.9</b> 10-16	<b>4.8</b> 4-5	<b>3.7</b> 1-5	<b>4.0</b> 2-5	<b>7.7</b> 5-10
<b>Kniphofia</b> Backdraft	<b>50</b> 0-100	<b>100</b> 100	<b>14.9</b> 6-20	<b>15.1</b> 8-24	<b>4.4</b> 3-5	<b>4.0</b> 2-5	<b>5.0</b> 5	<b>7.0</b> 5-8
<b>Kniphofia</b> Orange Blaze	<b>52</b> 0-100	<b>97</b> 85-100	<b>12.6</b> 4-20	<b>12.9</b> 8-18	<b>4</b> 2-5	<b>3.75</b> 2-5	<b>4.6</b> 3-5	<b>6.8</b> 5-8
<b>Panicum</b> Apache Rose	<b>43</b> 0-100	<b>83</b> 0-100	<b>52.2</b> 15-150	<b>28.3</b> 18-43	<b>3.8</b> 2-5	<b>4.0</b> 1-5	<b>4.8</b> 4-5	<b>9.0</b> 7-14
<b>Pennisetum</b> Puppy Love	<b>53</b> 0-100	<b>64</b> 0-100	<b>23.9</b> 6-50	<b>16.4</b> 10-30	<b>4.0</b> 3-5	<b>3.0</b> 1-5	<b>4.0</b> 1-5	<b>12.0</b> 7-21
<b>Phlox</b> Fashionably Early Flamingo	<b>36</b> 0-100	<b>100</b> 100	<b>22.4</b> 1-12	<b>13.7</b> 10-24	<b>3.8</b> 1-5	<b>3.7</b> 1-5	<b>4.2</b> 3-5	<b>6.3</b> 3-7
<b>Veronica</b> Blue Skywalker	<b>19</b> 0-100	<b>100</b> 100	<b>12.4</b> 6-25	<b>17.3</b> 8-25	<b>5.0</b> 5	<b>4.5</b> 2-5	<b>4.8</b> 4-5	<b>7.3</b> 5-10
<b>Veronica</b> Lavender Lightsaber	<b>18</b> 0-100	<b>100</b> 100	<b>10.2</b> 3-20	<b>13.3</b> 4-20	<b>4.6</b> 4-5	<b>3.7</b> 2-5	<b>4.7</b> 4-5	<b>7.4</b> 5-10

<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.

# 2020 ASCFG Hardy Eucalyptus Trial Report

John Dole, Nathan Jahnke, and Judy Laushman

When gardeners in cold climates try to grow tropical plants, we call it zone envy. When cut flower growers do it, we call it entrepreneurial.

The spicy fragrance and wonderful silvery foliage of eucalyptus leads growers of all types to try to grow it, despite its renowned sensitivity to cold. The most common or widely known eucalyptus in the trade are probably 'Silver Dollar' (*E. polyanthemos*) with its large round leaves, and 'Baby Blue' (*E. pulverulenta* and other similar species), with bright bluish-gray leaves that encircle the stem. Unfortunately for northern growers, neither is reliably hardy in cold climates, and many in the North have resigned themselves to treating them as summer annuals or high tunnel crops. Native mainly to Australia, there are over 700 species of eucalyptus. Some come from the southern island of Tasmania, which has a climate similar to the Pacific Northwest, or from the Australian Alps, which are more aspirational than truly tall, but nevertheless have snow and temperatures occasionally down to the single digits (°F).

With all this in mind, the ASCFG conducted a trial with Southern Eucs to test a few cultivars. This is the report on the second year of the trial. Of the four trialers who stuck with us from last year, only Mary Royal, from Elko, GA (Zone 8a) had plants from all five cultivars surviving. Here at NC State, Zone 7b, three of the five survived: 'Angus',

'Big O', and 'Funky Monkey', although we have to say that we did not have a particularly cold winter. Barbara Lamborne, Zone 7a, also had three survive: 'Angus', 'Big O', and 'Funky Monkey'. The hardiest of the trials may well be 'Funky Monkey'. It was the only one to survive for Jamie Rohda in Zone 5, Nebraska. She noted that the one plant that overwintered for her did not grow as robustly as the ones she planted in the spring so the cold weather may have had a long-term effect.

***Eucalyptus nicholii* 'Angus'.** Mary: She harvested 50 stems/plant and the stems were 30 inches long. She gave all 5s for the customer appreciation, ease of cultivation, and grow again ratings (1-5 scale, 5 best). She noted that all four plants survived, but one was stunted and she rarely harvested from it. Her comments: Love Angus! So different! My customers love this because of the light, airy nature of the limbs. Very useful for floral work. The plants were slightly damaged from a strong wind. We had to provide substantial staking. This was honestly my favorite and I would love to have more!

Barbara: My customers like this one and call it fern eucalyptus, but we found it did not produce very many stems and the vase life was about a week.

Nathan/John: Wonderful, easy-to-use filler foliage. The fragrance is distinctly eucalyptus but not as strong as some types. The plants are vigorous and

doing well, with no loss during the winters. The plants already have substantial trunks at the end of their second growing season. We gave it all 5s for ratings. Due to COVID we were not able to harvest regularly, but estimated that we would have had 30-40 stems/plant at a length of 24-30 inches. In our postharvest trials the vase life of 'Angus' was 7 to 8 days. Stems with toned growth lasted longer compared to fresh, bendable stems.

***Eucalyptus neglecta* 'Big O'.** Mary: She harvested 30 stems/plant at 36 inches each. She gave all 5s for customer appreciation, ease of cultivation, and grow again ratings, and all plants survived. She noted that it is best to be sure stems are hardened before harvesting, and that they dried well. Her comments: Great for large arrangements. Really like how the longest branches have started to make a huge fan shape. Love this! Have not sold any of the fans yet. Too large for some floral arrangements. I really liked this cultivar. I have used it constantly. It is very dependable and probably the best producer.

Barbara: I love the look of this next one, but it did not produce many usable stems. Vase life was 2 weeks for what few we had to even trial. I find it interesting that this is one of the forms my old 'Silver Drop' plants in a tunnel are reverting to. In the tunnel they barely get sturdy enough to hold up.

Nathan/John: Long, substantial stems with a classic eucalyptus look. This cultivar has a beautiful distinct blue-gray coloration. Plants reliably branched and produced multiple new shoots when harvested. Strong stems were easy to use. All four plants overwintered but one died suddenly during the summer, likely due to root rot. Due to COVID we were not able to harvest regularly, but estimated that we would have had 15-20 stems/plant at a length of 30-36 inches. We gave it a 4 for customer appreciation, 5 for ease of cultivation, and 3 for grow again ratings. In our postharvest trials the vase life was 8 to 9 days.

***Eucalyptus rubida* 'Cab Sav'.** Mary: She harvested 15 stems/plant that were an average of 11 inches long.



*Eucalyptus nicholii*  
'Angus'



*Eucalyptus neglecta*  
'Big O'



*Eucalyptus parvula*  
'Funky Monkey'

All plants survived. She gave it a 5 for customer appreciation, 5 for ease of cultivation, and 3 for grow again ratings. Comments: the color and size of the leaves makes this a very desirable cultivar. A favorite of customers. It just did not grow very big. I harvested some stems in the early summer, but it did not grow very much more. I completely stopped harvesting. I had lost 3 of the 4 plants when they arrived, so I only had 1 remaining plant. I would love to try the cultivar again.

***Eucalyptus parvula* 'Funky Monkey'** Mary: She harvested 25 stems/plant that averaged 25 inches long. All plants survived. She gave it a 5 for customer appreciation, 5 for ease of cultivation, and 4 for grow again ratings. Comments: Love the very small leaves and the branching. Excellent for floral work, but not useful for weddings. Florists don't really like it, but regular customers do. It did not grow as large as 'Angus' or 'Big O', but we still cut many branches. I stopped cutting for a while, so it could grow more.

Barbara: 'Funky Monkey' was the best in terms of usable stems per plant and vase life. It holds up for 3 weeks. The form is a nice alternative to the 'Silver Drop'.

Nathan/John: More compact than 'Angus' and 'Big O'. Three of the four plants had a slow growth rate and were not as productive. The foliage was typi-

cally eucalyptus shaped, but smaller and easier to use than 'Big O'. Stems were usually reddish when exposed to the sun. We estimated similar production to that of Mary: 20-25 stems/plant at a length of 20-24 inches. We gave it a 4 for customer appreciation, 4 for ease of cultivation, and 4 for grow again ratings. In our postharvest trials it had the longest vase life at 9 to 10 days.

***Eucalyptus stelluta* 'Sheila'**. Mary Royal reported that only one plant out of four is remaining and it is less than 2 feet tall with very few stems. She has not harvested anything from it. Comments: Last year the leaves had spots and the plants did not grow well. In June three of the 4 plants died within about 2 weeks' time. Not a viable choice for her zone.

**Summary from last year.** For comparison, 'Funky Monkey' was the overall favorite due to its small green leaves on reddish stems. Trialers were already getting an average of 5.3 stems per plant that averaged 13 inches long, with responses ranging from 9 to 20 inches. 'Cab Sav' produced 4 stems/plant that ranged from 10 to 15 inches long. 'Big O' was the fastest-growing cultivar with the longest stem length, 14.5 inches, and an average of 4.5 stems/plant. With 'Angus' trialers harvested an average of 3.9 stems/plant that ranged in length from 10 to 18 inches. Even last year 'Sheila' was the least favorite; trialers reported harvesting about 2 stems/

plant that were 10 to 13 inches long.

**Acknowledgments:** Thank you to the four evaluators who returned their trial reports; we appreciate your time. We especially thank **Mary Royal**, the first to return hers. Thanks to Southern Eucs for providing plant materials. All photos by John Dole.

\_\_\_\_\_ **Participating Company** \_\_\_\_\_

**SouthernEucs**  
southerneucs.com

\_\_\_\_\_ **Participating Trialers** \_\_\_\_\_

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**Mary Royal**  
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**Jamie Rohda**  
Harvest Home  
Waverly, NE  
Zone 5

# 2020 North Carolina State Postharvest Report

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Photo Rachel Lord

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Association of Specialty Cut Flower Grower Research Foundation  
and generous suppliers.*

As with many of you, COVID changed how we handled our research in 2020. Initially, all research was shut down, but limited work was allowed just in time for Nathan to be able to conduct some of our normal postharvest trials (hydrator and holding solution test) on 13 cultivars. In addition, John grew a set of all of the Seed, and first-year Perennial Trial plants at his home farmette, allowing him to perform some formal consumer vase life trials on many of the same cultivars, plus 20 more.

Of the species evaluated, marigolds and campanula lasted the longest in both sets of tests, ranging from 10 to 16 days. The quality of cut flower marigolds has improved over the years, and so has the postharvest life. Hopefully, this means the breeders are including postharvest trials in their evaluations. If properly handled, campanula has a reliably long vase life—good news for this distinctive flower.

We noted the shortest vase life from nicotiana ‘Bronze Queen’, with only 4 days in water and possibly up to 8 days in consumer vase solution. Why do we say “possibly”? While the flower food allowed the flowers to look good longer, the stems still bent over, making them appeared wilted. Regardless, this fun filler flower is probably best used for short-term events.

## Postharvest Handling Details

Field-grown flowers and foliage were harvested into tap water at their industry standard stage of development. For the full test, stems were sorted into 4 equal groups and placed in the treatments below for the specified time and then placed into vases of deionized water.

- Hydrator only (4 hours)
- Holding preservative only (2 days)
- Hydrator for 4 hours followed by holding preservative for 2 days
- Tap water only (as a control)

Floralife Hydraflor 100 was used as the hydrator at 1.0 ounce per gallon, and Floralife Professional was used as the holding preservative at 1.3 ounces per gallon (the rates listed on the packaging). After treatment, stems were placed in tap water and held at  $68 \pm 2F$  under approximately 200 foot-candles of light for 12 hours per day. The vase life for each stem was recorded. Flowers were typically terminated when 50% of the flowers or florets on the stem were brown, wilted, drooped, etc.

For the consumer solution test, we sorted flowers into two equal groups and placed them in either tap water or consumer vase flower food (Floralife Crystal Clear). We topped off the vases with plain water as needed, but otherwise the stems stayed in the solution until we threw them out.

Some of you may be asking, “What are hydrating and holding solutions?” Both are types of preservatives. Floral preservatives can be categorized as either hydrating, holding, or vase solutions. Hydrating solutions are meant to be applied right after harvest, prior to a holding solution, to facilitate water uptake, and do not contain a carbohydrate source. Hydrating solutions are usually used for a short time, such as 4 hours. Holding solutions contain a carbohydrate source (sugar) to encourage bud opening and/or flower longevity, and are applied for several hours up to approximately 2 days by growers or wholesalers before flowers get to the final customer. Vase solutions are generally used in final arrangements or bouquets sold in vases, or applied by the consumer, commonly in those little packets, and contain a higher concentration of carbohydrates than a holding solution.

### Campanula.

‘Champion II Deep Purple’ lasted the longest, 16 days in consumer vase solution, while ‘Champion II Lilac’ lasted 15 days and ‘Champion II Rose’ only ten. Vase life in water averaged 2 to 3 days shorter. Campanula have a lot of buds and flowers foods are necessary for them to open. Also, the new flowers of the dark-colored varieties will have better color when they open if stems are treated with holding or vase solutions.



Photo Misty Moman

**Celosia.** Three cultivars were tested, and of these, ‘Act Rima’ had the longest vase life—fourteen days—in a consumer vase solution. ‘Cristi Purple’ and ‘Red Ace’ lasted about 12 days. We did not have enough stems to test in only water. From prior work, celosias generally last the longest in consumer flower foods, while results are mixed with hydrator or holding solutions. The best way to maximize vase life of this species is to harvest when around half of the flowers on the plume are open.

**Dianthus.** All four cultivars were tested in a consumer vase solution. ‘Pink Magic’, ‘Purple’, ‘Red’, and ‘Rose’ all averaged 9 days in water and 12 days in vase solution. Dianthus are known to respond well to flower foods, which help



Photo Misty Moman

buds open, and improve color of new flowers. Knowing when to harvest can be tricky. It’s generally best to harvest early, when only a few florets are open, but everyone wants more color so flowers are often harvested later.

**Eucalyptus.** We tested three cultivars from the Trial and of these, ‘Funky Monkey’ and ‘Big O’ had the longest vase life with an average of 9.4 and 9.0 days, respectively. ‘Angus’ had the shortest with 7.4 days. We did not find any difference from use of hydrator or holding solution, which fits most previous work. Cut stems into clean water when leaves have matured.

**Lisianthus ‘Echo Purple’.** Vase life ranged from 8.3 to 9.5 days. While we did not see a significant effect from the preservatives in this case, holding solutions are recommended to improve bud opening and color of newly-opened flowers in the case of darker varieties. By the way, this cultivar has beautiful striped buds.

**Marigold.** With another banner year for marigolds in the Trial, we tested 9 cultivars. Vase life for all of them was good, ranging from 10 days for ‘Nosento Lime Green’ to 16 days for ‘Bengal Orange’, ‘Chedi Yellow’, and ‘Mayan Orange’. Hydrator and holding solution did not have much effect this



Photo Jamie Sammons

time for most of the cultivars, but a holding solution appeared to extend the vase life of ‘Bengal Orange’, ‘Chedi Yellow’, ‘Hermant Deep Gold’, ‘Nosento Lime Green’, and ‘Royal Bali Gold’ by one to two days.

In a separate trial, we tested the marigolds with consumer vase solution as well. For most cultivars the vase solution increased vase life by 1 to 5 days, but had no effect on ‘Xochi Orange’. Marigolds have an annoying tendency to root in the vase, which would be great if we were trying to propagate them. However, it can mess up the postharvest data as rooted stems just don’t seem to die. This was most common with ‘Bengal Orange’, but several of the cultivars had a few rooted stems as well.

Overall vase life for each of the cultivars:

- ‘Bengal Orange’ – 16.4 days
- ‘Bindi Gold’ – 15.8 days
- ‘Chedi Yellow’ – 16.4 days
- ‘Hermant Deep Gold’ – 13.9 days
- ‘Janthra Yellow’ – 14.4 days
- ‘Mayan Orange’ – 16.0 days
- ‘Nosento Lime Green’ – 10.3 days
- ‘Royal Bali Gold’ – 14.3 days
- ‘Xochi Orange’ – 11.1 days

**Nicotiana ‘Bronze Queen’.** This airy filler flower had a vase life of only 4 days in water, with stems bending over and florets dropping. The use of a



Photo Jamie Sammons

vase solution kept the flowers looking good, but the stems still drooped. We determined the vase life to be 8 days in flower food, but not everyone would agree on that. Note that the foliage is sticky, so be careful when harvesting to not set the flowers where they might pick up bits of soil and other debris.

**Snapdragon.** Both ‘Chantilly Deep Orange’ and ‘Purple Peloric’ lasted about 8 days in water, with the vase solution adding about a day. Snapdragons generally respond well to flower foods, with sugar allowing more buds to open.

**Stock.** ‘Sahin Anytime’ Mix and ‘Milla Salmon’ lasted 8 days in water

and 10 days in the vase solution. Stock generally responds well to flower foods, allowing more of the buds to open and keeping the foliage from turning yellow.

**Sunflower.** ‘Marley’ lasted the longest with a vase life of 8-10 days in flower food, while ‘Ziggy’ lasted only 6 days in flower food. We did not have enough stems to compare with water.



Photo Rachel Lord

Most sunflowers respond to flower foods, but not all.

**Verbena ‘Purple Haze’.** Use of a holding preservative increased vase life by a day from 8.2 to 9.1 days. Note that small florets tend to drop even with the use of flower foods. Luckily there are several florets in each flower cluster, but the dropped florets can be messy.

**Zinnia Expt. Orange.** ‘Zinnia Expt. Orange’ lasted 7 days in water, and 12 days with a vase solution. Zinnia postharvest handling is the subject of much discussion. Vase solutions generally increase vase life, but not with all cultivars and sometimes not when combined with other hydrators or holding solutions.

If you are interested in seeing more results from previous trials, check out the back issues of *The Cut Flower Quarterly*, or go to NC State’s Cut Flower Extension Website <https://cutflowers.ces.ncsu.edu/>. There you can find production and postharvest trial results by year, species, or cultivar.



Photo Joy Longfellow



Photo Rachel Lord



***Campanula trachelium* Flore Pleno Mix**

*Campanula trachelium* 'Flore Pleno Mix', the nettle-like double bellflower, is one of those perennials that is simply a joy in the garden. As a sturdy plant, it is ideally adapted to all kinds of climatic conditions. It tolerates dry periods in summer and light soils, loves the sun and feels at home in partial shade, competes against weeds and is stable upright. As a seedling in the landscape, it closes open spaces and improves every garden design. In fact, every garden becomes fabulous with this campanula included, whose bell-shaped flowers look like porcelain in detail. As beautiful as the nuances of the double, violet, light blue and white flowers may be, a mass planting produces a breathtaking sight from July to September.

## GRAB YOUR BUDS!

NEW FLOWER FARMING PODCAST TO LAUNCH IN THE NEW YEAR!



Jennie Love of Love 'n Fresh Flowers (and current ASCFG president) has teamed up with the crew behind the No-Till Growers Podcast to create a new podcast focused entirely on flower farming. The No-Till Flowers Podcast will be packed full of valuable conversations with flower farmers and soil experts, including several ASCFG members! The overarching theme of the podcast is how flower farmers, through symbiotic relationships with the myriad organisms in their farm ecosystems, can improve their stems while also enriching the earth. Topics range from no-till strategies for bed prep, Korean Natural Farming (KNF) applications for aphid control, experiences in reclaiming abandoned city lots for

flower farming, reading soil tests with a focus on biology, cover cropping, habitat building, sales outlets, COVID pivots, employee management, industry reflections, and much, much more! The podcast is free to download and new episodes will be aired each Wednesday starting December 23, 2020. Follow @notillflowers on Instagram and visit [www.notillgrowers.com](http://www.notillgrowers.com) to find the podcast feed.



# Seeds and Bulbs: Tough Challenges for Organic Flower Growers

Julie Martens Forney

Third of a Three-Part Series

*Discover some of the biggest obstacles organic flower growers face—including tips for overcoming the hurdles.*

Certified organic flower growers deal with the same issues other flower farmers face, from weed and pest control, to crop timing and production costs. But for certified organic growers, the difficulties spread, amoeba-like, to encompass additional areas that non-certified organic flower growers might take for granted.

For Missy Bahret, co-owner of Old Friends Farm in Amherst, Massachusetts, the toughest part of growing organically is “undisclosed pelletizing ingredients on

seeds.” Joan Thorndike, at Le Mera Gardens in southern Oregon, expands on the seed theme. “Where we’re stuck and have been stuck is finding purveyors of certified organic seeds and bulbs packaged for wholesale purchases,” she says.

## **Seeds: A Multifaceted Challenge**

The issue with seeds for certified organic flower growers is that there isn’t much, if any. “On the whole, there’s not as much organic flower

seed,” says Don Franczyk. He’s the Executive Director of Baystate Organic Certifiers in Dighton, Massachusetts. “If seed isn’t available commercially, growers can use untreated non-organic seed (raw seed).”

Bahret, who’s been growing for 17 years, shares that from her perspective, “there are more and more options for seed available each year. It’s important to keep asking seed companies for organic, non-treated and raw seed.” Scott Rusch, General Manager at BloomStudios Cut Flowers, a

division of Ball Horticultural Company, says, “We’ve been seeing increased requests for raw seed in the last three years for multiple product lines, including cut flowers.”

Johnny’s Selected Seeds in Winslow, Maine, offers organic flower seed, but it’s a “small portion of our overall assortment,” says Hillary Alger, Product Manager, Herbs and Flowers. “We’re actively working to make it a larger part of the business. Specialty cut flower growers are the core part of our flower business—that’s who we aim

to serve. Toward that, we're doing as much as we can to meet that need and add more flower varieties."

As Franczyk mentioned, if growers can't find organic flower seed, raw seed (untreated non-organic) provides a good alternative that passes muster with certifying agencies. It sounds like a simple solution, but due to the seed processing business, it's not always achievable with all crops. "We offer a lot of our products as raw seed," says Rusch. Examples include snapdragon, delphinium, anemone, gomphrena, limonium, and dianthus.

Johnny's "sells uncoated seeds as much as we can, but sometimes with flowers it's tricky," Alger explains. "Seed is often available only from breeding companies or suppliers as coated or pelletized. Sometimes we can make a special request and they set aside raw seed before it is processed." Johnny's raw seed list includes digitalis (not the modern, first-year flowering ones; that seed is pelletized), matthiola, and dusty miller (although it's not always available).

### Pelletted Seed Woes

The most common flower that crops up on the pelletted list is lisianthus. It's the flower every certified organic grower wants, which of course means it's the one that's toughest to get. The reason is the small seed size. "With lisianthus, there are between 25,000 and 30,000 seeds in a gram," Rusch says. "In comparison, a snapdragon is roughly ten times bigger. If lisianthus isn't pelletted, it can be a problem for commercial sowing equipment." Campanula is another tiny seed that's often pelletted.

Commercial growers sowing thousands of flats using automated seeding equipment are what drives the pelletted seed market. "The vast majority of our customer base wants pelletted seed," Rusch adds. This also explains why there's not always a large supply of raw seed available. The raw seed market is smaller, and the pelletting process has minimum batch numbers, so pelletting typically wins the day.

"Our pellets use all-natural or organic components," he continues. "Every year the topic of getting the pellet certified for organic use comes



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up for serious discussion, but the hurdles are challenging. We want to support organic growers—the entire concept of organic growing fits our company's mission of sustainability. But the business analysis is a hard case to go for in adding additional SKUs to manage, with separate receiving lines and equipment to follow it throughout our operations."

Franczyk explains that in order for a seed pellet to become certified, a seed producer must have their pelletizing material reviewed by a material agency like Organic Materials Review Institute (OMRI) or Washington State Department of Agriculture (WSDA). "If the material is approved, then all certifying agents that accept OMRI or WSDA approvals could use that material," he says. "The advantage of certifying through OMRI or WSDA is that the producer has to reveal the materials and process only to one entity, and all that information is kept confidential."



As a former flower grower and director of an agency with certified organic flower growers as clients, Franczyk is keenly aware of the problem with pelleted seed. “It hurts our clients not to have a compliant pelleted lisianthus seed. We would do anything we could, within the boundaries of the standards, to get one approved.”

For some certified organic growers, the work-around for the pellet issue is choosing raw seed when possible or buying in plugs and transitioning them to organic soil (considered putting into fresh soil by certifying agencies). Le Mera Gardens has always purchased lisianthus in plug form, most recently from Farmer Bailey in Vermont. “We do so in part so we can transition the plants to certified organic status, but also because lisianthus seedlings are fussy and take much too long to grow big enough for transplant,” Thorndike says. “Since we grow so many varieties we can’t afford to have one crop seize up pre-

vious space in our nursery.”

Another key to success is working closely with your certifying agency. “As long as the coating material on seeds is an approved material, we can use them,” says Deena Miller of Sweet Roots Farm in Grass Valley, California. The farm she and her husband operate is certified with California Certified Organic Farmers. “Clay-coated lettuce seeds are okay, while fungicide-treated flower seeds are not.”

She sources seeds primarily through Johnny’s Selected Seeds, High Mowing, Swallowtail Seeds, and GeoSeed. Others they find through pickacarrot.com database by searching for organic varieties. “I have a sense for the flowers I can find organically—a lot of edible flowers, including bachelor buttons and calendula, along with some sunflower varieties.” All the vegetable seeds Sweet Roots grows are certified organic.

Miller has also started saving her own seed. “In 2020 we saved seeds of over 20

varieties and hope to increase our collection,” she explains. “We select for colors that fit what our designer clients are looking for.”

### Sourcing Seed in Bulk

Finding organic flower seed—in bulk—is another key issue certified organic flower growers face. “Lots of companies sell seed packs that are organic and may have a nice variety,” Thorndike says. “But when you’re looking for bulk, those are harder to come by. You might be able to find sunflower seeds in the standard varieties, but when you start searching for specific unusual varieties, it’s harder.”

Alger also sees this need. “There’s an actual lack of organic seed available in bulk,” she says. “There are small organic seed companies that produce small amounts of flower seed, but they offer only packets. That doesn’t work on a commercial level.”

The good news is that seed companies are seeing a

“strong trend in distributors asking us to package seed for them.” Rusch says. “We’ve seen a big shift in business in this area. Nearly two-thirds of our business is going out the door prepackaged.” Ball currently offers prepackaged seed in the common sizes that growers and distributors want to use, including 1,000, 5,000 and 10,000 (those are the most popular—larger sizes are available for some crops). For the customer who needs 43,000 seeds of a particular plant, it’s simply a matter of purchasing four 10,000 seed packages and three 1,000 seed packages. The seeds may not be certified organic, but they could potentially be raw.

Cathy Jones of Perrywinkle Farm in Chapel Hill, North Carolina, shares her perspective on seed sourcing, based on her 30 years of growing organically. “It’s next to impossible to find organic seed in the cut flower world. I hardly ever try, to be honest. For my vegetable crops, I do my darnedest to find organic or untreated options—and I’m seeing more and more untreated options each year. For flowers, I make sure the seeds aren’t treated with fungicide.

“I learned a long time ago that, when it comes to the seed companies I deal with, that I need four things: quality, dependability, good germination, and varieties that are true. I’ve tried in the past to support smaller seed shops that are organic, but the seed didn’t always measure up in those four areas.”

### Bulbs Bring Another Hurdle

For certified organic flower growers who want crops raised from bulbs or tubers, it’s even harder to find that starter material in bulk. “Bulbs are definitely one of the hardest things to source,”

says Don Lareau of certified organic Zephyros Farm & Garden in Paonia, Colorado. “They come in from Europe and most of the companies won’t tell you what they do to them. It’s just presumed they’ve been dipped in some kind of fungicide to get into the country.”

If a certified organic grower plants non-certified organic lily bulbs, that area must be taken out of the organic rotation for three years. “We dealt with that for a few years, but have since found a U.S. producer of lily bulbs who can get those to us untreated,” Lareau says. The company is Mak Lilies & Perennials in Stayton, Oregon ([maklilies.com](http://maklilies.com)), a farmer wholesaler that’s been growing lilies for over 35 years—first in Holland and now in Oregon.

Finding organic bulbs has been equally challenging for Le Mera Gardens. “One year we found organic tulip bulbs and bought them,” Thorndike shares. “They grew 6 inches tall, which we couldn’t sell except at the farmers’ markets. You just cannot get enough food into the soil and into the bulb to produce those long stems. That was a flop—we had it on record.”

Most recently Le Mera sourced bulbs from ADR Bulbs (Chester, New York), which was a success. “I buy rose lilies from Ko Klaver, the U.S. representative for Zabo Plant. What’s interesting about Zabo is that they announced a year or two ago that they no longer use neonicotinoids,” Thorndike adds.

One way that Zephyros Farm has overcome sourcing organic plant materials is by growing their own dahlia tubers. “We love dahlias and started growing them about 15 years ago. Over time, we kept buying more and more,” Lareau laughs. “We went from having a couple dozen varieties to having 50 to 60.” Selling organic dahlia tubers simply started out of abundance. “When we dug them, we had so many extra.”

The farm sold their first tubers 6 years ago. “At that time we were the only organic source of dahlia tubers,” he adds. “Since then, it’s really become another way to have a different income stream at a time of year when we don’t have as much. Dahlia tubers are a good fit for our business model and help keep our main people employed during our snowy months.”

Zephyros started out planting a couple hundred tubers in three to four beds, and now they’re up to planting almost an acre. Although they’ll still occasionally source a variety or two, for the most part, they have become a certified organic dahlia tuber source. But other certified organic items still remain elusive, including ranunculus, tulips and, of course, flower seeds.



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*Julie Martens Forney is an avid gardener and freelance writer who’s been writing about flower and plant production, horticulture research and consumer gardening for over 30 years. Contact her at [julie@wordsthatbloom.com](mailto:julie@wordsthatbloom.com).*



# Cut Flower Cooperatives — Stronger Together

Kevin Edberg

Part Three of a Four-Part Series

A cooperative is a business enterprise that is mutually owned and democratically governed for the purpose of providing goods and services needed by its owner-members, typically in a manner or at a cost better than what an individual member could command on his or her own. While many metrics can and should be used to evaluate the success of the cooperative, one of the most important is its financial capacity to sustainably deliver those services and products.

In the United States, we swim in an ocean of investor-driven for-profit enterprise. That's not bad. But sometimes we lose sight of the fact that generating profits

for investor-owners is not the only legitimate purpose of a business. In a cooperative, the primary focus is to ensure that the needed goods and services are delivered to members at a cost close to the actual cost of operations. To be sustainable, the co-op must over time operate with revenues in excess of expenses so that a surplus is generated. Surplus is then used first to ensure reasonable reserves and stability for future years' operations, with any additional surplus returned to members in proportion to the amount of business they did with the co-op.

This proportional return of surplus ("patronage") is an incentive for members to

bring their business to the co-op, and a corollary is that the co-op's greatest competitive advantage is the business loyalty of its owner-members.

## Financial Management

Good practices to ensure the co-op's ongoing financial stability include:

**Obtaining professional assistance in setting up the co-op's accounting system.** Seek the assistance of an accountant with cooperative knowledge when setting up the co-op's accounting system. Member equity and debt are tracked via the balance sheet, while revenues and expenses are tracked via the income statement. It is of

critical importance that management does not treat the value of member investments in the co-op (e.g. membership shares and member accounts) as ordinary income. There are several tools available to help grow the co-op's capital over time, but these tools cannot be wisely used unless the appropriate accounting structures and statements are in place. Especially important is a system to easily track the amount of business that each member does with the cooperative.

**Adoption of an annual budget.** Prior to the beginning of the fiscal year, an annual budget should be developed and approved by the Board or in some cases, depending on the bylaws, the full member-

ship. The budget should be informed by the prior year's financial performance and address regular operational activities as well as any strategic objectives that will advance the work of the co-op. Documenting the assumptions in back of the budget is a good practice as it helps monitor budget performance during the year.

**Regular monitoring of budget performance and financial condition.** A set of financial statements should be made available at regular board meetings throughout the year, hopefully no less than quarterly. Typically these would include a balance sheet and income statement; ideally the income statement would include a budget-to-actual comparison to assess whether the organization is on track in its performance. An aging schedule of accounts receivable and payable is also a good practice and helps to manage cash flow. Regularly using financial statements builds organizational muscle and discipline among its leaders, and aids in making timely decisions during the year. Managing simply by the checkbook balance is not a recommended practice.

**Actively monitor cash flow.** Managing cash is a critical competency for co-op operations. Most organizations have somewhat predictable periods when they are cash-rich and cash-poor. In addition to actively managing accounts payable and receivable, it's not uncommon to need short-term cash infusions to help the co-op pay its bills until its revenues come in. There are

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also times when unforeseen events create a cash crunch. A business savings account and/or a line of credit at a local financial institution can be very useful ways of managing cash. Some co-ops, especially those that market members' products, establish policies that share the cash flow issue with members, such as by paying the member a portion of the agreed upon value at delivery, and a settle-up payment at some later time, presumably after the customers have paid. In a purchasing co-op, giving automatic discounts at time of purchase is usually not recommended (though it is wide practiced). In effect, the co-op is giving away margin and profit before it knows whether or not the co-op is profitable.

**Use annual patronage distributions.** A reliance on a patronage rebate approach is a better way to reward member loyalty while better managing cash flow. After the end of the fiscal year, the co-op will know whether it has generated surplus, and if so, how much. This should prompt the Board to discuss the future needs of the business, add to appropriate reserves, and to be intentional about the amount of surplus to share with members via patronage.

### Managing Risk

Whether we are talking about businesses, churches, local governments or co-ops, we all know that there are risks in managing the shared resources of a group of people. That's why at-

ention is needed to ensure the wise stewardship of the co-op's financial resources. Some tools that help achieve this include:

**Expenditure approval policies and procedures.** In small organizations, some good practices include allowing expenditures only for budgeted purposes, unless approved by the board or a board-delegated group. It is still not uncommon to require two people (manager and treasurer for example) to approve the issuance of checks; email and online docs make this process easier these days. Make sure that signature cards are on file with your financial institution as well.

**Segregate the duties of those handling financial accounts.** This is absolutely a challenge in very small organizations, but having more than one set of eyes on different parts of the accounting system is valuable. For example, have one person in charge of issuing/depositing checks and a different person receiving/opening/monitoring the monthly bank statements. Using regular financial statements at board meetings is another example. Bonding of managers might be another tool to consider.

**Annual audits or reviews.** Seldom will a small co-op find a third party professional audit to be cost effective. But having an end-of-year review conducted by a committee of board members can be effective (especially if one or more have an accounting background!). Essentially management prepares financial statements and supporting documents; the committee then compares



## Legal Compliance

Just like other businesses, cooperatives have obligations to pay tax, too. Payment of employment taxes, property tax, sales taxes, workers compensation, etc. generally do not differ from the obligations of other small businesses. However, there are differences in the treatment of income taxes, with a significant difference in the treatment of net income generated by business with members (patronage-based income) and the treatment of net income generated by business with non-members (non-patronage, or “non-pat” income). A general rule is that net income from non-patronage-based transactions is taxable at the level of the cooperative, whereas net income from business with patrons is passed through and taxed at the level of the member-owner. When patronage is allocated and distributed to members, the co-op will issue 1099-PAT statements to its member owners and report these amounts to the IRS. Beyond that, this is a complex area where licensed accounting help is typically needed.

the statements to ensure that they crosswalk, while also conducting randomized spot checks of individual transactions to ensure that the system is working as it should.

**Payment and credit policies.** A uniform practice should be in place concerning collection of unpaid bills and management of credit extended to members. While contributing to cash flow management, these policies also prevent the co-op from accumulating liabilities that might threaten the co-op’s viability.

## Board and Support Roles

Who is typically responsible for monitoring financial management, risk management and compliance?

**Board of directors.** The entire board is responsible for setting policy for the organization (such as credit and collections policies), approval and regular monitoring of budgets, and major financial decisions such as approving financial institutions, taking on a loan or line of credit, and allocation of patronage. Sometimes members of the board serve on an audit committee.

**Treasurer (or Secretary-Treasurer).** Certain members of the Board typically hold specific roles, such as Chair, Vice Chair, Secretary, and Treasurer. Often the role of the Treasurer will be to work with management to present board financial reports, monitor expenditures and approve checks, etc.

**Manager.** Very small co-ops may not have a specific person hired as “manager”, but all co-ops require someone(s) to perform the work of management. The manager implements board policies, tracks revenues and expenses, oversees receipt and expenditure of funds, and interfaces with professionals to ensure the financial records of the organization are in order.

**CPA, accountant, bookkeeper.** The size and complexity of the organization will inform what level of professional support is required to maintain financial records, manage risk, prepare and file taxes, etc. But having access to professional assistance in setting up and maintaining the cooperative’s accounting system is very important.

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*Kevin Edberg is Executive Director of Cooperative Development Services, Eagan, Minnesota. Learn about them at [www.cdsus.coop](http://www.cdsus.coop) or contact him at [kedberg@cdsus.com](mailto:kedberg@cdsus.com)*

## NORTHEAST

Connecticut, Maine, Massachusetts,  
New Hampshire, New York, Rhode Island, and  
Vermont



### Bailey Hale

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We all know that cut flowers have been having a renaissance in recent years, and you've probably noticed the same trend happening in houseplants. That trend was well underway prior to the pandemic, but spending more time at home has given us all more time to enjoy our flowers and plants.

There is a category of plants that falls squarely between cut flower and houseplant that is well poised for a return: the flowering gift plant. Outside of grocery stores and mass market outlets, these "pot plants" seem to have been overlooked of late. Generally these are flowering plants that are greenhouse grown and brought into flower with the intention of enjoying them inside for a few weeks before composting them. They are better thought of as cut flowers with roots than as true houseplants. The best part is, you probably already know how to grow them! Many of these crops happen to grow well in cool greenhouses, so they can be started in the winter with minimal heating expense.

Many of our tall cutting strains have shorter cousins bred specifically for pot plant production. Ranunculus, anemones, freesia, campanula, lilies, callas, carnations, stock, and lisianthus all have compact versions perfect for pot plant production. The same suppliers you use for seed, bulbs, and plugs can help you get your hands on these products and provide you with cultural information.

Bulb crops are especially well suited to this market. While there are some dwarf bulb varieties, many full-sized tulips, narcissus, amaryllis, muscari, iris, crocus, and ornithogalum grow beautifully in pots. (Do yourself a favor and watch Val Schirmer's presentation from the Nashville meeting on forcing bulbs for use in bulb gardens.) The cultural requirements of these crops are well documented and with a little skill you can time their flowering for Christmas, Valentine's, and Mother's Day.

Tender and hardy perennials such as hellebores, hydrangeas, astilbe, alstroemeria, gerberas, and many more can also be forced in pots for gift sales, then planted outdoors for further enjoyment. Suppliers can provide dormant plants ready to be potted and flowered under your care.

Cyclamen and primula are still seen with some regularity and are excellent winter potted flowers. Cineraria, calceolaria, and schizanthus are cool growers that were once staple crops but seen only occasionally these days. They all deserve a second look.

There are plenty of true houseplants you can grow as well that may or may not have a flower. Succulents have been growing in popularity for at least 20 years now and are a breeze to grow and propagate. Gloxinia, African violets and their relatives are true houseplants that also offer flowers. Begonias can be grown for foliage or flower, and the range of true foliage plants is vast.

I know we are all first and foremost cut flower growers, but traditionally "florists" have grown and sold all manner of flowering plants. Rather than looking for new customers to buy your cut flowers, perhaps there is an opportunity to sell a new class of flowers to your current customer base. Talk to your trusted supplier about adding these crops to your production plans. Educate your customers on what to expect from these plants, and just maybe you can develop a whole new market for some of these old-fashioned plants.

## MID-ATLANTIC

Delaware, Maryland, New Jersey, Pennsylvania,  
Virginia, and West Virginia



### Michelle Elston

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Are you making money?

A little? A lot? Not this year? Not yet? The unacceptable answer is "I don't know."

One of my wisest and most influential mentors, the late Gary Lebo, told me "Making money is a given. What you do beyond that is what counts." I love his admonishment to make financial viability a baseline assumption, not a goal. Just like we assert that our flowers are healthy and of high quality when we call ourselves professionals, we also assert that we are financially solvent as professionals. Otherwise, it's all just a hobby.

If you're not there yet, it's okay! However, I encourage you to chart a path to financial viability as quickly as possible. I'm not talking millions here, but whatever you consider "enough." As flower farmers, we are all a little nuts to choose a career that requires expertise in plant physiology, art and design, hydrology, employee management, equipment

*As flower farmers, we are all a little nuts to choose a career that requires expertise in plant physiology, art and design, hydrology, employee management, equipment mechanics, and so much more, all the while dealing with production variables completely out of our control (weather, weather, weather!).*

mechanics, and so much more, all the while dealing with production variables completely out of our control (weather, weather, weather!). To choose this career path is clearly a motivation out of passion, not riches. Yet, if we want to stay on the path, financial vitality is a must.

Here are my most helpful tools and tips to ensure financial viability:

- Hire the smartest professionals you can find. They are worth every penny. Get the best accountant who works with small businesses in your area. Look to other stable business owners in your area, and get a good referral from them.

- Either learn how to do your own bookkeeping, or hire another great professional. You do not need to pay accountant rates for weekly or monthly bookkeeping. If you'd like to do it yourself, get some help setting up a solid chart of accounts and data entry systems.

- When you set up your chart of accounts, be reflective on what information you need to make managerial decisions. Standard templates may be sufficient for tax filing, but will not help you discern crucial data. So very many directional decisions are made based on this information.

- Learn to read financial statements. There are so many great resources available for this. Again, be excited to pay for this knowledge!

- Set a budget. This can be really tricky early on, however you've got to make some sort of plan to see if you're going to be viable. Plus, it's immensely rewarding to reach your financial goals.

- Budget to pay yourself. My husband and I are both self-employed. We each pay ourselves a consistent amount monthly from our businesses.

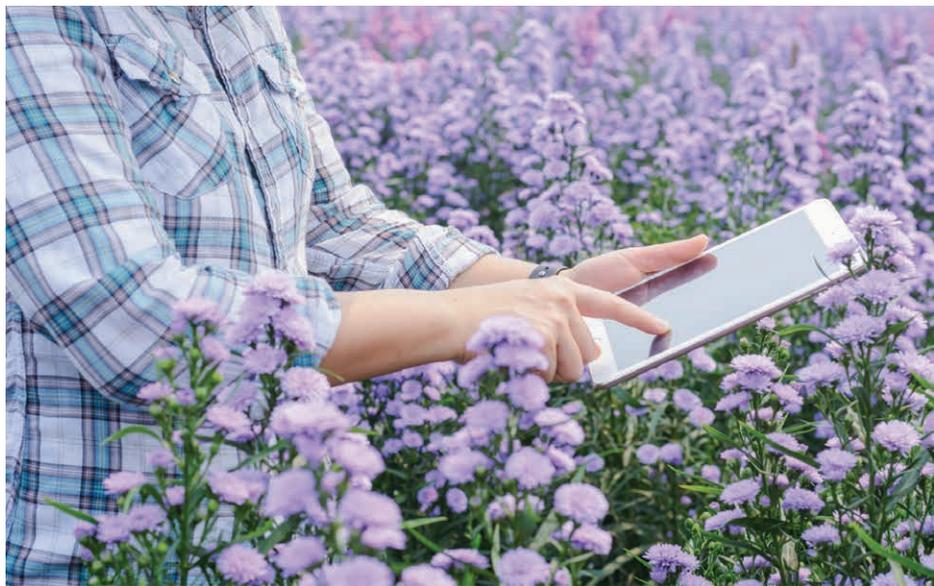
Once we got to this point, our personal financial stability greatly improved, as did our peace of mind. We pay ourselves what our family needs to get through the year. Profitability beyond this is then available for business improvements and equipment, home improvements, retirements, and fun stuff. A personal goal is to move retirement funding into the budget, therefore increasing its priority.

- Be steadfastly consistent in your processes. My very favorite report to view is P&L previous year comparison. It puts everything into context of the past season. But it has worth only if you are consistently entering your numbers into appropriate categories, both income and expense. I cannot emphasize this importance enough.

- Stay on top of tax filing and payment deadlines. Set the dates on your calendar. Hire out the filings you are not comfortable doing yourself.

- Rigidly set aside time to do financial work. I choose to do the bookkeeping for both of our businesses because it "keeps my head in the game." Whatever level of involvement you choose to have with your finances, you must commit to doing it regularly. This is as crucial as water to a plant.

I recognize that this topic can feel dry, boring and constrictive. However, the sooner you develop a positive relationship with your finances, the sooner your business will thrive! Winter is a great time to set in place some new, solid systems. I promise you, the investment will literally pay you back.



## SOUTHEAST

Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee



**Val Schirmer**  
Three Toads Farm  
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### COVID's Impact on Our Southeast Region Members

Thinking about my article for this *Quarterly*, I wanted to circle back and ask members about how the year has gone with the pandemic still raging, as a follow-up to their feedback I shared in the summer 2020 issue. I asked if 2020 has been more profitable, about the same, or less. And, if possible, to please share a photo that captures the year.

I'm hoping the feedback I heard will be useful, even provide a few ideas (and a glimmer of hope) to help more of us deal with the situation. At the very least, I hope you'll feel like you're not alone.

#### First, some hard news ...

**Linda Doan, Aunt Willie's Wildflowers, Blount, Tennessee** As I was moving through the growing season, I thought we were doing pretty well, but when we looked at the numbers we definitely made less money this year. We had been planning to cut back so didn't expect to be quite as profitable, but fell short even of what we had projected. Petals on the Porch was good and we were able to sell most of the flowers we grew, but porch bouquets prices just don't add up to bridal work prices. We really missed workshops



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and farm tours also. Did a couple small workshops but even these made me nervous so didn't do the volume of most years. We held two small tours at one-third capacity rather than 5-6 at full capacity. I felt for every grower, and while I really enjoyed seeing the hustle and creativity folks came up with, I realized there were many small growers who weren't able to get into shipping and online sales, and hope they're able to try another year.

**Donna Mills, Floral & Hardy Farm, Lexington, South Carolina** It was one of the worst years we've had in years. Cancelled weddings and the Masters really hurt! I'm wondering if I should find a job next year. We lost the only decent market to COVID and I haven't been able to find any decent help. We are busy making wreaths right now, but those sales are way down as well.

**Susan Wright, Shady Grove Gardens & Nursery, Vilas, North Carolina** Struggling to deal with all the new competition and the undercutting that follows. We finally perfected a technique of storing peonies into July. This photo was taken on July 17.



**Katy Thelan, Happy as a Coneflower Farm, Pittsboro, North Carolina** 2020 has been a really bad year for me. I made less than half of what I usually do. For the first time in 7 years I'm questioning whether I still want to do this. I sell exclusively to florists and without weddings demand was way down. A local florist in my area (my biggest customer) sold her shop and the new owner bought flowers from me only a handful of times as opposed to weekly. I wasn't set up to sell to the public so I hung in all year thinking things might get better.

This year has been doubly hard on parents and business owners—my kids have been home since March. Farming certainly provides flexibility as a parent because you are home but, of course, raising children is a job unto itself! I think that extra responsibility kept me from taking too much risk with my customer base this year. It's definitely hard to get excited about a new year but I've put so much energy into building my business, I want to give it one last go.

**And then there was a bit of light.**

**Mary Alford, Alive and Digginit, Rockford, Tennessee** More profit overall but less in the cut flower week by week average from farmers' markets. This was the year to be in the nursery business. I sell plants, too, and increased

my inventory. Spring was good with folks needing some beauty in their lives and staying home working in their gardens and freaking out about food thus trying to grow their own. Interest waned with summer. Fall was not so great and without bulbs would have been fair and not even middlin'. The man in the photo works for a woman who is being treated for cancer and is too weak to come to the market. She has shopped with me for several years and sends her husband and workers to pick out what we think she would like. Ain't he gorgeous?



**Lauren Smith, Ivy and Oak Farm, Holly Ridge, North Carolina** I think people just needed something to look forward to and for me, flowers were able to provide that. There were so many older couples who purchased one of my subscriptions and it was literally the highlight of their week when the flowers were dropped off and they could see them through their life stages.

**Linda Bradley, Purple Tuteur Farm, Columbia, South Carolina** Profitability improved in 2020 from an operational expense perspective, but if I include new capital expenses—



including a new processing shed, a hoop-house and a walk-in cooler—it's less. 2020 was a building year for the business and 2021 holds the possibility of increased growth and profit. The new infrastructure allows for better season extension and less product loss. We reached out to more florists and event planners

for sales, with good interest, and I expect these relationships to grow next year. Our subscriptions flourished last spring and we are planning for increased demand ahead. This will be year 3 for our first peonies so hoping to see that they were worth waiting for!

**Kayla Dineen, Well Rooted Farm, Winston-Salem, North Carolina** Much more profitable! Customers have said they started buying flowers BECAUSE of the pandemic. With the shutdowns, more folks were drawn to our local

market instead of buying from overseas. We excelled this year far beyond our wildest dreams.

**Karen Yasui, Petalland, Tullahoma, Tennessee**

Yes, 2020 has been more profitable for me. First, because the Tennessee Cut Flower group buys from me regularly. Second, with COVID, and my husband retiring, I have not used hired help this year.



**Cathy Jones, Perry-winkle Farm, Chapel Hill, North Carolina**

Flower sales at our three farmers' markets have been excellent this year. We were able to sell most everything we took to market each week. We had very few "special events" this year, but market sales made up for any shortfall in that area.

**Kathy Campbell, Campbell's Hollow Ranch, Albany, Kentucky** 2020 has been more profitable for me. I did a lot of contactless porch deliveries and my farmers' market sales more than doubled. I believe that people were and are hungry for beauty in these uncertain times, and flowers fit the bill.

**Karen Hogsten, Wild Paint Cut Flowers, Ashland, Kentucky**

Season started out very slow in the spring and early summer, and really picked up in July. Continued increased sales from late summer through fall. Key to success this year: Stopped going to farmers' market, increased bouquet prices, made deliveries, and designed non-traditional wedding bouquets using wildflowers and locally-grown flowers.

**Abigail Helberg Moffitt, Bloom WNC, Black Mountain, North Carolina**

Farm tours have sold out (people are looking for safer ways to gather and being on a farm with a mask on to cut your own flow-

ers has been a hit)! CSA sales are up. Elopements and à la carte weddings increased, and I prefer these to full-service anyway. Gearing up for a bigger production year and hoping that demand still increases. We shall see.

**Janet C. Nutt, Janbil Farms Country Cuttings, Cedartown, Georgia**

Our market didn't open this spring until May and it was online orders only. I set up at the Salvation Army near the market area (donated Mother's Day sales to them for the space) and had orders from previous customers and a few new ones. On May 30, the market opened near the old site but with a lot more space so we had 6 feet between tents. After just a few weeks, my sales were incredible, with a line of customers (six feet apart and mostly masked) waiting for our custom-made bouquets. We have a lot of flowers and greenery that you don't often see elsewhere. Normally it takes me, myself, and I two days to pick 25-30 buckets of flowers from which we pull on site to make the bouquets. This summer it took me 3 days and we still sold out. Finally, income was definitely up. But time and monies for helpers up also. Net result, we had fun and that was the best part of this unusual season. (Masks off for photos.)



**Mary Mason Royal, The Royal Gardens, Elko, Georgia**

2020 has been a record-breaking year for The Royal Gardens. People just could not get enough locally-grown flowers to bring some sunshine to themselves or someone else. At the farmers' market we provided a flower bar where customers requested what flowers they wanted, and we cre-



ated an arrangement on site. Customization is the key! People were waiting in line for 30-45 minutes to get designs. For the first time I had to hire extra help for picking and arranging. The assistants (one 12 years old and one 19 years old) were so good that they often received hefty tips! The additional support also allowed us to make dried flower arrangements and all-local greenery wreaths. We brought in the most income ever.



**Deborah Gibson, Green Meadow Farm, Kings Mountain, North Carolina** A much better year, cannot say it was more profitable. I completed my first seven weddings this year; last year I sold only mixed bouquets at the farmers' market. Every dollar I earn goes back into the farm, so I have yet to turn a profit. This is my third year at full-time farming. I figure this ship will right itself at the five-year mark. We'll see!

**And from a few new growers.**

**Mary Ann Adams, One Hubcap Farm, Blythewood, South Carolina** This is only my second year but it is definitely better than last year. COVID made people more interested in coming to the farmers' market and it was an outdoor activity they could enjoy even during the lockdown. (Ours was an essential-goods market for a while.) Florists also had supply chain trouble and were happy to have my flowers when the overseas markets collapsed. COVID gave me extra time to work on the farm since I wasn't driving kids all over the place, and so I've been able to expand my beds. This is a photo of my 4-year-old son, Luke (my gardening buddy) in late May.



**Sasha Willard, Red, White & Bloom, Moncks Corner, South Carolina** We thoroughly enjoyed our first year flower farming in the Charleston area. Our primary goal for our farm is our you-pick experience, and there couldn't have been a better time to start one. People loved the safe, open-air social distancing activity, as it provided a bit of normalcy from the stresses of pandemic life. Folks were definitely craving the beauty and joy that comes from flowers! Our on-farm workshops were a huge hit, many more to come next year. We also sold out at farmers' markets this season, and are looking ahead to offering bouquet subscriptions and deliveries in 2021. A successful first year! The photo is a you-pick cup before arranging at our farm's photo area, where our visitors would take a picture with their blooms.



**Virginia Rudnicki, Flora Berry Farm, Berry, Kentucky** This was our first year living in Kentucky and our first year flower farming and it was indeed interesting. We were affected by the coronavirus in that it took us a little longer to make contacts as most places were shut down in early spring. It was August before we were able to join a farmers' market so I would say our earnings were less than they could have been. We did not make a profit this year but were able to sell, so thankful to God for that and hoping and praying 2021 will be a better year.

**Jodie McCord, Great Blue Farms and Garden, Webster, North Carolina** 2020 has been a roller coaster. This is my second year of growing and floristry. At the beginning of the year, I had a solid marketing plan set for wedding venues, a calendar of on-farm events, a weekly flower bar set for the summer in a fabulous boutique and a couple of weddings on the books. Then came the lockdown. Word: Disappointing.

But to be totally honest, I have no idea how I could have done it all. The pandemic took away a lot but also gave me a much better perspective and time to really understand what I was going to physically be able to do and still be alive to tell about it. So even though almost everything was cancelled it was also a godsend. Word: Reflection.

As we began to open up in North Carolina, I did book several small weddings (perfect to start), I set up a flower bar in the boutique. Huge success but no way I could have done it every week. Made a solid connection with a wedding and event venue owner; she refers me to ALL of her brides. Made a much better plan for next year’s garden (I don’t need 400 zinnias). Word: Silver lining and self-care.

I’m gearing up for a holiday wreath-making workshop—the first workshop all year. Tomorrow we celebrate Thanksgiving. I’ve never felt more gratitude for my health, my family, and blessings disguised as disaster.

**Well said, Jodie, and thank you to everyone, for all you’re doing. I’m so grateful to see how our members stay connected and keep sharing what’s working and, even more important, what’s not. Stay safe, and please stay in touch.**

## NORTH AND CENTRAL .....

Iowa, Illinois, Indiana, Kansas, Michigan, Minnesota, Missouri, Montana, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin, and Wyoming



### Susan Rockwood

Arcola Trail Flower Farm  
Susan@ArcolaTrailFlowers.com

2020—A year of uncertainty, challenges, and the unexpected.

I am writing my first Report as the incoming North and Central Regional Director and am honored and humbled to join the ASCFG Board. Many thanks to Jamie Rohda for serving in this role and for her wisdom and commitment to the members of the North and Central Region.

I will use this first column as an introduction to our farm and “about us”. My husband, Brad Peterson, and I own Arcola Trail Flower Farm located just outside the Twin Cities in Minnesota. I began flower farming in 2015 after retiring from a 35-year career in health care administration. My sister, who lives in California, put the idea in my head that we should grow cut flowers as a business on our 15-acre property along the St. Croix River in Stillwater.

I wasn’t sure what “flower farming” was all about, but was intrigued enough to begin digging into the books, publications, workshops, and internet searches to learn all I could. I wasn’t so sure growing flowers commercially in Minnesota’s zone 4b was a smart idea, but like many of you, the more I learned the more motivated I became to build a business around flowers.



The first workshop I attended was Jennie Love’s Master Class on The Business of Local Flowers in Philadelphia in April 2015. I remember hearing terms that were foreign to me—plugs, brokers, 1020 trays, bumping up, tubers, etc.—and I’m sure I couldn’t tell the difference between a dahlia and a lisianthus. Jennie’s advice to anyone serious about growing cut flowers as a business was to join the ASCFG, which I did as soon as I got back to Minnesota. I think Brad and I attended at least one if not two ASCFG events every year and our knowledge and friendships grew exponentially allowing us to hit the ground running. We found that it took about five years to feel the momentum of our “retirement business” really take off.

Initially, most of our flowers were sold to florists and designers, then we added our local food co-op, a flower subscription CSA, DIY brides, and then design work for clients and à la carte weddings. Dried flowers and winter wreath making helped generate income beyond the growing season, and we hosted small events, tours, and classes at the farm prior to the pandemic.

Neither my husband nor I grew up on a farm, but I always felt like Brad must have been a farmer in a previous life. He has been able to combine his experience and knowledge in engineering, construction, equipment, and soil with his affable personality to contribute greatly to our success. He



built an incredible garage/studio which works efficiently for our processes, and sought out new information about cover crops and soil health. When asked about his role on the farm, he always says, “I am only in charge of two things...dirt and shit (meaning organic compost, of course) and Susan does everything else”. It always gets a good laugh.

At her course, Jennie encouraged us to write a business plan. I remember she said to consider the things that are potential risks to your business that could affect your ability to operate—the old SWOT analysis exercise. There is always the unpredictability of weather, but she said a farmer’s health is critically important.



We experienced this personally last fall. On September 27th, one week before “Frostmas” and as I was getting ready for our final afternoon dahlia sale, Brad had a severe stroke. He spent 10 weeks in the hospital and is now home where he can be with his family and his English Pointer. Due to COVID, hospitals

were closed to visitors so we are fortunate we could make arrangements to bring him home. He’s tough but has a long recovery ahead of him.

Given our current circumstances, I don’t know what our flower farming plans will be in 2021. While I carefully considered whether I should give up my position on the Board, I have decided to begin my term with full commitment. I appreciate the patience and encouragement of the ASCFG Board and staff. Having flower farming friends at times like these is heart-warming. I have received so much kindness over the past three months in many forms—messages, calls, food, help digging dahlias, and putting the farm to bed for the winter. It allowed me to spend the time I needed to focus on Brad and for this I am forever grateful.

My hope is that we will be able to come together for in-person conferences, farm tours, growers’ schools, and other networking opportunities in the near future since that is what I found so valuable as a member of the ASCFG. Thankfully, the ASCFG is offering great online education and learning opportunities until it is safe to meet.

In the meantime, I am looking forward to hearing from you and welcoming new members in the 14 states of the North and Central Region. Please don’t hesitate to reach out to me if I can be of any assistance or just to introduce yourself.

My 2021 mantra: keep going, keep growing.

## SOUTH AND CENTRAL

Arizona, Arkansas, Colorado, Louisiana, New Mexico, Oklahoma, Texas, and Utah



### Shanti Rade

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It’s hard to encapsulate 2020 in just a few words. It’s been such a whirlwind (even that word doesn’t do it justice). I can’t seem to find the right words to give any sort of meaning, consolation or dare I say, hope. I guess I just want to pass on a story that happened to us, which for me is keeping everything in perspective.

On the last farmers’ market of 2020 (we have a year-round market, so that’s the end of December for us), we were almost all set up about 5 minutes before the starting bell rings. Customers were already milling about and I was pricing wreaths at the last minute. I’m always doing something at the last minute. Our booth is located on the edge of the market right next to the parking lot. A customer was parking and something happened, we are still not sure what, and the car jumped over the parking barricade, right into our gang of tents. Vegetable racks were crushed—many vegetables went flying across the pavement.

The car slowed to a stop after pushing tables, racks, and crates up against three customers who were pinned against another rack. We first got the elderly woman out of her car, moved the car out of the mess, and took five minutes or so to get the people unpinned from all the rubble. Paramedics and the police department arrived. After getting checked out, all three customers were shaken, but okay.

I had to tell the many onlookers and do-gooders that we were fine, but we needed about 30 minutes to clean up our booth and get set up again before we would be open for business. The police put up some caution tape after I had to ask some new arrivals to step out of the booth. A few neighbor vendors helped us clean up, despite my protests. Many customers just waited patiently the whole time. And, soon enough we were up and running again, even if my nerves were shot for the next week. The support and love that so many people expressed throughout the morning and over the next week via emails and messages, was a good reminder of what a wonderful and caring community we have.

While in the end no one was seriously injured, this was definitely the scariest incident—and there have been several—that has happened to me in 15 years of selling at farmers’ markets. I feel lucky that only one of my 3 kids was at the market that day and she wasn’t in front of that car, and that the customers were all okay. If that car had gone forward literally another foot or two there would have been broken legs or something much worse. Also none of my wreaths or dried flowers were damaged as they were in the next tent over. Trivial, I know, but still a tiny bright spot.

This is not meant to be a warning or to scare anyone off from anything. Farmers’ markets are a great place to sell. Even through the pandemic, it has been our best sales outlet for almost 20 years. It is just a reminder that anything can happen. Anything. So be grateful for every day and every lesson that life brings. And it might not hurt to watch the four-part Risk Management series that ASCFG put together in December (in the Members Only section of the website, click on the Risk Management 101 tab).



In other news, I want to share some dried flower successes. We didn’t have as much time as I wanted this fall to make wreaths, but our dried flower stock was vast. So I decided to offer some curated dried flower boxes for shipping or local pickup. The work on my part was pretty easy for putting these together. I added an insert in the box on some different ideas of what to do with dried flowers; as well as where to find wreath bases and supplies; flower farmers friends’ online wreath classes, where I find inspiration for what to make; and tips and tricks to working with dried material. When I researched dried flower prices online, I realized I was not charging enough and I upped my prices to be more in line. Due to COVID I was already set up with a webstore, boxes, packaging, and shipping accounts, so it made this whole thing kind of seamless. I’m not going to retire off this venture, but it sure is some nice extra income when our production of fresh product is at the lowest point during the year. I know you all know already, but dried flowers are back. I hope you are taking advantage of the trend.



## WEST AND NORTHWEST

Alaska, California, Hawaii, Idaho, Nevada,  
Oregon, and Washington



### Erin McMullen

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raindropfarm@peak.org

Recently I stumbled upon an old pile of ledgers that had been buried under years of papers on my old desk. As often happens, I've been putting off cleaning that particular corner of my desk for some time. (Ask Judy about my relationship with procrastination.) Turns out that pile had been started in 2009 and added to every year since. When I finally got to the bottom of it, I was rewarded with the ledger for Rain Drop Farms in the year 2009.

Thinking back to that year, I was a relatively new mom (if only I knew then what I know now) and was wrangling a 2-year-old through a summer season while pregnant with his little brother. I remember being exhausted, which is par for the course, but I also remember that this was the year that a bold new idea began to take hold. Until this point the 10 years that we had been growing products for sale had mostly been as a way to fund our vacations and justify our buying a rural piece of property, and, let's be honest, my husband's way of placating me.

At this point I had been at home full time for two years with our son, farming when I could and enjoying the time together. With a new little one on the way and the ever-increasing cost of daycare, a new thought occurred to me. Maybe I could just keep doing this and never go back to work for someone else. Is that too out there? Could that possibly be a thing? I didn't know. I knew I could grow things well, I knew that I loved it, and I knew that I didn't want to have to work for someone else. So I sowed the seeds of a plan. I would make this "farm" a viable business by the time my new arrival went off to kindergarten, and then I wouldn't have to go off to work somewhere else. That gave me five years to make it happen.

At the time our markets consisted of a local farmers' market, Wednesday and Saturday, as well as two local grocery stores and a self-serve flower stand at the bottom of our driveway. We dabbled in weddings, but I can't say that we even "did" any in those first few seasons. The line item total for weddings in that 2009 ledger? \$411. Yup. In fact, the bottom line total for our income in the 2009 season was a whopping \$4700. When I saw those numbers I had to pause and think

back. How is that even possible? I remember distinctly how exhausted I was that summer, and it wasn't just because I was pregnant and chasing a toddler. I know for a fact that I was covered in dirt and sweat most days, on a dead hustle to weed, harvest, design, and get everything else done, too. So how could all of that effort result in only \$4700? I don't feel like I work any harder now and our farm brings in six figures. What's changed? Well, that's exactly what I started reflecting on. What had changed? What lessons have we learned? Are you maybe in a similar place with your farm? Does this sound familiar to you? Have you also stared at a long-lost ledger and realized how far you've come?

There are a handful of things that I can identify as game-changing moments for us and our farm.

1. The year we rented a tractor to expand our first field, taking us from 3 plots of 100 x 50, to a solid acre of land. Until this point we had done all our cultivation with either a shovel or an 8hp hand-me-down Honda tiller. Using the right equipment for a job makes the job not only easier, but dare I say enjoyable. Now, this doesn't mean that buying a tractor or a box truck or taking out a lease on 100



new acres is what you need to do for your farm, but if it is, make it happen. Once we realized how much time and energy we were expending on jobs we could do in half or a quarter of the time if we had a tractor, the hurdle of buying one was so much lower and we could clearly see a need. The same is true of other aspects of the business. Things like payroll, web development, book-keeping, marketing, seed starting—all tasks that may not be the best use of our time, we found other ways to get them done. We used the best equipment for the job, so that we could free ourselves up to do what we do really well, even better.

2. Hiring help. This was probably the single biggest step that we took in making my farm dream come true. It was hard, and still is, to find someone or someones to help build this dream. People to entrust with this baby that we've nurtured and toiled over. But, and I want you to read this out loud to yourself: YOU CAN'T DO IT ALL. And, when you try, you're doing a whole buncha stuff half-assed instead of what you do well with your full ass.

3. Getting out there and making connections. You're doing it right now, so you're on the right track. Finding the other people in this world who had the same wild dreams that



I had was an amazing moment. I can honestly marvel at the naivete with which I assumed that I was a unique flower in the world, the only person who had thought to do this. It's adorable. Once I got over myself and realized that there were hundreds and hundreds of other flower farmers in the U.S., I got busy networking with them. These connections led me to the ASCFG, which led me to meet some of the best flower friends and colleagues I could imagine.

4. Investing in myself. If you had asked me that summer in 2009 if I knew about, let alone would attend, a flower farming conference, I probably would have glared at you and told you to stop wasting my time. But, here I am, telling you that conferences have been one of the best things I've done to invest in myself and my farm. Not only have I gained valuable information and resources from conferences,

I have made some of the aforementioned connections at them. Friendships and business partnerships have been formed in the bland hotel bars at many conferences. I also would like to point out here that investing in yourself goes far beyond education and gaining resources. I also mean simple things, like investing in a pair of really good work shoes. Yes, you can wear your old running shoes out to the field—I mean they're trashed anyway—but don't. Get yourself a good pair of shoes that are comfortable and make you feel like you could walk in them for days, through wind, rain or snow. Because you will.

*I can honestly marvel at the naivete with which I assumed that I was a unique flower in the world, the only person who had thought to do this. It's adorable.*

out of the box, and it will be great. Because you are investing in yourself, in your comfort, in your ability to do your job well, in your longevity to maintain your body in an incredibly physical job. Give yourself permission to invest in yourself.

5. Taking wild leaps into markets that I never would have imagined. A few years before I joined the ASCFG I started investigating wholesale markets in my area. We live just outside a fairly small town, population 57,000. The closest big city is 100 miles away from us. So, that's where I looked for wholesale opportunities. Oof, it was scary. So many big farms, selling beautiful products, and you had to pay to sell there?! I swiftly tucked my tail and ran back to my comfort zone of selling \$5 bouquets from our farmstand. Two years later I was headed to my first conference and ended up on a plane with another grower from my region. She was selling almost everything she grew through wholesale and she wasn't scary, like the markets had seemed. In fact, she helped me to join



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said wholesale market and showed me that it was actually a pretty great place to be. She praised my product and assured me that people would want to buy it. I took a leap and gave it a shot, and guess what? She was right. Turns out that the only person keeping me from selling at that wholesale market for the past two years was me.

I'll be delving deeper into some of these topics in the next few *Quarterlys*, so stay tuned!

## CANADA

Alberta, British Columbia, Manitoba,  
New Brunswick, Newfoundland and Labrador,  
Nova Scotia, Ontario, Prince Edward Island,  
Quebec, and Saskatchewan

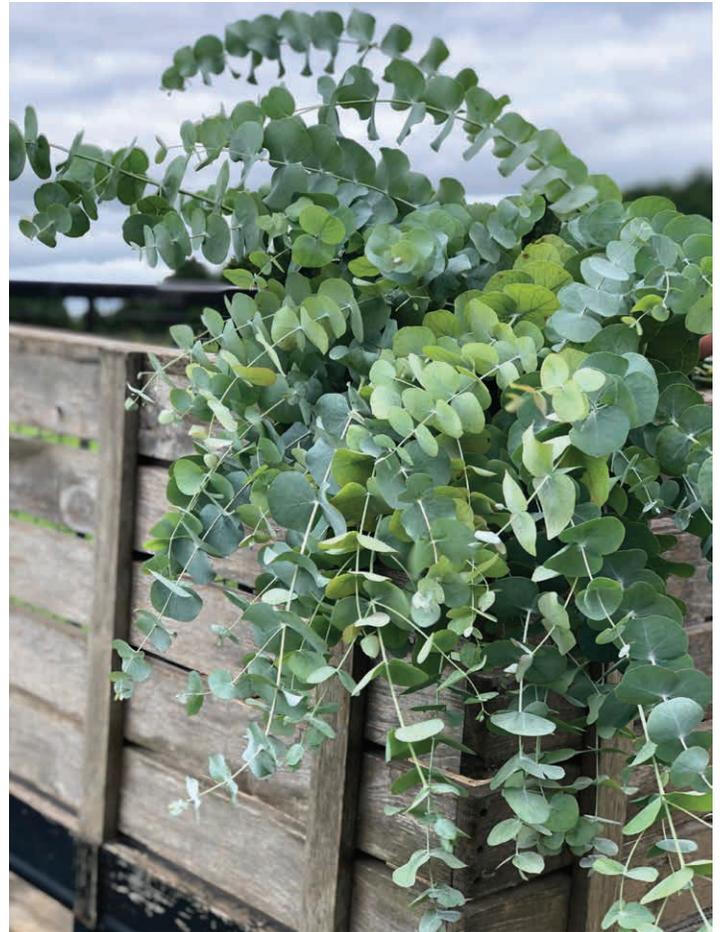


### Janis Harris

Harris Flower Farm  
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One of my favorite crops this year was definitely EU-CALYPTUS. It has been such a versatile crop! We made the jump from our usual 10-20 plugs to a 144 tray. And boy, was that the best move.

We order our eucalyptus through a group co-op buy. The tray was listed as 'Silver Drop' but there were a few different typed of eucalyptus in the tray. Most were the traditionally-shaped leaf but some were more almond shaped and some were more green than blue-green. The variation made it more fun!



Eucalyptus in my area is an annual crop. We (even though we have tried) have never been successful at overwintering it. As the perpetual optimists, we of course will try again this winter, hoping that winter 2020-2021 will be unseasonably mild.

The tiny plugs arrive in April and we bump them up into what we call bullet trays. They are a deep, rounded plug with 21 in a tray. The plugs grow there until it is a bit warmer but also when the space in our high tunnel is open. Spring 2020 the eucalyptus went in right after the tulips came out, so mid May.

We also sold a few extra plugs to our customers. Eucalyptus is popular so they want to try to grow it themselves. We have ordered an extra tray for 2021 to sell as potted plants.

We grow the plants in our high tunnel but I have seen others in my area growing in the field and having good success.

Eucalyptus is a fast-growing soft woody. It enjoys the heat and a good amount of water. In the high tunnel we mulched with straw to keep the weeds down.

I began to cut in mid to late August, exclusively for our wedding design work. The cut stems needed to have mature tips or they flopped pretty easily. We cut in the early morning or evening to avoid the heat.

By mid-September, the plants in the high tunnel touched the plastic roof. It was well over 10 feet tall. We were picking

it by the bunch and our customers were going wild. Freshly-harvested eucalyptus is so much different than shipped or imported. The fragrance of fresh eucalyptus is intoxicating! So much stronger than stems that have been shipped dry for who knows how long. We sold bunches at our farm for \$18 plus tax. We made a nice size bunch with 5-6 branchy stems. We didn't sell our eucalyptus to florists, only direct to customers. We had enough demand that we didn't feel that selling at a wholesale price was necessary. It was also a perk for our couples because they could boast that they had locally-grown eucalyptus in their wedding flowers.

I tested out glycerin preserving of eucalyptus. When I Googled and asked on the ASCFG Members Only Facebook group, I got varying procedures and results. I decided to try a random process that seemed



easy and made the most sense to me. Using vegetable glycerin with 1 to 2 ratio of glycerin to water, I mixed the solution in a black flower bucket. I recut the eucalyptus I had previously harvested which had been in my cooler for about a week already (life gets busy). It stayed in the solution, in the cooler, for about one week, then I removed and hung it upside down in my office. It has been hanging about 4 weeks and the leaves are dry and soft. Not brittle. It maintained the green colour. Slightly darker but still very nice. I will definitely preserve more eucalyptus this way.

Now that it is winterscaping season, we are using eucalyptus in our wreaths and other arrangements, using the shorter pieces so they don't go to waste. I used a grapevine frame and paddle wire to attach bunches of short pieces to make a full eucalyptus wreath. I lay it flat on the table for about a week to start the drying process, then hung it. They sold like crazy at our winter market.

At the winter market I also teamed up with a local soya candle maker and made little spa packages. These included a complimentary scent candle and a mason jar with a good amount of fresh eucalyptus. The customer could use the candle and eucalyptus for a spa-like experience (From what I imagine it would be like; a spa isn't somewhere that I spend a lot of time.). Those packages sold for \$35 plus tax. We are now offering them on our website and I have had to get two batches of candles. It's a great cross promotion of our businesses.

If you haven't grown eucalyptus you definitely should consider getting some. You will be amazed with the versatility and popularity of it. A great crop to grow!

## Meet the ASCFG's Newest Members

- Erin Abler**, Cloud City Flower Farm, Saint Cloud, WI  
**Ellen Adams**, Ellen's Bloomers, Norman Park, GA  
**Rochelle Adams**, The Free Flower Project, Boise, ID  
**Maria Affhalter**, Village Grown, Cross Village, MI  
**Geoffrey Agar**, Agar Grower Services, Coldwater, MI  
**Michelle Ahlers**, Stem & Spade, Faribault, MN  
**Darlene Alleman**, Sojda Farms, Weare, NH  
**Liisa Allen**, Pollenation Blooms & Botanicals, Hilton Beach, ON  
**David Anderson**, Anderson Family Farms, Veedersburg, IN  
**Raymond Artis**, Good Soil Gardens, Bahama, NC  
**Jenny Audo**, Cozy Oak Farm, New Fairfield, CT  
**Colleen Austin**, Heritage Farm Florals, Santa Rosa, CA  
**Amey Bailey**, Pike Hill Farm, Plymouth, NH  
**Rebecca Balke**, Soquel, CA  
**Josephine Banigo**, Elite Flower Farm, Marlborough, MA  
**Lemona Banks**, Springhouse Flower Farm, Barnardsville, NC  
**Linda Baptista**, Sultana Blooms, Cameron Park, CA  
**Marilyn Barlow**, Select Seeds, Union, CT  
**Devery Bellingham**, Lubbock, TX  
**Brooke Bennett**, Old North Farm, Durham, NC  
**Lisa Berkin**, Lisa Berkin Designs, Hingham, MA  
**Marie-Claude Biron**, Montreal, QC  
**Felicia Blackman**, Skye Flower Farm, Baltimore, MD  
**Laurie Blaylock**, Red Bud Farm, Highland, IL  
**Tammy Bloom**, Forever Bloom Farm, Pescadero, CA  
**Paula Bolash**, West Tisbury, MA  
**Melanie Bowlin**, United States Botanic Garden, Washington, DC  
**Andree Braha**, Garden To Table, West Long Branch, NJ  
**Cara Bratseth**, Blossomy Flower Farm, Powell River, BC  
**Julia Bristow**, Asheboro, NC  
**Christine Brotzge**, Bloomin Beauties, Groveland, FL  
**Elise Brown**, Brown Floral Farm, Macomb, IL  
**Lisa Burgess**, Gulf Breeze, FL  
**Jana Burk**, Midtown Micro Flower Farm, Tulsa, OK  
**Ashlea Burton**, Summerfield, NC  
**Amy Byington**, Hickory Flats Pumpkin Patch, Duffield, VA  
**Lucille Camp**, Norwich, ON  
**Brittany Campbell**, Aromatic Acres, Wauwatosa, WI  
**Jennifer Carr**, Posies Flower Farm, Falmouth, ME  
**Kathleen Casteel**, The Farmhouse Flower Co., Narrowsburg, NY  
**Jiani Chen**, Beijing Xijianzhai Culture Co., Beijing, China  
**Courtney Cohen**, Spore and Seed, Essex, MD  
**Christien Conniff**, Blazquez Gardens, Fredericksburg, VA  
**Lisa Cook**, Cora Lane Farms, Mapleton, UT  
**Jennifer Cooper**, Five Sparrows Farm, Escondido, CA  
**Raelynn Copeland**, Sweet Berry Farm, Marble Falls, TX  
**Christina Cover**, Cover's Flower Farm, New Plymouth, ID  
**Rachel Craig**, Ferma, A Family Farm, Weatherford, TX  
**Kadie Crivello**, Mid Rivers Bloom Co., Warrenton, MO  
**Andrea Curlo**, Aunt Annie's Flower Farm, Glenvil, NE  
**Eva Dannenberg**, Alexander Blossoming Bough Flowers, Craftsbury Common, VT  
**Angela Darrah**, C. S. Bouquets, McKinleyville, CA  
**Rachel Dauch**, Heywood Gardens, Castalia, OH  
**Kate DeJonge**, Pierce St. Goodies, Allendale, MI  
**Adriana Delucchi**, A's Alfalfa, Stockton, CA  
**Molly DeWinkle**, The Crooked Row, Howell, MI  
**Liz Dick**, Special Effects Flower Farm, Shawnigan Lake, BC  
**Marlo Dill**, McKay Creek Nursery, Prineville, OR  
**Glennys Doane**, Prairie Field, Downs, KS  
**Allison Donnelly**, Fernrock Farm, Durham, NC  
**Stacey Doran**, My Sage in Bloom, Manchester, MD  
**Sharon Doud**, Doud Farm, Stuart, IA  
**Bailey Dueker**, Boondock Flower Farm, Biggar, SK  
**Katherine Eickmeyer**, Warwick, NY  
**Janelle Elgersma**, Blackwell Farms, Caledonia, ON  
**Andrea Enright**, Eugene, OR  
**Kelli Eshelman**, Cedar Shake Farm, Winterset, IA  
**Erin Evans**, Valparaiso, IN  
**Christi Falls**, Falls Family Farms, Gastonia, NC  
**Julia Fant**, Ferma, A Family Farm, Weatherford, TX  
**Andrea Ferguson**, Otter Bend Farm, Altavista, VA  
**Kelly Fial**, Sandusky, OH  
**Jennifer Fiss**, Olivia Lucas Design, Philadelphia, PA  
**Tricia Fitzharris**, Hockessin, DE  
**Dene Flack**, Flowers by Dene, Bel Air, MD  
**Amy Fogo**, North Augusta, ON  
**Elizabeth Foley**, Bella Terra Flower Farm, Saline, MI  
**Lisa Frahm**, Prairie Hill Flower Co., Parker, CO  
**Jillian Fulhage**, C.F. Farms, New Hill, NC  
**Jessica Gamache**, JG Rural Living, Pasco, WA  
**Michelle Garrels**, Little Phlox Farm, Niles, MI

**Amy Getman**, Fieldsview Farm, South Haven, MI  
**Kristin Getter**, Michigan State University, East Lansing, MI  
**Ida Gianopulos**, Lone Creek Farm, Clinton, WA  
**Stefani Goetz**, 21 Petals Flower Farmer, Lafayette, IN  
**Elaine Gold**, Ever Gold Farm, Petaluma, CA  
**Lindsay Goldberg**, Fawn Lily Farm, Portland, OR  
**Abby and Wesley Gonzalez**, The Little Way Flower Farm, Cary, IL  
**Susan Gordon**, Candia, NH  
**Pamela Grashorn**, Enchanted Gardens, Alto, MI  
**Reesa Gravois-Arabie**, Haven Flower Farm, Lockport, LA  
**Perry Griffin**, Profeta Farms, Neshanic Station, NJ  
**Bobbie Grimes**, Gruetli Laager, TN  
**Monica Gruler Farrier**, Gruler Gardens, Petoskey, MI  
**Kathy Gulick**, Kindred Circle Farm, Springfield, VT  
**Hilary Hall**, Rose of Hall, Pepper Pike, OH  
**Sarah Hall**, Hall and Co. Flower Farm, Owasso, OK  
**Leslie Hamby**, Southern Roots Flower Farm, Pulaski, TN  
**Sarah Hamm**, Going for Green Farm, Prince George, VA  
**Kelly Hardin**, Barn Swallow Blossoms, Walterville, OR  
**Lanier Harris**, Patterson Oaks Farm, Montgomery, AL  
**Stephanie Harris**, Harris Cut-Flower Ranch,  
 Saint Clairsville, OH  
**Nina Hartman**, Salt Farm Flowers, Surry, ME  
**Lindsey Hauger**, Our Grace Farm, Watkins, IA  
**Mary B. Hayes**, Semper Virens Flowers, North Chelmsford, MA  
**Brent Heironimus**, Donna's Farm, Beaumont, TX  
**Tina Hendricks**, Jefferson, GA  
**Robert Herlihy**, Backyard Bunches, Allison Park, PA  
**Susan Hicks**, Hicks Farms, Souris, MB  
**Tonie Hockenbury**, Busybee Bouquets, Jamison, PA  
**Shannon Holman**, Sweet Gum Flower Farm, Lonoke, AR  
**Karen Holmes**, The Davidson Flower Company, Davidson, NC  
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**Michele Hozer**, Picton, ON  
**Elizabeth Hubbard**, Corey Lake Orchards, Three Rivers, MI  
**Alicia Hubert**, Wild Flower Forests, Belleville, IL  
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**Ashley Hutchison**, Fern's Farmette, Muncie, IN  
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 Durham, KS  
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**Kathy Kumpula**, Carlissa Farms, Newmarket, ON  
**Marie-Claude Lavoie**, IQDHO, Saint-Hyacinthe, QC  
**Alanah Lawrason**, Foggy Hill Farm, Freeland, WA  
**Janice Lehman**, Olde Lane Orchard, Odon, IN  
**Lisa LeMontangue**, Hackmatack Farm, Westbrook, CT  
**Melissa Leslie**, River Chase Flower Farm, Gadsden, AL  
**Emily Linn**, Long Lane Farm Flowers, Linden, PA  
**Barbara Little**, Middletown Farm, Middletown, MD  
**George Little**, Middletown Farm, Middletown, MD  
**Christa Little-Siebold**, Salt Farm Flowers, Ellsworth, ME  
**Kara Lolley**, Yakima, WA  
**Jill Long**, Whimsy Twins, Lancaster, PA  
**Kathy Lowther**, Petal & Pollen, Crossfield, AB  
**Heidi Luck**, Luck of Bolton Farm, Bolton, CT  
**Marnie Macgregor**, Fairhaven Farm, South Haven, MN  
**Jo Anne Malone**, Bradyville Blooms, Murfreesboro, TN  
**Heather Marano**, Bush Poppy Farm, Orinda, CA  
**Marni Martin McTavish**, Indigo Rain Flower Farm,  
 Hunstville, ON  
**Sara Mason**, The Mason Homestead, Wanatah, IN  
**Breanna McBride**, Maple Ridge, BC  
**Marnie McCarthy**, My Barnyard Garden, Pakenham, ON  
**Monica McColm**, Savage, MD  
**Nikki McComsey**, Gather Mountain Blooms,  
 Colorado Springs, CO  
**Terry McDevitt**, Honeycomb Gardens, Fort Walton Beach, FL  
**Dawn McDonald**, Blossom Knoll, Johns Island, SC  
**Jennifer McDonald**, Farmhouse Floral & Gifts, Vancouver, WA  
**Becca McDowell**, Houston, TX  
**Tina McGuire**, Sage & Sunshine Flower Farm, Murtaugh, ID  
**Erynn McInnis**, Tiny Flower Farm, Louisville, KY  
**Julie McLaws**, Wild Flower Farm, Oak City, UT  
**Maura McMahan**, Our Harvest Cooperative, Cincinnati, OH  
**Sarah McParland**, Philburn Farm, Belleville, ON  
**Susan McReynolds**, Sonrisa Gardens, DeRidder, LA  
**Jennifer Mears**, Oklahoma City, OK  
**Beverly Meek**, Flatwood Flower Farm, Calhoun, GA  
**Debby Meyer**, Lott, TX  
**Toni Miller**, Mill Pond Estate, Seffner, FL  
**Carla Miranda**, Millie Rose Flower Farm, Cabot, AR

## Meet the ASCFG's Newest Members (continued)

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- Phil Moddle**, Arrowwood Farm, Melbourne, ON  
**Molly Mount**, Wholesale Stone Supplies, Delaware, OH  
**Colleen Murphy**, Hart, MI  
**Dorothy O'Brien**, Wide River Winery, Clinton, IA  
**Tish Oldreive**, May Moon Flowers, Guelph, ON  
**Terry Oosterom**, Terry's Flower Power, Greenwich, NY  
**Samantha Ortiz**, Heart and Sol Farm, Flemington, NJ  
**Mollie Payne**, Foothill Farm Flowers, Provo, UT  
**Julie Peachey**, JP Gardens, Belleville, PA  
**Charlene Petersen**, Prairies Edge Farm, Monroeville, OH  
**Kristen Peterson**, Denham Springs, LA  
**Alexandra Pflager**, Alexandra Pflager Designs, Ramsey, NJ  
**Barbara Pickering**, Sojda Farms, Whitesboro, NY  
**Nicole Pitt**, Flower Hill Farm, Boonville, NY  
**Dina Pocernich**, Prairie Flowers and Gifts, Sun Prairie, WI  
**Jan Post**, Meriden, KS  
**Beth Preuss**, Local Roots Floral, New Carlisle, IN  
**Amanda Quinn**, Bloom: Cut Flower Farm, Huntsville, MO  
**Elizabeth Riggle**, Story & Bloom, White Plains, KY  
**Marilu Rivera**, Indigenous Love Design, Forest Knolls, CA  
**Amanda Roberts**, Bloom Ridge Farm, Carbondale, IL  
**Margaret Roche**, Native Poppy, San Diego, CA  
**Rachel Rockwell**, Merlin, OR  
**Lucinda Rooney**, Queen Anne's Lace, Norwich, VT  
**Shannon Rosnau**, Laughing Earth Homestead, Qualicum Beach, BC  
**Kelly Ross**, Mayfield Farm, Morgantown, WV  
**Stacey Rude**, Maple Park Farm, Beaver County, AB  
**Megan Ruf**, Regina, SK  
**Cara Ryan**, New York, NY  
**Molly Sadowksy**, Johnny's Selected Seeds, Portland, OR  
**Rachel Sannerud**, Pluck Flower Farm, Milaca, MN  
**Lauren Santo Domingo**, Skyfall, Southampton, NY  
**Erica Santoro**, Blushing Fields, Columbus, NJ  
**Dawn Saucier**, Daydream Manor, Zachary, LA  
**Kayla Schaffer**, Fence Posts Florals, Pontiac, IL  
**Sue Schletz**, Leesburg, VA  
**Carey Schoolmaster**, Floweret Farm, Kalamazoo, MI  
**Rebecca Seward**, Red Tree Farmstead, Nanjemoy, MD  
**Kim Seymour**, Wildmour Farm, Franklin, WV  
**Marcie Sharp**, Blooms by the River, Florence, ON  
**Heather Shepherd**, Flowering Fields, Lincoln City, OR  
**Scott Shepherd**, The Flower Podcast, Byron, GA  
**Lacey Sinclair**, Solid Roots, Hancock, ME  
**Laura Skidmore**, The Village Flower Farm, Yellow Springs, OH  
**Wendy Stacy**, Brooks Harvest, Shelbyville, TN  
**Cara Stefchak**, South Stems, Philadelphia, PA  
**Judy Stone**, Almonte, ON  
**Lindsay Storm**, Bushel and Peck Wildflowers, Mount Zion, IL  
**Annie Stovall**, Annie's Gardenscapes, Walnut Creek, CA  
**William Sundberg**, J & B Produce Report, Burien, WA  
**Deb Taft**, Mobius Fields, Sleepy Hollow, NY  
**Nick Taylor**, Piper Scout Farms, Prairieville, LA  
**Martha Thawngmung**, The Big Bloom, Battle Creek, MI  
**Natalie Thodoropoulos**, Tulip Lane, Paducah, KY  
**Lyla Thomas**, Aisle of Blooms, Waxhaw, NC  
**Susanna Thornton**, Thornfield Farm, Fincastle, VA  
**Diane Tindell**, Aquilla Valley Farm, Waco, TX  
**Lisa Todd**, The Flower Patch, Elkhorn, KY  
**Elizabeth Towe**, Inner Banks Farm, Hertford, NC  
**Jared Troyer**, Sugarcreek, OH  
**Allison Tucker**, Forest Blooms, Wake Forest, NC  
**Laura Urban**, Urban Honey Bee, Doylestown, OH  
**Jessica Valmas**, Bloomhouse, Baltimore, MD  
**Anthony Van Gorp**, Collier Row Cottage Farm, Demotte, IN  
**Christene Rosemann Vaughan**, Chatham Blooms, Pittsboro, NC  
**Amber Villarreal**, Redhead Flowerbed, Rio Linda, CA  
**Aenne Von Blumenbach**, Aenne's Garden, Bethanga, Victoria, Australia  
**Nicole Wahlquist**, Kamuela, HI  
**Anne Walsh**, The Happy Patch Flowers, Ben Lomond, CA  
**Christie Walsh-Myers**, The Heirloom Yard, Fernandina Beach, FL  
**Vicki Walters**, Isabell Blooms, London, KY  
**Korin Watson**, The Grounded Garden, Westminster, MD  
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**Farida Wilks**, North Fork, CA  
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**Calle Williams**, Placerville, CA  
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**Terry Wilson**, Central Lake, MI  
**Dani Winters**, Winters Farm Florals, Kennedyville, MD  
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**Sarah Wood**, Whitehall Flower Farm, Williamsburg, VA  
**Kacy Woodworth**, M.M. Flowers & Herbs, Corpus Christi, TX  
**Alex Yazdani**, London, ON  
**Sarah Zahn**, Pine & Posey, West Lafayette, IN

## Meet the New Members of the ASCFG Team

If you've noticed an expansion of the ASCFG's presence on social media in the last few months, now you'll know why. In August of 2020, Kelly Garcia was hired to manage our Facebook and Instagram accounts, and we think you'll agree she's doing a bang-up job. Here's a little more about her.

Kelly earned a degree in horticulture from the University of Georgia in 2010. During her time in Athens, she was an assistant to Dr. Allan Armitage, working with plant breeding and maintaining the perennial section of the University's trial garden, which trials new varieties of annuals and perennials developed by leading industry breeders.

Kelly learned a lot from this experience and used it to ground her vision of creating a unique horticulture-based business of her own. Terra Flower Farm was born in 2013 from a passion for mindfully growing plants and creating sustainable floral design.

That year Kelly and her family returned to Kelly's hometown of Signal Mountain, Tennessee, and broke ground on the area's first flower farm, hoping to bring interest in local flowers to the Chattanooga area. Terra's flowers are grown sustainably, with the least impact on our environment in mind. Kelly and her husband Marcos are also raising two beautiful children, Gabriella (8) and Graysen (4), who are their best helpers on the farm,

and serve as reminders of why they want to emphasize a connection to land in their mission. "Terra means earth, and part of our mission was to cultivate a healthy relationship with our farming practices and the land we own. We wanted to teach our children what it means to be stewards of our environment while we use the land to make a living," says Kelly.

Recently, Kelly has been managing several social media accounts, in addition to her own, and looks forward to sharing the online message and mission of this publication with you. To follow



Kelly Garcia and Family

Kelly and the ASCFG, visit [www.terraflowerfarm.com](http://www.terraflowerfarm.com) or [www.instagram.com/terraflowerfarm](http://www.instagram.com/terraflowerfarm) and find us on Instagram and Facebook via [www.Instagram.com/Ascfginc](http://www.Instagram.com/Ascfginc) and our Members Only Group on Facebook.

Have you recently called the ASCFG office and wondered who was the cheerful person on the other end of the line? It's Sherri Chavez, who started working with us in October to help manage our continually growing membership. You may not realize that she is not new to the ASCFG but in fact joined us almost two years ago in a more limited, behind-the-scenes capacity.

Most of Sherri's work experience was in retail management, primarily in books. She describes her bookstore experiences as labors of love where she could use her marketing degree. She and her store teams enjoyed success by building relationships with customers. Focusing on pro-

viding great customer service, creating interesting events, and implementing essential community outreach led to successful stores in a challenging, changing publishing world.

Appreciating an environment which fosters education and shared knowledge is exactly what drew her to work at the ASCFG. She met Judy and Linda while working in an independent bookstore near the ASCFG office. Through various conversations she learned more about the organization and when an opportunity presented itself to join the team on a part-time basis, she leapt at the chance.

In her part-time role Sherri interacted with many of our members by telephone and helped out at the Oberlin

Growers' School in February 2020. She found it inspiring to hear our members' stories, and to witness the depth of knowledge and spirit of cooperation within the ASCFG. When the opportunity came to join the team on a more full-time basis the decision was an easy one.

Sherri and her husband Steve enjoy traveling when there is not a raging pandemic. Until COVID is under control you can find her reading a good book and waiting for warmer weather so she can get back to playing tennis.



Sherri Chavez

If you need assistance with your ASCFG membership, call the office. Sherri will be standing by enthusiastically waiting to help.



# Dig in to your membership benefits!

## *Exclusively Yours!*

Log in to the exclusive **Members Only** section of [ascfg.org](http://ascfg.org). You'll find current and archived issues of *The Cut Flower Quarterly*, ASCFG Trial Reports, a collection of educational videos, recordings of webinars, documents on topics essential to your business, and much more!

## *Network and Share*

**ASCFG Facebook Closed Group** Check out what members are sharing! Find it by searching "ASCFG Members Only" and request to join. It's like having a consulting firm at your fingertips.

## *Make Your Mark on the Map*

**Localflowers.org** Members who are growing commercially have the option to be listed here. This is your chance to make your ad-free member page an effective marketing tool to promote you and your business. Be sure to embellish your page with photos and more to make it your own!

## *The Only Publication of its Kind*

*The Cut Flower Quarterly* is uploaded to Members Only as soon as it is finished and then will arrive in your mailbox 2-3 weeks later. Please keep the office informed of any changes to your address or problems receiving this important benefit.

## *Stay Informed*

Our emailed newsletter, *Short Cuts*, designed to keep you informed about your association and industry news, will arrive monthly. Be sure to check your spam and mark "not spam" if you find it there.

## *Learn and Grow*

Attend **ASCFG Events** to discover the many opportunities to learn new growing tips and techniques along with other growers with the same passion – cut flowers! We can't meet in person at this time, but stay tuned for more online opportunities.

## *Make Connections*

**Reach out to other members in your Region.** Use the map at [localflowers.org](http://localflowers.org) or the directory in Members Only to find fellow members near you. Growers are very busy, especially at the peak of their seasons, and their availability will vary from member to member. Suggest that you spend time at one another's farm to learn and share, or perhaps offer to work with a more experienced member for a day in exchange for the opportunity see their operation firsthand. Form a small group in your Region willing to check in on occasion for a casual meeting by phone, online, or in person.

# Not to be Missed in Members Only

## Risk Management 101

How fortunate is the ASCFG to have a member who is not only a flower grower, but also an expert in risk management? Gretchen Langston's presentations provided essential information on how to identify, evaluate, and prioritize risks, and how to avoid, prevent, mitigate, or transfer them. What's most valuable is that she frames these resources specifically for commercial cut flower growers. You don't know what you didn't know until you watch these.



## Ask an Expert

We started hosting Facebook live sessions called Ask an Expert in 2018. ASCFG Board members, industry suppliers, researchers, and grower members have generously given their time to share their knowledge and experience on topics ranging from sunflower and dahlia production to seed starting and postharvest handling. While the format is casual, the content is invaluable. Contact us if you want to be considered to share your expertise in 2021.

## Online Education

Here you'll find results from academic studies on snapdragon and ranunculus supported by the ASCFG Research Foundation; a course explaining how the broker system works; a webinar about no-till production; and a video explaining how to work with USDA for grower aid. More to come in 2021. Let us know what topics you'd like to see in the future.

## Meeting Videos

Tracking back to 2014, you'll find video files, slideshows, and handouts from National Conferences, Growers' Schools, and other ASCFG meetings in these pages. A vast array of topics have been covered through the years. There is much knowledge to be gained here while getting a glimpse into ASCFG in-person meetings. Say hello to old friends!

# Your ASCFG Board of Directors

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## Anticipate the Unexpected

Judy M. Laushman



It's impossible to describe 2020 with only a few words, but "unprecedented" seems to easily top the list of adjectives. No one could have anticipated a global pandemic that killed millions of people and upended economies; social unrest; political tension; and the continuing effects of relentless climate change.

It also feels disingenuous to assume such upheaval can be planned for. Large-scale disruptions like these, which affected people all over the world, can overwhelm us to the point of immobility. Who hasn't spent at least some time staring at a book or computer screen, reading the same text three times before it made sense? Sometimes it seems simpler to shut down and hope everything will all be over soon. How can anyone possibly be prepared for such universal calamity?

You can't. But you can be ready to handle issues that affect your own business. It's just as vital for you to be prepared to *identify, evaluate, and prioritize* risks as it is for national and state governments to address the safety and health of their citizens.

No one wants to talk about crop failures, but they happen. Whether it's poor germination, early or late frosts, or insect and rodent predation, sometimes cut flower plants die, or their flowers are unsalable. Do you have enough other material in production to make up for this potential loss?

What about on-farm safety? Is every one of your employees, family or otherwise, completely familiar with the correct operation of each piece of equipment? If the worst happens and there is an accident, what is your procedure for handling a medical emergency?

Which USDA, DOT or OSHA regulations may affect your business? Are you in compliance with them?

Who reads every paragraph and page of their insurance contracts? Do you remember which desk drawer you "filed" that in?

Referenced above, *identify, evaluate, and prioritize* are the cornerstones of four excellent presentations the ASCFG offered its members in November and December of 2019. ASCFG member Gretchen Langston, a cut flower grower whose other job is a risk management specialist, volunteered to create and present these sessions. "Risk Management 101—The Basics"; "Safety and Compliance"; "Insurance Claims



and Contracts"; and "Crisis Management" were created specifically for cut flower growers. Gretchen's PowerPoint slides, the video recordings of the Zoom sessions, and many pertinent collateral files are all posted in the Members Only section of the ASCFG website. Whether you're a new grower, or you've been in business for more than 25 year, it's worth your time to watch these free sessions.

We are enormously grateful to Gretchen for providing such valuable information.

If one of your resolutions for 2021 is to better plan, organize, and protect your business, this is an excellent place to begin.



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