

Volume 35, Number 1 Winter 2023

The **Cut Flower**

QUARTERLY

Association of Specialty Cut Flower Growers Inc.

for growers of field and greenhouse specialty cuts



Farmer Bailey

PLUGS FOR
FLOWER FARMERS

www.farmerbailey.com



Inside this Issue

- 4 From Your President
- 8 The Farmer and the Florist
- 12 Grower Profile
- 18 Is H2-A Labor Right For You?
- 26 Gather Ye ASCFGers
- 30 2022 Seed Trial Report
- 62 Regional Reports
- 74 ASCFG News
- 82 From the Director



The Cut Flower QUARTERLY

is published by
The Association of Specialty
Cut Flower Growers, Inc.
MPO Box 268, Oberlin, OH 44074

Judy Marriott Laushman, editor.
Linda Twining, layout.
2023 ASCFG
ISSN 1068-8013

PUBLISHING SCHEDULE

ISSUE	DEADLINE
Spring	February 15
Summer	May 15
Fall	August 15
Winter	November 15

All articles, features, and display advertising must be received by these deadlines for publication. *The Cut Flower Quarterly* welcomes advertising. Contact ASCFG for advertising insertion order form.

Contact Judy Laushman
(440) 774-2887 or mail@ascfg.org
www.ascfg.org

Subscription is included with ASCFG membership. No part of this publication may be reproduced in any form without the written permission of the ASCFG. No endorsement of named or illustrated products or companies is intended, nor is criticism implied of products or companies not included.

Could the ASCFG's founders ever have imagined where their organization would be 35 years later?

Val Schirmer



This past April, when we decided to hold our fall Board meeting in Chicago in early November, we never realized that we'd also be coming full circle.

It wasn't until Judy Laushman sent me a note later that the founders of what would become the ASCFG *had actually met in Chicago in November of 1988* to discuss the formation of the organization. And she would know—after all, she was one of them.

In that first organizational meeting of what was initially called the National Field Cut Flower Growers Association, interim Officers and Regional Directors were introduced, including Judy as the fledgling organization's Executive Director—a position she's continued to hold 35 years. Wow, I bet she would never have imagined that would take place!

So as we celebrate the ASCFG's 35th anniversary this year, we are also celebrating Judy's 35th anniversary with the organization and as our sole Executive Director, a huge milestone by anyone's standards...and one that's even more special because Judy has also decided to retire at the end of the year.

I have to say, we are extremely fortunate that Judy is giving us this much time to conduct the search for her replacement and I personally want to thank her for her kindness and foresight. It's another example of the kind of unselfish professional that Judy is.

The Executive Director is the organization's key management leader, overseeing the strategic and operational efficiency of the ASCFG's programs, policies, and staff. This will be just our second Executive Director in 35 years, which is incredible to consider and extremely important to the ongoing success and future of the ASCFG. Our association absolutely would not be where it is today without her at the helm.

To get our search process underway, we've formed a committee (led by John Dole, our long-time Executive Advisor) and hired an executive search firm to help us find and

hire the right person to fill this essential role. Look for more information throughout the year, including the job posting. It's possible that the right candidate may be one of our members, or someone one of you already knows.

For now, let me give you just a taste of what we have in store for you in 2023!

We've never had the wealth of in-person and on-line educational activities, services, and resources as we do now, focused on so many aspects of growing, business and operations management, building professional and personal connections among our community of flower farmers and original cut flower research. Be sure to take advantage of what your membership offers by delving into these events!

CELEBRATING
35
YEARS

Association
of
**Specialty
Cut Flower
Growers**
1988 - 2023

Ask an Expert These live webinars are held the second Monday of every month, featuring experienced member experts who share their insights, lessons learned, and experience on specific topics. Join the live session to participate in the real time Q&A. Zoom instructions are emailed to all members the day of the event, and recordings of all sessions are archived in the Members Only Learning Portal at www.ascfg.org.

Research and the Flower Farmer These live webinars are held on various Tuesday evenings each month, from February through May. The objective is to give us access to the latest research in cut flowers and inspire new ideas for crop, farm, and business management. Presenters are recent recipients of

the Research Foundation's Competitive Grants. They'll share overviews of their research, along with the exciting applications of the results. Join the live session to participate in Q&A. Zoom instructions are emailed to all members on the day of the event; recordings of all sessions are archived in the Members Only Learning Portal at www.ascfg.org.

Farm Tours These half-day or full-day tours are hosted by fellow members and are a GREAT way to jump-start your experience, expand your growing knowledge or simply spend time with fellow flower farmers. Host farmers provide an overview of their crops, production practices, and marketing and sales strategies. For the current schedule of farm tours, go to www.ascfg.org/2023-ascfg-farm-tours/ To find out more about hosting a Farm Tour in 2023 at YOUR farm, go to <https://www.ascfg.org/2023-tour-application/>

Catch up on the 2022 Conference Videos All 19 of the video presentations are posted in the Members Only Learning Portal, along with many, many more educational videos. If you have any quiet time during the late winter months, it's the perfect time to catch up on some of these.

Save the date for the 2023 35th Anniversary Conference November 6-8 at the Hyatt Regency St. Louis at the Arch. Whether you're relatively new to growing or very seasoned and experienced, the conference will have plenty of relevant content for you, plus the chance to reconnect with old friends and meet up with new ones. Plus, there will be **two** tours scheduled to visit Urban Buds. Keep on the lookout for a Constant Contact email with registration details and conference sessions.

This is just a sampling of the educational offerings we have in store for you. So you won't miss out on anything your membership provides you, check out the ENTIRE Events calendar at www.ascfg.org/events—or even better, sign up there to have all of the events automatically added to your personal calendar.

Here's to a great year, full of learning and opportunity, with a good dose of fun thrown in!

*Val Schirmer is founder of Three Toads Farm,
Winchester, Kentucky.
Contact her at vschirmer3@gmail.com*



Try Our New Varieties!



**Call Us At:
888-645-2523**

**Fax:
864-227-5108**

**website:
www.geoseed.com**

Coleus Premium Sun Ruby Heart

Verbena Bonariensis Vanity

Packaging

Floral Accessories & Supplies

A-ROO COMPANY

f @i @t @l @AROOCOMPANY

www.a-roo.com



TROLLEYS & DRYING RACKS

A-ROO Company's Plant Trolleys provide a high-quality way to easily transport and store your plants and flowers. A-ROO Company's Drying Racks streamline your drying process, improve efficiency, and save space by neatly organizing your drying flowers and plants. Both are 100% customizable to fit any occasion or need.



KRAFT PAPER SHEETS



FLOWER BUCKETS



KRAFT PAPER SLEEVES

CUSTOM KRAFT PAPER

A-ROO Company's Kraft Paper products have been an industry staple for their timeless style and sustainable build. Thanks to our customization options, you can add a nice pop of color to the natural look of kraft paper.

From logos to patterns, our custom options could be just what you need for the extra bit of branding or flair!

Kraft Paper Sleeves and Sheets are available in many sizes and offer your bouquets durable protection during transportation.



OHIO • TEXAS • FLORIDA • CALIFORNIA • RHODE ISLAND



INVINCIBELLE LACE®
Smooth hydrangea
Delicate, lacy, pink blooms



INVINCIBELLE SUBLIME™
Smooth hydrangea
Jade green blooms



LET'S DANCE CAN DO!®
Mountain hydrangea hybrid
Fast rebloom



LIMELIGHT PRIME®
Panicle hydrangea
Straight, upright stems



PINKY WINKY PRIME™
Panicle hydrangea
Huge panicle blooms



QUICK FIRE FAB®
Panicle hydrangea
Early bloomer



DOUBLE TAKE ETERNAL WHITE™
Quince
Elegant spring flowers



GOOD VIBRATIONS™
Privet
Fabulous foliage



BLOOMERANG® PURPINK™
Lilac
Blooms twice!

INVEST IN STYLE

Plant now, and you'll fill your buckets and bouquets with a reliable supply of flowers and foliage for years to come. Easy to grow and requiring minimal labor, they're ready to use whenever you need them - all season long. At just pennies per stem, these new varieties make a stylish investment.

Available at Spring Meadow Nursery. Call 800-633-8859 to request a catalog.

Ask about our Quick Turn™ liners for a faster crop.



Find an account manager.



Atonement for Flower Farmers

Ellen Frost and Laura Beth Resnick



Laura Beth

It was fall of 2022, and I was dragging. My life had been slowly unraveling since the pandemic began; I'll tell you that story another time over a stiff gin drink. Suffice it to say, every day for two and half years, there was some new emotional quagmire to navigate, and it left me fractured.

I was almost through. Just a few weeks to go, and then I could close business for the season, move to my own farm with my husband and our dog, and put myself back together. I just had to get through a couple more weeks of 14+ hour work days, and then it would be over. It was on one of those long, leaden days when my phone rang.

I was watering in the propagation house, thinking about how relieved I was that the day had gone smoothly. There was only one hitch: a DIY customer was underwhelmed by her "farmer's choice" order. With lots of smiles and warmth, I eased her concerns and sent her on her way. We get that reaction occasionally from customers who spend too much time on Pinterest and think they can get \$8,000 worth of flowers for \$800 if they buy directly from a farm. Usually I'm good at weeding those people out before they book, but every so often, one gets through.

I answered the phone with my right hand while continuing to water with my left. It was the DIY customer from earlier, and the moment she started speaking, I turned the water off and put down the hose. This was not going to be a normal conversation.

The customer was irate. She repeated again and again that the order was unacceptable, that it was "ugly" and "small," and that I had ruined her wedding. Her husband chimed in even more angrily that I "should be ashamed of myself," and that the farmers' market had much better flowers. Their main concern was that I didn't give them any flowers, that it was all "filler" according to them.

I was stunned. Standing there, waist deep in seedlings, I truly did not know what to do. Each accusation felt like a punch to the stomach. They threatened to give me a horrible review; she repeated herself in higher and higher pitches; his voice rang out violently.

I let them go on, hoping they would calm down once they got it all out. I had no language ready, no plan for how to deal—and my dumbfounded silence only turned up their volume. They didn't demand a refund or tell me how to fix it, they just threw bricks of anger that were increasingly destructive.

After too many long minutes and my own repeated assurance that "once you start putting the flowers together, you'll see how beautiful it is," I couldn't take it anymore. I repeated yet again that I was sorry they were disappointed, insisted I was proud of what we harvested, and hung up on them mid-outburst.

My face flushes with shame even as I type these words. I had never been yelled at before by a customer, and I didn't know which was worse—the idea that my flowers were BAD, or the fact that I had completely failed during that phone call. My heart pounding, my palms slick with sweat, I swiped to my phone contacts and immediately called Ellen.

Ellen

There are some people you always pick up the phone for. LB is one of those people for me. We text multiple times a day and see each other in real life sometimes, but she rarely calls on the phone. So when she called, I picked up, trying to talk and continue making the centerpiece I was working on. LB told me everything.

I was actually surprised this was her first angry customer. Not that we get irate people calling us on the regular, but after doing over 1000 weddings and creating thousands of single order arrangements over 15 years, occasionally people are unhappy. I listened. I knew how she felt. When someone tells you your product is deficient in some way, I think a natural response is "No way, my product is great, I know that because I grew it/made it/designed it myself." But that is NOT what the customer at that time wants to hear. They want an apology, which LB gave. But on top of the apology they want you to fix it. NOW.

My strategy is always to apologize, fix it, and kill them with kindness. I learned this strategy from a great book called *Hug Your Haters* by Jay Baer. Usually what the customer wants is a replacement for the thing they don't like, or a refund. And that's what we do. Maybe I can take this approach because it happens so infrequently. It hasn't happened for a wedding in 10 or so years. And it only happens about once a year for single orders. But I've learned—there is no arguing or convincing people that they're wrong and you're right when they are hurt, stressed, mad, or worried about money.

So I suggested LB give them some money back. It was (a little) comical haggling over what was appropriate. LB suggested \$75 at first. I think I suggested \$300. My thinking was "What is the amount that will let them know 'I hear you.'?"

I want them to be able to move on from this without a sour taste in their mouth (AKA no bad review). Don't get me wrong, I'm not saying you should live in fear of a bad review. But no one can really give you a bad review if you try hard to fix things.

We drafted an email together over the phone and then hung up.

Laura Beth _____

Ellen's familiar voice and empathy calmed me down. I called my dad too, and he repeated Ellen's advice almost exactly. Unable to handle another phone conversation with that customer, I rushed to my computer, feeling furious that I'd have to give a refund to this awful person. Her total invoice was about \$800.

The customer had already emailed me, sending a screenshot of an article insisting that zinnias are not flowers, but rather, they are filler. This was just one example of the many non-flowers we gave her, she said. Indignant, I responded offering a refund of just \$100, since I would have eaten a bouquet of zinnias rather than give her an ounce of satisfaction.

But I didn't feel better. Ellen had suggested a more significant refund just to get this customer out of my life forever. Her words—"do what it takes"—echoed in my head, and I realized that my ego was standing in the way of freedom from this impossible situation. This customer would never agree with me; I would never agree with her. There was only one way out. I wrote another email saying that I had considered the situation further, and would be issuing her a \$400 refund so that she could buy the flowers she wanted from someone else, and I wished her all the best.

That old adage "The customer is always right" had led me astray. It didn't matter whether the customer was right or not. What mattered was that the customer was hurt, and when someone feels you hurt them, you apologize and take responsibility, even if you don't necessarily agree on the facts. Accepting responsibility for my actions, whether real or imagined, was literally the only way either of us could move on.

Giving almost too much, half her money back, removed all the pressure: I had finally done the right thing. I put my dog in the car and drove to my favorite trail by the lake. I strode down the dirt path, trying to leave it all behind me. Being told that I'm fundamentally a failure by a screaming bride might normally be a funny story to tell later. But I was already down, feeling shame and guilt in larger areas of my life, which is why it hurt.

Ellen _____

LB texted me updates later. She received an emailed "THANK YOU" response from the customer and never heard from her again. The reason we have so few complaints



Samples of Butterbee Farm's DIY buckets, filled with seasonal flowers and foliage

is because we work hard to manage our customers' expectations. While it's easy to blame complaints as a one-off, it's important to always be trying to improve how we communicate our offerings to our customers so that they aren't surprised or disappointed. I urged LB to review her DIY offerings for the coming year and look for ways to improve her marketing of this product.

Laura Beth _____

We had a few more DIY weddings to go before the season closed, and to prevent any more mishaps, I put my whole heart into them. The response was just what I needed. Each customer was glowing; one even said that she discovered her favorite flower (dahlias, of course) thanks to me.

What did I learn from atonement with the angry customer? That it's not "the customer is always right," it's that "the customer's hurt is real." That it's better to give money back, even if the customer is psycho. That I can fix my mistakes, even after multiple screw-ups.

I'm writing this column from the new farm, where I am finally putting myself back together after that difficult period. My husband and I marvel daily that we finally achieved the dream we worked for our entire adult lives: to create the world we want to live in, on our very own farm. I've added to my mental toolbox a checklist for dealing with angry customers going forward. I'll keep trying to do the right thing in tough situations, and when I can't figure out what to do, I can always ask Ellen!

*Ellen Frost is owner of Local Color Flowers.
Contact her at ellen@locoflo.com*

*Laura Beth Resnick is owner of Butterbee Farm.
Contact her at butterbeefarm@gmail.com*

MEET OUR INSTRUCTORS:



Lisa Mason Ziegler



Dave Dowling



Ellen Frost



Jennie Love



Steve & Gretel Adams

Visit the Course Pages:

- Course details
- Enrollment dates
- Student reviews

Flower-Based Business Courses Taught by Industry Leaders

Student Reviews:

- ...learned to work smarter and plan better... S.W.
- ...Worth every dime! J.L.
- ...easy to understand, accessible, and supportive! B.H.
- ...changed the way we think about our flower farm P.N.
- ...shared a lifetime of experience. C.C.



TheGardenersWorkshop.com



SEVEN SPRINGS FARM SUPPLY

The Farmer's Choice since 1990

Fertilizer • Pest Management
Growing Mixes • Cover Crop Seed

(800) 540-9181

WWW.SEVENSPRINGSFARMSUPPLY.COM

members use ASCFG7 for 7% off

Lessons from a Third-Generation Flower Grower

Julie Martens Forney



At LaSalle Florists, eight decades of flower growing has produced a harvest of hands-on experience and down-to-earth advice.

It might not be proper to call LaSalle Florists in Whately, Massachusetts, a floral dynasty—but then again, it might. Third-generation business owner John LaSalle turned 70 last summer, and he’s still running the family’s traditional brick-and-mortar florist, along with a strong wholesale flower program.

These days he hauls freesia, stock, dahlias, baby sunflowers, and other blooms seasonally to the New York and Boston floral wholesale markets, arriving for 5:00 a.m. opening. After returning home, he tends crops and creates floral designs for retail sales. John started his floral career at the knee of his grandfather, James LaSalle Sr., who founded the business in 1929 as a backyard hobby.

From Backyard to World Champion

Born in 1884, James Sr. grew up on a farm in North Hadley, Mass., embarking on a career at the local general store, which he eventually bought. He started manufacturing ice cream out of the market, developing that into a business, which he sold in the 1920s. That windfall kickstarted what would become LaSalle Florists. “He made enough money from selling the ice cream business that he could pursue his hobby of raising gladioli and dahlias,” John says.

The hobby eventually outgrew the backyard, so LaSalle packed up his family and moved to Whately, where a 16-acre parcel offered ample elbow room to grow flowers and do what James Sr. loved most: breeding gladiolus. “He used a mix of European and Australian varieties, some of which had nice flower colors but poor plant form, and vice versa,” John explains. By cross-pollinating, he was aiming for richly tinted glad blooms on a strong plant.



John LaSalle raises stock for his wholesale customers. He’s kept the business going by being flexible enough to add or change products quickly. “Colors change, styles change, and you need to keep your eyes and ears open to pick up on them,” he says. “Don’t be afraid to be wrong once in a while, but you have to take chance.



In 1955, James LaSalle Sr. (front) and his son, James Jr. (back) carry bunches of freshly harvested carnations. Gregarious James Jr. marketed the business by giving talks to local organizations, churches and school groups.

It took two years to go from seed to flower, so James Sr. built a greenhouse in 1934 to shave a year off that timeline. That greenhouse is still in use today. “We grew up to seven acres of glads on this property for over 80 years, much of which shipped to Boston or Springfield,” John says. “My grandfather produced a World Grand Champion gladiolus in the 1940s. They were really proud of that.”

John’s father, James Jr., joined his father in the business in 1949, with his wife, Ann. As the flower venture thrived, more greenhouses sprouted through the 1950s. Today LaSalle’s has 13,000 square feet under cover including three older glass houses and two plastic covered hoopouses.

A Traditional Florist Thrives

The crop mix at LaSalle Florists reads like a history of the U.S. cut flower industry. When gladiolus filled the growing fields, carnations bloomed in the greenhouses. Massachusetts was the leading carnation growing state until the 1940s, when production shifted



In 1983, LaSalle Florists raised the crops it sold, from cut flowers to bedding plants. That tradition continues today, with 90 percent of the flowers going out the door in 2022 raised on site.

to Colorado with its bright light and cool nights (ideal carnation conditions).

At that point, LaSalle Florists shifted gears to raise chrysanthemums. “That worked until South American growers figured out how to ship them profitably,” John recalls. “That killed the mum market here.”

Once again LaSalle Florists pivoted, this time adding more freesia, a crop they had raised since the 1950s. “Originally we’d get freesia bulbs in September and grow them for a single February crop,” John explains. “But we learned

from a sales broker that we could get conditioned bulbs and plant in succession from September through December for cutting from January through May. Once we understood that, freesia became a consistent crop for us for a number of years.” A bonus with freesia is that they grow on the cool side (low energy needs) and need little fertilizer.

Eventually John cut back on freesia as his client base changed. These days the main crops in the greenhouse include freesia, stock, dianthus, asters, and baby sunflowers. The business also grows a lot of minor crops for their retail customers. “This summer we grew 90 percent of what went out through the florist operation,” he says.

“We’re pretty much a dinosaur, but we’re a traditional retail florist. Funerals, anniversaries, birthdays—that’s still our primary business.” While funeral business has dropped off over time, John finds that part of the retail program “the most gratifying. Dealing



Freesia thrives in a Lord and Burnham glasshouse built in 1952, the year John was born. Back in the day, the 30- by 125-foot house was filled with carnations and bedding plants. Today freesia thrives in the original wooden benches John’s grandfather built.

"I don't see enough good quality delphinium. California grows good delphinium, but shipping kills it. By the time us poor retail florists get it, it starts to shed. Whether it's Belladonna types or hybrids, in summer, fall or anytime actually, there's a market for quality delphinium." John LaSalle

with families in grief is probably one of the most important parts of what I do—helping families get through that. Having flowers at a funeral or wake is a way to show someone was loved."

Find a Flower that Sells

When it comes to determining a crop mix, John believes "you need to have something unique, especially if you're selling to a wholesale house. You need something that gets their attention and that they'll want—and then you can sell your other stuff."

For years John's attention-grabbing bloom was ornithogalum. His New York wholesale clients clamored for that, but didn't need his dahlias. With a little shrewd salesman-



LaSalle's grows about 3 acres of dahlias. John has been hoping to find someone to take over the dahlia part of his business in New York. "The dahlia program is the most profitable part of the business," he says.

ship, he started telling customers they couldn't have the ornithogalum unless they also bought dahlias. "That ornithogalum wasn't very profitable, but it got everybody's attention—and it got my foot in the door," he says.

Any crops he thinks have potential for flower farmers? "I don't see enough good quality delphinium. California grows good delphinium, but shipping kills it. By the time us poor retail florists get it, it starts to shed. Whether it's Belladonna types or hybrids, in summer, fall or anytime actually, there's a market for quality delphinium."

Making Money with Flowers

Sometimes a crop like ornithogalum, which wasn't profitable, can help open doors for business. In general, though, John lives by the mantra, "If it's hard to grow, it's probably not profitable. It's all about time and labor," he explains. "When my grandfather started the business, labor was cheap, and material was expensive. Now labor is really expensive, so if a crop takes a lot of time or extra work, you won't get your money back for your labor."

The ornithogalum eventually disappeared from John's sales roster due to a power outage that froze the stored bulbs. "That was a blessing, because they took up a lot of space and time, and they were heavy. I filled up the space with more dahlias, which are more profitable," he says.

Dahlias are a big deal at LaSalle's, with a little over 20,000 tubers filling 3 acres of the farm's 5.75 production acres. Like the other flowers John grows, dahlias sell wholesale to brokers, to retail flower shops, wedding designers, and other local flower farms. "I sell to everybody," John says. "I just started working with another grower who sells tubers to the public. She's purchasing some from me to split up and sell."

For the most part, though, John doesn't sell his dahlia tubers. "Up until a year or two ago, I would just dig up what I wanted for replanting and harrow the rest under," he says. "I only grow 10 main varieties. My clients want consistency. They may buy 30 bunches of one color." A typical NYC wholesale run includes 80 bunches of black dahlias, 50 of white, 30 of orange, 30 of pink, and another group of assorted colors.

One thing John's afraid of is that at some point there might be an overproduction of dahlias, "because so many people are now selling more tubers. It used to be you'd get tubers mostly from brokers, but now farmers realize they can sell tubers. If we're selling to the retail market, that's one thing. But if we're selling to other farmers and some of us end up selling to the same market, that could cause an overabundance or even undercutting. That's one thing I worry about: the dahlia market oversaturating."

Advice for New Flower Farmers

For 67 years, John has been involved in growing flowers. “It’s not easy work—it’s hard,” he says. Although he studied business administration in college, he learned flower growing “through osmosis, absorbing it all as I went along. If a person doesn’t have a background in farming, they really should go to agricultural school or community college part-time to get knowledge of what they’re doing,” he suggests.

He also recommends reading trade magazines and talking to other people. “Salesmen actually can be helpful,” he adds. John also finds talking to other growers is key. “The conferences are very expensive, and it can be hard to justify, but all it takes is one really good piece of advice and you’ll make back those expenses—and more. The secret is being able to glean and make that information work for you.”

One of the most common mistakes he sees flower growers make is in pricing crops. “Always remember that the people you’re selling to have to be able to turn that product and make money. We all value our crops pretty highly, but don’t price yourself higher than someone can afford.”

In terms of customers, he shares one lesson he learned along the way. “I only know this because I’ve been around long enough to figure it out,” he says. “If you sell to a wholesale florist in a market, you really can’t sell to a retail florist in that same market or you’ll be undercutting the wholesaler, taking their market.”

Try Automation to Beat Labor Costs

The toughest challenges flower growers face today are inflation and labor. John wrestles with the same issues. “Equipment is pricey, but the earlier you mechanize your farm, the better off you’ll be,” he shares. “It may cost more than you think you can afford that year, but if you can reduce labor cost, you’ll be better off in the long run.”

His favorite example of that principle is a Ford tractor he bought in 1992. “It was 16 years old but had everything on it I wanted. It was a beautiful bucket loader. I spent \$9,000 on that, rebuilt the engine once, and 30 years later, I’m still using it—all the time. I spent that extra money to get what I needed, and over the long haul it cost me next to nothing,” he says.

The tractor especially comes in handy for digging dahlias. “With good weather, it takes me less than 10 days to dig 20,000 dahlia tubers out of the ground and pack them away,” he says. The secret is a simple undercutter—a mulch lifter—that slides under the tubers to loosen them. “Then we just pull them out of the ground, shake the dirt off, cut the tops and then pack them away. That attachment cost maybe \$2,000 and allows us to get our work done.”

What’s Next for LaSalle’s Florists?

At age 70, John’s floral endeavors are a tough act to keep up with. This past Mother’s Day weekend, he designed 140 to 160 arrangements for his retail customers—in addition to his regular floral wholesaler runs to the Big Apple and Beantown. During dahlia season, John averages about four hours of sleep a night.

So maybe it’s no surprise that he’s looking to “wind things down a bit. I’m at a point where I’m ready to sell,” he says. “I’m hoping to find the right person to continue the business as a cut flower farm or farm. It’s time for me to retire and enjoy the next 20 years of my life.”



In a good year, LaSalle Florists harvest 200,000 dahlia stems. ‘Labyrinth’ is one of John’s favorite varieties.



John’s grandson Carter is learning how to count daffodils for bunching.

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



GROWING IS IN OUR DNA

Back in 1982, Grower John had a problem. He was looking at plug production and wanted to purchase seed by seed count. The industry standard at the time was to sell by seed weight only.

Purchasing seed by weight caused challenges year by year and even lot by lot an ounce of seed of “variety A” could be 7,000 seeds or 10,000 seeds. That meant his costs could swing 30% depending on how many seeds ended up in that 1-ounce packet of seeds. Also, it was hard to give feedback to the seed producer on the performance of the lot or variety; if you grew that lot of seed out and got 6500 plugs, should you be happy with the performance of that seed lot? 6500 plugs out of 7000 seeds is a 92% germination rate, 6500 plugs out of 10,000 seeds is a 65% germination rate. How would you know unless you knew how many seeds you started with?

Grower John wanted to improve efficiencies in plug production and purchase seed by seed count only. After looking at multiple distributors, he could not find a seed distributor who would package and sell seed by seed count. So, like many entrepreneurs, he set out to solve the challenge and founded Express Seed Company.

Grower John in this story is John van Wingerden. He founded Express Seed Company in 1982 with the goal of solving challenges that growers face. Over the last 40 years, Express Seed Company has grown into one of the leading horticultural distributors serving the USA and Canada. The company initially focused on the annual/bedding plant segment; but in recent years has focused on organizing relevant product lines and supply chains for and supporting growers of perennials, indoor foliage, and indoor flowering plants.

The heart of Express Seed Company is our grower-focused mentality. We understand growers because we are growers; our founder John and his family, who continue leading the company today, are growers. Our team is composed of knowledgeable industry experts who have come from growing backgrounds. All day, every day we work to deliver value to our growers.

What is next? Serving Cut Flower Growers

In many consumer categories, “locally produced” continues to trend. Consumers like the idea of buying from a local or regional business and that the items they purchase have fewer air miles than they do. We have seen this trend as well in the cut flower market, imports from Colombia or Holland are still the majority of the flowers purchased here. However, there is a slow and steady trend toward consumers buying locally produced flowers. To meet that consumer demand, our North American cut flower growers are improving their quality and increasing availability year-round.

Consolidation is another trend that has impacted cut flower growers. Breeders and brokers have acquired their competitors and some tried & true varieties are now harder to find. Additionally, because of the pandemic, local supply chain has become more needed while sourcing inputs has gotten more complicated. Overall, there is more opportunity for domestic growers and suppliers.

As the growers’ needs have increased, Express Seed Company has realized that there is a need for additional support. We asked ourselves, “How might we fill that need”? We will:

1. Leverage our capabilities in distributing seeds, cuttings, young plants, bulbs, and bareroot to serve the cut flower growers.
2. Offer shipping and logistics support with our truck fleet.
3. Provide technical support and advisory services to growers throughout the USA and Canada.

Express Seed Company envisions our strengths can be leveraged to serve to cut flower growers. We have created a team of technical support, product, and sales professionals with decades of industry experience in the cut flower segment.

EXPRESS SEED COMPANY



Pictured: John van Wingerden, David van Wingerden

Our team is excited to introduce InFlora™ Cut Flowers.

InFlora™ Cut Flowers represents a dedicated team of breeding, technical support, and industry experts that connects cut flower growers to the optimal varieties, product forms, supply chain, and growing recommendations. Our sole purpose is to help growers achieve success.

The InFlora™ Cut Flowers team along with our strategic suppliers created an assortment optimized based on your production location. These strategic suppliers include leaders in the cut flower market: Syngenta Flowers, Danziger, Sakata, American Takii, Kapiteyn, Evanthia, Headstart Nursery, Kubepak, and UNEX. This avant-garde group is excited for you

to get to know our capabilities and the varieties we represent. We also leverage our complete vendor network throughout the USA and Canada to deliver a complete solution of Seed, Cutting, Plug, Liner, Bulb, and Bareroot inputs for your business.

InFlora™ Cut Flowers and Express Seed Company actively support the industry and are involved with the following organizations: Association of Specialty Cut Flower Growers, American Grown, AmericanHort, Florida Nursery Growers and Landscape Association, National Garden Bureau, and All-America Selections.

We are **IN**vested in your best **IN**terests.



INFLORA™

CUT FLOWERS

PRODUCT FORMS OFFERED



BAREROOT



BULBS



CUTTINGS



PLUG & LINERS



SEED



TISSUE CULTURE

TOP CROPS



DAHLIA



DIANTHUS



LISIANTHUS



PEONY



SNAPDRAGONS



SUNFLOWERS

Learn more at InFloraCutFlowers.com   
The entire InFlora™ Cut Flowers product offering is available at Express Seed Company.



Is H2-A Labor Right for You?

Julie Martens Forney

The labor crisis is hitting hard everywhere, and flower farms are no exception. Guest workers with temporary work permits, also known as H2-A visas, could help solve your employee puzzle. Learn how some flower growers are using H2-A labor to form a reliable labor pool.

One of the hardest issues many farmers face is finding reliable help. Hiring high schoolers and college students during summer fills some gaps, but this group usually heads back to class before the fields are done exploding with peak harvest. Some flower growers are lucky enough to find workers among the local labor pool; individuals who are happy to work part of the year on the farm, and the remainder picking up hours in restaurant, retail, or other service industries.

These are typically younger workers who bring a lot of energy to the farm—but also uncertainty as they're finding their way in life. All of this creates a frustrating situation for farmers who wind up training a new crew season after season. It can be equal parts financial deficit and frustration.

That's where the H2-A Visa Program comes in.

This guest worker program allows flower growers to bring in seasonal workers on temporary agricultural visas or work permits, known as H2-A visas. At the end of the growing season, the foreign workers return to their homes. For some flower farmers, H2-A workers have solved the labor question, providing a stable, trained workforce that returns year after year.

Anisa Kline is a PhD candidate in the Department of Geography at The Ohio State University. Her doctoral thesis focuses on the lives and experiences of H2-A workers in Ohio. She spent last summer logging 10,000 miles on her Toyota Highlander—all in the state of Ohio—as she interviewed growers and a total of 285 laborers participating in the program. “I’ve done the largest survey of H2-A workers in the country,” she says. She visited a mix of traditional agriculture production, plant nurseries, and flower farms.

Hands down, the biggest benefit H2-A workers bring to farms is stability and reliability. “If it’s a good fit, they



Bob and Teri Berry at Cultivate

Bob and Teri Berry of Berry's Blooms, in Medina, Ohio, have a strategic plan to be a destination farm for farm-fresh flowers and home décor items. In addition to 15 acres of sunflowers, their main crops include peonies, lilies, and lisianthus.



Berry's Blooms, Ohio H2-A workers

Berry's Blooms in Medina, Ohio, have hired H2-A workers for six years. "These guys are motivated to make money and to get an invitation to come back next year," Bob says. The farm takes the team to visit the Cultivate horticultural conference.



Sunny Meadows, Ohio field crew

The field crew at Sunny Meadows comes in late February, which means they have some cold work days in the spring.

will come back year, after year, after year," she says. "These jobs are very valued in Mexico (93 percent of H2-A workers come from Mexico). There's a lot of competition." Anisa discovered that, among workers she interviewed who had been coming for more than one season, 77 percent of them had been working at the same farm. "Three-fourths of the returning H2-A workers had only ever worked for one employer. That gives you an idea of the amount of stability this program has. For a grower, that means they know their workforce and what their expertise is."

Berry's Blooms in Medina, Ohio, just wrapped their sixth year of using H2-A labor, and has experienced both sides of the trend Anisa reports. While they have had to switch crews, the current crew is going on their third year. "These are hard-working men," co-owner Bob Berry says. "It's a big deal to them to be here. They're leaving their families and community for six to eight months. Ultimately they're here to provide a better living for their families."

He says these workers are motivated. "They're highly motivated to make money, so they'll work the long hours. They're also motivated to do a good job, because they want an invitation to come back, and they take pride in their work. We have struggled to find workers who really want to work the long hours in season and want to do a good job. These men are the opposite."

Gretel and Steve Adams, owners of Sunny Meadows Flower Farm in Columbus, Ohio, embraced the guest worker program after talking with other flower growers who said some of their H2-A workers had returned to the farm every year for 15 years. They recently completed their fifth year with H2-A and rate it a complete success. "Our workers have really become our family. Now I can't imagine the farm without them," Gretel says.

How the Program Works

Like most government programs, the H2-A visa program brings its own maze of regulations. Bob is a retired corporate attorney, but didn't want to tackle the paperwork solo. "I realize that I don't do this on a daily basis, and if I do it wrong, it could be a huge problem. If the crew is not at the farm, plants still need (to be) planted and harvested."

He categorizes the forms as "pretty straightforward, but if there's a hiccup, I have no idea how to interact with the Department of Labor or Homeland Security." Berry's Blooms opted to hire an agency to spearhead the visa application process. For four years they worked with másLabor, one of the biggest foreign worker recruitment agencies, which they connected with at the Cultivate horticulture conference in Columbus.

"Más is a machine that focuses on compliance. They'll hold your hand through the process to make sure you have the tools to be compliant." Ultimately the Berrys connected with Head Honchos, based in San Antonio, Texas. This will be their third year with this agency. "They run a small, hands-on shop and provide great workers. It's a good fit for our situation."

Gretel and Steve work with the agency USA Works. She notes that it's important to "verify the level of service that you need before you hire someone." USA Works handles the legal issues of securing visas for workers, but Sunny Meadows did their own worker recruitment through a farmer friend. Over time, the Mexican workers, who have returned each year, did any needed recruiting.

The government application forms have a list of agencies, and you can also search online or talk to other flower growers who are using agencies. What should you look for in



Berry's Blooms, Ohio H2-A worker with lilies

"The way to succeed in the H2-A program is to drive efficiency. It requires a lot of management," Bob Berry says. "The guest workers bring a different culture, so you have to learn what motivates them."

an agency? "There are two criteria in my mind," Bob says. "First, are they going to keep you in compliance? Second, they need to source and provide you with good workers."

Anisa adds that "it's really important to go into the process being very careful, because there have been lots of lawsuits. The process is complex, and an agency might do something wrong and you wouldn't know it, but you'd still be held accountable. So you need to do some due diligence to ensure your paperwork is in order. It's best to start small so you can understand the steps."

Finding Workers

Berry's Blooms found their workers through an agency specializing in securing H2-A workers and visas. Sunny Meadows located theirs through a farmer friend. "Beto was our first worker," Gretel shares. "His uncle told him that there was a work visa for him in Ohio. In his community in Guanajuato, Mexico, we were told there is a lineup of people when a farm needs another worker." In that community, most work is in car factories, earning \$80 per week.

"When I interviewed growers, many of them found workers through referrals," Anisa says. "Sometimes they leveraged relationships they had within the Latino community where they're located. For instance, maybe a farmer knew people who were undocumented and living in the community, who had cousins who wanted to come into the country with papers."

One farmer Anisa interviewed found someone on Facebook—"there's a whole page devoted to H2-A work." A farmer might consider incentivizing workers by giving them a bonus for recruiting good workers, but it "has to be under the table, because you're not supposed to give them bonuses, but it is a kind and fair thing to do," she adds. "Once a farmer has a crew that they like, they usually work with them directly and avoid the middleman as much as possible."

A challenge of obtaining workers through an agency is that you don't get to interview them. "We're meeting and talking to these guys for the first time when they step off the bus," Bob says. "You don't do any interviews. It's somewhat luck of the draw. We feel very fortunate to have the men we have."

Best Management Practices

The toughest part of working with H2-A labor is coming into compliance with all the regulations. For instance, the farm must provide worker housing. This can be on-farm or a rented apartment, but must include certain requirements, such as access to running water and electricity, beds, clean bathroom facilities, a nearby kitchen, and more. A house owned by the farmer must pass a state Department of Health inspection.

"Some of the best setups I saw were when workers were living on the outskirts of a city in an apartment complex," Anisa says. "They weren't as isolated then and might even connect with other Latinos in the complex. If they could get a bike, they could ride to a nearby strip mall."

The farm must also provide transportation to the job site and to town, so the workers can cash checks, buy food, and take care of other needs. "In year two, Beto got his driver's license, so we bought him a van to transport himself and the other workers," Gretel shares. "This really helped them to feel independent."

Any worker can get a U.S. license if they have a valid license in their home country, a current visa, a letter from the employer stating they're here to work, and some other form of identification with their name and address on it. "We've used a fishing license for this purpose," Gretel explains. "They have to pass both the written test (Ohio has a Spanish version) and driving test." The license is valid only while the worker is here and must be reinstated yearly, which is easily done: The worker simply has to show the copy of the previous year's license, this year's visa, their valid home country ID, and a letter from the employer.

She adds that sometimes it's difficult to explain to the Bureau of Motor Vehicle staff that the laborers don't have a social security number because they're temporary workers. Every state's requirements vary, so double-check what's needed for your state and consider taking time to go with workers to these appointments.

"The main thing to realize is that the regulations around this program are the floor, not the ceiling of what it means to be an H2-A employer," Anisa explains. "It's important to understand the regulations in order to be a good boss, but you also want to remember that these are people in search of a dignified and safe work environment. As the grower, you have the opportunity to provide that for them. It can be life-changing for the workers."

When bringing workers in for a long contract that's more than six months, she suggests that once you develop a relationship with your workers, that you let them go back for one to two weeks to see their family during the season. "If they have the resources, let them go. They have a valid visa to get back into the country," she says. "So many men I interviewed missed the birth of children because they were working here."

¿Habla español?

The language barrier can be an issue, but it's easy to connect to English classes, especially if there's a community of workers. "There's usually a migrant worker outreach organization in every state, and they might send someone to your farm to offer English classes for free," Anisa says. "It's a way to invest in your workforce."

In their second year with H2-A workers, Sunny Meadows brought in a Spanish instructor from a local community college to teach the team. It provided a great way to learn specific farm vocabulary and practice giving instructions related to harvesting or other farm tasks. Google Translate is another key tool in communicating.

These days the farm runs on its own Spanglish culture. "We also have at least one person on the farm who knows more Spanish and serves as a liaison for specific HR conversations," Gretel says. "We also paid to have our employee and safety manuals translated into Spanish."

Impact on the Bottom Line

While the toughest part of hiring H2-A workers is compliance, there are also numerous costs—direct and indirect—that go into drawing from this labor pool. "It's not the cheapest, quite frankly," Bob says. "For instance, for housing we use a rental home that we had here on the farm, so we took that off the market and lost that income. That house has to be inspected by the state of Ohio, as does the car, because it's used to take workers to town once a week. I have to have

a Department of Transportation physical because I drive the workers to town. We also have to have the water tested."

Beyond these fees, the regulations require that you guarantee to pay workers for at least 75 percent of the contracted hours. "That's not really a problem for us because they're full-time and work most Saturdays they're here," Gretel explains. "Because their goal is to make as much money as they can to send to their families at home, they like the extra hours."

Bob ensures that he doesn't fall short on guaranteed hours by hiring two separate crews. "My need is from February to November, but I don't have enough work to keep four workers busy for that full time, so I came up with the idea to place a second job order with Head Honchos." The first crew works at Berry's Blooms from February to September, and the second from May to October. "It's twice the cost—I'm basically like two farms with Head Honchos. You really have to sharpen your pencil when you do that because it's expensive, but it works better for the farm and the men."

Anisa agrees. "This is a tricky part. Be very careful when you bring the workers in. Sometimes farmers want to hedge their bets, and they bring workers in two weeks early, but don't have enough work for them. They're not earning to full capacity in that time and they're away from their families—it's not a good situation."



Sunny Meadows, Ohio Latino soccer league

Steve Adams plays on a soccer team in a local Latino league with some of Sunny Meadows' crew members. The league provides a great connection for the H2-A workers with the local Mexican community.



Sunny Meadows, Ohio Tourist visas for families

This year Sunny Meadows' H2-A workers were able to get H4 tourist visas for their families to come visit. "We had one big extended family which was an amazing experience!" Gretel says.

Other costs covered by the grower include travel to and from the workers' home country. In terms of hourly wage, you have to pay the rate set by each state Department of Labor. That labor rate tends to go up about \$1 annually, according to Gretel.

Also, no employee doing the same job can earn less than the H2-A workers. "Using H2-A workers effectively raises the minimum wage on the farm," Bob says. "It means you're paying high schoolers who are doing similar jobs the same rate, which in Ohio is \$15.89 (H2-A minimum wage as of November 2022)."

At Sunny Meadows, they keep a line on QuickBooks in their Personnel section called "H2-A support." It includes the apartment rent, fees, and other expenses. In 2020, the figure totaled around \$8,000 for four workers. The farm has since bought a house for the workers to use. Anisa says, "Many growers I interviewed said hiring H2-A workers was so profitable the first year that they just bought a house for the workers the second year."

Using H2-A workers involves a lot of capital. "There's a lot of upfront money," Anisa says. She and her husband ran a business for 10 years, so she understands looking at the bottom line and trying to make things work. "It's tough. Just remember the statistic: 77 percent of people come back to the same farm. When you realize that, the initial investment becomes a start-up cost. Get through the process once, and you'll likely have workers who return."

H2-A Can Fuel Growth

On the whole, the farmers Anisa interviewed raved about their H2-A labor. One farmer said, "It has revolutionized our farm. It has been absolutely amazing. I'm never walking away from that program if I can help it. I've added 50 acres—I never could have considered that without the H2-A program."

That was a common theme she heard from farmers: that H2-A workers allowed businesses to expand. "Farmers often said the workers are so productive that it's worth the cost and then some," she says. Bob sees the program as a "tool in the toolbox once you reach a certain size and scale that you're hiring seasonal workers. But you have to be careful," he adds. "If you aren't, you're going to get burned."

Is there any situation where H2-A workers aren't a good fit for an operation? Anisa sees several. "If you can't provide decent housing or don't have the bandwidth to train the workforce, don't do it. I wouldn't do this if you're going to have a baby or have another family pressure or are overextended in some other way."



Berry's Blooms, Ohio Packing flowers

Berry's Blooms started small with two H2-A workers and have gradually increased to four. "Our desire was to hire Americans, but we couldn't find anyone to do the work," Bob Berry says.



Sunny Meadows, Ohio, Steve in Mexico

Steve and Gretel Adams have traveled to Mexico to meet their H2-A workers' families. This is Steve on their first trip with three of their crew members in Guanajuato.

In general, the H2-A laborers Anisa interviewed who worked at flower farms or plant nurseries really enjoyed the work. "They would say, 'I like growing plants. It's cool to see things grow.' There's a real element of satisfaction that people get in seeing things grow."

For Gretel and Steve Adams, flowers aren't the only thing that's growing on the farm. Their relationship with their Mexican workers is also thriving. "We hired a lawyer to work toward getting our workers—and later their families—green cards. With cartel violence increasing in their region, we want to help their families remain safe and their children to have more opportunities," Gretel says. "We're told the process will take three years for the workers and another year for their families. For now the guys are here on H2-A visas as seasonal employees for part of the year (up to 10 months)."

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



Facts about the H2-A Program

The demand for H2-A workers is on the rise, increasing by 70 percent between 2011 and 2019. "The most important thing to remember about H2-A is that it houses a very stable workforce. The visa is temporary, but the labor isn't," says Anisa Kline, PhD candidate at The Ohio State University. Her doctoral thesis focuses on the lives and experiences of H2-A workers in Ohio. She shares these basic aspects of H2-A program.

Wages for H2-A workers differ by state, but are higher than minimum wage. They're set by the Adverse Effect Wage Rate (AEWR), which ensures that foreign workers don't negatively affect wages for local workers.

Before applying for H2-A visas, a farmer must advertise job positions locally and prove they were unable to be filled. If hired, an H2-A agency handles this part of the process, which has very detailed rules that must be followed.

H2-A workers receive free housing from employers. Housing must conform to federal guidelines and, depending on the state, pass an inspection.

Workers are guaranteed payment for 75 percent of the hours specified in the contract.

An H2-A visa is not transferrable. If a worker is unhappy in their position, they can't look for other work. They have two choices: Continue with the grower who hired them, or return home and lose a season's wages.

Growers can directly employ H2-A workers, or the laborers may be recruited and hired to work for a Farm Labor Contractor (FLC) who then contracts with the grower. "FLCs are active in agriculture in general, and they're associated with a lot of labor violations, including human trafficking. An FLC's profit is the difference between what he charges the farmer and what he pays his workers," Anisa says. "They have a huge motive to pay workers less so they make more."



ONE STOP SHOP BULBS, PERENNIALS & MORE

Order Online Today!
berbeebus.com

USE CODE **ASCFG** AND SAVE 10%
ON NEW ORDERS OVER \$200

EXCLUDING BROKERED PRODUCT

CONTACT US

Sales@berbeebus.com
800-642-BULBS





NEW! Aster Azumi XL Mix

SAKATA BLOOMS WITH BRIGHT COLORS

Sakata offers a full array of top-quality cut flower genetics including aster, sunflower and lisianthus. In fact, every single stem is backed by Sakata's stellar reputation for quality, reliability, and service; specifically bred with grower and consumer needs in mind. With four bright colors, Aster Azumi XL stands out with bold, large pom-poms in the newest aster series and keeps up the trend of great fusarium tolerance. With an outstanding vase-life, Solo shows off as the very first pollen-free series in the world and an exciting new addition to the lisianthus collection. With a comprehensive program like this, Sakata cut flower genetics bring ultimate satisfaction from start to finish! To learn more, please visit us at www.SakataOrnamentals.com. please visit us at www.SakataOrnamentals.com.

Together We Flourish



SakataOrnamentals.com



Sakata Seed America FlowersBySakata Sakata Ornamentals



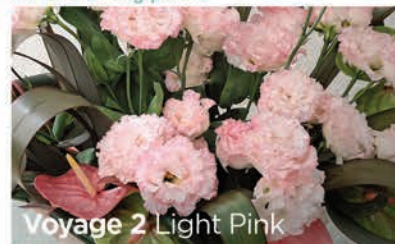
Vincent's® Choice

Vincent's® Choice features the well-loved combination of a dark center and deep orange petals



Lisianthus Solo

NEW! Solo is a new pollen-free series featuring four vibrant colors, a long vase life and strong petals



Voyage 2 Light Pink

NEW! Voyage 2 Light Pink has large fringed, gorgeous doubled flowers with strong petals that withstand the rigors of shipping

Gather Ye Fellow ASCFGers



Left to right: Jean Barker, BarkersBlooms; Meg Kirk and Vicki Kirk, The Flower Girl TN; Linda Doan, Aunt Willie's Wild Flowers; Tina Gregg, Alethia Fields Farm, Ashley Johnson, Harvest Farm Flowers

Linda Doan

Why not start off your season this year by gathering the ASCFG members in your area to celebrate the beginning of another season of flower growing? We tried this last fall as a season-ending activity, and hopefully we'll gather annually.

The idea to gather came about when seven of us, including Roy, traveled this past summer to an ASCFG Farm Tour at Abigail Helberg Moffitt's farm, Bloom WNC, in Black Mountain, North Carolina. We all decided we wanted to get together again when the dust of the season settled and we had time and energy to just relax and share all things flowers. We are very comfortable with visitors, so our farm seemed the logical place for the first gathering.

I have had enough groups to the farm to realize that things go better when folks have something to do, and because I had been thinking about hosting a farm install workshop, I thought this might be a good way to gather and try out a new idea. We gathered in late October to create an install using only what the season handed us several weeks after our first frost. We began with branches of beech and bittersweet, and then filled in with aging dahlias and hydrangea from the cooler, and dark-toned oak from the field. Several of our attendees were relatively new growers so it seemed creating an install would be not only fun but also educational. All was foam-free, of course, and we chose green wire rather than



zip ties when attaching materials. The arbor structure was made from hickory cut from the farm several years ago when Roy was clearing pastures, then bolted and lashed with twine.

We made sure everyone helped with the arbor and answered each other's questions as we went along. Working together encouraged easy conversation and teamwork so by the time the install was completed we were well acquainted. Next came the table setting with china, linens, and candles and a centerpiece created in a pumpkin brought by Ashley Johnson of Harvest Farm Flower Co. who also grows pumpkins. We encouraged everyone to take pictures and use them on their social media mentioning our farm and the ASCFG.

For a little bit of fun Roy built a fire and made sassafras tea using sassafras cleaned out from a fencerow, and talked about other home "brews" that are fun to create with materials easy to find on a farm in Tennessee.



each shared the highs and lows of their season. Interestingly, most everyone mentioned as one of the highs the opportunity to get to know and support other flower farmers and also mentioned the perks of the ASCFG. Two of us had been to the conference in Boston and we decided we would like to go to a conference together if possible next year. Contact information was shared freely and we all talked about getting together again perhaps to meet for coffee informally during the slower-paced winter. We didn't charge a fee to attend and kept our costs low.



We have many growers in our area—most but not all are ASCFG members and many have been to our farm for workshops or farm tours. To avoid offending growers not invited I limited the invitees to those who had attended the ASCFG Tour in August at Bloom WNC. I did invite our favorite photographer and a florist who buys from all of us. Also invited Abigail from Bloom WNC but she dropped pruners on her foot that morning so had to cancel (very appropriate for a flower farmer), and Niki Irving from Flourish Flower Farm, our wonderful new Southeast Regional Director, but she was hosting her farm workers that evening. Another year we might open the gathering to all ASCFG growers or even all growers but we wanted to keep it simple the first year.

We asked folks to bring a dish to pass and we roasted hot dogs over the fire and ate at our beautifully decorated table.

We didn't want people to think they had to share secrets or reveal too many details about their operations, so the only guided flower talk came when

Two growers volunteered to host a gathering in 2023. We'll get to visit other farms in informal settings and that's good for everyone.

Some of positives from this gathering:

1. Got acquainted with local growers/ASCFG members
2. Created a sustainably-built install together
3. Social media material for all
4. Learned who's growing what (I'm not a tulip grower but need some April 1st)
5. Met as a community, not as a competition
6. Lots of fun and flower fellowship
7. Two others volunteered to host another gathering which is good for building community

I would encourage members to try a similar gathering perhaps in the late winter or early spring before things ramp up into crazy. Some suggestions or possibilities for your gathering include:

- Go to the map on the ASCFG website (<https://local-flowers.org/find-flowers/>) and find out who is growing near you. Just type in your zip code and distance you want included and you'll see all the members in that search area. All their contact information is there.
- Unless you're inviting the whole flower world, send invitations via social media message or texts. People respond better when the invitation is personal.
- Invite your Regional Director if distance is reasonable. That person is busy but wants to know what's going on and get better acquainted with you. If she/he can't come, send a summary with a few pics after your gathering.
- Plan an activity. People will more likely attend if there is something other than a meeting. If it's during flower season, ask each person to bring one bucket of flowers as their admission. You can do something as simple as ball jar arrangements or as complex as an install. You could even have a dahlia digging or planting party—that's the best way to learn and it's more fun to work on someone else's farm.
- Even a potluck is more work for you but I think worth it. We used china and linen because of the install but paper plates would be fine. Again, people are more likely to come if they commit to bringing a dish.
- Charge a fee if you'd like. A small fee to cover costs will not keep someone from coming and might even help attendance.
- Keep the meeting short and sweet; another meeting time can be planned if discussion heads in that direction.

And if any of you try this, please message me, I'd love to hear what you're doing. Happy Gathering!

*Linda Doan of Aunt Willie's Wild Flowers joined the ASCFG in 2006.
She has served as the organization's Secretary, as well as Southeast Regional Director.
Contact her at auntwillies@gmail.com*



Selling flowers, simplified

A SALES PLATFORM FOR FARMERS, BUILT BY FARMERS.



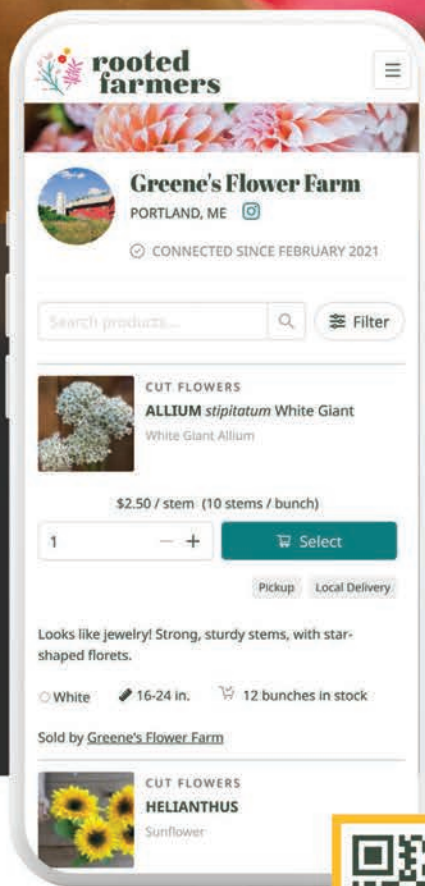
Easily upload, update & manage your real-time inventory in one convenient place right from the field!



Increase sales with pre-order, point-of-sale, & invoicing options for both wholesale & retail buyers.



Save time with harvest lists, buyer management, & powerful sales analytics.



\$50 off your first year!
Use code ASCFG23

rootedfarmers.com

@rooted_farmers


rooted farmers
• GROWING TOGETHER •

2022 ASCFG Seed Trial Report



John Dole and Judy Laushman

Elizabeth Harlan

Each year we collect samples of the latest and greatest new cultivars from several seed companies, then lovingly sort, repackage, and mail them out to make their way to our Trialers around North America. Like any good parents, we hope they all do well. And many do, which are the ones we will highlight in this summary. Alas, while many are tested, not all are stars. Some are solid performers at least somewhere in the U.S. and Canada and others are great, but not different enough from other cultivars already on the market.

This year is the 30th year that John Dole has been involved in the trials (Happy Anniversary!). Allan Armitage launched the first Seed Trial in 1992 and John took them over in 1993. Since 1993, the program has evaluated over 1100 varieties! Most of the major cultivars for each species have been introduced to the industry through the ASCFG Trials.

One quick way for an interested grower to determine if a cultivar is particularly good is to check the “Grow again” rating for each entry; this score indicates that the Trialer would take the time, money, and space to actually grow the variety again. The other ratings, “Market appreciation”, and “Ease of cultivation,” will help provide a complete picture of the cultivars. More than one Trialer has reported that they personally like the cultivar, but couldn’t sell it or couldn’t grow it. And the truth be told, unless that variety is truly spectacular, most growers don’t have the time to develop a market for a new species/cultivar or figure out how to grow it.

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.

Comments on all cultivars are worth reviewing carefully. As you read them, you might see a wide range of opinions. It's not unusual for one Trialer to love a cultivar and another to hate it. Color is a common source of disagreement. For instance, in last year's report, regarding *Salpiglossus* 'Café au Lait', one Trialer reported "I absolutely loved the color of this one; it went so well with the popular rusty hues that clients are asking for.", while another had a different opinion: "UGLY brown color!". As the cliché goes, beauty is in the eye of the beholder! Most substantive differences tend to be regional. In North Carolina we have a hard time getting good results from spring-planted stock and larkspur as the summer heat comes on quickly most years. Growers on the West Coast and in some northern locations are able to grow gorgeous stock and larkspur.

This year we were thrilled to have new zinnias in the Trial. Zinnias are the most commonly grown cut flower in the United States and Canada according to NC State research.



Trial Field

Barbara Jewell

Note that we did not say the most valuable, as that honor goes to tulips and lilies due to their higher dollar value. Zinnias are popular because of their broad range of colors (everything but true blue), flower sizes, and general reliability in most areas of the continent, except for particularly cool locations. Unfortunately, diseases are their Achilles' heel, with powdery mildew, various leaf spots, and occasional postharvest meltdown their major problems—not to mention that Japanese beetles also love zinnias.

In 2008, zinnia 'Uproar Rose' debuted in our Seed Trial. It was universally loved for its productivity, uniformity, and decent disease resistance (Note the wishy-washy language about disease resistance—decent is about as good as it gets with cut zinnias). Shortly after its release, growers started asking for more colors. Well, 14 years later they have arrived. Syngenta has released



'Uproar Rose Improved'

John Dole

'Uproar Deep Yellow', 'Uproar Scarlet', and an improved version of **'Uproar Rose'**. All three were similar in productivity, with an average of 7 stems per plant that were 18-19 inches long. Several Trialers reported stems up to 28 inches long, which is quite nice for zinnias, and other had up to 20 stems per plant by the end of the season. Growers loved their large heads, uniformity, and degree of doubleness. It was noted by a number of Trialers, however, that flower size tended to get smaller with later harvests from the same plants.



'Uproar Scarlet'

Elizabeth Harlan



'Celway Purple'

Barbara Jewell



'Sunday Red'

John Dole

As with the original 'Uproar Rose', the new varieties appear to have some resistance to mildew and leaf spot, but those diseases would eventually develop through the season. All three colors are clear and bright, which many folks liked. Regarding 'Uproar Rose Improved' one Trialer wrote, "Can't say enough about this cultivar. My customers LOVED it, and so did the butterflies and hummingbirds!" Of the three varieties, 'Uproar Deep Yellow', and 'Uproar Rose Improved' made it into the Top Ten of the 2022 Trial.

Also in that Top Ten are celosia at number seven, with over 60% of growers producing them. The versatile flower comes in three main types: crested, plumose, and wheat. Having said that, a myriad of new varieties are blurring those lines. This year we had two classic wheat varieties which produced a bumper crop of, well—wheat-sized flower spikes on long straight stems. 'Sharon' (Takii Europe/Sahin) was a soft silvery pink and produced close to 10 stems per plant that averaged 20+ inches.



'Sharon'

John Dole



'Xantippe'

John Dole

'Xantippe' (Takii Europe/Sahin) had similarly long stems, and Trialers reported harvesting an average of 7 stems per plant. Several Trialers mentioned that both varieties dried well, adding to their value. Many people commented positively on the pale silvery color of 'Xantippe', while others weren't impressed. One saw it from both sides: "I was skeptical about the color, but ended up loving it. The color really made it stand out in dried bouquets. It shined!!"

Two celosias were classic plume types: 'Sunday Red' and 'Sunday Cherry Improved' (BloomStudios), which produced an average of 4-5 stems per plant, with a few growers getting 8 to 10 stems per plant. Stem length averaged 17 inches for both cultivars, but one Trialer reported 18- to 36-inch stems! 'Sunday Red' scored the highest, possibly due to the color: "Beautiful rich wine-red blooms on dark red stems with dark leaves—this is a dramatic and eye-catching combination".

The final two celosias, ‘**Celway Orange**’ and ‘**Celway Purple**’ (BloomStudios), are midway between plumed and wheat celosias with long straight stems, topped with a central spike surrounded by short spikelets. Both cultivars produced an average of 6 stems per plant that were 19-21 inches long. One Trialer grew stems up to 36 inches, and another up to 40. However, a few people reported the stems were short. Both cultivars were well-liked for their “upright architecture” and “sturdy stems”. ‘**Celway Orange**’ got more compliments on its color; “Stunning!” according to one.

Number six on the most-grown list is lovely, lovely lisianthus. As you can tell, we have a soft spot for this cut flower. In many ways it has become the queen of local cuts for its lush flowers in large array of colors and bicolors, and long postharvest life. We had six cultivars in the trials and the clear favorite was ‘**Voyage 3 Champagne**’ (Sakata). One Trialer summed it up as follows: “Versatile and attractive color—deeply ruffled layers of petals in shades of peach and pink. Excellent bloom quality. Tall plants with straight stems.” Plants produced an average of 3 stems per plant that were 21 inches long. A couple of growers produced stems up to 36 inches long, to the envy of all.

We had a nice array of soft colors in the trial lisis this year, from ‘**Rosanne 2 Clear Green**’ (Sakata), which was well named; ‘**Arena III White**’ (American Takii) to ‘**Corelli 3 Yellow Improved**’ (American Takii), and ‘**Mariachi Light Pink**’ (Sakata), all rounded out the pastel color palette. ‘**Voyage 2 First Love**’ (Sakata) flowers were interesting in that they opened white and aged to a blush pink. All lisianthus scored well, if not at the same level as ‘**Champagne**’. As in most years, all of the lisis were reported to have a long postharvest life averaging 10 to 14 days, which we confirmed in our testing at NC State.

For new growers reading this report, we feel we need to mention that lisianthus can be a bit finicky to grow. It is best to start by buying plugs rather than growing your own seedlings. Be sure to transplant promptly, avoid allowing the young plants to dry out, and use a well-drained soil, as they are prone to root and crown rot. If plants are happy, you might get a second and even a third flush of flowers, albeit with shorter stems. Lisianthus generally does better in tunnels but some growers are able to get gorgeous crops outdoors.



‘**Voyage 3 Champagne**’

John Dole

If lisis are the cut flower queens of our industry, then the kings may well be ornamental cabbages and kales. Their large striking heads command attention in the field and in arrangements or bouquets. They’re best grown in areas with long springs or cool summers, where the stems can get tall and heads large, if desired. Two cultivars did particularly well this year: ‘**Crane Ruffle Red**’ and ‘**Crane Ruffle White**’ (American Takii). Both cultivars had an average stem length of 19-20 inches and many Trialers reporting some stems up to 30 inches long. Ornamental kales can produce large heads if given enough room. Tight spacing will generally give smaller heads and at least one grower said these “responded well to close planting”. Both cultivars scored well, not only for their production characteristics, but also for their appearance: “Super fluffy and ruffly,” and “Beautiful form and color. The round ruffled shape was perfect for design work and bouquets”.

Another species best grown in areas with long springs or cool summers is stock. **Stock ‘Quartet Deep Yellow’** (Sakata) was noted for sturdy stems that averaged 18 inches long, although one super



‘**Rosanne 2 Clear Green**’

John Dole



‘**Mariachi Light Pink**’

John Dole



Barbara Jewell

grower got 30-inch stems. Most growers handled them as a one and done cut, but a few folks got more than one stem per plant. Trialers noted the “lovely fragrance”, high percentage of double flowers, and “beautiful rich buttery yellow”. New growers should keep in mind that true yellow is not common in stock, so take the ‘Deep Yellow’ name of this cultivar with a bit of horticultural license.

Continuing to climb the popularity chart is the marigold; there were eight in the 2022 Trial. As more cultivars are released, it gets harder and harder for a new one to stand out. The top-ranked marigolds this year were ‘**Kanthon Deep Gold**’ and ‘**Maesa Deep Gold**’ (Homeseeds), each averaging 8-9 stems/plant that were 18-19 inches long. However, a few growers had 24-inch, and one had up to 36-inch, stems. Notable comments on ‘Kanthon Deep Gold’ included: “Very uniform orange blooms with excellent quality. Sturdy and straight stems form attractive bunches.” and “My favorite of all the marigolds I have ever grown.” ‘Maesa Deep Gold’, on the other hand, was the favorite for another grower: “‘Maesa Deep Gold’ was the longest and strongest stem, great colour, this was my fav.” To be honest most of the marigolds did



Marigolds

John Dole

well, as befitting the attention this group is getting from plant breeders. Vase life was quite nice, ranging from 10 to 13 days, on average.

Didiscus is one of those species that has been used as a cut flower for decades but has never been widely grown. It was great to have two cultivars in this year’s program, the first in over 20 years. ‘**Lace White**’ and ‘**Lace Pink**’ (Takii Europe/Sahin) reminded us why didiscus should be more commonly grown. Both cultivars had charming lacy flowers, ‘Lace White’ with pure white flowers and ‘Lace Pink’ in lovely pale pink. One Trialer summed up their thoughts as follows: “Such a pretty flower that really stands out in a bouquet, used in wedding work, so soft and dainty and romantic, even the spent umbels were pretty, lasted a long time in the cooler then still good life in arrangements”.

Alas, no flower is perfect and didiscus had problems with petal shattering, short flowering period, and branchiness. Didiscus flowers start dropping tiny petals when they are



John Dole

fully open. This would be a good candidate for postharvest work. In regard to short flowering period, the plants grow and flower very fast, which is certainly nice, but then the plants tend to die fairly fast as well. One of our Trialers solved that problem by succession planting. And finally, the plants can be too branchy. There are two ways to reduce excessive branching: pinch plants, best done when plants are young and have only a few leaves; and close spacing, which will also tend to increase stem length. Close spacing works for species that produce enough foliage to “close the canopy”. In other words, branching will be reduced and stem length will increase when there is a complete canopy of foliage, which then greatly reduces the amount of light reaching the base of the plant.

Another species in the fast to flower, fast to finish category is nigella. Of the several species grown commercially, we evaluated two cultivars of *Nigella damascena*, ‘**Albion Black Pod**’ and ‘**Albion Green Pod**’ (Takii Europe/Sahin). While the flowers are attractive and intricate, the pods are the stars. ‘Black Pod’ had a “burgundy-purple tone”, and as advertised, ‘Green Pod’ was entirely green. Both cultivars produced about 5 stems per plant, which averaged about 15 inches long. At least one Trialer had stems over two feet long and more than 10 stems per plant, which must have been spectacular. *Nigella* generally does best when direct seeded.

Since we have a theme going of fast flowering, we should discuss *Limonium bonduelli* (Takii Europe/Sahin). This productive statice species was early and uniform with an average of 10 wiry stems on each plant that were 18 inches long. Here at NC State, we got 15-20 stems per plant. All the stems were ready at once and each plant made one nice dried bunch for us. The petals held their color well. Alas, it comes in only one color—a bright yellow that several Trialers thought was a “harsh bright color”. Others noted that the plant was too short.

The second limonium in the trial, ‘**QIS Mix Improved**’ (BloomStudios), produced about 6 stems per plant, which averaged about 19 inches long. It has a wonderful mix of colors—the light blue was specifically mentioned. Trialers noted long stems and one mentioned “Awesome dried flower, holds color perfectly”. The biggest downside was lack of uniformity among the colors, with some Trialers noting they prefer to grow the colors individually. There was also a lack of uniformity across the trial sites—while most Trialers had flowers, at least one reported getting only healthy rosettes of foliage but no flowers. Some varieties of *Limonium sinuatum* flower best when the plants are exposed to a few weeks, generally three to six, of temperatures in the 50s (F). One or two gibberellic acid sprays of 150 ppm can also be used to encourage flowering.



Barbara Jewell

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: Celosia ‘Celway Orange’, celosia ‘Sunday Red’, kale ‘Crane Ruffle Red’, kale ‘Crane Ruffle White’, lisianthus ‘Voyage 3 Champagne’, marigold ‘Kanthong Deep Gold’, marigold ‘Maesa Deep Gold’, stock ‘Quartet Deep Yellow’, and zinnia ‘Uproar Deep Yellow’, and zinnia ‘Uproar Rose Improved’.

Acknowledgments: Thank you to each of the 27 evaluators who returned their Trial reports! We very much appreciate the time it takes to do the Trial. We want to especially thank Claude Gauthier, Floriculture Gauthier, Inc., for being the first Trialer to return her 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. A special thanks to Jen Kalinowski for growing our transplants this year.

Photos: Thank you to Elizabeth Harlan and Barbara Jewell, who provided several wonderful photos. We included as many as possible in this report. Thank you, thank you!



Limonium bonduelli

John Dole

Participating Trialers

Shannon Algieri
Stone Barns Center for
Food and Agriculture
Tarrytown, NY
Zone 6

Cathy Bartolic
Perennial Petals
Stouffville, ON
Zone 5b

Connie Dam-Bijl
William Dam Seeds
Dundas, ON
Zone 6

John Dole
NC State University
Raleigh, NC
Zone 7b

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

Cole Etheredge
Mississippi State University
Mississippi State, MS
Zone 8a

Jennifer Feddema-Gerryts
Wendalane Farms
Wellandport, ON
Zone 5

Melissa Fischbach
Wild Hollow Farm
Ashland, WI
Zone 4

Beth Foose
Little Bluestem Farm
Carthage, MS
Zone 8a

Marie Fowler
Little Pond Flower Farm
Belchertown, MA
Zone 5b

Aislinn Gandy
Woodland Flower Farm
Cedarville, NJ
Zone 6a

Claude Gauthier
Floriculture Gauthier, Inc.
Trois-Rivieres, QC
Zone 4b

Elizabeth Harlan
Belvedere Farm
Fallston, MD
Zone 7a

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

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

Barb Jewell
Island Meadow Farms
York, PEI
Zone 5b

Shannon Jones
Broadfork Farm
River Hébert, NS
Zone 4b

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

Jennie Love
Love 'n Fresh Flowers
Philadelphia, PA
Zone 7

Elaine Madansky
Elawa Farm Foundation
Lake Forest, IL
Zone 5b

Erin McMullen
Rain Drop Farms
Philomath, OR
Zone 8b

Tracey Parriman
Tracey Rae Farmer Florist
Midland, OH
Zone 6a

Laura Beth Resnick
Butterbee Farm
Pikesville, MD
Zone 7a

Rachell Ryall
River and Sea Flowers
Delta, BC
Zone 8a

Jamie Sammons
Jayflora Designs
Fonda, NY
Zone 5

Beth Van Sandt
Scenic Place Peonies
Homer, AK
Zone 4

Brenda Visser
Flowers of the Field
Prescott, ON
Zone 4b

Susan Wright
Shady Grove Farm
Vilas, NC
Zone 6a

Participating Companies

American Takii
Salinas, California
www.takii.com

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

Homeseed Limited Partnership
Chiang Mai, Thailand
en.thaihomeseeds.com

Sakata Seed America
Morgan Hill, California
www.sakata.com

Syngenta Flowers
Gilroy, California
www.syngentaflowers-us.com

Takii Europe/Sahin
De Kwakel, Netherlands
www.takii.eu

Lisianthus F1 Arena series

Range of 19 colors from an array of whites, the most delicate pinks and apricots to bold purple, and red

Range of timing categorized by earliness of flowering from early (I), middle (II), mid-late (III) and late (IV)

Range of desirable qualities including fully double flowers, strong yet slender stems, and thick petals that help transportability

III Rose

III Red

III Purple

Arena

For more information contact your preferred broker or American Takii, Inc. / 831-443-4901 www.takii.com

TAKII SEED
Creating Tomorrow Today

Purple Springs™

Golden Gate™

Auburn™ Red

Shanghai™ Red

syngenta.flowers

Harvest Your Potential™

CUT FLOWERS
MUMS

Get ready for next year
Contact your preferred broker or young plant supplier and ask for Syngenta Flowers' cut chrysanthemums!

Experience the benefits of a high quality, professional supplier.
syngentaflores-us.com/cutflowers



All photos are either the property of Syngenta or are used with permission.
© 2023 Syngenta. Some or all of the varieties may be protected under one or more of the following: Plant Variety Protection, United States Plant Patents and/or Utility Patents and may not be propagated or reproduced without authorization. The trademarks or service marks displayed or otherwise used herein are the property of a Syngenta Group Company. All other trademarks are the property of their respective owners.

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.

Celosia ‘Celway Orange’

(BloomStudios)

Good Qualities: Good terracotta color (9), that is desirable right now, this isn’t your typical orange celosia, the color was the perfect bronze burnt orange and my clients loved it; Very easy to cut and process (3); Straight upright stems (2); Easy to grow (2); Dries well (2); Vigorous and healthy plants, upright plant architecture. Stems are sturdy; Great form; Good number of stems per plant, tends to reflush with shorter stems; Really easy to sell; It’s not quite as tall as ‘Terracotta’ and certainly not as tall as purple in the Celway family, but it’s stocky and abundant, the color is not really orange—it would be helpful to rename this variety to ‘Celway Coral’, it would sell much better and be more accurate!; Good and even germination, seedlings were about 1 in. tall after 2 weeks, good for use in fresh bouquets, long vase life; Nice size flower heads; We were getting requests for it constantly, this one is definitely going on the must-grow list; Nice for fall bouquets, which is when they’re ready in our climate, the bronze-tipped foliage is nice; Good straight stems, healthy plant, no insect or disease issues.

Problems: None (2); Little on the short side compared to other celosias (4); Tasty to deer; Late to flower compared to other Celway varieties, reached maturity nearly a month later than ‘Celway Purple’ and approximately two weeks later than ‘Celway Terracotta’ and ‘Celway Red’; In general, we prefer larger feather plume heads, not the wheat type; Some of the plants didn’t branch out as expected after being pinched, not sure if some plants accidentally didn’t get pinched or if the plant doesn’t consistently branch with pinching; I kept

wishing that the orange had the same stem length as the purple!; Sensitive to cold; Not as productive as I would like; Tends to be on the shorter side for second cuts, not particularly fond of the flower shape of Celway series (they can look a little...rude, if you know what I mean); Needs to be pinched early on for better performance.

Similar Cultivars: Others in the same series (2); The bloom form and plant habit is consistent with the rest of the Celway series, and the color is closest to ‘Celway Terracotta’, although more orange; ‘Celway Terracotta’; No.

Postharvest Recommendations: Place directly into buckets of water, didn’t need any conditioning to work well in fresh bouquets, also dries well; We don’t store celosia in our cooler, we treat them similar to zinnias; Avoid the cooler.

Comments: This color holds well when dried, making it useful for dried fall and winter arrangements; Unfortunately, these plants were eaten by deer soon after transplanting them into the field; I find the colour too similar to ‘Terracotta’, and prefer ‘Terracotta’ because the shade is a little less vibrant, so it blends with more colours; Really nice color, in demand; Very vibrant color fresh or dried; I enjoyed using the flowers in design work; Great color for fall bouquets. worked really well with sunflowers and zinnias; Amazing color, was able to use in lots of design work, stems could have been longer but may have been our fault with a rough and dry season; Sowed May 16, do not allow to be root bound, I liked this celosia but honestly saw no significant difference from the Celway varieties I have been growing in the past, they were good healthy plants, I did not net but added a side support of string to keep from spilling out in the row, I like to avoid netting where ever possible to avoid the extra time required when harvesting and the labour to install and remove the netting, when planted in a sheltered location they stayed upright, the same with the other 3 celosias in the trial ‘Celway Purple’, ‘Sunday Cherry’ and ‘Sunday Red’, all performed consistently, in the Sunday



‘Celway Orange’

John Dole

series the ‘Bright Pink Improved’ and ‘Orange’ still remain my favourites; I pinched once in June, when I planted in my field, and I should have pinched another time after to have more stems on each plant.

Celosia ‘Celway Purple’

(BloomStudios)

Good Qualities: Great purple/magenta color (5); Cut and come again (2); Tall/long stems (3); Productive (3); Easy to grow; Vigorous, healthy plants, this variety was the earliest to flower of the Celway series grown, sturdy stems, upright plant architecture; Plentiful branching, 3-dimensional filler that adds volume to a bouquet without bulk like a regular plume would; Long, strong stems; We loved ‘Celway Purple’! It’s very abundant, and though it doesn’t make a huge impact in design, it’s a useful texture, purple was a popular color this year in weddings, and we were glad to have this variety as part of our offerings, it sold out almost immediately!; Good and even germination, seedlings were about 1 in. tall after 2 weeks, good for both drying and in use in fresh bouquets; The plants were nice and tall. they were hardy; Great form, easy to harvest; The color was loved by my customers, and me.

Problems: ‘Purple’ was very short, Both



'Celway Purple'

John Dole

need to be pinched early on for better performance; Tasty to deer; Got leaf spots very early in the season, earlier than all other celosias planted at the same time; Flowers are a bit smaller than others; None!; Some of the plants didn't branch out after being pinched, Not sure if some of the plants accidentally didn't get pinched or if this variety doesn't consistently branch even when pinched; I did not care for the color and tended to avoid using it; Sensitive to cold; Too much foliage compared to flower heads; Slow to get started.

Similar Cultivars: The color and bloom form are similar to 'Ruby Parfait', but the 'Celway Purple' plants are taller and yield longer stems; One we used to grow, 'Cramers' Amazon'?; 'Celway Terracotta'; Celway series or 'Flamingo Feather'; Very similar to 'Flamingo' celosia, which we already grow successfully so not worth it for us.

Postharvest Recommendations: Place directly into buckets of water, didn't need any conditioning to work well in fresh bouquets, dries well too using typical drying techniques—strip leaves and hang upside down in a dark, dry environment.

Comments: Vibrant purple and lavender spike-shaped flowers on sturdy stems are easy to mix into bouquets and add a pop

of color without being overpowering. Unfortunately, these plants were eaten by deer soon after transplanting them into the field; It was early to bloom in spring when getting celosia to bloom can be tricky, however, the dark magenta/purple color would be better for late summer; Loved this colour and shape for contrast in arrangements so much, we'll be selling seed for it next season; Great for bouquet and grocery work; Vibrant color fresh or dried; We lost these under frost cloth! but we love Celways and have grown them other years, easy to germinate; I didn't find this one to be a standout variety, the color can be harder to work into designs, any celosia is a winner in my book so I will most likely grow again, I guess I'm just not a purple lover; I used it a lot in mason jar bouquets, the plume was unique and especially kids and students (we sell at a farmers' market in a college town) found it fun, once I pointed it out; There are so many celosias available in this purple color, the Celway series falls to the bottom of our list of ones we would want to grow because of its more bushy habit and less beautiful flower shape; I pinched once in June, when I planted in my field, and I should have pinched another time after to have more stems on each plant.

***Celosia spicata* 'Sharon'**

(Takii Europe/Sahin)

Good Qualities: Loved the silvery-pink color (7); Very tall usable stems (4); Uniform growth and colouring (3); Very productive (2); Sturdy (2); Supports itself - no need for netting (2); Good spike for bouquet filler; Very branchy; Dried well, re-flushed after initial cut; Flowers last a long time on the plant, which provided us with a long harvest window, good for drying and for use in fresh bouquets; Long flower plume, staking not necessary; Tall straight stems are easy to harvest and process blooms work great as fresh and dried flowers, one of the earliest celosias to flower in our trial; Cool-looking spikes; Healthy plant, no insect or disease issues, stayed upright with strong stems.

Problems: Poor germination (3), 63%, slower to grow once germinated, as a point of comparison, the Celway celosias that we tested were 1 in. tall 2 weeks after seeding, while 'Sharon' was 1/4 in. tall at 2 weeks; On the shorter side for us (2); More foliage on the stems than Celway celosia varieties meant that more leaves needed to be stripped off the stems before being placed in water and also preparing for drying; None noted; Plants didn't fill in well until the second flush.

Similar Cultivars: Similar to 'Flamingo Feather' (7); Similar to other wheat celosia.

Postharvest Recommendations: Worked fine being immediately being placed in water with no conditioning; Clean water and chlorine if holding more than 24 hours.

Comments: Love the two-tone pink, it's easy to use in all sorts of bouquets; Similar to other wheat celosia, did not stand out in comparison; Would get more stems by pinching, not sure how this is better than 'Flamingo Feather' except in stem length; Would grow again



'Sharon'

John Dole

if we didn't have access to 'Flamingo Feather', center head spikes were shorter than 'Flamingo Feather' so they didn't look as "dirty" from the bottom, but the side shoots took longer to mature so most of them had to be edited out when processing; The silvery-pink flowers are versatile and we used them in both mixed bouquets and dried arrangements, the color fades slightly when the blooms dry, but the cool colors are well-suited for winter arrangements; Sowed first time May 16, then again June, surprisingly they bloomed very close in days despite the 3-week difference in sow dates, the colour was quite soft and useful, I found when dried the colour faded, with the softer colour it would potentially make a good wedding item.

***Celosia spicata* 'Xantippe'**

(Takii Europe/Sahin)

Good Qualities: Perfect blush or silver color (9); Long stems (4); It shined!; Dark foliage adds contrast to bouquets; I don't know of another celosia that is this lightly colored; Cute spires of flowers, nice color when cut early; We grew this right next to our 'Flamingo Feather' crop, and they are fairly similar but with one notable difference: 'Xantippe' is more willowy, we did not have netting on this bed and it flopped over before we could sell much of it, but 'Flamingo Feather' stayed upright; Good branching when pinched early, long harvest window, good for drying and fresh bouquets; Sturdy side stems; Very robust, got multiple stems even without pinching, long flower plume; Great for events, wedding design, personals, jewelry, etc. and dries nicely; 'Xantippe' flowered early and abundantly on productive and densely branching plants, each stem had multiple small 1.25 to 2.5 in. tall spike-shaped flowers on each stem; Not too pink like other feather celosia varieties; Cool-coloured foliage (red tinge); Good germination, strong healthy plants no obvious disease or insect pressure, I did not net this one the stems seemed strong and held up well.

Problems: Poor germination (5), similar to the Sharon variety ~62%, plants were 1/4 in. tall after two weeks as compared

*I love, love, love
this plant!
(Celosia 'Xantippe')
I definitely want to
grow it again, it was
beautiful and
incredibly productive,
we had an early frost
and lost all of our
celosia, but this
"dried" beautifully,
I harvested over 125
stems after the frost.*

to the Celway celosia varieties that were 1 in. tall at 2 weeks; Hard to catch the correct time to harvest and short harvest window (3), kept thinking flower heads would get larger, but they went to seed quickly, was not able to really catch the golden window; Compared to other similar varieties, 'Xantippe' is not all that great; Tendency to wilt.



'Xantippe'

John Dole

Pinched some of them, which created a spray type stem—bloom heads were smaller and color really faded quickly into a pale blah tone; Spike looks gray as it ages; I wish that the cultivar's spikes/florets opened up more or farther down the flower head; On the short side, browned quickly in the field; It's not as sturdy as some other celosias, it definitely needs netting; The color is too pale for us to consider growing in the future; Plants are densely branching, low on the plant, and shorter compared to varieties like 'Sharon' or 'Flamingo Feather', as a result the stems were too short and densely branching to use easily in mixed bunches and for our purposes this variety would be primarily used for drying, the flower size is small; Not a standout, shorter than we'd like; Plants did not do well in our climate, even in a tunnel; None!

Similar Cultivars: Similar to 'Flamingo Feather' (3), but more lightly colored; The color and bloom form are very comparable to 'Sharon', although the blooms are much smaller and the plant habit is more densely branching and shrublike compared to 'Sharon' (2); Similar to *Celosia spicata* 'Sharon', although more pale pink in color; A little like 'Flamingo Feather', but I like it much better; Similar to other wheat celosia.

Postharvest Recommendations: Like many other light color celosias it needs harvesting within a week or two of being ready to be picked, otherwise goes to seed and looks aged; Place in water after harvesting with no conditioning needed; Clean water and chlorine if holding more than 24 hours; We cut into water with a CVBN tab, stored in a cooler at 68 deg.

Comments: Very unique color, I can't think of any other flower that has the silvery tones like this variety, except perhaps lunaria, has the same effect in dried bouquets; Visitors to our trials like the little pink centres in the spikes; I liked the willowy, wild nature of 'Xantippe', I'd like to try again with support netting!; I love, love, love this plant! I definitely want to grow it again, it was beautiful and incredibly productive, we had an early frost and lost all of our celosia, but this "dried"

beautifully, I harvested over 125 stems after the frost; Similar to other wheat celosia, did not stand out in comparison; Love the robust plant, sturdy stems and height, the colour was very neutral (i.e. boring) and it dried brown/gray which is undesirable, if colour could be improved, I'd be all in, for now, I'll stick to 'Flamingo Feather'; Since the stems and plants were not as well-suited for mixed bunches, this variety is not as versatile for us as something like 'Sharon'. Did not love, flowers went to seed too quickly, it was a PITA to germinate and grow on to field; This was a very light-coloured celosia, fading to almost silver and wasn't particularly popular with my staff, it would make a good wedding/event stem offering neutral tones, I was disappointed in the colour when dried, however, if a light silver grey colour is required, this would be a good choice; Used some in bouquets, but due to the short stems, I ended up using the entire plant, unable to sell to florist.

Celosia 'Sunday Cherry Improved'
(BloomStudios)

Good Qualities: Beautiful cherry color somewhere between pink and red (8); Was a standout in mixed bouquets (2); A showstopper! dried very nicely; We have grown this celosia before, and it's always a great addition to our fall crop offerings, the plume is more robust than other plumed celosias; Uniform plants and sturdy stems that are easy to harvest and process; Good head form; Even plumes throughout row, uniform colour—great summer shade; Fun for fall; The shape and size of the plume were nice; Stems are coloured; Fuller heads than other varieties trialed; Works well in multiple color palettes, our favorite Sunday celosia this year; Great cut flower, lots of side shoots that were cuttable as well.

Problems: Too short (5); Slow to get started, did not pinch, I think I should have, I had one good cut and then a second, but not really usable; A bit of a brash color for design work; Tasty to deer; The flower shape was irregular in this variety—many plants produced plume-shaped flowers that then transi-



John Dole

tioned to comb-shaped flowers as the blooms matured, this mix of flower shapes on the same flower made this variety more challenging to work with, this is inconsistent with rest of the Sunday series, which usually have a really nice plume-shaped flower; The cherry color is way too dark for our bright bouquets, might work well for some design work; I wish it was more branching; Sensitive to cold; Slow starter in the spring.



John Dole

Similar Cultivars: Similar to all plumed celosia; 'Sunday Purple'; Sunday series.
Postharvest Recommendations: None listed.

Comments: Really loved the nice clear hot cherry color; This celosia is shockingly bright!; Unfortunately, these plants were eaten by deer soon after transplanting them into the field; The color is beautiful and it's possible the strange flower shapes were a stress response from a hot, dry summer, plants were transplanted May 25, grown at 12 in. spacing and did experience heat and drought stress during the growing season; Due to drought, our celosias were shorter than usual, which has affected the stem length; We lost these under frost cloth in the spring, and our second planting was too late so we lost them to cold again, good choice for a hoop or greenhouse, love the coloured stems and will definitely try again; Loved both Sunday cultivars, 'Cherry' was slightly better for me.

Celosia 'Sunday Red' (BloomStudio)

Good Qualities: Beautiful rich wine-red blooms on dark red stems with dark leaves (7), this is a dramatic and eye-catching combination; Plants are uniform with sturdy stems that are easy to clean and harvest; Color was very popular, both fresh and dried; Great cut flower, lots of side shoots that were cuttable as well; Nice early and fast red; Well-filled plumes; I will absolutely grow this again! we sold out right away and I wished we had more! it's nice and tall, too; The foliage is beautiful, the contrast between the foliage and the flower is cool; Nice standard red plume; Large flower heads.

Problems: Slow and poor germination (2); None (2); Too short (2); Once planted, very slow to mature; Slow starter in the spring, 'Sunday Red' would do better with support; Tasty to deer; The flower shape was less plume-like compared to the other Sunday varieties, the flower shape tended to be a little more spike-like and less the feathery plumes I expect from the Sunday series, plants were a little shorter and later to flower than other Sunday varieties as well; Flowers

weren't as full as their sister cultivar, Cherry; Sensitive to cold.

Similar Cultivars: The color is comparable to 'Celway Red', but the bloom form and plant habit are different; 'Forest Fire Celosia', but more consistent and faster to bloom; 'Sunday Cherry/Improved'.

Postharvest Recommendations: None listed.

Comments: Once I finally had salable cuts, my customers really liked this, stems were pretty short and I got really only one good cut, not very productive; Loved both of these, 'Cherry' was slightly better for me; Unfortunately, these plants were eaten by deer soon after transplanting them into the field; This dark red color is great for late summer mixed bouquets, this variety also dries beautifully and plants hold their color well—great for holiday dried arrangements; This is a great source of red early in the season, which can be hard to get; Our whole patch was shorter than usual due to drought, which has affected stem length; The dark foliage was a lovely contrast in design work and bouquets; We lost these under frost cloth in the spring, and our second planting was too late so we lost them to cold again, good choice for a hoop or greenhouse, these have brilliant stems, and I will definitely try them again; This color was like fire engine red, it really put on a show and customers loved it, I've never seen anything so vibrant red before, florists loved it too, it's a must-grow for me!

Didiscus 'Lace Pink'

(Takii Europe/Sahin)

Good Qualities: Perfect blush color (2), attractive and versatile color; Very uniform lacy blooms; Dainty whimsical look, unique; Love the branching and lots of flower umbels.

Problems: Shatters easily (3); Short flowering period (2); 'Lace Pink' was grown alongside 'Lace White' and 'Lace Blue', 'Pink Lace' plants were shorter, less vigorous and less productive with shorter stems compared to 'Lace Blue'; Short stems; All my plants died on the same week because of too much rain.

Similar Cultivars: Bloom form and

plant architecture are very comparable to 'Lace White' and 'Lace Blue'; 'Lace White'.

Postharvest Recommendations: None listed.

Comments: This is a beautiful, versatile color well-suited to spring and early summer arrangements; Very pleasing to work with a soft pink lacy flower—a nice change from white, good candidate for pinching early; Such a pretty flower that really stands out in a bouquet, used in wedding work, so soft and dainty and romantic, lasted a long time in the cooler then still good life in arrangements; By the time I received the seeds, the temperatures must have been too high for germination, I planted the seeds, but didn't have any results, I still have a few seeds and intend to try planting some this fall; Attracted groundhogs and it was hard to keep them from being eaten, performed quite well given they were not growing in an irrigated bed.

Didiscus 'Lace White'

(Takii Europe/Sahin)

Good Qualities: 'Lace White' produced a uniform stand of bright white 1.5 to 2 in. wide flowers on well-branched plants, attractive color and bloom form, fast-growing plants and uniformity of flower form were the best qualities, the



'Lace Pink'

John Dole



'Lace White'

John Dole

delicate, lacy look to the blooms made this variety well-suited to early summer arrangements; Surprisingly easy to grow even with taproot; Great white whimsical accent flower, love the texture and shape; love the branching and lots of flower umbels; Nice addition to summer bouquets and bridal work, good producer and kept flowering when harvested regularly.

Problems: Shatters easily (3); Short stems (2); Short harvest window (2); This variety was grown alongside 'Lace Pink' and 'Lace Blue' and was the least vigorous stand and the shortest plants of the three varieties, lower yield and shorter stems compared to 'Lace Blue' and other blue varieties; Attracts groundhogs and it was hard to keep them from being eaten, also, the white looked a bit dirty with some browning; All my plants died on the same week because of too much rain.

Similar Cultivars: Bloom form and plant architecture are very comparable to 'Lace Pink' and 'Lace Blue', 'Lace Pink'.

Postharvest Recommendations: None listed.

Comments: Somewhat boring when you can get a similar lacy white look with orlaya or Queen Anne's lace with less mess—try the 'Pink Lace' didiscus

instead for something new, good candidate for pinching; Such a pretty flower that really stands out in a bouquet, used in wedding work, so soft and dainty and romantic, even the spent umbels were pretty, lasted a long time in the cooler then still good life in arrangements; Like any of the smaller blooms they require time to harvest, this one was good to germinate and grow, was healthy with no disease or insect issues, I succession planted this variety three times and had consistent results, if it was kept harvested regularly, I believe it would continue to produce, sometimes they get ahead of you, the seed pods when harvested early made an interesting addition to boutonnieres and bridal work, I will be planting again along with the blue and pink; By the time I received the seeds, the temperatures must have been too high for germination, I planted the seeds, but didn't have any results, I still have a few seeds and intend to try planting some this fall.

***Echinacea purpurea* 'Green'**
(Takii Europe/Sahin)

Good Qualities: Unique lime-green color (5), which blends well with other flowers for market bouquets; Good-sized cones for use with or without petals, strong plants that are sure to produce more blooms next season; Multiple blooms per stem, main bloom open and others still to bloom; Densely branched plants; Easy to start from seeds.

Problems: Wasn't productive for me this first year, I'm hoping it survives the winter and will be worth its space next year; Very short stems, however, this was their first year and this is a perennial crop, this stand of echinacea eventually got asters yellow and we pulled them all out; In this first-year planting the cultivar showed variability in height, vigor, bloom quality, and size, it is a little shorter and lower vigor and less productive than desirable, although it's possible in the second-season plants will be taller and more productive; Germination was less than 50%, as an annual the number of stems harvested would not make it worthwhile to grow commercially; Poor germination in 72

trays, we grew them inside a greenhouse and used heated mats and humidity domes for the first few days, the plants that made it were transplanted into the field after hardening off, there was slow growth throughout, both in the trays and in the field, we were not able to harvest any flowers from these seeds this year; Hard to keep out the bad weeds because it was very short on the first year, I hope they will survive the Canadian winter.

Similar Cultivars: This variety was planted alongside 'Green Twister' and was more vigorous and productive in a first-year planting, 'Green Twister' also blooms with some pink coloring on blooms while this variety is solid green, compared to 'Green Twister', this variety is superior in all respects, at least in the first year.

Postharvest Recommendations: I cut when fully open.

Comments: These plants bloomed first year from a seeding date of March 25, which is also remarkable; Flowered very late in our season (mid to late October) but perhaps because it was a first-year seedling, we also removed the petals to use just the cone in arrangements, good vase life; Densely-branching plants yielded 2.5 to 5 in. blooms with ray petals in shades of

*Echinacea 'Green'
was planted
alongside 'Green
Twister' and was
more vigorous and
productive in a
first-year planting,
'Green Twister' also
blooms with some
pink coloring on
blooms while this
variety is solid green.*

green, the center disk opens green and transitions to gold as blooms mature, the unique lime-green blooms stand out in a field of berry-colored echinacea varieties, ideally this variety would be more vigorous and productive in its first season, but the unique color makes it worth planting and observing in future years; Loved the colour and enjoyed the unique texture, I would think this would be best for a garden bed, as well the blooms last a long time on the plant and for this reason would make a good item for a mixed container, did not have any insect or disease issues, good healthy foliage, sturdy stems, one central stem and a couple of shorter sides, I am leaving in the ground to see if it overwinters, perhaps year two will offer more stems; The few plants we have in the field are still alive, but they are tiny and have not produced any flowers.

Kale 'Crane Carmine'
(American Takii)

Good Qualities: Bright purple color (3); I love all the colors in the Crane series and this was yet another awesome color to add to the lineup; There didn't appear to have much bolting, it was a nice height and size, some other varieties are too large for bouquet use, also with a better height it was easier to keep upright, we stripped the stems 3 times throughout the growing season, it was well adapted to close spacing required to help control size; Same quality as other Crane series; Excellent height, flower head size; Sturdy, stood well without staking needed, long lasting, closer plantings allowed for smaller more usable heads; Tight compact heads, florist loved them, good stem length without oversized stems.

Problems: As with all members of the brassica family, cabbage moths can be an issue; None; Heads were a bit larger than we needed, but was probably due to spacing; Cabbage worms (easily dealt with BTK solution, would also like to try a salt water treatment next year); Can be prone to caterpillars but somehow we didn't have any issues this year; Sadly we had a bumper crop of bunnies

this year, kale was candy for them, they munched the entire crop; Be careful, marmots (groundhogs) LOVE flowering kales! I will have to put a fence around my kales next year.

Similar Cultivars: We didn't see a huge difference between 'Crane Red' and 'Crane Carmine'; All the Cranes.

Postharvest Recommendations: Keep water clean, do not store in the same container as other flowers, harvest as required; Keep clean of debris or lower leaves, recut after a few days, used Florilife 2; Change your water often, because gets stinky after a few days.

Comments: Love this brilliant colour! surprised by the ease of germination, growth and how well it did in our poor-ish, un-irrigated field; This kale I found dark and lacked any spark, just seemed common and similar to other varieties, although it checked most of the boxes, with Carmine in the name, I was hoping for something a bit brighter, it was an OK variety, but a bit common, strong netting a must, unfortunately, our kale crop toppled over despite the support netting due to the September hurricane, nearly all stems bent and are not salable; Colour is not much different than 'Red' in our trials; Larger heads can be hard to work into bouquets, some call flowering kale a "gorilla" for bouquet work but with closer plantings you can achieve smaller more workable heads, it's great for late-season bouquets when there's not much else out there, I have been pairing it nicely with mums and fall foliage; I would definitely want to try this again, but I would most certainly need to put fencing around it; Loved everything about these, growing conditions resulted in varied stem length was evident, plants grown in the middle of the tunnel ranged from 18 to 24 in., plants grown on the side of the tunnel with rollups resulted in short 10 in. stems due to our very cold summer; Flower designers love to work with flower kales, but it has to be longer than 12 inches to be easy to work with.

Kale 'Crane Ruffle Red'

(American Takii)

Good Qualities: Beautiful lovely lacy ruffles and color (5), nice contrast to other tight Crane varieties with smooth leaves, shape was perfect for design work and bouquets, myself and my customers love the ruffled edges, it stands out more in a bouquet; It stayed a good size and responded well to close planting, the cabbage moth didn't seem to pay much attention to this one, even growth, good stems not overly thick; Additional texture for fall arrangements, 'Ruffle Red' has the most pronounced frills in the series; Excellent size; Tight compact heads, florist loved them, good stem length without oversized stems; *Problems:* Sadly we had a bumper crop of bunnies this year, kale was candy for

*Love this ruffly
bright cabbage
(‘Crane Ruffle Red’)!
it was perfect
for Canadian
Thanksgiving sales
in October.*

them, they munched the entire crop; None, except the usual cabbage worms; Cabbage worms, for which we used BTK; Can be very large to work with; Be careful, marmots (groundhogs) LOVE flowering kales! I will have to put a fence around my kales next year.

Similar Cultivars: Crane series.

Postharvest Recommendations: Cut as needed, keep water clean, and recut daily where possible; Keep very clean, remove debris and recut after 2-3 days; Change your water often, because it gets stinky after a few days.

Comments: Will grow again! (2); I really enjoyed the ruffled canes, they had the added lacy interest softening the set cabbage look, the colour still looks

amazing in the field today (Nov.), will grow again, 7 to 10 day vase life, much longer vase life if used in an outdoor arrangement; I would definitely want to try this again, but I would most certainly need to put fencing around it; Can't wait to see these seeds for sale; It's wonderful that there are more textures available for cool season floral design with this expansion of the series; Love this ruffly bright cabbage! it was perfect for Canadian Thanksgiving sales in October; Loved everything about these, growing conditions resulted in varied stem length was evident, plants grown in the middle of the tunnel ranged from 24 to 30 in., plants grown on the side of the tunnel with rollups resulted in short 10 in. stems due to our very cold summer; Flower designers love to work with flower kales, but it has to be longer than 12 in. to be easy to work with.

Kale 'Crane Ruffle White'

(American Takii)

Good Qualities: Beautiful ruffled round form (5); Color that included a fine green edge and some other subtle green accents (6); This was my favourite kale and fourth fav in the seed trial this year after the 3 zinnias, this worked well in bouquets and large arrangements, cabbage moth didn't seem too interested in this one, the neutral shade was popular addition

in bouquets, the few remaining are still looking beautiful in the field today (Nov.); plant close as possible to keep heads from getting too large, this variety seemed to respond well to the close 4 in. spacing, definitely worth growing; Heads were smaller than the 'Ruffle Red', which were grown in the exact same location and at the same time; Excellent size, grew well in our poor-ish soil without irrigation; I think it stands out in fall mixes and winter mixes; Love all the Crane ruffles; Tight compact heads, florist loved them, good stem length without oversized stems; This one was a hit with our customers in the fall, great for fall/winter arrangements. *Problems:* Sadly we had a bumper crop

of bunnies this year, kale was candy for them, they munched the entire crop; Cabbage worms (2) for which we used BTK; Be careful, marmots (groundhogs) LOVE flowering kales! I will have to put a fence around my kales next year.

Similar Cultivars: Crane series.

Postharvest Recommendations: Harvest as required, seems to keep better growing in the field, keep water clean and change often, tell customers to pay extra attention in keeping water clean and fresh; Keep very clean of debris, recut stems after 2 to 3 days, use Floralife 2; Change your water often, because it gets stinky after a few days.

Comments: Love this one! (2); This was my fav kale, I always grow the Crane series every year, especially enjoyed the ruffles and colouring in the white, the edges of the leaves grown green contrasted nicely with the creamy white, the few remaining are still looking good in the field today. (Nov.), this kale responded well to the close 4 in. spacing, I sowed this May 26 directly into 200 cell Speedling trays, transplanted to the field late June, we stripped the plants 3 times during the growing season, strong support required to keep upright especially with the pressure of close spacing, avoid high nitrogen; I would definitely want to try this again, but I would most certainly need to put fencing around it; Great for design work and bouquets; Was useful for late summer harvest/filler, before the demand for strong autumn colours; Long-lasting vase life; Recommend planting 3 plants per plug at 6 x 6 spacing to keep them small enough to use easily in arrangements; Loved everything about these, growing conditions resulted in varied stem length was evident, plants grown in the middle of the tunnel ranged from 24 to 30 in., plants grown on the side of the tunnel with rollups resulted in short 10 in. stems due to our very cold summer; Flower designers love to work with flowering kales, but it has to be longer than 12 in. to be easy to work with.



Limonium bonduelli

John Dole

Limonium bonduelli

(Takii Europe/Sahin)

Good Qualities: Bloomed early (4), earliest of all limoniums in our trial; REALLY bright yellow (3)—which is great if you like the bright!; None; No insect issues; 100% germination!; Very uniform, the entire plot bloomed uniformly, clean stems are wiry and thin, without the thicker vegetative form of many statice varieties, this made them easy to harvest and clean; Excellent dried flower that holds color well, hard to use in design work because the yellow is such a harsh bright color.

Problems: These flowers did not open up quickly, so by the time the blooms opened, their yellow color was browning, we had to harvest them a little early, which resulted in them not having the bright color one would expect, the stems were spindly; The blooms were not as clean and defined as other colours of statice; REALLY bright yellow—which I didn't prefer, just too bright!; Not as full flowered as the other statices we grow, flower heads are not as long-lived in the field as our other statices before browning (so require faster picking and the bloom is already not as large or noticeably ready); Plants are very small and low vigor and while this variety

bloomed early and very uniformly, it also declined much faster than most other statice varieties and did not produce multiple flushes of blooms like other varieties; One big flush of blooms but only sent out fewer than 20 stems per week; Stopped blooming early because of too much rain.

Similar Cultivars: Color is comparable to other yellow statice varieties like 'QIS Yellow', although stem quality is different.

Postharvest Recommendations: None listed.

Comments: Many of the stems were too short (2); The flowers never looked that great, growth was inconsistent from seedlings through maturity, we would not grow this again; Interesting cultivar, slightly more delicate than the *L. sinuatum* types, but still not as airy as *L. sinuense* (variety name Elegant, which may be off the market); This yellow statice has never been a favourite of mine as I find it a bit straggly, it was a very prolific plant with good stem length, I did not dry any stems, sowed this May 1, 2022 with good germination, 140 cell plugs bumped to 50 cell plugs and planted in field June 5; We started the seed too late to get usable stems (week 21); Bright yellow blooms that hold color well when dried; Thinner stems than sinuata statice; There was no specific colors on my seeds bag, and I got the surprise of having only yellow flowers on my lot!!

Limonium 'QIS Mix Improved'

(BloomStudios)

Good Qualities: Very tall stems (4); Great colors and range (4); Sturdy stems (2); 100% germination!; None noted; Light blue in mix is great, stress resistant, productive; Reliable stems—plant them and walk away!; Statice is great fresh or dried, such a versatile crop; Healthy plants; The flowers are pretty big, for what I have got!

Problems: We would rather grow in single colors, as opposed to a mix, and that is why it had a lower rating for us; This statice did not produce any harvestable stems, the plants stayed green and healthy with no sign of a stem until late

October; We experienced uneven plant development, within the same 72 tray, some seedlings flourished while others were stunted or died completely, this experience continued once the statice was transplanted into the field; Not entirely sure why it is “improved”? seems pretty similar to the regular QIS mix, which I also grew; Crop failure due to onset of (likely) botrytis; Variable stem lengths according to colour (yellow short, purple tall), mixes are a great way to see and trial new colours, but not desirable for production, we prefer to grow different colours separately; None; Overall was later to bloom than other single colours of the same series sown and planted at same time; One big flush to harvest and then less than 10 stems per week, fairly low performer; Stopped blooming early because of too much rain.

Similar Cultivars: Regular Limonium QIS (2); None noted.

Postharvest Recommendations: We consistently cut all of our flowers into water treated with AquaPlus and store them in a cooler for at least one day before use, we also strip off all leaves that would otherwise be submerged in the water, for the statice, it was important to refresh the water if they were stored for more than a couple of days; Clean water, with chlorine tablets; Fresh in Floralife 2, or dry for low season colour; Use fresh or hang to dry.

Comments: Would like to see if each straight color is also improved, the yellow in particular was extremely tall; This variety did not produce a stem, the plants remained green and healthy but was not inclined to initiate production, this seed was sown May 12, perhaps I should have started it earlier, our safe plant date here is June 10, I did not want them to become root bound, I directed seeded into 50 cell trays and they went to the field on June 14, statice in general, annual statice production was a disappointment this year and for that matter the past 3 years, it is very inconsistent with stem production, I have tried sowing early and giving it a cold treatment with mixed results, in my main statice crop (BallSeed) certain colours seemed to bloom—Apricot,



John Dole

Dark Blue, and some white and rose, but these were from an earlier planting and I would do the same next year, I am cutting my statice production by 2/3 for 2023 due to nil production; This was an unusual growing season for us, in previous years, we would harvest a lot of statice all around the same time, this year, all of our statice (this cultivar included) was harvested over a longer period of time, but never produced in the typical volume, this cultivar created a relatively small number of stems for three months; We started our seed too late in the season (week 21) we really didn't start to see it flower until end of September or beginning of October; We have never had good luck with statice—never; Grown in landscape fabric at 12 x 12 in. spacing, planted very late due to our late spring, this cultivar was the least resistant to stress and rootbound-ness of all statice varieties we grew this year, but still performed all right, I never thought we'd be able to sell the yellow, it's so neon, but surprisingly a few florists went for it; I've grown a lot of limonium over the last few years, but still quite impressed with this improvement, robust, healthy plants and stems with wonderful colours, there was a light denim blue with a white floret that was

particularly attractive, we grew these in poor soil (our test for everything!), and they still flourished—a winner!; We sell some fresh but we mostly save ours for dried wreaths, it's a customer fav! Long lasting and dries; Awesome dried flower, holds color perfectly; All the pink blooms in the mix didn't last on the plants, but the mauves were very nice.

Lisianthus 'Arena III White'

(American Takii)

Good Qualities: Nice pure white (5); Large flowers (4); Sturdy stems (2); Tall stems (2); Multiple layers of clean white petals, loosely layered, lightly ruffled blooms are attractive and elegant, most side stems are also long enough to be used as cuts, very uniform stand; High quality white lisis are always in demand for wedding work; I really haven't met a lisianthus I don't like, they bloomed a few weeks later than some other varieties, which was nice to keep white as a wholesale option for my florists, white was a popular wedding color this year (and every year); An improvement on Arena II with larger blooms, the form was very rose-like; Not as many branches as other varieties.

Problems: Thin and sensitive petals, blooms kept showing damage—possibly from rain or dew? I've never had this before, the tips of all the blooms were “wilty”, if I pulled the blooms in before they really opened and let them open in the barn then I didn't have a problem; Nothing specific to this variety, we find lisis to be a difficult crop; A little underwhelming compared to the others in the trial; I tried to cultivate in hoops and outside in the field, and effectively, it has to be grown in a hoop, because in a field in stays very short.

Similar Cultivars: 'Croma 3 White'; 'Arena 4 White'; 'Arena II' for colour and form; Appears consistent with other Arena III varieties for bloom form and plant habit; Not much difference to others.

Postharvest Recommendations: Clean water, chlorine tablets if holding more than 24 hours.

Comments: Very long lasting; I really liked this variety until I started cutting

it and then just couldn't get the blooms "perfect", all the lisianthus I grow are in the field so wondering if I had put them under a low tunnel if I would have been able to eliminate the damage—maybe the petals are just too thin to handle the dew and rain; We don't see a lot of difference in cultivars, they either do well or they don't, as there are so many things that can go wrong with lisis, any lisianthus of the needed color is a good seller, if high quality; We were growing outdoors without cover and the colour remained pure white, perhaps this is a positive thing in a drought where most of the irrigation was at the roots!

Lisianthus 'Corelli III Yellow Improved' (American Takii)

Good Qualities: The light creamy yellow color (3) is versatile and blends well with a wide range of other flowers and colors; Large, ruffly blooms, many blooms per stem; Very double, frilly form; Great plant, slightly fewer buds compared to others in the trial; Deeply frilled blooms have multiple layers of petals—very full and excellent quality; Nice color for weddings.

Problems: Had a lot of dieback, probably due to inconsistent drip irrigation; The color of light yellow is "beurk"—the yellow should be darker to match with other colors, I tried to cultivate in hoops and outside in the field, and effectively, it has to be grown in a hoop because in a field in stays very short.

Similar Cultivars: 'Voyage Yellow' (3); 'Croma 3 Yellow'; The deeply ruffled blooms are similar in form to the Voyage series and this variety is comparable in color to 'Voyage 2 Yellow', although later to flower and plants are shorter and slightly lower vigor than the Voyage series; We don't see a lot of difference in varieties.

Postharvest Recommendations: Clean water, chlorine tablets if holding more than 24 hours.

Comments: Just a good, solid yellow lisianthus option, it didn't wow me as the 'Mariachi Light Pink' or the 'Voyage 3 Champagne', but I still used every stem I could grow; Long lasting; This fluffy flower was irresistible! I simply had to



John Dole

have it in bouquets where it looked like a scoop of lemon sorbet, it was especially lovely with 'Voyage Champagne' and 'First Love'; Lovely plant and flower; Excellent bloom quality and versatile color; Lisianthus of the right colors (for the weddings that week) are always in demand, if high quality, lisianthus is a necessary focal flower, for late summer and fall, they are a hassle, but important; 'Corelli Yellow' is our favorite lisianthus currently, large, ruffly flowers are beautiful and blend well with all other lisianthus colors, the dark centers of the 'Corelli Yellow' in particular are eye-catching.

Lisianthus 'Mariachi Light Pink'

(Sakata Seed America)

Good Qualities: Beautiful pale blush pink blooms (5); Tall, healthy vigorous plants (2); Attractive flower form—loosely packed layers of petals have a light ruffle on the petal edges; good medium-size heads; Lots of buds per stem; Early to bloom, open form is lovely; Strong stems.

Problems: Stems were slightly weaker and snapped easier compared to other varieties; Not as fancy as the more frilly or multi-petalled varieties; Seed can be hard to grow, needs to be planted early; My designers don't really like

this boring color, not enough petals, the flowers are simple and not as big as the champagne or the blue ones, I tried to cultivate in hoops and outside in the field, and effectively, it has to be grown in a hoop because in a field in stays very short.

Similar Cultivars: Color and form are comparable to 'Corelli 2 Light Pink', however, the color is slightly darker than Corelli; 'Corelli Light Pink' (both could be considered blush with my designers except the Corelli have the dark centers where these don't).

Postharvest Recommendations: With flower food, buds opened pale pink, without flower food, buds opened white.

Comments: It adds layers of shading to a pink pink colour scheme; This was my favourite lisianthus I think I have ever grown, I am definitely going to try it again! it was so pretty and "romantic", it looked gorgeous on its own, with just greenery, or mixed with just about anything, the designers just loved it since they were still looking for a lot of blush this year, the stems also were slightly less 'bulky' than a Voyage stem yet the blooms did have a bit of a ruffle to them, the stems also seemed to be a bit stronger than some of the other Mariachi lisianthus, I've tried, holding the blooms taller, just perfect; Very long lasting.

Lisianthus 'Rosanne 2 Clear Green'

(Sakata Seed America)

Good Qualities: Unique pistachio-green color (6), more green than 'Rosanne 1 Green', which has a more lemon/lime hue; Excellent bloom quality—multiple layers of lightly ruffled petals are densely packed in 2-3 in. wide blooms; I loved it!; Medium double blooms are easy to use in arrangements; Sturdy stems and blooms, colour that makes market bouquets pop, it was also one of the first of my lisianthus to bloom, I would grow it again just to have a good early variety; Nice compact form and small flower shape; Lots of petals and full flower; The color has a special effect in a bouquet.

Problems: I didn't have a huge market for it, the color was cool but most people want "color" rather than green,



'Voyage 2 First Love'

John Dole



'Rosanne 2 Clear Green'

John Dole



'Voyage 3 Champagne'

John Dole

which blends in with green foliage; this colour was not popular with the wedding designers; It was almost too green for my customers to appreciate; Lots of aborted blooms, short, probably a result of inconsistent drip irrigation; Very dense flowers; Not all my customers that like that color, it is nice when mixed with white, but that is about it, I tried to cultivate in hoops and outside in the field, and effectively, it has to be grown in a hoop because in a field it stays very short.

Similar Cultivars: Habit and form are comparable to the rest of the Rosanne series; however, the color is a brighter, cleaner green than 'Rosanne Green'; 'Roseanne 1 Green', but '2 Clear Green' is much brighter green, '1 Green' has more yellow tones in it.

Postharvest Recommendations: Make sure blooms are dry before storing in cooler; Clean water, chlorine tablets if holding more than 24 hours.

Comments: Very long lasting (3); This is a really beautiful green variety—the bloom quality is excellent and the color is fresh and unique, this was a great addition to high-season summer mixed bouquets; This bloom really adds energy and vibrancy to bouquets—keeps them fresh looking; At first I wasn't sure about

this colour since I think I like to lean towards softer colours, but the florists kept scooping up any that I had and asking for it when they didn't see it, they loved it; We loved this one, but it was not as popular as pinks, yellows, and purples; It's a good green, for the rare occasion of needing green flowers, probably, low on our priority of varieties to grow; Looked like cabbages, very dense, thick flowers lisianthus are usually very romantic pretty flowers, the colour was too green for my liking, they were blooming in late fall so maybe if this was planted and blooming earlier then I would like to use in arrangements.

Lisianthus 'Voyage 2 First Love'

(Sakata Seed America)

Good Qualities: Unique color—white petals are brushed with blush pink (5), PERFECT BLUSH COLOR; Lots of ruffles, lots of petals and full flower (4); Attractive large 2.5 to 4 in. wide flowers, consistent with the rest of the Voyage series. Tall, vigorous, and healthy plants; Good size bloom—same as other Voyage varieties, early bloomer; Beautiful strong flower, almost a bicolor or picotee type, but more refined; Beautiful blooms, first to flower of the trial varieties.

Problems: We were not crazy about the rimmed bicolor form, but some of our customers loved it; None, other than typical lisianthus problems; Very dense flowers, huge flowers on the stem with short distance between blooms so difficult to use without removing flowers. *Similar Cultivars:* The plant habit, bloom form and bloom timing are consistent with the rest of the Voyage series—excellent bloom quality, large blooms and healthy, vigorous plants; 'Voyage White'.

Postharvest Recommendations: Clean water, chlorine tablets if holding more than 24 hours.

Comments: Blush is hard to come by, so this variety is much appreciated, a must for wedding work; Very dense thick flowers, colour was perfect for wedding work but had to remove branches of the stem and flowers because they were too huge and close together, good vase life; It was pretty but very, very little pink showed up in the blooms so not a whole lot different than 'Voyage White', but did bloom earlier than the white, it did pair nicely with pink zinnias and sweet William to make a fast market bouquet, the wedding designers didn't seem interested in it so used all of the stems for

market bouquets; It's the perfect ruffled blush color, it is already ordered for next year's plantings I love it so much; AMAZING!

Lisianthus 'Voyage 3 Champagne'

(Sakata Seed America)

Good Qualities: Versatile and attractive color—deeply ruffled layers of petals in shades of peach and pink (7). Champagne was outstanding size (2); Strong stems (3); Excellent bloom quality, tall plants with straight stems; Amazing! beefier plants than '2 Champagne', more ruffled flowers too, will definitely grow again; More double and frilly than '2 Champagne'; Very full stems; 'Voyage Champagne' has been a staple in our lisianthus production for several years now, glad to have a group 3 now available in the series to extend the harvest; Beautiful blooms; Good for weddings and bouquets.

Problems: None (2); I tried to cultivate in hoops and outside in the field, and effectively, it has to be grown in a hoop because in a field it stays very short.

Similar Cultivars: Appears identical to 'Voyage 2 Champagne', only flowers slightly later and on slightly shorter stems in our trial, bloom quality and plant habit are consistent with the rest of the Voyage series—excellent bloom quality and large fully double blooms; 'Voyage 2 Champagne'—very similar but the 3 was less ruffly and a little softer in colour.

Postharvest Recommendations: Clean water and chlorine tablets if holding more than 24 hours.

Comments: This actually bloomed earlier by five days vs. '2 Champagne', transplanted into high tunnel 5/12 and '3 Champagne' bloomed 7/15 and '2 Champagne' bloomed 7/20; Excellent for wedding work, good seller to florists; Beautiful! love the ruffles and color, customers loved it too; The colour intensifies with lower light and cooler conditions, it has beautiful full form!; One stem looked like a whole bouquet—I had some florists who could not get over how full the stems were! I liked this variety better than 'Voyage Champagne 2', I

had both growing and didn't find any difference in bloom time and I thought this was a "prettier" option; Very long lasting; Opens pale yellow and ages to a lovely pink; AMAZING!

Marigold 'Angka Deep Gold'

(Homeseeds)

Good Qualities: Beautiful golden color (3); Great germination rate, we harvested these for 8 weeks, they created long-lasting stems with a nice usable size, they are smaller than the 'Giant' marigolds, but that smaller size made them easier to market and use in arrangements, the color worked well with several color palettes, we sold many of these to designers over the season and to customers at farmers' markets; Uniform plants with good bloom quality, sturdy stems; Large, beautiful blooms, multiple blooms per stem.

Problems: The only potential problem was that the plants get a bit overly-branched after you've been harvesting from them for a few weeks, this was not a surprise, but at some point, the somewhat crazy branching shape of the stems made them unusable; Plants are late to flower compared to other comparable marigold varieties in trial; Crop destroyed by deer and groundhogs; We

have an insect issue that appears every August and lasts for about 6 weeks: small gnats congregate to mate and love marigolds for this activity, they completely smother the flowers and bury deep into the petals making the blooms unsalable, all marigold cultivars were susceptible to this issue; I corralled the plants rather than netting them, and they tended to fall over, next time, I will use netting; Stems were very short.

Similar Cultivars: This cultivar is similar to the other deep gold variety in this year's trial set; Color is comparable to 'Coco Gold', height and habit is more comparable to 'Angka Yellow' than 'Angka Orange'; Other gold and deep gold cultivars in this trial.

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; We cut all of our flowers into water treated with AquaPlus, we remove all leaves that would otherwise be in the water and we store the flowers in a cooler for at least one day before selling, nothing special was done with the marigolds; Clean water and chlorine tablets; Very breakable necks, always pick extra to account for this; We used CVBN in cold water and held at 65 degrees; Trim stems and keep them in clean water.

Comments: We loved this flower and would certainly grow it again, the quality was so good and so consistent that our market customers were willing to pay more for it and purchased it repeatedly, designers and florists also purchased it repeatedly, the deep gold marigolds were so stunning in the field that they were memorialized in an oil painting; This variety is consistent with the other Angka varieties for a late flowering date, as a result, I would choose another comparable earlier variety before I would grow this one again; We have put a fortress around marigolds, due to deer and groundhogs; We need help with managing marigolds... We had hoped to find a cultivar in this trial that would prove to have stronger necks and be less susceptible to broken heads, but didn't find any that fit the bill! Our customers learned to love marigolds this



'Angka Deep Gold'

John Dole

year, after having trouble moving them in past years, people came looking for them, the scent is polarizing, with some folks loving it and other quite repulsed, when I told my staff we were growing a marigold trial with over 10x more bed feet than past years they were horrified, but it worked out and we sold plenty, wish our harvest could have gone longer into the season, but our August insect issue stopped us from harvesting between late August and the end of September, our second succession bloomed late September till late October; Let me be honest: I love marigolds, I love growing them and designing with them I even love the fragrance, I planted some marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead. The early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Loved growing these marigolds, haven't had much luck with marigolds in the past.

Marigold 'Angka Orange'

(Homeseeds)

Good Qualities: Attractive dark orange blooms (3); Great germination—100%, this plant got extremely tall, like 5 feet tall and was very sturdy, no netting was necessary; Tall and vigorous plants—one of the most vigorous marigolds in our trial, the tallest of the Angka varieties in trial; Nice uniformity of stems; stems start low on plant so less waste; Nice head size, long stems; Large, lovely blossoms with multiple (5 to 7) blossoms per stem.

Problems: As with the other Angka marigold varieties, after harvesting the stems for a few weeks, the plant became branchy and assumed a somewhat unusable shape, also, during the last two weeks of harvest, the stems would sometimes break at the point where the plant branched off in a new direction; Very late to flower compared to other tall orange and gold marigold varieties, while bloom and stem quality are nice, I would grow a comparable variety that flowers earlier before growing this variety again; Crop destroyed by deer and groundhogs; Insects such as Japanese



John Dole

beetles and earwigs; Not specific to this cultivar, but insect issues and weak necks were issues we had with all our marigolds; A rabbit ate all my plants from this variety in May in my field.

Similar Cultivars: This cultivar is similar to 'Giant Orange' marigold that we typically grow, but the flowers are significantly smaller, the smaller size worked better for us, also, the stems on these marigolds were longer and of better quality than 'Giant Orange'; Color is comparable to 'Giant Orange', although nearly two weeks later to flower; 'Angka Deep Gold'; 'Jedi Orange', 'Coco Orange'.

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; Clean water and chlorine if holding more than 24 hours; Strip clean, use only water; Breakable necks, pick extra stems to account for this; We used CVBN in cold water and held at 65 degrees; Clean water and trim stems.

Comments: These flowers sold well at market and to our designers, this is a traditional orange marigold color, it's not quite as exciting as the deep gold varieties, but it was a great producer and we'd definitely grow it again, post-harvest life was especially long the first six weeks of harvesting; This was the tallest of the Angka varieties in trial and

seemed a little out of place with the rest of the series as this variety was taller and more vigorous, although bloom time of all the Angka varieties was quite late compared to the rest of the marigolds in trial; Marigolds get eaten by deer and groundhogs if not grown in a fortress; Favourite marigold of the trial due to its intense pumpkin orange colour, stronger necks than some varieties, thin plant shape which is great for close and economical planting, could be used in a large spray with no pinching; Weak necks wreaked havoc on all marigolds! our customers learned to love marigolds this year, after having trouble moving them in past years, people came looking for them, the scent is polarizing, with some folks loving it and other quite repulsed, when I told my staff we were growing a marigold trial with over 10x more bed feet than past years they were horrified, but it worked out and we sold plenty, wish our harvest could have gone longer into the season, but our August insect issue stopped us from harvesting between late August and the end of September, our second succession bloomed late September till late October, all plants were pinched 1 to 2 times, planted at 12 x 12 spacing in bare soil, no fabric; Let me be honest: I love marigolds, I love growing them and designing with them, I even love the fragrance, my favorite things about this cultivar is the way the stems branch, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Rabbits ate all of my plants from this variety in May in my field; Not as buggy as 'Angka Deep Gold', nice cultivar, looked great in mixed bouquets.

Marigold 'Angka Yellow' (Homeseeds)

Good Qualities: Attractive bright yellow blooms (4); Great germination in 72 trays inside a greenhouse, this plant thrived during germination and after being transplanted into the field; Sturdy stems, blooms are fully double and uniform; Uniform branching that starts low,

mild honey scent; Nice head size (4 in.); Complex and dense blossom.

Problems: This color is almost fluorescent and somewhat difficult to blend with other flowers; The plant habit was slightly shorter and more compact compared to other yellow varieties like ‘Cana Yellow’ and ‘Giant Gold’, it was also later to flower in our planting compared to most other marigold varieties, while blooms are good quality, I would probably choose a comparable earlier flowering variety to grow again before I would grow this again; Crop destroyed by deer and groundhogs; Insects such as earwigs and Japanese beetles; Yellow marigolds were the least popular with our customers; ‘Angka Yellow’ seems a little less robust than

the other Angka cultivars, the plants didn’t grow as tall; A rabbit ate all my plants from this variety in May in my field; No noticeable problems.

Similar Cultivars: Color and bloom form is similar to ‘Cana Yellow’ and ‘Giant Yellow’, although later to flower

than both varieties; ‘Angka Deep Gold’ or ‘Orange’; Reminds me of ‘Jedi Gold’; Other yellow cultivars.

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; Clean water and chlorine if holding more than 24 hours; Strip clean, use fresh water only; We used CVBN in cold water and held at 65 degrees; Breakable necks,

really stocky plants; Long graceful side branches, I also like the slightly more compact flowers; Tall stems.

Problems: Harsh bright yellow color was hard to use in design work; Late-season disease onset; Insects such as Japanese beetles and earwigs; Like other marigolds, weak necks; Very brittle.

Similar Cultivars: ‘Angka Yellow’ (2); This variety is similar to ‘Giant Yellow’ in color and bloom form, although later to flower; Similar to other yellows.

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; Clean water and chlorine if holding more than 24 hours; We used CVBN in cold water and held at 65 degrees; Breakable necks, pick extra

When I told my staff we were growing a marigold trial with over 10x more bed feet than past years they were horrified, but it worked out and we sold plenty, wish our harvest could have gone longer into the season.

pick extra stems to account for this.

Comments: Classic yellow perfect for sunny bouquets; reliable and sturdy stems; Marigolds get eaten by deer and groundhogs if not grown in a fortress; We’ll probably grow minimal yellow marigolds in the future, folks prefer the gold and orange it seems, we dried some to experiment with plant dyes in the future; Let me be honest: I love marigolds, I love growing them and designing with them, I even love the fragrance, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Rabbits ate all of my plants from this variety in May in my field; Not as buggy as ‘Angka Deep Gold’, nice cultivar, looked great in mixed bouquets.

stems to account for this.

Comments: Holds bright yellow color well as a dried flower; The color is highlighter yellow and was not a good seller; Marigolds get eaten by deer and groundhogs if not grown in a fortress; Weakish heads—suitable to clip for



‘Angka Yellow’

John Dole



‘Cana Yellow’

John Dole

Marigold ‘Cana Yellow’ (Homeseeds)

Good Qualities: Bright lemon colour (3); Upright and sturdy plants, 2 to 4 in. wide blooms are uniform and densely packed; Long bloom period,

garlands, larger green center; Let me be honest: I love marigolds, I love growing them and designing with them, I even love the fragrance; ‘Cana Yellow’ was my favorite of all the marigold cultivars I tested, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; We’ll probably grow minimal yellow marigolds in the future, folks prefer the gold and orange it seems, 12 x 12 spacing, two pinches done to these plants; Really liked the color and large blooms, very prolific, did well at the farmers’ market, we cut multi-branched stems.

Marigold ‘Kanthong Deep Gold’

(Homeseeds)

Good Qualities: Very nice color (4), gold is in style, so used a lot for weddings; Sturdy stems (2); Very uniform blooms with excellent quality, straight stems form attractive bunches; My favorite of all the marigolds I have ever grown; Prolific producer, strong necks; Heads were a little smaller than some other cultivars, so they were less prone to breaking; Production was amazing!; Good length; Very consistent straight stems of single flowers, less likely to

branch than other marigold varieties.

Problems: Late-season disease onset; Insects; I only corralled the plants, and I regret not netting them; My florist didn’t want marigolds after a few weeks, saying that her customers were not interested in them, I used them all summer for market bouquets; stems not as strong as ‘Maesa’.

Similar Cultivars: ‘Angka Deep Gold’ (2); ‘Kanthong Deep Gold Extra’ (2), but shorter and bloomed earlier; The color of this variety is similar to ‘Maesa Deep Gold’ although this variety flowers earlier, the color is also comparable to ‘Coco Gold’, with a similar bloom time; Similar to other golds; ‘Devi Deep Gold’; ‘Cracker Jack’ is stronger.

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; Strip off the foliage for less of the marigold scent; Clean water and chlorine if holding more than 24 hours; We used CVBN in cold water and held at 65 degrees; Breakable necks, pick extra stems to account for this.

Comments: This one would probably excel if pinched; Marigolds get eaten by deer and groundhogs if not grown in a fortress; This was a huge marigold trial for us, we grew a few others that weren’t part of the ASCFG trial as well

as our usual ones, I liked the Kanthong series, this cultivar was one of the earliest to bloom, which helped us get a jump on the insect issues we experience; Let me be honest: I love marigolds, I love growing them and designing with them,

I even love the fragrance, these were the first study marigolds to bloom, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Since the stems were very consistent with single flower heads, if growing this for the foliage it may not be the best candidate; I feel like the stem is too thin for the big flower that it produces: it breaks very easily; Very prolific! Looked great in mixed bouquets, was a workhorse all season.

Marigold ‘Kanthong Deep Gold

Extra’ (Homeseeds)

Good Qualities: Highly uniform plants with excellent sturdy stems and good bloom quality, bright orange flowers are 2 to 3 in. wide and fully double, well-suited for cut flowers; Quite ruffly, strong necks.

Problems: The stems got weaker and shorter as the season went on; Crop destroyed by deer and groundhogs; Insects.



‘Angka Deep Gold’

John Dole



‘Kanthong Deep Gold Extra’

John Dole



‘Lanchang Orange’

John Dole

Similar Cultivars: ‘Angka Deep Gold’; Plant habit, timing and bloom size are very comparable to ‘Maesa Deep Gold’ but the color of ‘Kanthong Deep Gold Extra’ is slightly darker; ‘Kanthong Deep Gold’, but taller and bloomed later. *Postharvest Recommendations:* Stems should be handled carefully, flower heads can get heavy and snap stem; We used CVBN in cold water and held at 65 degrees; Clean water and chlorine if holding more than 24 hours.

Comments: My second favourite of the marigold trial, can be cut as large spray, more orange than gold, sturdy plant and flower head; Let me be honest; I love marigolds, I love growing them and designing with them, I even love the fragrance, I planted this cultivar in early August, and it had just started to bloom when the plants were killed by freezing temperatures, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Loved growing these marigold, haven’t had much luck with marigolds in the past, marigolds get eaten by deer and groundhogs if not grown in a fortress.

Marigold ‘Lanchang Orange’ (Homeseeds)

Good Qualities: Rich, true pumpkin orange colour (3); Densely packed 2-4 in. wide flowers are fully double, vigorous, healthy, upright plants, straight stems make attractive bunches—overall well-suited for cut flowers; Long, strong stems, very ruffly, nice scent!; Smaller head, making it less prone to broken stems.

Problems: A little shorter, but still an acceptable stem length; Crop destroyed by deer and groundhogs; Insects; Seeded 2 x 72 in cells, but 0% went out.

Similar Cultivars: This variety is similar to ‘Giant Orange’ with respect to timing and plant habit, color is also comparable, although ‘Lanchang Orange’ appears slightly lighter in color than ‘Giant Orange’; ‘Angka Orange’; Other orange cultivars.



‘Maesa Deep Gold’

John Dole

Postharvest Recommendations: Stems should be handled carefully, flower heads can get heavy and snap stem; Clean water and chlorine if holding more than 24 hours; We used CVBN in cold water and held at 65 degrees; Breakable necks, pick extra stems to account for this.

Comments: In top 3 for marigold trial!; Marigolds get eaten by deer and groundhogs if not grown in a fortress; Let me be honest: I love marigolds. I love growing them and designing with them—I even love the fragrance, I planted this cultivar in early August, and it had just started to bloom when the plants were killed by freezing temperatures, until then the plants had grown well, I planted some of marigolds in June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; I struggled to find a favourite in the marigolds, there were no duds or standouts, curious to see how others fared, we’ll be growing several again next year, and this one will be on the list due to it blooming slightly earlier than most other cultivars; Seeds didn’t grow.

Marigold ‘Maesa Deep Gold’ (Homeseeds)

Good Qualities: Vibrant colour (5); Great germination, strong tall stems; Tall, vigorous, and very uniform plants, produced uniform stems and bunches, blooms are uniform and full; Large flower heads; Smaller, less fragile heads, a slightly more yellow tone than some of the other gold marigolds; Easy to grow; ‘Maesa Deep Gold’ had the longest and strongest stem, this was my favorite.

Problems: Crop destroyed by deer and groundhogs; insects, weak necks; Less productive than some, though not conclusive as we had to stop harvesting due to our August insect issues; ‘Maesa Deep Gold’, unfortunately the blooms were a little too big and heavy later in the season; Hard to start from seeds, the flowers are very heavy so the stems are easy to break when in blooms.

Similar Cultivars: These plants were very similar to the ‘Angka Deep Gold’ (2); Color and bloom form is comparable to ‘Coco Gold’, although ‘Maesa Deep Gold’ flowers later; Other gold cultivars.

Postharvest Recommendations: Stems need to be handled carefully, flower heads can get heavy and snap stem; Clean water and chlorine if holding more than 24 hours; We used CVBN in cold water and held at 65 degrees; Breakable necks, pick extra stems to account for this.

Comments: The ‘Maesa Deep Gold’ flower was actually a very similar color to the ‘Angka Deep Gold’ (because this would make sense), we loved this deep gold color, it inspired our market customers to pay a higher price for marigolds this year and we sold several hundred stems to designers, postharvest life was especially long the first six weeks of harvesting; Marigolds get eaten by deer and groundhogs if not grown in a fortress; An average good marigold; Let me be honest: I love marigolds. I love growing them and designing with them—I even love the fragrance, planted this cultivar in early August, and it had just started to bloom when the plants were killed by freezing temperatures, the plants were very robust before the freeze, I planted some of marigolds in



'Albion Black Pod'

John Dole



'Albion Green Pod'

John Dole

June and others in early August, in hope of having plenty to sell for the Day of the Dead, the early plants were still going strong in mid-October, and the late-planted ones were beginning to bloom well; Loved growing these marigold, haven't had much luck with marigolds in the past; The smell of the marigolds is special, you love it or you hate it, but this one stops smelling when it's been in the fridge for a few hours.

Nigella 'Albion Black Pod'

(Takii Europe/Sahin)

Good Qualities: Vigorous and uniform variety, attractive purple pods are an interesting shape and color; LOVE it, pods are a nice burgundy-purple tone, which dry excellently and are a nice element in dried bouquets, etc., for fresh use they also were a great color contrast in bouquets, although grown mainly for the pods, flowers were also really nice and usable; The pods have a good vase life and work well in flower bouquets as well as dried; Great fresh blooms, lots of blooms per stem; Quick to develop pods, consistent purple colour: a favourite filler of our staff; Nice colouring on both varieties—green pods looked especially fresh when they were growing, flowers nice for both, green pods were noticeably early than the black pods.

Problems: Flowers fade and shatter quickly—seed pods are more versatile with a longer fresh and dried vase life; Poor germination in the field as compared to the variegated variety that we also grow (I'm not sure of the variety name, we collect the seeds every year); Planted out seedlings in high tunnel in late February, cold and/or rodents killed the crop; Although we were harvesting, the plants shut down very early, haven't grown nigella for a few years but thought they would continue growing for a longer period of time; Too short, impossible to work with, I won't try again, I scrapped all my plants because nobody wanted some because too short. *Similar Cultivars:* Very comparable in form and habit to 'Albion Green Pod'. *Postharvest Recommendations:* These pods work well put straight into water and not conditioned; Clean water and chlorine if holding more than 24 hours. *Comments:* While the flowers pass quickly, the pods are excellent for fresh or dried use, dried pods hold their shape and color well and add unique texture and geometry to dried arrangements; We prefer to grow variegated nigella seed pods rather than solid-colored ones; Should have established in fall or waited until mid March to plant out; Fresh flowers were so pretty that I had to remind

myself that I needed to let some go to pod, good vase life; We could either harvest the whole plant, or pick a stem at a time, because they dry, they have a very long postharvest life, but if using in fresh arrangements the length of time was limited to molds forming on the stems; I have grown quite a lot of nigella, but I plant it in the fall, by the time I received the seeds, the temperatures must have been too high for germination, I planted the seeds, but didn't have any results, I still have a few seeds and intend to try planting some this fall.

Nigella 'Albion Green Pod'

(Takii Europe/Sahin)

Good Qualities: Vigorous plant growth and very uniform variety, attractive green pods are interesting for both fresh and dried use; Nice plump pods! great germination and although grown for the pods, flowers are cute and very usable, pods dry well; The pods have a good vase life and work well in both fresh and dried bouquets; Great fresh blooms with lots of blooms per stem; Set pods quickly, but the bloom was also beautiful; Nice colouring on both varieties, 'Green Pod' looked especially fresh when they were growing, flowers nice for both, green pods were noticeably early than the black pods

Problems: Very poor germination in 65 degree greenhouse, used heating pads and humidity domes for the first few days; Flowers fade and shatter quickly—seedpods are more versatile with a longer fresh and dried vase life; Green pod color is just ok—nothing remarkable about the pods in general, I didn't use them at all for fresh use because they were just blah, but as dried they provide much more interest; Poor germination in the field as compared to the variegated podded variety that we also grow (I'm not sure of the variety, we've been collecting its seeds for years); Planted out seedlings in high tunnel in late February, cold and/or rodents killed the crop; Although we were harvesting, the plants shut down very early, haven't grown nigella for a few years but thought they would continue growing for a longer period of time; Too short, impossible to work with, I won't try again.

Similar Cultivars: Very comparable to 'Albion Black Pod', except seed pods are green rather than purple.

Postharvest Recommendations: These pods work well placed directly into water and not conditioned, clean water and chlorine if holding more than 24 hours.

Comments: These plants did not grow well in the 72 trays or in the field—they just sat there; While the flowers pass quickly, the pods are excellent for fresh or dried use, dried pods hold their shape and color well and add unique texture and geometry to dried arrangements; We prefer to grow variegated nigella seed pods rather than solid-colored ones for our bouquets; Should have established in fall or waited until mid March to plant out; Fresh flowers were so pretty that I had to remind myself that I needed to let some go to pod, good vase life; Because of the green colour, we needed to harvest more quickly than the 'Black Pod' because the freshness of colour was evident; I have grown quite a lot of nigella, but I plant it in the fall, by the time I received the seeds, the temperatures must have been too high for germination, I planted the seeds, but didn't have any results, I still have a few seeds and intend to try planting some this fall.

Stock 'Quartet Deep Yellow'

(Sakata Seed America)

Good Qualities: Sturdy (6); Beautiful rich buttery yellow blooms (6); Highly uniform variety (2); Tall (2); Lovely fragrance (2); 2/3 were doubles, nice consistent stem length, full heads with dense florets at the top of the stem, no bald spots!; Really full fluffy blooms and singles are compact, very cute, and very usable!; Stems that did not need staking, tolerated wind and dry soil; Just a few singles, colour is a deeper pale yellow than 'Cheerful Yellow', full and vertically compact flowering heads; 70% double blooms, high performer, healthy; Pretty good length for a double stock, I will try again next year, but I will grow them under a hoop, maybe it will grow taller.

Problems: Shorter than the many other stock varieties we grow (4), though still usable certainly; Not exactly a "deep yellow", average typical yellow stock colour (2); The spray-type habit was a little more challenging to harvest and clean than the single-stem stock varieties and yielded shorter-than-desired stem lengths; None noted; Particular about light exposure/temperature; Not as hardy as the other stock varieties planted at the same time, slower to grow and less heat tolerant.

Similar Cultivars: Similar to other yellow Matthiola: Katz, Cheerful, Iron. (2); The color is similar although slightly darker than 'Katz Yellow' and 'Iron Yellow'; Darker than 'Yellow Cheerfulness'.

Postharvest Recommendations: Cut when 1/3 of florets open, store at 4C, change water, recut stems if storing for more than a couple days; Clean water and chlorine if holding more than 24 hours.

Comments: We didn't pinch these or select for doubles, planted at 9 x 9 spacing with two plants per cell, nothing too special about these, maybe should have tried pinching?; We included this variety in a spring and a fall tunnel planting and performance was consistent between the two planting slots, these plants produced one taller central stalk (18 to 24 in.) with several smaller secondary sideshoots typically closer to 12 to 16 in., it's possible this variety should have been pinched to encourage longer and more uniform sideshoots; Definitely worth growing, probably the best quality stock we've grown; More creamy or soft yellow than "deep yellow", very sweet colour that goes with anything, growth slowed in high summer but regained as nights cooled in August, love this one!;



Barbara Jewell



Barbara Jewell

We had terrible growing conditions for stocks, and Quartet still bloomed; I've grown stock prior but never had such great results, this cultivar was beautiful, strong and had very few singles, everyone loved it, including me—so easy to grow; The smell is impressive.

Zinnia 'Uproar Deep Yellow'

(Syngenta)

Good Qualities: Bright, bold yellow color (13); Large flowers (11); Sturdy stems (3); Tall (2); High degree of doubleness (3), no single blooms; Dahlia-type heads; Extremely uniform plant habit and bloom size, blooms are 2.5 to 4 in. wide, plants produced flushes of high quality blooms throughout a hot dry growing season; Rebloomed vigorously, great for grocery and market sales, so nice!; None; This was the winner of all the seed trial varieties this year; This was a star!, by far the most impressive in the trials this year were the Uproar zinnias, I have grown 'Uproar Rose' every year since it was developed and have been looking forward to new colours, was not disappointed with this yellow!, had no insect or disease issues, a bit of mildew very late in the season, sowed May 12 and planted to field June 14, there were blooms on every plant by July 10, the first blooms were too short to harvest typical of any zinnia, they grew quickly

and continued to produce throughout the season creating a showpiece—I would stop and gaze every time I went by, my favourite new flower for 2022, look forward to acquiring seed as it comes commercially available; Very prolific; They seemed to hold up longer than the 'Scarlet'; Sturdy stems; Easy to match with other colors for the florist designers.

Problems: We could only harvest from this patch for 4 weeks and then it succumbed to downy and powdery mildew, they did not branch like Benary's Giant zinnias and were somewhat spindly; The large bloom size made these a little challenging to incorporate into mixed bouquets, but worked well as single-variety bunches; Typical zinnia problem—powdery mildew; weaker stems than Benary; Shorter than Benary series, more prone to disease, the color was *too* yellow! like ketchup and mustard yellow, it was not a popular color, beetles really loved it too; The degree of doubleness of the blooms was quite variable; Yellow zinnias were not a favorite with my customers, in fact, most mixed bouquets that contained yellow zinnias were the last to sell, if at all; Powdery mildew resistance was same as other cultivars in the trial; It grew super fast and tall and then blew over in first wind storm; Like we have experienced with 'Uproar Rose', the flower quality

diminishes significantly by the third flush or so, flowers get smaller with far fewer petals and stems are less hardy, Benary seem to produce well for longer, but the yellow available from Benary Giants is not nearly as bright and lovely as the 'Uproar Yellow'; Slugs did some damage after transplanting but they rebounded; Unfortunately, the Scarlet variety got alternaria leaf spot early on shortly after it was transplanted and gradually infected the 'Rose' as well, 'Deep Yellow' kept growing strong even though the disease was all around it; Lots of diseases when rainy season. *Similar Cultivars:* Comparable bloom form and quality to the 'Benary's Giant Yellow' (5), although plant habit was more uniform; The color was similar to Benary's Giant Yellow (2), but this cultivar did not produce nearly as many stems; 'Benary Giant Golden Yellow', but slightly larger blooms; Strong necks, large head size similar to the Benary series so we will most likely grow again; Not as nice as this one.

Postharvest Recommendations: CVBN and Chrysal #2; We store them in a cool room, but not in cooler; Did not prefer cooler; We avoid keeping zinnias in the cooler for too long.

Comments: These plants were rock-solid in a hot, dry summer producing high quality and very uniform blooms; This was by far the nicest yellow zinnia that we've ever grown, the color was so pure and the heads were really nice; While I liked these, I found them a bit weaker than Benary varieties—even the foliage was a softer green as opposed to dark green, not likely I would spend the extra on these seeds; We did not get a good sense of customer reaction to this flower because we did not have enough of them to sell; Least diseased of the zinnias we trialed (but still more than other varieties of zinnias we grew); With the exception of sunflowers, yellow is not a popular color with my customers, so no offense to 'Uproar Deep Yellow', I thought the color was great, but I wouldn't grow again; Had a good long bloom time starting from a month after transplanting, through the whole summer to mid-



'Uproar Deep Yellow'

John Dole

September; I find that 'Benary's Yellow' is a very prolific and early bloomer, I didn't see much difference in this variety in comparison, except the blooms on the Uproar were probably larger on average, but this variety blew over in our first storm right before I was ready to do my first cut, the 'Benary Yellow' did not since they weren't quite as tall, I just don't see this variety as worth the extra seed cost but maybe if that storm had missed us I would be raving about the Uproars (shrug); Did not net but staked and used string to keep upright and prevent spreading to path, would allow lots of room for this zinnia to grow as it does become a very large, vigorous plant, overall height by mid August was 4 feet, consistent large blooms on strong stems, amazing zinnia! Five stars; I'm not a huge yellow fan but these were really pretty and lasted most of the season; The bright yellow was superb: disease resistant, huge heads, kept flowering all season; Good vase life; This was my favorite of the Uproar series by far, I tend to prefer the size of the Oklahoma series for my CSA bouquets, I don't sell to any florists, but I would imagine that they would prefer the size of the Uproar; Customers love that color and it is super nice with sunflowers!

Zinnia 'Uproar Rose Improved'

(Syngenta)

Good Qualities: Wonderful bright rose pink (14); Bloom size is quite large (9); Long stems (3); Sturdy (3); Super productive (3); Maintains brightness, consistent and endless blooms, healthy plants, good germination, very popular colour, the best bright rose zinnia; Re-bloomed vigorously, great for grocery and market sales, just a really nice zinnia; Many doubles, straight stems, coordinated well with other colors, great in market bouquets, was a butterfly magnet, kept producing, much longer than other Benary zinnias; No singles; Blends well with other zinnia colors for a market bouquet; Extremely uniform plant habit and bloom size, high quality large fully double blooms, plants produced flushes of high quality blooms throughout a hot dry growing season; Great germination; Pretty flowers; Stopped us in our tracks in the field; Super nice big, huge flower, easy to match with other flowers in bouquets, long lasting in a vase; Hot-ticket item at farm market.

Problems: We could only harvest from this patch for 3 to 4 weeks and then they succumbed to downy and powdery

mildew, even though we pinched them, these plants did not branch as well as Benary's Giant zinnias, the plants themselves were spindly; Necks break easily, prone to powdery mildew later in the season though better than some other zinnia cultivars, vase life can be uncertain ranging widely without reason; Grew too tall and whole row went over in the first crazy wind/rain storm (Benary zinnias in the row beside did not go over, or at least to the degree that this variety did); Unfortunately, 'Scarlet' variety got alternaria leaf spot early on shortly after it was transplanted and gradually infected 'Rose' as well. 'Deep Yellow' kept growing strong even though the disease was all around it, Great colour and strong stems; Weak stems; A lot of deformed flowers, of the three Uproar trial colors this was our least favorite and we cut the least number of marketable stems from these plants; The large bloom size made these a little challenging to incorporate into mixed bouquets but worked well as single-variety bunches; Not necessarily a problem, but I didn't prefer the more open petal form of this flower; Powdery mildew; More prone to disease than Benary, beetles loved it over Benary series,



'Uproar Rose Improved'

John Dole



'Uproar Scarlet'

Elizabeth Harlan

shorter than Benary; Leaves were more diseased than the variety next to them; First flush is absolutely beautiful, but subsequent flushes have steep decreases in quality and plants slow down much faster compared to Benary cultivars; Did get spotty towards the end of August, much like Queen series, also did not like the drought; None.

Similar Cultivars: 'Benary's Giant Dahlia Flowered Wine', though 'Uproar' is better; Similar to 'Benary Bright Pink', but the color of 'Uproar' is a much deeper, clearer rose; 'Benary's Giant Coral'; 'Benary' and 'Magna Wine'; Benary's Giant; Comparable bloom form to the Benary's Giant Series, although plants were slightly shorter and bloom quality was more consistent across the season; 'Benary Wine', 'Carmine Rose', 'Purple'; I prefer the 'Uproar Rose' (not Improved) that we've grown, though we didn't trial them side by side this year so there may have been other influencing factors; Not as nice as this one.

Postharvest Recommendations: Avoid holding cold (below 40F); CVBN and Chrysal #2; Typical zinnia care, fresh water in bucket after harvesting, keep in cool place, not in cooler; We used

CVBN in cold water and held at 65 degrees; Does not prefer cooler.

Comments: I have always grown 'Uproar Rose' since whenever it was first introduced, it is superior to any other zinnia variety for consistent production and bloom size, healthy plants, watch for mildew later in the season, keeping good air flow, stems harvested regularly, along with preventive sprays when weather conditions are favourable for mildew, I did not net but used support stakes and twine, be sure to give ample room for the Uproar series as they are vigorous, overall height of the plant was 4+ ft, large size blooms in this series are wonderful in creating mixed market bouquets, would highly recommend the Uproar series for cut flower production, sown direct to 140 plugs, bumped up to 50 cell and then field planted June 9, first blooms July 10; We did not get a good sense of customer reaction to this flower because we did not have enough of them to sell; Would love to see more colors!; Grown in landscape fabric at 9 x 9 in. spacing, planted very late due to our late, cold, wet spring, lost several plants due to weather conditions and stressed plants, but they still performed acceptably, they are often more productive than they were this year, pinched twice before blooming on usable stems; wish this seed was more readily available unpelleted/uncoated as we are certified organic and are not able to use pelleted seed and this cultivar often is, we love this cultivar and wish it came in more colours!; I almost found that they grew too well, fell over, then proceeded to get brown spots, I think I would have to almost string this variety to guarantee that I can keep it usable and not sure it's still profitable with the extra work and the extra expense of seed, the storm hit the patch right before my first cutting, and there were a ton of perfect blooms that would have been ready! I'm thinking if the storm had missed me, I might have been way, way more positive about this variety; These plants were rock-solid in a hot, dry summer producing high quality and very uniform blooms; Didn't use many of these as fresh cuts, as I didn't prefer the more open petal structure

compared to a Benary's which is more compact, however, I dried most of them and found them to be really awesome—the deep rich colors and wide bloom made for great, large dried heads; I've heard rave reviews of 'Uproar Rose', but we were underwhelmed, 'Benary Wine', 'Carmine Rose', 'Purple' or 'Dark Pink' are easy competitors in our fields, it is not likely I would spend the extra money for the Uproar seed; In photos this variety didn't really stand out to me but once seeing it in person, it's so much more vibrant and eye catching, the rose magenta color just pops and the petals grew so symmetrical, the heads are large and they are a showcase in bouquets; Variability of doubleness of flowers and less super full ones than the 'Uproar Scarlet' and 'Deep Yellow'; Stunning with other summer flowers in arrangements, nice bushy plants when pinched; The stems are strong and high, by chance, because the flowers are very big!; Very popular at the market; Can't say enough about this cultivar, my customers LOVED it—and so did the butterflies and hummingbirds!!

Zinnia 'Uproar Scarlet'

(Syngenta)

Good Qualities: Fire engine vibrant red (13), it was incomparable to the other red zinnias in the field, this one was much more Fire Engine!; The size of the bloom is very big (8); Strong stems (6); Long stems (2); Fully double blooms (2); Extremely uniform plant habit and bloom size, plants produced flushes of high quality blooms throughout a hot dry growing season; Super productive, great germination; Rebloomed vigorously, great for grocery and market sales; More chartreuse green foliage than Benary series; Somewhat stress resistant; No singles, colour was great for fall bouquets; This was a good healthy plant, the bloom size consistent with the 'Rose' and 'Deep Yellow', a nice addition to mixed bouquets; Customers liked these in straight bunches: Prolific, was a hot-ticket item at farm market.

Problems: Lots of diseases in the rainy season; This was the first Uproar zinnia to get diseased, we cut this flower

for only approximately 2 weeks and it was taken over by powdery mildew; the large bloom size made these a little challenging to incorporate into mixed bouquets but worked well as single-variety bunches; Color was a little too orangey-red for my use, would prefer a more deep rich red; Powdery mildew; Necks break easily, prone to powdery mildew later in the season though better than some other zinnia cultivars, vase life can be uncertain, ranging widely without reason; Bugs loved it and ate the petals, more prone to disease over Benarys, shorter than Benarys; Leaves more diseased than the variety grown next to it, variability of doubleness of flowers, were a bit stunted compared to the other zinnias we grew; Some of the plants had blooms that were more on the orange side of 'Scarlet'; Not a popular summer colour; Not very productive; Not a fan of the color, looks like tomato soup and is hard to use in design work, stems were shorter than other Uproar varieties but we also had a drought; Short bloom duration on plant; Unfortunately, the 'Scarlet' variety got alternaria leaf spot early on shortly after it was transplanted and gradually infected the 'Rose' as well, 'Deep Yellow' kept growing strong even though the disease was all around it, great colour and strong stems; Some deformed flowers in the first few cuts but got better as the season went on; Did get spotty towards the end of August, much like Queen series.

Similar Cultivars: Scarlet Benary's Giant (8), but this cultivar did not produce flowers for nearly as long and did not branch well; Comparable bloom form to the Benary's Giant Series, although plants were slightly shorter and bloom quality was more consistent across the season.

Postharvest Recommendations: Zinnias don't like cold water in a vase; We used CVBN tabs and Chrysal #2, stored in warm cooler at 45-48 degrees; Typical zinnia care, fresh water in bucket after harvesting, keep in cool place, not in cooler; Avoid temps under 40F, best if harvested at night, condition in cool water and use the following day; We used CVBN in cold water and held at 65 degrees.



Barbara Jewell

Comments: Looks like bugs love this variety—I don't know why!; These plants were rock-solid in a hot, dry summer producing high quality and very uniform blooms; Didn't use many of these as fresh cuts, as I didn't prefer the more open petal structure compared to a Benary's, which is more compact, however, I dried most of them and found them to be really awesome—the deep rich colors and wide bloom made for great, large, dried heads; Interesting tidbit that these threw quite a few double- and triple-headed blooms throughout the season; This did not win me over—I will stick to the tried and true Benary series; Grown in landscape fabric at 9 x 9 in. spacing, planted in later succession for late summer/fall, quite stressed when planted but they still performed acceptably, pinched twice before blooming on usable stems, would love to see more of this series, have grown 'Uproar Rose' regularly and was excited to see new colours, need availability of unpelleted/uncoated seed to be able to grow in organic production; Stunning with other summer flowers in arrangements, nice bushy plants when pinched; Our staff loved the bright colours of the zinnias and we cut them often; I was impressed with how many "perfect" and large blooms were on each plant, as like my other Uproar varieties, a storm took out

a lot of my plants as well as the 'Scarlet' but the 'Scarlet' seemed to be a bit sturdier? or shorter? and stayed a bit more upright meaning I didn't have to wait as long for it to recover; The 'Scarlet' was definitely the most reliable of the Uproar colors I planted, all of the Uproar varieties seemed to have a short window of suitability for cutting, I cut three times a week, and found that I was deadheading a lot of blooms, I probably could have cut longer stems on all of the Uproar varieties, but just as long as I needed for market bouquets; I had anticipated that it would be a bright yellow red but found it more towards a darker orangey red, it was very consistent blooming with the other two colours in the series, an excellent choice for bouquets, sown May 12 and first bloom on July 10, I found the blooms consistent in size and they kept producing until a hurricane Sept 24 ended the season prematurely, same overall height as the other Uproars, I hope Syngenta will soon make seed available for the cut flower market, the Uproar series would also make very showy choice for a taller border in an ornamental garden, the Uproar zinnias were definitely the winners in the 2022 trial; Good vase life; Really liked the tomato soup color, very popular at market; Looks like bugs love this variety, I don't know why!

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.) ¹	Market appreciation rating ²	Ease of cultivation rating ²	Grow again rating ²	Average postharvest life (days)
Celosia Celway Orange	5.7 1-14	19.0 6-36	4.1 3-5	4.2 2-5	4.4 3-5	8.5 7-14
Celosia Celway Purple	5.7 2-16	20.8 6-40	3.7 2-5	3.8 1-5	4.5 4-5	8.4 6-14
Celosia spicata Sharon	9.6 1-88	20.9 12-33	3.8 2-5	3.8 3-5	4.4 2-5	9.5 7-14
Celosia spicata Xantippe	6.9 1-15	21.3 12-40	3.3 1-5	3.1 1-5	4.1 1-5	9.1 7-14
Celosia Sunday Cherry Improved	4.3 1-10	17.0 6-24	3.5 1-5	3.5 1-5	4.1 1-5	8.8 7-10
Celosia Sunday Red	5.2 1-12	17.0 6-36	3.9 1-5	4.1 1-5	4.1 1-5	8.9 7-10
Didiscus Lace Pink	5.8 1-12	13.9 8-24	4.0 1-5	4.1 1-5	3.4 1-5	7.0 5-9
Didiscus Lace White	5.8 2-14	13.1 6-24	3.7 1-5	3.5 1-5	3.5 1-5	7.3 5-10
Echinacea purpurea Green	2.1 1-5	13.8 8-20	2.8 1-5	2.7 1-4	3.1 1-4	14.0 14
Kale Crane Carmine	1.0 1	19.9 6-30	4.0 1-5	3.8 1-5	4.3 1-5	11.5 7-14
Kale Crane Ruffle Red	1.0 1	19.8 6-33	4.2 1-5	4.2 1-5	4.2 1-5	11.0 7-14
Kale Crane Ruffle White	1.0 1	19.2 6-30	4.5 1-5	4.2 1-5	4.5 1-5	11.2 7-14
Limonium bonduelli	10.1 5-20	18.4 5-27	2.8 1-4	2.6 1-4	3.9 2-5	44.3 7-14
Limonium QIS Mix Improved	6.3 3-12	19.0 6-34	3.6 1-5	3.0 1-5	3.5 1-5	10.3 7-14
Lisianthus Arena III White	2.8 1-6	18.5 8-32	4.1 3-5	3.9 1-5	3.3 2-5	14.0 14
Lisianthus Corelli III Yellow Imp	2.9 1-6	18.8 8-32	3.5 1-5	3.8 2-5	3.5 2-5	14.0 14
Lisianthus Mariachi Light Pink	3.2 1-8	19.7 14-30	4.3 3-5	4.2 3-5	3.0 2-4	14.0 14
Lisianthus Rosanne 2 Clear Green	2.3 1-4	18.1 6-28	3.7 2-5	3.7 2-5	3.1 2-5	9.5 5-14

Species and cultivar	Yield (stems/plant)	Stem length (in.) ¹	Market appreciation rating ²	Ease of cultivation rating ²	Grow again rating ²	Average postharvest life (days)
Lisianthus Voyage 2 First Love	2.3 1-4	20.3 13-30	4.0 2-5	4.1 2-5	3.5 2-5	14.0 14
Lisianthus Voyage 3 Champagne	3.1 1-8	21.4 13-36	5.0 5	4.9 4-5	3.4 2-5	14.0 14
Marigold Angka Deep Gold	9.5 2-20	17.4 6-30	3.5 1-5	3.6 2-5	4.1 2-5	12.8 7-21
Marigold Angka Orange	6.7 1-20	21.6 6-36	3.6 1-5	3.9 2-5	4.4 2-5	13.0 7-21
Marigold Angka Yellow	7.6 2-20	18.3 6-36	3.3 1-5	3.9 3-5	4.4 3-5	13.0 7-21
Marigold Cana Yellow	6.3 3-12	19.8 6-36	3.0 1-5	3.4 1-5	4.0 1-5	12.0 7-21
Marigold Kanthong Deep Gold	8.8 2-24	18.9 6-36	4.0 3-5	4.4 4-5	4.6 3-5	12.2 7-21
Marigold Kanthong Deep Gold Extra	7.9 2-20	21.5 6-36	3.0 1-4	4.0 3-5	4.5 3-5	8.5 7-10
Marigold Lanchang Orange	4.6 1-9	18.3 6-36	3.0 1-4	4.0 2-5	4.2 2-5	10.5 7-14
Marigold Maesa Deep Gold	7.6 1-20	18.2 6-24	3.4 1-5	4.1 2-5	4.4 2-5	11.4 7-14
Nigella Albion Black Pod	5.0 1-10	15.6 8-23	3.2 1-5	3.3 1-5	4.0 2-5	8.3 7-10
Nigella Albion Green Pod	5.0 1-10	15.0 8-24	2.8 1-5	3.1 1-5	4.0 2-5	8.3 7-10
Stock Quartet Deep Yellow	1.7 1-7	18.2 6-30	4.5 4-5	4.3 3-5	4.3 3-5	8.5 5-14
Zinnia Uproar Deep Yellow	7.3 1-16	18.1 8-28	3.7 1-5	3.7 1-5	4.4 2-5	7.2 5-11
Zinnia Uproar Rose Improved	6.5 2-18	19.1 6-28	4.2 2-5	3.9 1-5	4.5 2-5	7.3 5-11
Zinnia Uproar Scarlet	7.0 2-20	18.6 6-28	3.9 1-5	3.6 1-5	4.2 1-5	6.4 5-11

¹Data 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.

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

NORTHEAST

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



Jennifer Marks

Trademarks Flower Farm
hello@trademarksflowers.com

Firstly, thank you all so much for the opportunity to serve as the ASCFG Northeast Regional Director! I am so honored to be chosen, and I cannot wait to connect with more of you. I hope to be a resource to continue learning, and to help foster positive relationships as much as possible. Please don't hesitate to reach out with questions, concerns, or general ideas about how I can support you on your growing journey!

A little about me: I own Trademarks Flower Farm in central New York State, where I grow intensively on one acre for one farmers' market, our flower CSA, and florist sales. We specialize in hoophouse-grown ranunculus. I live on my farm with my husband, various pets and farm animals, and am expecting my first child this spring (currently welcoming advice on farming with a newborn!).

When we first bought the farm, it was a complete disaster as the property had been abandoned for at least seven years. The house was in shambles, the fields completely overgrown, and



the yards were littered with thousands of empty cat food cans from a squatter who happened to hoard cats (no, not kidding).

Luckily, we got one heck of a deal on the place! Over the years we have renovated, brought the fields and soil back to life, and have built a ton of infrastructure (several barns and outbuildings, a frost-free irrigation system, fenced-in pastures, and six hoophouses), and now have a thriving business and lovely home.

As we rapidly head into the new year, I am finalizing our annual crop planning process, which has evolved quite a bit over the years. When I first started my farm, I wasn't great at crop planning, and often forgot about flowers or messed up planting dates, and didn't account for finances in any part of it. Planning felt overwhelming, frustrating, and downright stressful. But, over the years I have tweaked the process, and now find it easy. It greatly contributes to the farm's success.

A good crop planning process is essential if you want a successful and profitable farm. Without one, you are working without any aims, goals, targets, or direction. Simply choosing what flowers you want to grow and deciding when to start the seeds is not a solid plan to achieve your business and financial goals. A good crop planning process will force you to get clear on how much money you want to make, from what, and a concrete plan on how to make it happen.

On a farm it's rare than anything goes exactly to plan, but you still need a guide to lead you through. The old Ben Franklin adage rings true in this situation: "If you fail to plan, you are planning to fail."

Here's an overview of my process:

Step 1: Set Financial Goals

In this step, I use holistic financial management to set goals with profit first in mind. The equation looks like this: $PROFIT = INCOME - EXPENSES$. Based off past years' performances and future goals, I pick a realistic profit number to shoot for and then plan what income I will have to make in order to reach that goal. Finally, I budget for all my expenses. I find it useful to briefly plan out financial goals for the next 3-5 years, just to help me visualize the direction the business is headed in. This practice has been a game-changer for me, because surprisingly, it's been so accurate at telling the future! Each year I have exceeded the profit and income goal that I have written down in this step!

Step 2: Make a Sales Projections and Marketing Chart

In this step I list all my sales outlets (farmers' market, CSA, weddings, etc.) and write down an educated guess on how much revenue each one will generate per month. These

numbers are based on previous years' sales records and realistic goals for the future. Then, I will total my projected gross income per outlet. This number should ideally come out somewhere near my projected gross income from Step 1. If it's not, I make any necessary adjustments.

These numbers also serve a secondary purpose as sales targets for each month throughout the season. Each week and month I keep an eye on my sales to ensure I'm meeting my goals. If something isn't working out the way I had planned, I do my best to figure out why.

In this step I also create a marketing chart, where I list every crop I plan to grow and project how many bunches of each crop I will need to (or think I can) sell. I refer to past crop sales records to make appropriate projections. This helps to predict an accurate number of flowers I need to grow to A) hit my sales target numbers but also B) do not overproduce. Some overproduction and waste on a farm is inevitable, but it can really dig into profits, so I avoid it as much as possible.

I make sure that the projected sales of each crop roughly totals my overall projected income goal from step one (not including miscellaneous non-flower sales). If it doesn't, I make adjustments as necessary.

Step 3: Production Plan and Field Map

In this step I use the total number of bunches I need to produce of each crop from my marketing chart in the previous step to calculate how much of each crop I will need to grow. I calculate the number of bed feet that will be dedicated to each crop, along with the total number of plants. Then, I assign each crop to a specific growing bed on the farm. Keeping a master field map is extremely useful for this!

Often my field map changes a bit throughout the season, but it is important to have a space dedicated on your farm for specific crops to go. Without this plan in place, you may find yourself in mid-June staring at 800 zinnia transplants without a place to plant them (not speaking from experience or anything...). While you rush to get ground prepared over the coming week, the transplants will get root-bound and unhealthy, which will result in decreased yield, and increased, unnecessary stress!

Step 4: Greenhouse Plan

My greenhouse plan is a planting schedule that tells me exactly when to start my seeds, how many to start, when to transplant, and when I can expect to have flowers. Taking the time to create this document upfront will save you loads of time, stress, and overwhelm during the "busy season." Truth be told, I would be completely lost without my greenhouse plan.

On our farm, everything is planned by the week number, starting with the first week in January (week one), through the last week in December (week 52). This makes everything easy and organized.

I start this process by referring to my marketing chart from step 2, and using that information to plan out how many seeds to start of each crop, when to start my seeds (or order plugs), when to transplant, and a projected first harvest week. I consider proper succession planning and harvest windows during this step. Keep in mind that the information I use (days to maturity, days in greenhouse, etc.) is based on past years' records (not just the back of seed packets). I find it very useful to keep track of this information, since the DTM on the back of seed packets is not always accurate based on your unique growing conditions. Finally, I copy all the seeding and transplant dates into the farm calendar and planner.

That's it! This process has helped put my mind at ease, knowing I will be producing enough flowers to reach my sales goals, but will not be overproducing or wasting flowers either. Since implementing this process, activities flow much smoother on my farm, and we waste much less product.

It is such a relief to do all of the planning and scheduling ahead of the season, and put everything into my calendar/planner for the entire year. Then, as the year rolls by, all I have to do is open my calendar each week to see what has to be done. Being this organized is truly a GIFT on a busy, chaotic farm.

MID-ATLANTIC

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



Dave Delbo
 Dave's Flowers
 davesflowerselys@aol.com

Writing this article for the 2023 winter edition of the *The Cut Flower Quarterly* is my first responsibility as your newly-elected Regional Director. I am honored to have been elected to serve the Mid-Atlantic Region following Michelle Elston, who is now the Treasurer of this great organization; Lisa Ziegler, Jennie Love, Becky Devlin, Andrea Gagnon, Dave Dowling, Bob Wollam, and the six others to serve this region since the ASCFG was formed in 1988.

Let me introduce myself. My business started in 1981 (I was still in high school), when my brother and I put gladiolus on a card table along the state highway that we lived on. We sold only at the roadside stand for a year or two, then started

attending a farmers’ market. After graduating high school, I worked full-time at an orchard while still selling at the roadside stand and doing two markets on Saturday. In the fall of 1991, I quit my job at the orchard and had just the flower business.

Somewhere along the way, I started selling to florists and found out it was much easier for me to make money selling to florists, so that became our focus and main part of the business. I now sell to about 40 florists, delivering four days a week. We still do farmers’ markets and have the roadside stand, but they now account for only about 20 percent of our gross sales.

In 1994, I married my wife Alicia and we bought our own house and 2.7 acres of land, and moved all the growing to our home, where we have deep topsoil and a good well, unlike where I grew up. My wife and I have two children, Greg and Jessica. They were my cheap labor for many years and still are even though they both have jobs away from the farm now. Both kids spent many hours on the road with me as I made my routes selling to florists, and I still hear from some of the long-time florists about how I use to change diapers in their shops.



We now grow on 3-4 acres (we plant on an acre or two of our neighbors as well) of mostly annuals along with four greenhouses, which are mostly used to start seeds and grow a few lilies and other flowers in crates.

I first heard of the ASCFG somewhere in the late 90’s. I finally joined in 2005 when I heard the national conference was coming to Cramer’s Farm in Pennsylvania. I was one of 36 new members that quarter. Now with the much higher social media presence and the increased popularity of flower farming, there were almost 200 new members in the summer 2022 edition of the *Quarterly*. As of this report, there are 454 members in the Mid-Atlantic Region alone. I am sure that is higher than the total number of members in the ASCFG back in 2005 when I joined.

It would be great if I could meet each one of you in person as I only know a small portion of the members. If anyone has any concerns, questions or ideas to help the organization grow, don’t hesitate to contact me via email davesflowerspa@gmail.com or by phone at (570) 245-8889. And if anyone would like a visit from me, I would love to visit your farms, especially if you are growing cut flowers year-round.

SOUTHEAST

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



Nicolette Irving

Flourish Flower Farm

hello@flourishflowerfarm.com

I am honored to be the new Southeast Regional Director, and I am nervous/excited to follow in the footsteps of the wonderful Linda Doan and Val Schirmer. As a member of the ASCFG, I have gained invaluable knowledge, access to resources and have made so many meaningful friendships with other growers—and now I’m excited to deepen my connections and help support this wonderful organization.

This past year has been the most “settled” season that we’ve had on our farm—perhaps ever—and we’re looking into the 2023 season with excitement and an open mind, since constant change seems to be the norm. Here at Flourish Flower Farm, we have previously focused heavily on sales to florists while also designing for weddings, hosting workshops on the farm, operating a bouquet subscription program, and more. I began to feel spread thin over the past 5 years as the wedding and workshop side of our business grew—as did demand for flowers from florists, both local and those we shipped to across the country—but we didn’t necessarily have the space, labor or desire to expand production to meet demand. Going into 2022, I did lots of soul-searching about what aspects of the business brought me joy, caused stress, what aspects generated the most revenue, and where our margins could be tightened. This was an extremely helpful exercise which helped me to make some big changes moving forward.

Two of the big changes that we made this year were limiting (well, practically eliminating) sales to florists, and opening a farmstand on our property. The demand for on-farm sales has always been high, and since we never had a way to meet that demand because the farm is our home and we try to keep some work-life privacy, we had been doing lots of deliveries



the past several years. Deliveries definitely fell into the “high stress and low-margin” categories during my soul-searching. We received a grant from the NC Tobacco Trust Commission and WNC AgOptions to help us build a farmstand on a part of our farm that is further away from our house and studio. While we’re still honing the operating schedule, we finally have a way to meet the demand of on-farm sales with our new farmstand!

In the spirit of embracing change, I asked our Southeast Region Members what changes they made to their own farm sales operation this past year, if they tried anything new and what the best part of their season was. Here is what some folks had to say:



Our farm is a North Carolina Agritourism destination and next year we hope to open a you-pick area.”

Sherry Kelly of Chatuge Springs Flower Farm in Hayesville, North Carolina says that “The long-standing florist in town closed/retired, which left a big void and we’ve been successful in helping to fill a need. We have a roadside air conditioned flower vardo, open every day in season, and because we’re on the Appalachian Parkway (Highway 64) we get quite a number of tourists popping in.

Melissa Scott of In Bloom Flower Farm in Hephzibah, Georgia says that “This year we scaled up a bit by adding a large warm season field! I learned that my florist clientele wants the side shoots left available to them for use and some use the foliage from the stems. I’ve added this into my questions for new customers so I can find special things that each likes or dislikes. My favorite part of our year was spring flowers!



Whoa! Game changer adding in the ranunculus and anemones!”

Linda Doan of Aunt Willie’s Wildflowers in Blountville, Tennessee says “The only thing we did differently this year was not leave the farm for any kind of deliveries. Covid taught us that people are willing to come our way, so even our weddings and CSAs were picked up in the cooler at their convenience. I tried not to even go down to meet folks, and that saved a lot of time.”

Shellie Watkins Ritzman of My Garden Blooms in Kernersville, North Carolina says that “We doubled our on-the-farm events this season because they have been so popular. The events sold out very quickly due to the amazing small business owners we invited to teach classes. We always add our flower bar, refreshments, and other farm products so that we have a revenue portion of the ticket. We tried marketing edible flowers this season and it was a huge success! I had bakers, tea blenders, and charcuterie board businesses reaching out. It was a very profitable product and we are focusing on adding even more edible flowers to be able to have things year round. I’d say having guests come out for our events was the best part of our season. We have created beautiful spaces around the farm and in our new heated/cooled workshop! I love seeing people’s mouths drop open and the “wow” when they walk in the workshop space. It has allowed us to have events in the hot summer and cold winters, which is a huge revenue boost for us.”

Jodie McCord of Great Blue Farms and Garden in Topton, North Carolina says that “I had a lot of changes for this year and plan even more for next year. In 2020-2021 most of our farm income came from our wedding work, with a few bouquet sales and workshops at a local floral shop. This year we have added a biweekly boutique bouquet sales avenue, florist sales,

on-farm workshops, and a greenhouse (from a WNC AgOptions grant). We had 25 weddings this year which have been our greatest challenge. Because we have added the other sales opportunities for the flowers that we grow, I am cutting our wedding work by 75%. Weddings no longer serve our mission of growing local, sustainable flowers. We will be focusing on boutique sales, pop-up flower bars, and florist sales. The new greenhouse will enable us to grow and propagate for on-farm plant sales, do more on-farm workshops, and a greater seed-starting operation (all of the things I love). Any business has to continue to assess what is a good fit and what serves the people working that business. At least for the coming year, I think we have fine-tuned what will serve us best...but stay tuned: just like the garden, it's always evolving."

Loretta Ball of The Never Ending Flower Farm in Barnardsville, North Carolina says that "So much has happened on our farm this season. With receiving the Tobacco Trust Fund AgOptions Grant, we were able to put in a new septic system and add an actual restroom for our you-pick guests and event guests who rent our covered shed. We also bought a pre-built building that houses our restroom, and a small area for our check-in. No more porta-jon or plastic table for you-pick customers! It has been a welcoming addition to our farm and has created a covered space where I can sell other items like fresh eucalyptus bunches, luffa sponges, and sorghum syrup. The only downside to having the restroom is that I have to clean it every day. We also added onto our existing covered shed and made the space a total of 1,250 sq. ft. We rent this space out for birthday parties, baby/bridal showers, private dinners and small weddings of 40 people max."



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

Lifetime Membership - Why Now?

Eight years ago I was a "newbie" to flower farming. Like many who get into this unique career, I was eager to learn everything I could about growing flowers and the business of flower farming. Because I started farming at age 60, I knew I couldn't wait 20 years to figure it out for myself. I wanted to hit the ground running.

So in April 2015 I attended my first workshop at Jennie Love's farm—I was extremely naive. Jennie encouraged anyone serious about commercial cut flower farming to join the ASCFG (it took several years before these letters rolled off my tongue in the right order). I joined right away and started to benefit from all the education, conferences, networking, and research the ASCFG had to offer. I am very grateful to the ASCFG for kick-starting my encore career as a flower farmer!

Fast forward to today, and my appreciation for the ASCFG has only grown. Since the early years when my learning curve was steep and I was soaking up as much information as possible to create my own personal business, my commitment to the ASCFG has evolved. I now better understand and value the work the ASCFG does on behalf of all members in the area of cut flower research, being a voice for the local flower industry, and their mission to be relevant for new and seasoned growers alike in new and creative ways.

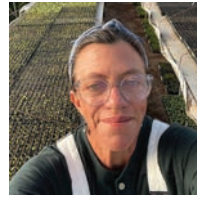
The Board and Staff work hard to meet member needs and always welcome your input and involvement.

I don't remember ever considering the Lifetime Membership option or maybe I just ignored it until recently. As a new grower eight years ago, I doubt I would have justified paying this amount of money. In hindsight, it would have been a great investment as I would be nearing the end of my annual member dues offsetting the \$2000 Lifetime dues.

In 2023 I plan to become a Lifetime Member. I likely I won't be farming 10 years from now, but I feel compelled to help ensure the success of the ASCFG into the future. If you plan to be in the flower farming business for the long term,



SOUTH AND CENTRAL
 Arizona, Arkansas, Colorado, Louisiana,
 New Mexico, Oklahoma, Texas, and Utah



Shanti Rade
 Whipstone Farm
 info@whipstone.com

Switching Things Up

Sometimes I just keep doing the same thing because it works. And while there is absolutely nothing wrong with what works, it can also lead to stagnation. If I don't think outside the box and take some risks, I may miss some real opportunities. After being in the business of farming for a long time (closing in on 20 years), sometimes it's hard to want to change how you do things. But it is also very hard to make breakthroughs when we are stuck in our patterns. Winter is here and I am kind of in a rut, which is normal for me. But I am trying hard to get inspired, get my groove back, and think outside the box to make our business better and my outlook better too.

Here is one just one example of changing how we do things. In this case it is the timing of when we plant lisianthus. But the lesson can be applied to many areas.

Lisianthus

For many years we planted lisianthus in mid-March to early April, like most other folks I know in our range of zones. We are in zone 7a, in the higher elevations of Arizona. Hot, dry days, but still very chilly nights. We want to capitalize on some cooler growing time for lisianthus roots to establish, even though they will eventually enjoy the high heat of summer when coming into bloom.

I wish I could remember who I first noticed planting lisianthus in fall, but I can't. A little light bulb went off for me when I saw this. So, I decided to try late fall planting of lisis, à la the method we use for many cool season annuals (aka cool flowers). I could have been smart and just tried a few trays this way, but no—I went all in the first year. On another note, I have grown my own plants from seed and brought in purchased plugs; of course there are advantages to each, but I have transitioned to all purchased plugs, it's just less stressful for me that way.

you might consider the Lifetime option sooner rather than later. Some of the reasons I've decided to become a Lifetime Member are:

1. To avoid receiving repeated annual renewal letters.
2. The ASCFG has not raised dues for over 10 years, but a Lifetime Membership protects you from any future dues increase.
3. The ASCFG is unique in that it conducts cut flower research that benefits us all.
4. Members support members and we all benefit from the vast knowledge of our membership.
5. The Board strives to be relevant to growers at all stages and is committed to this goal.
6. I think it's important to belong to the professional association representing my business and to stay informed.
7. It's a way to honor the 35th anniversary of the ASCFG.
8. There is a special offer until March 31, 2023 to save \$200 off the regular Lifetime rate, and an option for a 12-month payment plan.

Whether you renew your annual dues in 2023 or choose to become a Lifetime Member, we value your membership. Keep going, keep growing.

The Deets

We planted purchased plugs in early December of 2021 into an unheated high tunnel. I would have liked them to go in the ground earlier to get established before it was super cold, but I didn't really nail my date for plug orders (so hard to get



to in summer), so we were about a month behind my envisioned schedule. I was worried this was way too late and too cold for those tiny lisi plugs to establish. But despite all my concern, they performed really well through the cold. We hooped and added heavy row cover/frost cloth for the winter, uncovering on warm sunny days and venting the sides of the tunnel as needed. We did have one super cold snap down to about 9 deg F where the row cover blew off some of the rows. There was definitely some cold damage, but most of the plants bounced back with new growth after a few weeks.

The crop growth was painfully slow. I mean, isn't it always with lisianthus? But so much slower in the winter. We were very conscious not to water too much. We needed to keep those tiny roots from drying out, but with

this disease-prone crop, I was careful not to keep the soil too wet during the cold period, especially when the plants were small.

The Results

By spring when the ranunculus and poppies were blooming and I had run out of space for some of the plants I would have liked to overwinter, I really started to doubt my decision about the lisianthus and the space they were taking up. The lisis were still pretty tiny. But in the end we had a fabulous crop, maybe our best ever. They started blooming in June and into early July, one variety after the next. Then we had a nice transition to the spring-planted, field-grown lisianthus from late July into August. We also had a good second flush from the high tunnel in September. Usually our lisianthus all comes on at once over just about a month and it is overwhelming to keep up with harvesting and trying to sell it all. It still felt a little overwhelming this last year, but spreading it over a longer harvest window was definitely advantageous.

We were able to plant, weed, then weed again, and stake and net the crop all during the time of the season when other work is more manageable and I am still scraping around trying to find enough work to keep the crew busy. The season prior we lost over 50% of our lisianthus crop because we ran out of time (or didn't prioritize) weeding them. Grass and lisianthus are a bad combination, just so you know. During the winter and early spring, weeding this crop was easy and quick, because the weeds grow so much slower. I would say being able to keep the weeds in check early was the second most advantageous aspect, next to bloom time.

The one major drawback was tying up the tunnel space for so much of the winter for what is still essentially a summer crop. But all in all, it felt successful—so much so that I am doing it again. Plugs are here and going in the ground the second week of November. I ordered them all from Farmer Bailey Plugs. I like their selection, size and ordering ease, and if you get 30 trays in one ship-

ment, it comes in one giant freight box. I will report back on how they do in 2023. If you want more details of how we





WEST AND NORTHWEST

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



Erin McMullen

Rain Drop Farm

raindropfarm@peak.org

plant, I have a lisianthus highlight on our Instagram account @whipstonefarm you might appreciate which shows how we have changed our spacing, started planting without fabric, and all the ways I keep tweaking this crop.

I don't know that I am really advocating for all or any of you to try this method for your lisianthus. That would depend on your winter temperatures, winter work flow, and how much covered space you have available. But if all the boxes check out for you, then maybe it's worth a try. Mainly I am advocating for trying something new, not to get stuck in the mindset of "this is how we have always done it", and thinking outside the box, whether that's to extend your growing season or branch into new crops. Trying new things on a smaller scale is always a good idea too; don't be like me.

I'd love to know if anyone else is fall planting their lisianthus. Or if you are trying other crops in new and innovative ways and how is that going for you? Send me a note!

Growing as a farmer is about so much more than doing more, growing more, or selling more. For me, it's become about finding ways to do this job in a way that continues to challenge and excite me from year to year, season to season. If you had told my 20-year-old self that I would enjoy reading harvest records or be nerding out about farm efficiencies I would have rolled my eyes, I mean, as if. But, here we are.

Identifying time sinks and waste is a never-ending process. From the simplest things, like hanging tools to ensure that they are always put away, to more complex systems intended to minimize worker steps, we've seen great improvement in our efficiencies by taking time to pinpoint those kinds of waste.

With efficiency comes increased productivity, improved yields, and an overall benefit to profitability. I mean, that's the idea, right? We have spent a lot of brain power over the last few years, as our farm and output have increased, trying to master the art of working smarter, not harder. It's definitely a process, but here are a few things that we've found to be really helpful. Hopefully you will find a gem that can help you on your farm.

A lot of where we've spent our time drilling down on efficiencies is during harvest, which is also the sexy part, so let's get down to it.

First things first, creating expectations is imperative. When we are talking about harvest, the obvious place to start is with the flowers, but let's back up and think about what we'll need to harvest quickly and precisely.

We have field trucks that go with the harvest crew. These trucks are stocked with everything the crew needs as they move from place to place and crop to crop. Each truck has a



large Tupperware tote filled with rubber bands, tags, sharpies, price lists, gloves, extra pruners, a sharpener, and a first aid kit, sunscreen, and extra drinking water. Maybe this all sounds like a bit more than you need, maybe your field is close enough to your house, barn or processing space that you don't use a vehicle or cart. The point here is to make sure that the tools of your harvest are organized, accounted for, and readily available when you need them. Nothing drags a harvest out like having to stop and search for that bag of rubber bands that you know you bought and put somewhere, or having to drive back to the barn because someone forgot to restock any of the above items.

Having a harvest plan can make or break the quality and quantity of your product. Have a plan for order of harvest, processing, and postharvest. We fill and treat all of our buckets when they go to the field. Take some time during the winter and spring to determine what treatment you'll be using for what products and make sure to have it on hand before the harvest season kicks off. For example, we use CVBN tabs in all of our buckets, so ensuring that not only do we have those on hand when harvest starts but also that all of our staff knows that is an expectation from the get go helps to eliminate costly mistakes.

Having a time frame for harvest of specific crops is important as well. Knowing that the hoops are going to heat up early and that anything we plan to harvest out of them needs to happen first thing in the morning seems obvious, but in practice can be challenging. Setting a loose schedule for each harvest day (and recognizing when and if it needs to change), helps to keep things moving throughout the day. It could be as simple as harvest hoops, move to field 2, move to field 3, finish day harvesting zinnias. Letting the whole crew know the day's plan will help everyone stay on the same page and have clear expectations.

Setting parameters for crops is also imperative. We have standards for all of our crops that employees are trained to. This includes stem count and height as well as stage of harvest, bunches per bucket, and bunch feel (in the case of growers' bunches). How do you sell your flowers? What is the market expectation? For us, we harvest all of our dahlias into 10-stem bunches, with the exception of dinner plates (and grocery, but that's a whole other story), and we put 5 bunches per 10L bucket. This helps immensely during harvest as we are counting bunches and allocating orders, keeping us from having to handle any flower more than is absolutely necessary. Each crop is unique, so having a matrix for each crop you grow is super helpful. A sheet with these parameters can live in each harvest tote for quick reference.

Maybe the single biggest efficiency step that we take during harvest is to utilize runners. We employ runners during the high season, in a ratio of about 1 runner for every 3 harvesters. The main job of a runner is to keep flowers out of the hands of the harvesters. They literally just run bunches, or bulk stems



that are destined for bouquets, from the harvest crew back to the trucks and into water as quickly (and gently) as possible. Every wasted step by a harvester takes away from the bottom line. Every time we change tasks we lose time, so when I stop cutting to walk flowers to a bucket I'm missing out on the continuation of a task that I was already doing. I'm shifting my focus to something else and losing efficiency. If the harvester is having to walk down a row to drop off bunches, they're not cutting flowers, and if they're not cutting flowers then we're not filling buckets.

When we are in full production we'll have the runners constantly moving, filling buckets (treating the water as they go), running bunches, organizing buckets (and ensuring that the counts are correct), running supplies for the harvest crew (rubber bands), and shuttling flowers out of the field and back to the barn and cooler as fast as possible. While not a highly skilled position, the runner spot is a great place to start a young employee (or maybe a first employee!), as it gives them a front row to the action. We've had many runners who have moved from that position into great harvesters as they become more familiar with the crops, the specs, and the systems as a whole.

Now, if you're thinking to yourself, sounds dreamy, Erin, but I don't have any employees. I get it. But there are still nuggets in there that you should be looking at. Setting up the parameters of your harvest now, identifying your systems, and expectations when you are your only employee will be invaluable in the future when you go to hire that first person. Also, don't sell yourself short. You may be closer to that step of

hiring than you think. If you are an efficient harvester, having someone run for you could add productivity. Could you cut 5 more bunches per hour? 10? 25? How much is that position worth for a few hours of those kind of harvest numbers?

Also, get yourself a fanny pack or apron because you should, at the very least, always have all of the rubber bands with you.

Bottom line, take some time to really think through the time spent on your farm, both yours and your employees'. Find opportunities to visit other farms and connect with other farmers (ASCFG Farm Tours, anyone?). You may be able to identify places where you can be more efficient, you'll definitely find places where you're doing a great job (which always feels good), and you'll find yourself on that path to working smarter, not harder.



Early summer bouquets ready to go out the door



Late summer subscription bouquets

CANADA

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



Sarah Kistner

Stone Meadow Gardens
stonemeadowflowers@gmail.com

First, I want to say how honoured I am to be serving as your new Regional Director for Canada! A huge thank you is owed to Janis for all the work she has done—as the first ever Canada Director—to help flower farmers across the country over the last SIX years. I've got big shoes to fill!

Winter is a time for planning and reflection. A time to review the past season, but do you have a formal process for looking back at your year? We didn't! That's why I was happy to find "Habit Farming", the Instagram account and blog from Taylor Mendell of Footprint Farm in Vermont. A few years back she shared a framework for what can feel like an overwhelming task—doing an annual review of your farm operation. Previously our process felt disorganized, basically just a pile of lists. It was hard to know where to start and what to prioritize. This process was really helpful for us, so I thought this would be a great time to share it with you!

Taylor outlines the process into eight steps, and I strongly encourage you to go visit her website, <https://habitfarming.weebly.com/blog/category/hippo-camp>, to fully walk yourself

through the process. I'll take you through the basics here and then share an example of how we used it on our farm.

The first step is probably the most important because this serves as the foundation of the whole exercise. To begin, make two simple lists of all the season's achievements and disappointments. Just fire them off—big or small—and don't stop to analyze; that comes later. Think finances, processes, farm fertility, crops, tools, staffing, etc. Start with your achievements and be specific. For example, instead of saying, "We had lots of happy customers." try "We sold 75 summer subscriptions, flowered 10 small weddings, and provided 60 bouquets a week to our local co-op." I like to also include small things like always having clean buckets when you need them, or "I answered all emails within two days." I'm probably not alone in giving negative things a heavier weight than they deserve, so seeing the list of achievements can be an empowering reminder of all the things you're doing right.

Then go ahead with the disappointments. What wasn't working or made you feel frustrated? Are tools left scattered around the farm? Are there bottlenecks that hold you back? And again—be specific. This really helps later when you're trying to determine what needs to change. If you were frustrated on delivery days, ask why. And then ask why again. Keep drilling down until you get a specific answer.

Now take your "disappointments" list and categorize them; try highlighters to color code your list into four categories. Can be solved by: research, infrastructure improvement, equipment improvement, or refining systems. Don't get hung up on trying to solve the problems here, just focus on categorizing.

Next, look at each list item a little closer and then label each item with either Stop Doing, Start Doing, or Keep Doing.



Getting ready to prep the studio for bouquet making

I'm going to simplify and condense the next few steps here, and again encourage you to visit Taylor's website where she outlines this process in depth. The quality of the result depends on you doing the work.

Now, with lists in hand, you're ready for the next step: setting goals for the upcoming year. Looking at your disappointments you may see some overarching patterns emerge. What is something that you'd really like to change? What are some dreams for next year? This is a place for big ideas. Don't include things that can be checked off on a daily to-do list. This is for season-long goals; both business and personal. I'm sure we're all guilty of putting our business before our personal health.

After writing down a few big goals, you're ready to start making budgets. In this step you're going to create an "ideal" investment budget—basically a wish list—so make it fun, sky's the limit! Go back to your disappointments list again and refer to the categories you made. Write down all the equipment, tools, and infrastructure investments you would make

to turn those disappointments into achievements. Would a bigger walk-in cooler solve some problems? A better layout for your work area?

Now do the same thing for an "ideal" personal budget. Are you paying yourself enough (anything?!)? Are your needs met?

Next, you're going to create an actual monthly budget for your farm. Hold on to those good feelings you imagined in your "ideal" farm life because numbers can feel scary, even discouraging sometimes. But remember, they can also be a great tool for motivating us! Using data from the previous year (expenses and income), plus your newly minted ideal budgets, make a working monthly budget.

Plug in the numbers and see what your bottom line is. What's the difference between what you made last year and what you would need to make this year to cover all your expenses, your personal budget, and your wish list? Chances are that the number you're looking at is negative—meaning that you'd have to increase your income (and/or decrease expenses) to reach those goals. But now you get to start playing and tweaking the numbers. Can you raise your prices? Can you gain some efficiencies to increase production? Do you need to sell a few more bouquets? Now is the time to challenge yourself! Sure, you might not have the money to build a brand-new workspace and cooler this year, but I encourage you to not underestimate yourself. You can reach some big goals when you have a plan.

Once you get that budget dialed in, this will lead straight into your production and crop plans. Just how many flowers will you need to grow (and sell for the right price) to reach that goal?

Can you see how it all fits together? How each step of the process is tied to the one before it? When you follow the steps, you can not only set some big goals, but you can create your own road map to take you there.

Now I'll give you an example of how we used this framework to make some changes and set goals on our farm. We had a healthy achievements list: a new farmstand that was going quite well, and our bouquet subscription had doubled in membership. But our disappointments list was long—we were feeling like we were spread too thin and didn't have enough time in the fields. So, we asked ourselves why. We determined that we were scattered and tired because we had too many sales channels and were spending too much time off the farm. We were doing farmers' markets, which were successful, but the hours—9:00 to 2:00—were terrible (in our opinion). It ate up an entire day. We were also doing small à la carte weddings, which although I loved the creativity of the job (and the price point) it left me feeling stressed out. I wasn't offering the best service I could, and I was staying up too late Friday nights to get everything done which meant I didn't have enough bouquets ready for the farmstand crowd on Saturday. Of course, there are many ways to solve these problems and different farms would make different choices, but here's what

we did. We asked, what if we put those on the “Stop Doing” list to see if we could make it work” After all, we had started our farmstand because we wanted to start funneling people to us, not going to them, and it was working.

With that decision we might solve a few problems at once. If we quit going to the farmers’ market, we would essentially have a whole extra day on the farm. And we would feel less scattered by eliminating two sales channels—weddings and farmers’ markets. This would allow us to focus our energy on the things that we both liked and were working, our farmstand and our subscriptions.

We then used that decision to set some broad goals, which would we hone a little later. We knew we needed to make up for the loss of income from those channels, so we would try to grow our subscription membership and increase our on-farm sales. Now the budgeting comes into play.

We knew we would need to invest some money in making a few improvements to our farmstand. And because we made a personal budget, we knew we would also need to generally grow our overall sales to start paying ourselves something closer to a living wage. This led directly to creating our first ‘SMART’ (Specific, Measurable, Achievable, Realistic, and Timely) goal for the season: We would grow our spring bouquet subscription to 75 members, our summer bouquet subscriptions to 150 members, and increase our farmstand sales by 50% (plus we would “keep doing” our grocery store sales outlets and online dahlia tuber sales). Although they were big goals, we felt like they were within reach.

Once we set our sales targets that told us how many bouquets and bunches we would need to sell to meet that goal. Armed with that information we could now build a crop plan tailored to meet those goals.

And now that we had our production plan sorted and had focused our sales channels, we were able to use that information to help us make our staffing and harvest schedule and to guide us in our marketing strategy.

With some big goals down on paper, we went back to the disappointments list. While your list can help guide you in making big changes, don’t underestimate the power of small changes to make things flow better! Going down our itemized list led us to small investments that we could build into our budget. We stocked up on extra pairs of our favorite clippers and other essential supplies at the beginning of the season because it was often difficult to source tools in our rural area. We bought a mini freezer to store our seeds in the greenhouse, so everything was handy when we needed it, seeds stayed fresh, and we didn’t have to waste any time walking back to the house. In another example, we spent \$5 on a binder for our subscription customer check lists that we used for deliveries. This was a tiny investment, but the bigger change happened with the system.



New checkout at the farm stand

In the winter, I pre-printed all the lists with the date and drop location highlighted across the top along with the total number of bouquets needed. And then used sticky notes, color-coded by drop-off location, marked with the dates as tabs. So, when Carl was ready to deliver, all he needed to do was go to the binder (kept right by the cooler) where he could quickly and easily find the sheets for that day and load the van accordingly. Easy! A small change that made our subscription deliveries run much smoother.

You can see how this can be a very effective tool to not only analyze your business, but to help guide you step-by-step in creating a solid plan for the year ahead. We made this plan in the fall of 2019, so the timing for dropping weddings and farmers’ markets couldn’t have been better (hello 2020 Covid restrictions). Who knew that it would be the perfect time to focus on subscriptions and our farm stand? We met all our goals for that year, and I hope this inspires you to make your annual review and goal setting a new healthy habit for 2023 and beyond!

Meet the ASCFG's Newest Members

- Karen Anderson, Greenhouse on Greendell, Newton, NJ
 Kathleen Armstrong, KR Farms, Bakersfield, CA
 Dana Askew, Floral Habit, Damascus, OR
 Keegan Athey, Down Valley Flowers, Montrose, CO
 Christy Avey, Hope Filled Farm, Ellensburg, WA
 Megan Bantle, Full Well Farm, Adams, MA
 Kelly Barnett, North Bloomfield, OH
 Kristen Baughman Yeary, Curly Girl Farm, Adamsville, OH
 Kristina Beaumont, Larson Meadows, Coleville, CA
 Geneviève Beauregard, Ferme Boutin Jetté senc.,
 Notre-Dame de Stanbridge, QC
 Maria Berglund, Ishtars Eden, Amity, OR
 Mindy Bidewell, High Q Greenhouses, Sturgeon County, AB
 Amy Blevins, Aspen Meadow Flower Farm, Larkspur, CO
 Marie Borgman, Blue Heron Farm, Afton, VA
 Diana Boyle, Blooming Joy Flower Farm, Wilton, CA
 Aubrey Brinkworth, Local Blooms, Clifton, CO
 Karen Broom, Brooms Blooms, East Flat Rock, NC
 Laura Butchko, Clever Girl Flowers, Columbus, MN
 Christina Campbell, Healing Blooms Flower Farm, Apex, NC
 Cristina Champion, Fogside Farms, Half Moon Bay, CA
 Michelle Cann, Blue Heron Farm, Nellysford, VA
 Susan Card, Misty Vale Flower Farm, Franklin, TN
 Kim Carlsen, Grahamsville, NY
 Alexandra Causey, Blush & Bashful Flower Farm, Franklinton, NC
 Joanne Chamberlain, Willow Brook Farm, Bath, ON
 Meggen Chase, Milkweed Meadow Flowers, Plympton, MA
 Jessi Chmielewski, Jessiwayne Farm, West Newfield, ME
 Rebecca Christopher, Popycock Gardens & Goods,
 Jacksonville, FL
 Sara Clendenin, Willow Spring, NC
 Tara Cobb, Plainfield, IN
 Jackie Colacce, Libby, MT
 Anna Costello, Slatington, PA
 Laura Dautzenberg, Jamesport Farmstead, Riverhead, NY
 Jordon Davis, Jordon's Flower Farm, Tulsa, OK
 Andrea DeRiancho, Jardineira Garden Co., Ringoes, NJ
 Shari Froelich, Harmony Acres, Alpena, MI
 Amber Galusha, Skywyld Farm, Cottonwood, CA
 Laurie Garza, Fleurie, Reedley, CA
 Angela Gerbrandt, Little Treasures Farm & Flowers, LaCrete, AB
 Morgan Gilbert, Gastonia, NC
 Lyn Godsey-Hurt, Heavenly Hill Farm, Mead, WA
 Shery Goodman, Sunspring Ranch, Provo, UT
 Carrie Gorham, Grown Heeyah, Lyman, ME
 Becca Greaney, Nightshade Farm & Flowers, New Orleans, LA
 Pam Green, The Flower Cart Lady, Converse, IN
 Caitlin Greene, Peach House Farm, Toccoa, GA
 Julie Gunderson, Little Idaho Farm, Harrison, ID
 Christina Hanson, Sunshine and Flora, Holstein, IA
 Joann Hartwell, Barnstar Florals, Ferndale, WA
 Patricia Hinman, Bare Root Creek Flower Farm, Cumberland, VA
 Regina Holcombe, Cazador Farms, Alpharetta, GA
 Marnie Holoubek, Flowers by Marnie and Jenny, Lexington, KY
 Carrie Huckleby, McMinnville, TN
 Hanna Jallo, Long Dog Dahlias, Long Grove, IA
 Indigo Janes, Thanelpa Farm, Lewiston, ME
 Deb Jenks, OMJ Gardens, New Berlin, WI
 Jennifer Johnson, Summer Thyme Nursery, Lorena, TX
 JoAnn Johnson, Growing Wild, Denmark, WI
 Mary Johnston, Lockhart, TX
 Svava Juliusson, Concession Road Garden, Hagersville, ON
 Mary Anne Kapila, Kapila Farms, Granite Bay, CA
 Amanda King, Lime Rock Flowers, Lititz, PA
 Katie King, Barry Farms, Horse Shoe, NC
 Patricia Kirkpatrick, Small Farm, Inc., Stow, MA
 Amy Kitchen, Sideroad Farm, Markdale, ON
 Jodi Larson, High Desert Dahlias and Blooms by Jo, Kuna, ID
 Gail Ledbetter, Lakota Creek Flower Farm, McLeansville, NC
 Sydney Lewis, June and Jane Flower Co., North Branch, MN
 Heather Lewis, Port Allegany, PA
 Amy Linhart, Humming Harvest Farm, Gig Harbor, WA
 Joan Longton, Farmhouse Flowers, Traverse City, MI
 Holly Lukasiewicz, District 2 Floral Studio, Omaha, NE
 Mary Luken, Knollwood Blossoms, Baltimore, MD
 Kim Lundeen, Timberline Flower Farm, Reno, NV
 Kimberly Lynas, The Inn at West Settlement, Roxbury, NY
 Victoria Mandich, Sweetbay Farms, Landenberg, PA
 Kyrie Martino, Lunenburg, MA
 Gina Marts, The Garden Door, Hot Springs, AR
 Clare McCahill, Perigee Farm, Elbe, WA
 Grant McCarty, Fox River Dahlias, Crystal Lake, IL
 Meredith McGraw, Bishop Bloom and Bounty, Nashville, TN
 Julia McLeod, McLeod Family Farm, Carrollton, GA
 Caitlin Meredith, Quietside Flower Farm, Southwest Harbor, ME
 Monica Meyer, Mo Flowers, Aptos, CA
 Jeanmarie Milne, Lenox, MA
 Anna Monfils, FlowerBird Farm & Garden, Mt. Pleasant, MI
 Megan Moody, Philo Ridge Farm, Charlotte, VT
 Bill Murphy, Late Bloomer Farm, Hamilton, NJ
 Trisha Neill, Ludlow, MA
 Tomoko Nishijima, Miyoshi & Co., Kobuchizawacho,
 Yamanashi, JAPAN
 April Oestman, Sandhill Bloomers, Holyoke, CO
 Sara Olberding, Bella Ren Fields, Abilene, KS
 Kathryn Ovechkin, Pavel's Garden, Crestwood, KY
 Jenny Owens, Flowers by Marnie and Jenny, Lexington, KY
 Mickie Parker, Benton, LA
 Amber Pate, Greenland Flower Fields, Larkspur, CO
 Sheri Perkins, Luna Flower Farm, Sand Springs, OK
 Mary Philpott, Boones Mill, VA
 Jillian Podolsky, Whipwood Gardens, Dillsburg, PA
 Emily Porterfield, Emily's Flower Farm, Grifton, NC
 April Potterfield, The Backyard Flower Lab, Winnetka, IL
 Pat Preib, Petal Pushers Santa Fe, Santa Fe, NM
 Kali Rabaut, Blue House Florals, Tampa, FL
 Rachel Ratcliff, Ladybug and Blooms, West Lakeland, MN
 Avery Rimmer, Flower Child Organic Blooms, Cargill, ON



SunflowerSelections.com™
QUALITY SEEDS FOR PERFECT FLOWERS

**ORDER ONLINE
NOW FOR 2023**

SunflowerSelections.com™
offers more than
50 sunflower seed
choices for every season
of the year including a
Fleuroselect Gold Medal
winner in 2023.
We are ProCut®!

Visit us!

SELECT SEEDS
seeds & plants



SEE WHAT SUMMER WILL BRING!

www.selectseeds.com

1(800) 684-0395

ask us about our grower's discount!

Wild Garden Seed

*Organic Flower Seeds from
Shoulder to Shoulder Farm
Ecological Crop Improvement For and By Farmers*



www.WildGardenSeed.com/flowers

Meet the ASCFG's Newest Members *continued*

Rebecca Ringham, Eleven Mile Farm, Pittsburgh, PA
Jerry Rodgers, Haven Flower Farm, Kennewick, WA
Jacqueline Rohrs, The Farmers Daughters on Olive Hill, Napa, CA
Amanda Rome, The Romestead Flower Farm, Cambridge, MN
Carah Ronan, Rodi Farm, Laurel, MT
Sara Rose, Bramble & Bloom Flower Farm, Ann Arbor, MI
Courtney Rosiak-Quinto, Quaintrelle Farms, Santa Cruz, CA
Daniel and Amanda Sanchez, Riverside Farm, Duncan, AZ

Tricia Schmenk, Pemberville, OH
Annemarie Schweiger, Exquisite Blumen, Clinton, WA
Celeste Scott, Univ. of Tenn. Extension, Humboldt, TN
Ron Shaffer, Red Clay Farm, Cleveland, TN
Amy Shearer, Four Flowers Farm, Skokie, IL
K.A. Shinoda-Ingalls, Ball Seed Co., Snohomish, WA
Sherry Siebenaler, Morgan Hill Farm, North Hero, VT
Sarah Simms, Blended Blooms Farm, Oxford, NJ

CALAMINTHA nepeta ssp. nepeta 'White Cloud Strain'



Exciting New Perennial Varieties from Seed

www.jelitto.com

Jelitto

STAUDENSAMEN · PERENNIAL SEEDS · GRAINES DE PLANTES VIVACES

Production · Breeding · Seed Technology

USA Office: 125 Chenoweth Ln. · Louisville, KY 40207
Phone (502) 895-08 07 · Fax (502) 895-39 34 · www.jelitto.com · maryv@jelitto.com
German Headquarters: P. O. Box 1264 · D-29685 Schwarmstedt
Phone 01149-5071-98 29-0 · Fax 01149-50 71-98 29-27 · info@jelitto.com

Ruthie Sizemore, Annville, KY
Suzanne Snyder, Pavel's Garden,
Louisville, KY
Brandi Spas, Bradley Farmstead,
Livingston, TN
Katie Startzman, Sunny Side Flower
Farm, Berea, KY
Marnie Stetson, Cool Breeze Farm,
Ringoos, NJ
Rebecca Stoltzfus, Honey Brook, PA
Belinda Stoto, B's Barn, Portland, CT
Julie Sullivan, Jules Got Flowers JGF,
Chantilly, VA
Jacky Surber, Alpenglow Gardens,
Bishop, CA
Martha SurrIDGE, Martha SurrIDGE Design,
Indianapolis, IN
Jamie Sutherland, The Little Fleur Farm,
Argyle, TX
Stephanie Talbot, Wild Flora Farm,
Bellville, OH
Natalie Tegarden, Olive Branch Farm,
Vancouver, WA
Jeannie Toole, Hot Springs, AR
Tamara Tormohlen, Rabbit Brush Flower
Farm, Carbondale, CO
Carl Turner, Southpaw Flower Farm,
Vincennes, IN
Jessica Ulassin, FlowerWood Farm,
Corvallis, OR
Sara Vann, Rafter V Farms, Fayetteville, AR
Alex Vaughan, Cameron Vaughan Farms,
Wilmington, OH
George Vaught, Austin, TX
Vanessa Vaught, Austin, TX
Kayla Walter, Centennial Acres Farm,
Mifflinburg, PA
Cara Weigold, Northern Farm & Forestry,
West Cornwall, CT
Jessie Westover, Utah Premier Flower
Collective, Farmington, UT
Patrick Wiseman, Atlanta, GA
Brenda Wood, Dahlia Gardens,
Oakdale, PA
Stephen Workman, Utah Premier Flower
Collective, Morgan, UT
Laurie Young, Legacy Farms,
Leesburg, VA

Ask an Expert in 2023



The Ask an Expert webinar series features ASCFG member experts who share their ideas, insights, and lessons learned on a specific topic. Driven by experience, these webinars provide a robust overview of the topic before segueing into an interactive question and answer period for attendees.

We're thrilled to share our 2023 roster of presenters and topics! View the forthcoming sessions below; for more details, be sure to visit our website and Events Calendar. Members can also access recordings of prior webinars in the ASCFG Members Only Learning Portal.

January

Finding Employees: Part I of II Sessions
Monday, January 9
8:00 p.m. EST
Presented by Jennifer Joray, Seth and Kelci Wright, Rebecca Kutzer-Rice, and Michelle Elston.

February

Keeping Employees: Part II of II
Monday, February 20
8:00 p.m. EST
Presented by Jennifer Joray, Seth and Kelci Wright, Rebecca Kutzer-Rice, and Michelle Elston.

March

Selling Flowers to Florists
Monday, March 13
8:00 p.m. EST
Presented by Maya Kosok and Ellen Frost.

April

Breeding Unique Zinnias
Monday, April 10
8:00 p.m. EST
Presented by Tiffany Jones.

May

Cultivating Native Plants in Cut Flower Farming
Monday, May 15
8:00 p.m. EST
Presented by Matthew Dell.

June

Growing Superb Celosia: Strategies and Tips
Monday, June 12
8:00 p.m. EST
Presented by Laura Beth Resnick.

July

Floral Design Showcase
Monday, July 10
8:00 p.m. EST
Presenter information coming soon!

August

Floral Photography for Farmers
Monday, August 14
8:00 p.m. EST
Presented by Teri Klinger.

September

Growing Ranunculus
Monday, September 11
8:00 p.m. EST
Presented by Jenny Marks.

October

Branding and Logo Development
Monday, October 9
8:00 p.m. EST
Presented by Jan Trent.

Interested in presenting in November or December? Propose a topic!

Apply here: <https://www.ascfg.org/community-of-experts-application/>



ASSOCIATION OF
Specialty Cut Flower Growers
RESEARCH FOUNDATION
Research • Growth • Results

STARTING IN FEBRUARY 2023

New Webinar Series!

The Association of Specialty Cut Flower Growers Research Foundation is starting a webinar series in early 2023 titled, “Research and the Flower Farmer.” The goal of this short series is to connect our members with the latest research in cut flowers and to inspire new ideas for crop, farm, and business management. During these webinars, recent recipients of the Research Foundation’s Competitive Grants will share synopses of their research, along with the exciting applications of the results, before a short Q and A session with attendees. Here is the schedule for the upcoming presentations!

Can’t attend a presentation? Don’t worry – the webinar will be recorded and be accessible in the ASCFG Members Only portal after the event.

February 2023

Comparison of Dahlia Cultivars for Specialty Cut Flower Production in the Northeastern United States.

Dr. Stephanie Burnett, University of Maine

Dr. Bryan Peterson, University of Maine

Dr. Matthew Wallhead, University of Maine

Join Drs. Burnett, Peterson, and Wallhead as they discuss their project, which evaluated a wide range of commercially popular, field-grown dahlias to compare the postharvest life of a cold-sensitive crop in Northern climates that have a limited growing season. The researchers will discuss the exciting outcomes of their research and answer questions from audience members.

Learn about the Research Foundation Grant Program and read prior research reports here!
www.ascfg.org/research/academic-research/

March 2023

Manipulating Light Quality and Duration to Improve the Greenhouse Production of Specialty Cut Flowers.

Dr. Roberto Lopez, Michigan State University
Caleb Spall, Michigan State University

A recent recipient of an ASCFG Grant, this project seeks to determine the ideal lighting conditions, in both the intensity and duration of lights, for growing flowers in greenhouse settings. In response to the growing market for specialty cut flowers throughout North America, crop growth and management in greenhouses can help meet the year-round demand for flowers. Dr. Lopez and Mr. Spall will discuss the exciting outcomes of their research and answer questions from audience members.

April 2023

Longterm Subzero Storage of Specialty Cut Flowers.

Dr. John M. Dole and Jennifer Kalinowski
North Carolina State University

Dr. John Dole and his colleague Jennifer Kalinowski will present their research on the best practices for postharvest cold storage of cut flowers across multiple species. By developing effective long-term cold storage procedures for cut flower growers and farmers, this research has direct benefit for ASCFG members. The researchers will discuss the exciting outcomes of their research and answer questions from audience members.

May 2023

Evaluating Protected Cultivation of Freesia to Diversify Early Cut Flower Production in the Mountain West.

Dr. Melanie Stock, Maegan Lewis, Ben Scow, and Victoria Xiong
Utah State University

This project seeks to explore early season cultivation of specialty cut flowers in cold and mountainous regions that are vulnerable to drought during late summers. If the researchers can determine when to plant (and how best to manage different crops) in these regions, the findings could provide new ideas to cut flower growers around the timing of their individual farming schedules. The researchers will discuss the exciting outcomes of their research and answer questions from audience members.

WANT MORE RESEARCH?

Membership in the ASCFG has increased 100% in the last four years. The need for relevant research on the wide variety of cut flowers, methods of production and marketing, and agriculture economics is greater than ever.

However, we can't fund this important work without our ASCFG members! Fund future research by visiting the website below.

www.ascfg.org/research/donate-to-the-research-foundation/

2023 ASCFG Farm Tours

May 23, 2023

Farm Lot 59

Host: Sasha Kanno
2714 California Ave.
Long Beach, California
www.farmlot59.org
9:00 a.m. – 2:00 p.m.
Lunch included
Limited to 100 attendees
\$100



June 8, 2023

Harmony Harvest Farm

Jessica Hall
201 Little Run Road
Weyers Cave, Virginia
www.hhfshop.com
8:30 a.m. – 3:00 p.m.
Limited to 75 attendees
\$150



May 31, 2023

CA & J Farm

Host: Jean Howard
5620 East River Road
Foster, Virginia
www.cajfarm.com
1:00 p.m. – 5:00 p.m.
Limited to 50 attendees
\$75



July 26, 2023

Floriculture Gauthier, Inc.

Claude Gauthier
8645 rue Notre-Dame Ouest
Trois-Rivieres, Quebec
www.gauthierfj.qc.ca
9:00 a.m. – Noon
Limited to 25 attendees
\$50



June 1, 2023

Leap Frog Flower Farm

Host: Liz Faucher
4919 Miller Road
Earlysville, Virginia
www.leapfrogflowerfarm.com
9:00 a.m. – Noon
Limited to 25 attendees
\$50



August 8, 2023

Trademarks Flower Farm

Jennifer Marks
654 Larue Road
Clifton Springs, New York
www.trademarksflowers.com
2:00 p.m. – 6:00 p.m.
Limited to 100 attendees
\$75



August 15, 2023

Bloom Hill Farm

Hosts Judd and Shannon Allen
10475 Hoover Avenue NW
Uniontown, OH 44685
www.bloomhillfarm.com
1:00 p.m. to 4:00 p.m.
Limited to 75 attendees
\$75



Details can be found at www.ascfg.org/2023-ascfg-farm-tours/



Lifetime Membership Special \$200 off

Choose to pay a one time rate of \$1,800
or 12 monthly payments of \$150

Read Susan Rockwood's regional report on page 64-65
for all of the reasons to become a Lifetime Member.



Association of Specialty Cut Flower Growers

Digging Deep

A four-part
webinar series

March 27 - 30, 2023

Details to be announced soon!

The Last Waltz

Judy M. Laushman



Like everyone, we always look forward to a new year, anticipating interactions with our members, in person, on-line, or a combination of the two.

2023 is no exception; in fact it will bring a variety of events and programs for ASCFG members. It's only the beginning of the year, and already four Research Foundation webinars, nine Ask an Expert sessions, two special grower workshops, and six farm tours are on the calendar. The two-part Supplier Showcase will have just completed as you read this, with 14 suppliers sharing their new products and services for this season.

Education Director Rebecca Marrall has worked steadily since she joined us to create these and many other resources. We are hoping more growers will be able to host farm tours,

especially those in the North and Central, South and Central, Northeast, and Southeast Regions.

Be sure to mark your calendars with red ink and glitter for November 6-9, the dates of the 2023 Conference to be held in St. Louis, Missouri. The Conference Planning Committee has been meeting regularly since last fall to develop a program that will offer sessions of interest to a wide range of our grower members, along with plenty of time for networking and socializing.

We're hoping to make this event extra special, as a fun celebration of the ASCFG's 35th Anniversary. The founding fathers (and a couple mothers) and I who gathered in a meeting room in West Chicago back in 1988 had no inkling that this germ of an idea for a growers' association would bloom to nearly 3000 members years later.

Looking at the list of those attended that meeting, I realize how many of those energetic and committed people are no longer with us, but I'm proud to say that we've successfully carried on their vision for 35 years. I think they would be pleased.

This will be my final year as Executive Director of the organization. Reflecting on the scores of people who have come through the ASCFG, and able to remember their faces (and in many cases, handwriting), I'm grateful at the depth of support I've received since 1988. My on-the-job training for tasks such as membership management, conference organization, board coordination, and magazine publishing could not have been accomplished without your encouragement and guidance.

A search committee headed by the eternally intrepid Dr. John Dole, whom I've known for 33 of those 35 years—yet who never ages—is already at work crafting a job posting for the new Executive Director.

You'll be hearing much more from that committee, ASCFG President Val Schirmer, and me throughout the year; we thought it was important for the word to be shared with our membership first. You never know if my replacement is reading these words right now.

CELEBRATING
35
YEARS

Association of
Specialty
Cut Flower
Growers

1988 - 2023

SAVE THE DATE!

Celebrate the ASCFG's
35th Anniversary

Working Together into the Future

November 6-8, 2023

Hyatt Regency St. Louis at the Arch

Zabo Plant
LILIES FOR PROFESSIONALS

info@zaboplant.com
877 642 8770

www.ZaboPlant.com



Double Flowering
No Pollen
Pleasantly Scented
Long VaseLife

Rose Lily[®]

by Zabo Plant

RoseLily Anouska



RoseLily Editha



RoseLily Aisha



RoseLily Samantha



RoseLily Vanessa



Easy Ordering of 2023 CUT FLOWERS



Double Oriental Lily Empress



Sunflower Ziggy



Marigold Xochi™ Orange

Cut flower growers can rely on **Ball Seed®**, **Ednie Flower Bulbs** and **Ball ColorLink®** to supply you for the upcoming season. We have all the cut flower seed, bulbs, plants, plugs and supplies you need to get you growing right away! Place your orders far in advance to ensure availability.

With 24/7 access to **live inventory** and online ordering at WebTrack plus technical resources like **expert growing tips** from industry pioneer **Dave Dowling**, you can rely on us for a **successful growing and selling season**.



Connect with your **BALL SEED** or **BALL COLORLINK** sales representative, contact customer service at **800 879-BALL** or order at **ballseed.com/webtrack** today.

Ball Seed®

Ball ColorLink®

Your small business partner



Zinnia Queeny Lime Red



Cosmos Double Click Extra Mix



Lily Emperor Orange

Talk to us. Ball Seed: 800 879-BALL Ball ColorLink: 800 686-7380

Visit ballseed.com for current Terms & Conditions of Sale. ©2021 Ball Horticultural Company 22346862

™ denotes a trademark of and ® denotes a registered trademark of Ball Horticultural Company in the U.S., unless otherwise noted. They may also be registered in other countries.