

# 2012 ASCFG CUT FLOWER SEED TRIALS

JOHN M. DOLE, HALLEY M. GRANITZ,  
ALICAIN CARLSON, AND JUDY M. LAUSHMAN

This year's Trial featured a modest number of new varieties, along with several standard cultivars for comparison. Of the four celosia cultivars, 'Dark Rose' (Genesis) and 'Sunday Orange' (Kieft) scored the highest. Both were heralded for their color – deep rose for 'Dark Rose' and vibrant "light tangerine to pumpkin orange" for 'Sunday Orange'. One trialer called 'Dark Rose' "a real show-stopper!". 'Dark Rose' featured a nice rose color to the leaf edges, large heads and long stems averaging 21 inches overall, but up to 4 feet for one trialer. One trialer had good results from pinching plants early. 'Sunday Orange' was shorter with stems up to 24 inches long. As with most celosia, plugs are sensitive to anything that checks their growth, especially excessive drying and holding too long in the plug flat. If growth is checked, flowers will form prematurely and stems will be short.

For productivity it is hard to beat gomphrenas. To be honest, after harvesting tons of stems for many weeks, its productivity may switch from being a positive trait to a negative one. 'Qis Carmine' and 'Qis Red' (Kieft-Pro-

Seed) in this year's trial were no different – at NCSU we harvested close to 80 stems per plant over the season and the overall average for the trials was around 20 stems/plant. Stems lengths ranged from 12 to 24 inches, depending on how stems were harvested. Both cultivars were lauded for their color as well

While not as productive as gomphrena, African marigold 'Jedi Orange' (Gloeckner) still produced many stems, averaging 11 stems/plant and up to 43 stems/plant at NCSU. Stem length averaged 18 inches with some as long as 42 inches. Trialers loved the orange/gold color, season-long productivity and excellent vase life. For many growers

'Vincent Choice' had a double row of petals, providing a fuller flower, and an insurance policy if a petal or two falls out or is damaged.

and customers marigolds are an acquired taste due to their scent; however, other trialers were okay with the fragrance and one trialer even called it a "great citrusy fragrance". Another trialer commented that "the fragrance was not the typical marigold smell - it

was milder". Many growers over the years have tried and abandoned cut marigolds due to their odor, weak necks, excessive branching, and low interest by florists. If you are one of these, you may want to try them again. One trialer noted that "I am not a big fan of marigolds, but this one changed my mind." and another stated that "Customers loved these, have to admit I would not have planted marigolds as cuts if not for this trial."

Stocks have been cultivated as a cut flower for centuries, but are a bit fussy about their growing conditions. They are a cool-season crop, but not fond of really cold winters. This limits where and when they can

far." Most trialers harvested one stem per plant, averaging 16 inches. Several trialers reported 20-inch stems.

As with most years we had several sunflowers in the trial: 'Goldy Double' (Genesis), 'Vincent Choice' (Sakata/Gloeckner), 'Vincent Fresh' (Sakata/Gloeckner), and 'Sunbright Supreme' (Sakata/Gloeckner). 'Goldy Double' was the most unusual with fully double flowers and a green center when first opened that filled in when the flowers were fully mature. One trialer noted that "Florists liked it best when cut early while center still slightly green, customers liked fuzzy petals." The extra flower buds near the top were a distraction for many. While 'Goldy Double' is not a true branching type, it might work well when young plants are pinched.

'Vincent Choice' and 'Sunbright Supreme' had the standard pattern of orange-yellow petals and dark centers. However, 'Vincent Choice' had a double row of petals, providing a fuller flower, and an insurance policy if a petal or two falls out or is damaged. 'Vincent Fresh' had a golden green center.

be grown. Stock 'Carthago White' (Takii Seed), on the other hand, did very well in the trials. One trialer noted that he was "Amazed; this actually bloomed in August in the Northeast.", and another said "This is definitely the most promising stock I've tried so

All four sunflowers scored fairly well in postharvest with trialers reporting an average vase life of about a week and a half. Here at NCSU we also had a vase life of 8 to 10 days. Most growers reported stem length of up to 60 inches, but a couple harvested the side shoots, with much shorter stems. When planted in the summer at NC State 'Vincent Choice' flowered first (with 'ProCut Orange'), 'Vincent Fresh' second (with 'Sunrich Gold'), and 'Sunbright Supreme' flowered last, by approximately 2½ weeks after 'ProCut Orange' and 'Vincent Choice'. 'Goldy Double' is also a late-flowering sunflower. At Cornell, Chris Wien reported that 'Vincent Fresh' and 'Vincent Choice' are moderately sensitive to short days in seedling stage,

but that 'Sunbright Supreme' is quite short day sensitive.

In summary, we had 24 cultivars from 5 companies. Based on trial results, the top five performers are automatically nominated for the ASCFG Cut Flower of the Year. The rankings are based on the combined ratings score: market appreciation + repeat again + ease of cultivation. Thus, from the 2012 trials gomphrena 'QIS Red' and four sunflowers 'Goldy Double', 'Sunbright Supreme', 'Vincent Choice', 'Vincent Fresh' are nominated for the Cut Flowers of the Year and will join other nominations from ASCFG members.

**Interpreting the trial results:**

The numbers reported are averages of all the respondents and many factors will affect

the success of any plant species. Our participants are growing and harvesting the trial plants in a wide variety of ways. After looking at the average, check the range of responses listed below each number to see how the cultivar performed at its best and its worst. If the range of responses in the ratings is narrow and high, i.e., 3-5 or 4-5, the plant was a winner for most of the respondents and is likely to do well for you. The 'Repeat Again Rating' is particularly important because it indicates if the trialer would take the time, money, and space to actually grow the cultivar again. Review the trial results carefully. If a cultivar sounds interesting but did not appear to do well, try it anyway. The cultivar may work well for you.

**Acknowledgments:** A hearty thank you to all of the 24 evaluators who returned their trial reports and to the seed companies for providing such great cultivars. Congratulations to Suzanne Royer, Earths Phocas, for being the first trialer to return her evaluations. We would also like to thank Ingram McCall for taking care of the North Carolina State University portion of the trials and Brigitte Crawford, Laura Daly, Benjamin Brindis, Blair Lane, and Diane Mays for assisting with the NCSU trials. In preparing the report we have edited the participants' comments for space and clarity; apologies if we've altered the tone or content of anyone's comments.

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## SUMMARY OF COMMENTS

The number in a parenthesis refers to the number of respondents who made the comment. If no number is present, only one person made the comment. Comments by each individual are separated with a semicolon (;). Note: many respondents did not make specific comments on each cultivar and in some cases, comments have been shortened because of limited space.

### PARTICIPATING SEED COMPANIES

FRED C. GLOECKNER COMPANY  
Harrison, New York  
www.fredgloeckner.com

GENESIS SEEDS LTD.  
Ashalim, Israel  
www.genesisseeds.com

KIEFT-PRO-SEEDS  
Venhuizen, Netherlands  
www.kieft-pro-seeds.com

SAKATA SEED AMERICA, INC  
Morgan Hill, California  
www.sakata.com

TAKII SEED  
Salinas, California  
www.takii.com

Photos in this article by  
John M. Dole and  
Halley M. Granitz

## CARTHAMUS

### Carthamus 'Dark Orange-Red' (Genesis)

**Good Qualities:** Nice color (5); Very tall (2); Fragrance, this cultivar flowered more uniformly than the other cultivars that we grew this year; Healthy foliage, tallest in our trials with long side branches, good for late use because it blooms later than the others; customers loved it, not much pollen, the double flowers could be cut more mature and still looked good; Darker than other orange; None; Healthy, held flowers better than others and dried nicely.

**Problems:** Did not germinate; Some malformed main flowers, I think it's day length sensitive, which means less flexibility in scheduling; Two attempts to grow this resulted in 12-inch high plants with tiny ugly flower heads covered with rust; Found the first bloom was past by the time the rest were out, made the flower (which had at least 4 stems) look tired, foliage was spotted and yellow, perhaps had a fungus issue, I did not harvest many stems; I've never had much luck growing carthamus and this year was no exception, the first planting bloomed very short for me and the second planting got some disease; All but a handful of plants succumbed to a late killing frost (Zone 4); Zero yield, plants dried up despite frequent watering, we had 10+ days of 100+ degree temperatures in early July, I think it was too much for the plants; None.

**Similar Cultivars:** 'Orange Grenade' (2).

**Postharvest Recommendations:** Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; I cut when four-five blooms were opened. (See also Postharvest article in this issue for more information.)

**Comments:** This was the best carthamus I grew; UGH! big waste of my precious time; Transplant plugs early or direct seed; I have grown carthamus for 3-4 years and this was my last attempt, looks super in catalogs but not in my field or bucket; I had a complete crop failure, they germinated fine but when I planted them out in the field they died; Gopher predation destroyed most of this crop; 100% germination; The orange-red was awesome and everyone at my market wanted to know what it was; used the orange in wedding work also and I really liked it at a very early bud stage.

### Carthamus 'Grenade Orange' (Kieft-Pro-Seed)

**Good Qualities:** Great color (4); The plants germinated quickly and were all the same size; None; Use fresh or dried; Great plant height.

**Problems:** All but a handful of plants

succumbed to a late killing frost (Zone 4); Flowers were small, short stemmed, pale; Needs to have netting, they are top heavy and hard to handle, they are very prickly, and the spray does not flower uniformly; Tried direct seeding and transplants, initially it looked like the direct seeded plants were going to perform significantly better, but ultimately none produced saleable stems - plants stayed very short, some didn't branch at all, bloomed very short, leaves turned brown, plants refused to grow, complete failure; The first flower deteriorated very quickly so as the majority opened there were others that looked dead, I had to remove the tufts so it didn't look so bad; Branching habit, center blooms and fades before others bloom; I've never had much luck growing carthamus and this year was no exception, the first planting bloomed very short for me and the second planting got some disease; Rust.

**Similar Cultivars:** 'Orange Red'

**Postharvest Recommendations:** None suggested. (See also Postharvest article in this issue for more information.)

**Comments:** I had a complete crop failure, they germinated fine but when I planted them out in the field they died; Major fail - 2 attempts resulted in ugly stunted flowers; Gopher damage early, pinched (munched) by bunnies gave stems that produced well and had little branching (past the pinch); Consistency - every plant bloomed the same day and same height; 100% germination; The orange was awesome and everyone at my market wanted to know what it was, used the orange in wedding work also and I really liked it at a very early bud stage.

### Carthamus 'Grenade White' (Kieft-Pro-Seed)

**Good Qualities:** None (2); Germinated quickly, plants of same height; Adds variety to the carthamus; Easy to grow; Great plant height.

**Problems:** Dirty Laundry White when mature (5); Found the first bloom was past by the time the rest were out, made the flower (which had at least 4 stem) look tired, foliage was spotted and yellow - perhaps had a fungus issue, I did not harvest many stems; All but a handful of plants succumbed to a late killing frost (Zone 4); Needs to have netting, they are top heavy and hard to handle, they are very prickly, and the spray does not flower uniformly; Tried direct seeding and transplants - neither worked! white variety was even weaker and worse looking than the orange; Branching growth; Small flowers, pale, short stems, I've never had much luck growing carthamus and this



year was no exception, the first planting bloomed very short for me and the second planting got some disease; White tassels turn brown on first flowers before others open making it look dead, tassels can be plucked off, but is very time consuming.

**Similar Cultivars:** ‘Orange Grenade’; ‘Orange Red’.

**Postharvest Recommendations:** None suggested. (See also Postharvest article in this issue for more information.)

**Comments:** I have grown carthamus for 3-4 years and this was my last attempt, looks super in catalogs but not in my field or bucket; I’m inexperienced with this variety, so probably seeded it too early, and it WANTED to get planted out, we had 80 degree days then a couple of killing frosts in early May, I did NOT love the color, and the plant was bushy with unattractive leaves, so probably won’t try this again; Wasted a lot of time and got stunted ugly plants; Didn’t really like the color (or lack of it)!; I had a complete crop failure, they germinated fine but when I planted them out in the field they died; Didn’t sell any of this color; 100% germination.

#### Carthamus ‘Orange Head’ (Genesis)

**Good Qualities:** Bright, long stem with multiple flowers, buds continued to open; Blooms early.

**Problems:** All but a handful of plants succumbed to a late killing frost (Zone 4); Did not germinate; Short field life, need to cut as soon as begins blooming; Needs to have netting, they are top heavy and hard to handle, they are very prickly, and the spray does not flower uniformly; Zero yield, plants dried up despite frequent watering, we had 10+ days of 100+ degree temperatures in early July, I think it was too much for the plants; Found the first bloom was past by the time the rest were out, made the flower (which had at least 4 stem) look tired, found the foliage was spotted and yellow, perhaps had a fungus issue, I did not harvest many stems; Many leaves were infected with some sort of blight making them unmarketable, a few stems were ok and somewhat useful but most were not; Short plants; Two attempts to grow this, both resulted in stunted, tiny headed flowers with rust.

**Similar Cultivars:** None listed.

**Postharvest Recommendations:** Strip leaves. (See also Postharvest article in this issue for more information.)

**Comments:** I’m inexperienced with this variety, so probably seeded it too early, and it WANTED to get planted out, we had 80 degree days then a couple of killing frosts

## PARTICIPATING GROWERS

CYNTHIA ALEXANDER  
Quarry Flower Farm  
Celina, Texas

JANET BACHMAN  
Riverbend Gardens  
Fayetteville, Arkansas

ANNE BERTINUSON  
Rosebud Estates  
Frederick, Maryland

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Plantmasters  
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TERRI CARSTENS  
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Island Meadow Farms  
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Love ‘n Fresh Flowers  
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JENNIFER MOELLER  
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Field and Flower  
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ALLISON SMITH  
Hunny Bunny Honey and Flowers  
Helotes, Texas

ROGER TSCHANTZ  
University of Guelph  
Guelph, Ontario

CHRIS WIEN  
Cornell University  
Ithaca, New York



**‘Dark Rose’**

in early May; Needed to cut first flower off then would have at least 4-5 blooms per stem for sale; I am disappointed that I didn’t get to successfully grow this plant; I had a complete crop failure, they germinated fine but when I planted them out in the field they died; I have grown carthamus for 3-4 years and this was my last attempt, looks super in catalogs but not in my field or bucket; Waste of time; Gopher predation destroyed 99% of crop.

## CELOSIA

### Celosia ‘Dark Rose’ (Genesis)

**Good Qualities:** Deep rose color (13); Long stems (3); Strong stem; Good head size; These two varieties are real keepers, there wasn’t one customer who didn’t ask what they were when they saw them! I have to say that these were probably the most popular of everything I grew this year, they had a long cut life, bloomed consistently during the growing season, they are still blooming in early October; Nice leaf with rose edges, great stem length; The color is amazing - bright sharp pink that coordinates wonderfully with lots of other hot summer colors, I pinched the plants early and they produced tons of stems with just the right size heads for working into mixed bouquets, a real show-stopper!; Lots of stems, long term output; Small blooms for use in bouquets, added interest to bouquets; Nice rounded form; Comb attractive; Holds well on plant, bright color is long-lasting; Dramatic large lush head; Height; Good texture.

**Problems:** Only one usable stem, germination was poor; They get top-heavy when you don’t cut them consistently and they fall over, but they are still useable; Fans/blossoms very small; Was perhaps a little on the short side, but I didn’t mind; Like all  
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celosias I try to grow it was too short; Foliage is yellowish; Large variability from plant to plant, comb variable in shape and size, late; Typical celosia - will head too soon if left in trays too long; Weak stem couldn’t hold up its heavy head, I don’t usually have to net celosia, but I think it would help this variety, variability of height; some bloomed very short with smaller head; This one needs a hard pinch when young, it got very tall and spindly when it got the normal 10 in. spacing.

**Similar Cultivars:** The color would be similar to ‘Bombay Pink’, but much easier to grow and more productive; ‘Cramers’ Amazon’; Kurume series; Sunday series, ‘Tornado Red’.

**Postharvest Recommendations:** Keep water clean to prevent (bleeding) and store out of out of the cooler; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Chrysal CVBn. (See also Postharvest article in this issue for more information.)

**Comments:** Flower size not consistent; Big thumbs up!; Great in bouquets!; Would like to grow again, had a very hot dry summer and had the best celosia result ever, very pleasing variety, cut the central stem and develop many useful sides; Most of the primary flower stems were fasciated; There are better varieties of this type; Both side stems and center flowers make good cuts; I would call this more red than “rose”; Insect damage to much of the crop, possibly thrips; Cut main stem and then harvested side shoots for small bouquets

### Celosia ‘Sunday Orange’ (Kieft-Pro-Seed)

**Good Qualities:** Excellent, vibrant color (17), ranging from light tangerine to pumpkin orange; Good any time of year, neon type quality; These really stand out in a flower arrangement, I loved them and so did my customers, these plants kept producing all season long and are still blooming; The plumes very fluffy/full but not too big, it is an orange that really goes with just about any color, especially a rich pink; Great-looking flower; Very branching plant, used a lot in smaller arrangements and bouquets, bloomed early and kept producing all season; Beautiful full plume; Great plume celosia, good branching when pinched; Light green foliage and bright orange plume, earliest in trial; Form.

**Problems:** Short stem length (6); Not very productive; One usable stem per plant; Seemed a bit more sensitive to stems rotting after cultivating around transplants when they were very young, I know this can be a problem with all celosia, but I lost more of

this variety than others, in a bed where all factors were pretty much the same; Pinching helped make the stems taller; I had several succession plantings and none got over 18-inch; None; Like all plume types, doesn’t keep well on plant.

**Similar Cultivars:** Sparkler series; ‘New Look’.

**Postharvest Recommendations:** Clean stems, #2, do not put in cooler; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach. (See also Postharvest article in this issue for more information.)

**Comments:** This was one of our favorites; Color was perfect for this year’s market, everyone was looking for oranges in my area; Can’t emphasize enough how much my store clerks and customers liked this color; Would like more stems/plant but will probably try this again; Would like to try this one again, with a more serious pinching early on, love the color palette of these...wish they had taller stems; Despite it being so short for me, I will still grow again as the color is just so outstanding, hoping it will be taller next time; Loved the color! it was a great addition to arrangements and bouquets; Would like to see a longer stem for use in larger bouquets, however, the colour and performance made it one of my top 3 choices in the trials this year. We had a very hot dry summer, and that may have affected the stem length, sowed May 12 and transplanted to 50 cell, out to



**‘Sunday Orange’**



field through bio black plastic June 22, no irrigation, started cutting early August, cut some today Oct 11; Needs to be combined with other vivid colours to sell well as a bouquet; Probably the best flower in the trials; Might benefit from early pinch?

### **Celosia ‘Sunday Wine Red’** (Kieft-Pro-Seed)

**Good Qualities:** Awesome color (7), these really stand out in a flower arrangement, I loved them and so did my customers, these plants kept producing all season long and are still blooming; Robust plant, very consistent development, but slow to set flowers, left in the field all summer and they produced an entire second round of decent length stems in late summer; Very long vase life; Gorgeous hot red/orange tight plume on deep maroon, shiny leaves, strong stems, with pinching, nice length stems; Nice length; Nice form; Plumes are manageable size, foliage is also dark, which adds contrast to bouquets; Well branching; Attractive dark red leaves, stem and bright red plume; Color of foliage; Leaves and flower are red, adds depth to bouquets; Definitely a deep wine red that is nice especially with autumn flowers, nice size plume for mixed bouquets.

**Problems:** Very short (5); Kinda dark; Color is very deep red and not at all vibrant, by the time the somewhat small flower heads are fully developed they are beginning to look too dark and even a bit dry, customers weren't so quick to select this variety in midsummer, may be better in fall; Not similar to the orange color in plume shape; Doesn't hold well on plant; Did not germinate; I had several succession plantings and now got more than 18-inches tall.

**Similar Cultivars:** ‘New Look’.

**Postharvest Recommendations:** Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach. (See also Postharvest article in this issue for more information.)

**Comments:** Found this one very dark, 98% of people like bright and I felt it made things look very dark and perhaps dull, the foliage was a nice change but the bloom way too dark for us as a cut, may be useful as a contrast bedding plant, it was easy to grow and stayed upright without support, excellent germination as with all the celosia in the trial, sowed May 12, transplanted to 50s and to the field June 22, good main stem, the sides much shorter. I may give this a second chance, it was quite short, but I loved

I have to say that ‘Dark Rose’ and ‘Tornado Red’ celosia were probably the most popular of everything I grew this year; they had a long cut life, bloomed consistently during the growing season, they are still blooming in early October.

the color, shape and vase life; Fantastic color blossom and foliage - but very dark altogether in a bouquet, will definitely want to grow this again, far and away my favorite of the four celosias in my trials; As with all of the celosia we found almost no pest problems!; ‘Wine Red’ is quite different from ‘Sunday Orange’; Promising and worth another look; Grew well.

### **Celosia ‘Tornado Red’ (Genesis)**

**Good Qualities:** Bright fuchsia colour (11); Large heads (2); Height; Initial bloom had sturdy stem and medium size flower; These two varieties are real keepers, there wasn't one customer who didn't ask what they were when they saw them! I have to say that these were probably the most popular of everything I grew this year, they had a long cut life, bloomed consistently during the growing season, they are still blooming in early October. More of a burgundy than red; The bloom size was very useful, my top 3 of the trial choices for colour and size of bloom, many, many side shoots for smaller bouquets as well, would definitely grow again; Nice head size except the central head was too large; Many usable side stems; Dark red showy comb; Color holds well on plant, long lasting cut; Good texture.

**Problems:** Too short (6); After cut first flower, additional flowers were not uniform, some were the “brain” shape while others were more like plumes; For the second year in a row, these were just too short to cut; Very short, got no usable stems except a few I dried and used on wreaths; They get top-heavy when you don't cut them consistently and they fall over but they are still useable; Fan/blossoms generally small; Some weak stems, shape is inconsistent; Thick, some plants had little or no branching, comb variable shape; Usual celosia - will head in trays if left too long; Variable forms - some crested, some wheat-type; Did not germinate.

**Similar Cultivars:** Taller than ‘Toreador’,

‘Amazon’, ‘Toreador’; Kurume series, Sunday series.

**Postharvest Recommendations:** Remove most leaves; Clean water and #2 Chrysal, no cooler; Perhaps if I would have pinched it I would have had better stem length; Beware of stems that flop over, could be because stem is flattened and head is heavy; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Chrysal CVBn.

**Comments:** Just was not uniform in flowering; It was almost unusable because of the short stems, but the color was great so we used it in some arrangements in smaller vases where it was addition; I grew this cultivar last year and had better developed cockscomb heads last year than this year, perhaps the high summer temperatures delayed normal head development; Second year in the trial, appreciated by viewers both years; I would call this color more “dark rose” than red; Cut main stem and then harvested side shoots for small bouquets

## DIANTHUS

### **Dianthus ‘Volcano Mix’ (Genesis)**

**Good Qualities:** Beautiful color assortment (6); Easy to grow; Nice stem length, great in postharvest; Enjoyed the colour range, more pink and pink blends that are not available in the Sweet series, good germination and plant vigour, stems were good in smaller bouquets and table pieces for wedding work; Nice scent, long lasting and bloomed all summer; Blooms in heat and has a scent, well-shaped heads; Grew great.

**Problems:** Too short (5); Germination was poor; Small flower heads, individual florets turn brown quickly; Lots of tiny stems; Faded blossoms made so many stems unusable, the dead blossoms didn't seem to self-clean in the way that, say, the Neon series seems to; Stems not as thick as Amazon Neon series.

**Similar Cultivars:** Comparable with Sweet series, but not quite as tall.

**Postharvest Recommendations:** Used only water; Treat with AVB then to Chrysal #2; Cut when first started to open into Floralife Professional or hard water. (See also Postharvest article in this issue for more information.)

**Comments:** Did well with the warm summer in the Northeast, planted 4/10, saw blooms approximately 9/1; We have had a wet spring, so we had some root rot, then we had several days in a row of triple

digit heat and the plants stopped growing; I would recommend this as a terrific medium height bedding plant, the plants blossomed for a very long time, standing up to cooler early autumn temps, they look much better in a mass from a distance than close up, because of the unattractive faded petals on each blossom head; May grow it again for an early planting just to get the color variations, but would not grow for later plantings; I had a complete crop failure. They germinated fine but when I planted them out in the field they died; Although this was an easy plant with great colour mix, it bloomed at the same time as lots of other flowers that seemed to make it to the bucket instead, it was a good flower, but not a favorite with our staff...and we all know if they don't care for it, you're not going to see it in too many bouquets.... will, however, like to grow it again as it offers some great colours, and very long-lasting stems after cutting, a longer stem would be nice, but our dry weather could have affected growth...no irrigation; Did very well in extreme heat; I treated this as a biennial, so it just went in the ground; Pretty blooms, but we had so much other stuff blooming when the dianthus was that it was left behind and picked when we had time, I did like it for wedding work.

## GOMPHRENA

### Gomphrena 'Qis Carmine'

(Kieft-Pro-Seed)

**Good Qualities:** Excellent deep rose color (17); Very prolific flowering (4); Super bouquet filler (2); Planted in March and still producing usable flowers; Similar to 'Fireworks', but a bit more red; Customers love the gomphrena, it is a unusual-looking flower, but beautiful; Put a little pop in a bouquet, nice long, not-too-branched stems; This cultivar is much easier to harvest than most gomphrena as the stems were straighter and not as leafy, customers really loved the color, good head size; Easy harvest, long-lasting blooms, no pests, full growth kept down weeds; Long harvest window, good stem length, no insect or mildew issues, very easy plant; Long-lasting in bouquets, good shape; Cute; Tall stems; Relatively straight stems, the more you cut, the more you get, maintains good color when dried, tallest of all my gomphrenas, except 'Fireworks'; Best gomphrena I ever grew! stem length and flower size.

**Problems:** Stems break easily (3); Took 4 months to start producing usable flowers; Germination only 50 percent; It was very productive for a few weeks but then fizzled

out, other varieties of gomphrena in the field kept going much longer, succession plantings are a must; As the plants aged the lower part of the bloom browned and the shattered easily; Variable vase life; A pain to cut; Sheds bottom "petals" if cut too late; None.

**Similar Cultivars:** All other gomphrena.

**Postharvest Recommendations:** Used only water; cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Cut when little yellow florets appear overall, before bottom carmine seeds start to dry and shed; Place in 2 inches of water; Cut when mature into plain water; Harvested into CVBn. (See also Postharvest article in this issue for more information.)

**Comments:** Gorgeous pink color with yellow accent (2); Somewhat fragile stems common to this type of gomphrena; My intern started harvesting this and didn't count the stems but we picked TONS of these every week all season long from one planting; Love the number of stems, liked having fairly long stems; Has great ornamental value in the garden as well, this plant was voted one of the favourites by visitors to this summer's trial garden; Grows in drought without need for additional irrigation; Customer called color "raspberry"; Treat addition to bouquets, especially fall bouquets with celosia.

### Gomphrena 'Qis Red' (Kieft-Pro-Seed)

**Good Qualities:** Awesome color (12); Very productive (4); Very tall, strong stems; Best gomphrena I ever grew!; Great stem length and flower size; Nice filler; Customers love the gomphrena, it is a unusual looking flower but beautiful; Customers like the little yellow flecks; Straight stems and easier to harvest without so many leaves like other types; Held up well - stems didn't break while we worked with them, nice stem length, good growth helped keep weeds down, no pests, great addition to bouquets; Goes well with the orange/coral trend, nice large bloom, very healthy, and long bloom window, still cutting October 11; Color worked really well with zinnias ('Uproar Rose', 'Queen Lime', Benary's Giant Mix), and with dahlias in the amber colors, short stem length is fine for the short bouquets I make for farmers' market sales, grew very well from direct seeding! it grew so robustly I thought it must be a weed! glad I didn't pull it out!; Long-lasting in arrangements, good filler; Cute; Tall stems; Relatively straight stems, the more you cut, the more you get, maintains good color when dried, slightly larger heads than 'Qis Carmine'.



'Qis Carmine'

**Problems:** Stems break easily (2); None; Germination only about 50 percent; It is a trial to harvest since the stems are easily broken; Stems not as strong as QIS 'Carmine'; Was pretty productive for a few weeks but then quickly fizzled out, definitely need to plant successions for longer harvest window; As the plants aged the lower part of the bloom browned and then shattered easily; Some worm damage shortly after the plants started to bloom; Pain to cut; Bottom petals shed easily; Did not germinate.

**Similar Cultivars:** All gomphrena are pretty much the same; Virtually identical to 'Strawberry Fields' and 'Flashing Light'.

**Postharvest Recommendations:** Cut when mature into plain water; Used only water; May need chlorine tablet?; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach. (See also Postharvest article in this issue for more information.)

**Comments:** Sold well as straight bunches and blended well in summer bouquets; Color is an orange-red and not a true red; My intern started harvesting this and didn't count the stems but we picked TONS of these every week all season long from one planting; Held up well, even in extreme heat and drought; Harvested by the handful, too tedious to cut individual stems.

## LARKSPUR

### Larkspur 'Galilee Carmin' (Genesis)

**Good Qualities:** Attractive dark pink color (4); Great vase life; Salmon colour not as useful to us, nice long blooms on good stems, good harvest window with lots of useful sides, the main central stem was very long and strong; Beautiful flower; Strong stem; Good doubleness and floret placement.

**Problems:** These darker blossoms got spotted more easily with rain/dew; Root rot reduced plant stand at harvest in this high tunnel trial; Were awesome - 3 feet tall, I had raves from my customers. I grew them in the field and



was pretty disappointed in the result, I could not use them because they were too short. Had I grown them in the hoop house, I think I would have been able to use them; None.

**Similar Cultivars:** 'Sydney', 'Qis Carmine'.

**Postharvest Recommendations:** AVB then place in #2.

**Comments:** All but 10 plants succumbed to a late killing frost, we had 80-degree days that sort of fried them, then a couple of killing frosts in early May, I did love the color; If you want trialers to grow larkspur, please send in the fall, fall-sown larkspur performs much better (Authors' note: we agree completely and have tried to get the seed earlier, but have been unsuccessful.), this seed came too late for even early spring planting so it failed to germinate when I put it in; Similar to standard 'Sublime' series in earliness and productivity; Poor seedling survival; Not as good vigour as Qis.

#### Larkspur 'Galilee Pink Perfection' (Genesis)

**Good Qualities:** Nice light pink (4); Good stem length (2); Favorites White and Pink Perfection, nice long blooms on good stems, good harvest window with lots of useful sides, the main central stem was very long and strong; Good form; Good stem strength; Great vase life; Good doubleness and stem fill; Mostly single, some double, strong stems, better in early spring than late spring, next year I will plant in fall; Beautiful flower.

**Problems:** None; Root rot wilted plants at flowering in this tunnel trial; Sheds if cut too late; Disappointed in the result, I could not use them because they were too short, had I grown them in the hoop house I think I would have been able to use them.

**Similar Cultivars:** 'Sydney', 'Qis Pink', Qis series.

**Postharvest Recommendations:** AVB then place in #2.

**Comments:** White was excellent and I felt the best colour in the series, a favorite; All but ten plants succumbed to a late killing frost, we had 80-degree days that sort of fried them, then a couple of killing frosts in early May; If you want trialers to grow larkspur, please send in the fall, fall-sown larkspur performs much better, (Authors' note: we agree completely and have tried to get the seed earlier, but have been unsuccessful.) this seed came too late for even early spring planting so it failed to germinate when I put it in; Vigour not as good as Qis.

#### Larkspur 'Galilee Salmon' (Genesis)

**Good Qualities:** Nice long blooms on good stems, good harvest window with lots of

useful sides, the main central stem was very long and strong; Good color, strong stems; Good doubleness and floret placement on stems; Tall stems; Beautiful flower.

**Problems:** None; Salmon colour not as useful to us; colour is between 'Carmine' and 'Pink Perfection', not really salmon; Affected by root rot in this tunnel trial; This was the first time I have grown larkspur, I grew larkspur in the hoop house early which were awesome - 3 feet tall, I had raves from my customers, I grew them in the field and was pretty disappointed in the result, I could not use them because they were too short, had I grown them in the hoop house I think I would have been able to use them.

**Similar Cultivars:** 'Sydney', Qis.

**Postharvest Recommendations:** AVB then place in #2.

**Comments:** All but two plants succumbed to a late killing frost, we had 80-degree days then a couple of killing frosts in early May, I did love the color; White was excellent and I felt the best colour in the series, a favorite; If you want trialers to grow larkspur, please send in the fall, fall-sown larkspur performs much better, this seed came too late for even early spring planting so it failed to germinate when I put it in; Poor seedling survival; Overall vigour not as strong as Qis.

#### Larkspur 'Galilee White' (Genesis)

**Good Qualities:** Favorites were White' and 'Pink Perfection', nice long blooms on good stems, good harvest window with lots of useful sides, the main central stem was very long and strong; Beautiful flower; Vase life was 10 days; Good doubleness and floret placement on stems.

**Problems:** This was the first time I have grown larkspur. I grew larkspur in the hoop house early which were awesome - 3 feet tall, I had raves from my customers, I grew them in the field and was pretty disappointed in the result. I could not use them because they were too short. Had I grown them in the hoop house I think I would have been able to use them; None; Suffered from root rot like the other varieties in the trial: in high tunnel

**Similar Cultivars:** 'Qis White' (2); 'Sydney'.

**Postharvest Recommendations:** AVB then place in #2.

**Comments:** White was excellent and I felt the best colour in the series, a favorite; All but two plants succumbed to a late killing frost, we had 80-degree days then a couple of killing frosts in early May; Poor seedling survival; Vigour not as good as Qis.

## LISIANTHUS

### Lisianthus 'Arena II Kilimanjaro'

(Takii Seed)

**Good Qualities:** Very nice pure white flower (2); Such beautiful blossoms - customers think they are roses.

**Problems:** Poor germination; The number of months and hours of care growing these from seed - YIKES!; Pretty wimpy compared to the 1-2-3 whites I grow, but I did get a late start with this seed so it may be due to that, would look for plugs the next time instead of trying from seed. Just as difficult to grow from seed as most other lisianthus; None.

**Similar Cultivars:** Similar to many other lisianthus series.

**Postharvest Recommendations:** None listed.

**Comments:** I planted the seed 2/20, as of 9/18 I have 5 plants that survived and none of them have bloomed, they are approximately 6 inches in height; All but 40 plants succumbed to a late killing frost, we had 80-degree days that sort of fried them, then a couple of killing frosts in early May - that said, these are magnificent and the white stays fresh; Got the seed too late to make a real go of this since lisianthus are so slow to germinate and grow, I would take that into consideration when weighing my comments, I was actually impressed with how well it did considering the late start.

### Lisianthus 'Falda II Yellow' (Takii Seed)

**Good Qualities:** Pretty yellow (2); RUFFLED! the petals are adorably ruffled and the color is a really nice soft yellow that goes well with white and ivory, excellent for wedding work, seed germinated relatively "easy" for lisianthus, still spotty but at least 50% without any fuss; The frillier blossom edge was lovely.

**Problems:** Poor germination (2); Mine weren't very productive or tall, but I think that is due to a very late start; The off-white "yellow" color was muddy; None.

**Similar Cultivars:** None listed.

**Postharvest Recommendations:** None listed.

**Comments:** Germination was extremely poor and only one seedling made it through summer, they were planted 2/20, as of 9/18 they are approximately 6 inches in height and no sign of budding; Got the seed too late to make a real go of this since lisianthus are so slow to germinate and grow, I would take that into consideration when weighing my comments, I was actually impressed with how well it do considering the late start; All but six plants succumbed to a late killing frost, we had 80 degree days that sort of fried them, then a couple of killing frosts in early May.





**'Jedi Orange'**

## MARIGOLD

### Marigold 'Jedi Orange' (Gloeckner)

**Good Qualities:** Beautiful orange/gold color (12); Season-long production (4); Excellent vase life (3); Insanely productive! (2); Excellent germination (2); Large flowers (3); Very uniform in both stem length and size through the entire season; Dark green foliage, hearty plants, minimal pest issues; Grew vigorously, the first cut was awesome the stems and heads were very strong, the color was neon orange it glowed at night, really!; Tall, long stems, few to no malformed or bad flowers; Nice size bloom, great vase life; Great citrusy fragrance; They shoot out new blooms literally overnight. The heads are large and ruffled and the color true-marigold-orange, very tall - shoulder height, absolutely no pests or diseases; Fully double; Good-sized flowers, not too heavy on marigold smell; Early bloomer; I loved this plant! I will definitely grow this every season, the fragrance was not the typical marigold smell - it was milder, my customers loved the flowers, I also had some yellow-flowered plants and they are just as wonderful as the orange ones, I've always used a lot of zinnias in my bouquets but I found myself using these marigolds much more often than the zinnias! this is definitely a keeper.

**Problems:** Definitely needs support/netting (3); Strong scent (3); Stems are flimsy; The later cuts, the heads would easily break; Lowest side branches were somewhat fragile and broke under their own weight; Sometimes have weak necks; Excessive branching - making short stems or long stems with odd angled branches, perhaps I should have nipped the centers very early to get long stems; None; Stems aren't straight, foliage got black fast; Too branching and too

short of stems to harvest; Tended to fall over if not planted close; Japanese beetles loved eating it; Head size smaller than some, like 'Narai Orange', less productive than 'Optiva Orange'; Plants ruined by botrytis-like mold in August, I have never seen marigolds get mold before, this is a probably deal-killer for me in terms of planting again; Foliage sparse - more like French marigold than African marigold, long skinny stems - couldn't decide whether to cut many shorter stems or a few long scraggly ones, most flowers were smaller scale (1.5 in.) and a few large (3 in.).

**Similar Cultivars:** Coin series; 'Crackerjack'; No.  
**Postharvest Recommendations:** Use caution with the stems, some necks are weak; Harvested into CVBn; some flowers lasted several weeks, even when sitting in the discard bucket in full sun; Just used plain water; I cut well-hydrated plants in the evening and condition overnight in acidified water with sugar and drop of bleach, these had no problems; Strip most foliage. (See also Postharvest article in this issue for more information.)  
**Comments:** I am not a big fan of marigolds but this one changed my mind, my customers loved the scent when I added it to the mixed bouquets at the farm market, the flower shops in my area were not interested in it; Great marigold, nice color for midsummer, long productive period, nice tall, long stems with multiple flowers; These just kept pumping out the stems all season from the same planting, would have gotten even more but we had an early frost that took them out; I want to try these again, and try to get the long stems, the blossoms do need to be picked at the right time, quite mature, or they look muddy and don't keep opening or turning that gorgeous bright orange, the limited number of stems/plant I noted is because my market ended, not because the flowers

'Jedi Orange' marigolds just kept pumping out the stems all season from the same planting, would have gotten even more but we had an early frost that took them out.

stopped blooming!; I really wish I could use these but they didn't work so well with wedding designs, marigolds are just a bit too "pedestrian", though I did use them in a few centerpieces and liked them well enough, they are amazing plants and I may well grow them again just for my garden, I think

these might be nice for mixed fall consumer bouquets so I don't want to put people off of them, just not good for weddings; Good as a filler for bouquets, didn't sell on its own as a bunch; Grew four varieties of marigolds this year, very hot dry summer and spider mite was in full throttle, this variety was the only one to survive a severe mite attack. The bloom wasn't as double as some others but it has very good vigour to withstand the mite attack, therefore, rates high for that reason alone, colour was good also; There isn't a lot of interest locally in this plant as a cut flower; Great addition to bouquets, foliage held up well when included as filler with the flowers; Colour is not as deep as 'Kees Orange', but it is earlier to bloom; Marigolds are still a tough sale to florists, sold well in mixed bouquets in farmer's market; Grows well in high tunnel, starts flowering in late June, vs. early August in field; Customers loved these, have to admit I would not have planted marigolds as cuts if not for this trial - but I will probably look for a different cultivar; I really liked this one; Nice plant but never outstanding for me, height wasn't all that great either, I like flowers I don't have to bend way over to pick. 'Jedi Orange' marigolds just kept pumping out the stems all season from the same planting, would have gotten even more but we had an early frost that took them out.

## SNAPDRAGON

### Snapdragon 'Chantilly Purple' (Takii Seed)

**Good Qualities:** Great color (5); It was a different look for my customer, I usually have Rocket series, it tolerated the dry summer in the northeast extremely well, it is now fall and it is still blooming!; Great stem length; Beautiful nice shape, love the open-faced flowers, so did the customers, nice stems, good for mixed bunches and straight bunches; Quite early, blooming with the rest in the series; Open blossoms; Very beautiful open snapdragon, it yielded well all summer and into fall from one planting; Beautiful floret form; Productive and early, attractive open-faced flowers; Strong stems.

**Problems:** Shorter than Rocket series; In postharvest, the buds open almost white instead of purple; Only about half of the plants reliably produced really full stems; It is not purple, the color is a deep magenta or fuchsia, not as vigorous as Opus series or as tall; Stems too short, especially under hot conditions, some flower bud inhibition, maroon color is lighter and more faded in new buds opening in the vase; None.

**Similar Cultivars:** Other Chantilly colors.

**Postharvest Recommendations:** Did best if rested in cooler for 24 hours prior to sale; I always treat snap with Chrysal AVB then to Chrysal #2, store in cooler at 38 degrees; Harvested into Floralife professional or hard water mix; strip leaves. (See also Postharvest article in this issue for more information.)

**Comments:** It seems more suitable for landscaping than cut flower; Much taller than the others in the series, I did not think it would get as tall as it did and failed to use support netting, so had less than ideal stems, also do not have much demand for “dark” coloured snaps in summer, also it was planted later in the ‘second’ planting, transplanted to 50 cell trays and planted through black bio plastic, no irrigation; Greenhouse grown.

## STOCK

**Stock ‘Carthago White’(Takii Seed)**

**Good Qualities:** Clear white (3); Amazed, this actually bloomed in August in the northeast; Strong stems, good fragrance; Was really impressed that these produced anything for me, stock does not do well in our short and often hot springs here but it actually grew nicely and produced some nice stems, I will try again with starts planted out earlier under low tunnels and/or in the hoop house, this is definitely the most promising stock I’ve tried so far; Four out of 50 singles, fragrant, long full bloom, easy to grow, customers loved it, wish I had planted a lot more; Clean white spikes with dark foliage; Nice stems, pretty.

**Problems:** None; Not overly productive but no stock ever is here, the fragrance was a bit foul in my opinion - certainly not sweet or perfume-y, my employee thought it smelled like cardamom but I’m not sure, it wasn’t so bad that it was off-putting but it was noticeable; Lower fading blossoms distract from the usefulness of the stem over time.

**Similar Cultivars:** ‘Cheerful White’, Other stocks.

**Postharvest Recommendations:** None listed. (See also Postharvest article in this issue for more information.)

**Comments:** I will certainly grow this one again, the best result I have ever had with stocks, planted thru black bio plastic 6 by 8 inches, no irrigation; Due to weeds and extreme drought, we did not get to see this variety at its best; First time I grew it in a hoop house, much better results; I should have netted these, the stems bent and I lost length, these don’t have the wow factor on their own, but all I had to do was have a customer bend over to smell, and that bouquet was sold!

*The Cut Flower Quarterly*

## SUNFLOWER

**Sunflower ‘Goldy Double’ (Genesis)**

**Good Qualities:** Attractive double orange (5); Stem held well, unique look; The buds! Oh my, are the buds exquisite, any grower selling to florists should grow these just for the sculptural buds, I never use sunflowers in wedding work here in the city (just doesn’t sit well with clients), but I actually used the buds from ‘Goldy Double’ to rave reviews because they are so amazing, the fully formed flower is also very funky, in a good way; Awesome sunflower! My customers loved them in arrangements, very eye-catching; Market customers enjoyed its different appearance, it seemed to keep on

producing side stems and stayed looking good for a very long time, I think it would be good for a home gardener who would enjoy the long harvest window, my first ones still have colour; The double form with the green center was a huge hit with my buyers; Many side shoots were usable for farmers’ market bouquets; Long stems when pinched; Customers loved it held well on plant pollenless; Used as spray; Vigorous, healthy, very nice form, smaller leaves toward tops; Florists liked best when cut early while center still slightly green, customers liked fuzzy petals.

**Problems:** Malformed flowers (2); Stems were a bit short for sunflower sales, some contracted downy mildew; Very thick stems, I would grow at a closer spacing next time; It wasn’t a problem for me since I used all the shorter side buds, but I could see it being a problem for growers selling straight bunches - the side buds are up close to the terminal flower so they could make a bunch really awkward, maybe pinching would help that?; Not a consistent plant, had perhaps 20 out of 50 that were nice single stems, these came back and produced many sides, some had very short stems around the central bloom, late to bloom, the later plantings were not as long lived on the plant, the earlier planting produced the best flowers; Planted in 18 in. spacing and 6 in. spacing to see if it would branch and how head size might be affected, only about 80% germination in both spacings, branched in both spacings, but neither produced usable length stems, secondary stems were also very weak with 4 in. heads, neglected to record time to harvest, but it was substantially longer than other trial sunflowers - may 10-12 weeks to harvest all; Side stems were too long on some for sprays, would prefer shorter

internodes for a really nice looking spray effect; removed terminal bud to have better side flowering, did not get quite figured out when to remove terminal bud to have shorter side stems; Very late coming into flower (about 90 days); Sometimes branched, liked best as single cut, bloomed shorter later in season during heat; Smaller flower heads than expected.

**Similar Cultivars:** ‘Teddy Bear’ (3) but it’s so much cooler!, slightly taller; ‘Double Quick Orange’ (larger than ‘Double Quick Orange’) or ‘Giant Sungold’ (smaller than

The buds! Oh my, are the buds exquisite.  
Any grower selling to florists should grow  
‘Goldy Double’ just for the sculptural buds.

‘Giant Sungold’); ‘Golden Cheer’, a later version of ‘Double Quick Orange’.

**Postharvest Recommendations:** Cut when first begin to open, if you wait until fully open, the center petals turn brown; Cut when terminal flower is unfurling its petals, store in solution of chlorine pill and preservative; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Cut when half open. (See also Postharvest article in this issue for more information.)

**Comments:** My customers were not as impressed with this one as they were with



**‘Goldy Double’**

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‘Vincent’ from Sakata Seed; Loved! Coolest sunflower ever!; Very popular at the trial garden’s open house; Most customers preferred the traditional sunflower, may plant a few next season but just a few; Crazy cluster of 4-6 blossoms atop each strong stem, on some, I cut out the first blossom (4 in. stems) and let the rest mature - one stem was a bouquet all on its own! I will grow these again; Harvested about 75 days from planting; Hold well in cooler if cut early; Nice for a double; Would love to see someone develop a nice spray type sunflower with smaller heads that would work well in bouquets; Loved this one, beautiful flower head, strong plant and good height. The buds! Oh my, are the buds exquisite. Any grower selling to florists should grow ‘Goldy Double’ just for the sculptural buds.



‘Vincent Choice’

**Sunflower ‘Sunbright Supreme’**  
(Sakata/Gloeckner)

**Good Qualities:** Beautiful, traditional sunflower (9); Strong stems (2); Very tall, large flower heads even with 6 x 6 in. spacing; These three sunflowers varieties (with ‘Vincent’s Fresh’ and ‘Choice’) were off the chart! they were absolutely gorgeous! I didn’t have enough of them! they had long stems, the right size for arrangements and very striking; Petals and disk ratio are excellent, no other sunflower other than ‘Sunbright’ has quite the same ‘look’; Good size for bouquet making, faces stay fairly upright; Tall stems and great form as well as wonderful vase life; Short production time, dependable performer, day length neutral; When grown in our summer, this is a tall, unbranched.

**Problems:** None (2); Some contracted downy mildew; Probably too large for some growers; Maybe a little too tall; Pretty boring, it just seems like every other sunflower, the flowers weren’t consistent for me...if you were scheduling a crop to cut all at once, this one had a lot of stragglers, I also seemed



‘Sunbright Supreme’

looking shrunken next to the others, they were still use-able but they just were very different; Misshapen flowers; Stinkbugs love it!; This variety is extremely sensitive to short days in the seedling stage, it has been around for years, and still has that problem, it should not be grown if the daylength at time of sowing is around 12 hours or shorter, if it is, the plants will be very early, flowering 50 days from sowing, with short stems and many small buds and a small main flower.

**Similar Cultivars:** ‘Sunrich Orange’ (3); ‘Sunbright’; Loads; Vincents and Procut; This is the standard for pollenless sunflowers.

**Postharvest Recommendations:** Need to cut just as flowers begin to open; Used only water, cut in bud, store in a solution of chlorine pill and preservative; Experimented with dry storage this season, and found the re-hydrated blooms lasted longer than stems stored in water in the cooler, found the stem were pale and all foliage had to be removed, but I was very pleased to have an option for keeping blooms useful, sometimes there are more stems than you need, it is a good method to be able to take advantage of; I harvested at the first sign of opening and placed into the cooler to store for a wedding, they held great for ten days and opened and looked wonderful, used Floralife Professional; Harvested into CVBn and/or Chrysal 1; Flowers lasted several weeks, cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach.

**Comments:** Overall sturdy, reliable sunflower; Definitely will grow this again;

Grew ours this year with no chemical fertilizers, other than in the greenhouse before transplanting to field, they were a good height, 65% of our sunflowers are sown in 72’s and 200 speeding trays, the rest are direct sown in field, final sowing for ‘Sunright Supreme’ this season was July 24, extremely dry and hot summer causing a delay in germination, cutting them now (October 7); I will grow this again; These were among our first sunflowers of the season, customers were excited to see them; These were very similar to the Procut, but I did like the flower head, picked them very tight and held in the cooler, all flowers opened and was very pleased with the results; We did a late-season trial this year, it was earlier to bloom than ‘Sunrich’ and later than Vincent and Procut; One of the two main sunflowers we grow; I plant these on 9-in. centers and plan on single flower stems; Old workhorse flower.

**Sunflower ‘Vincent Choice’** (Sakata/Gloeckner)

**Good Qualities:** Wonderful brown center with clear medium yellow color petals (7); Early flowering (2); Double overlapping petals makes full flower, faces slightly upward; There was nothing particularly great about this cultivar, true standard sunflower that grew reliably and was on schedule; Good germination, nice head position on the stem; Very nice sunflower, leaves under the flower head nice size (not too large) and very clean and sharp looking; Nice sturdy stem and neck, easy to grow, all around LOVED it!; The petals were rounded, which gives this sunflower a more sophisticated and clean look, the heads were small enough to work into bouquets but also large enough to stand alone in a straight bunch; OK standard sunflower; Rebloomed for a second, smaller cut; Very nice tall strong stems and clean blossoms; Upright heads are good for bunching, interesting rounded petals; Small plant and flower with dark center and long orange petals with blunt tips, flowering at 56 days after sowing; Harvested 60 days after planting, plants grew to about 4 feet tall, one bloom per stem; These three sunflowers varieties (with ‘Vincent Fresh’ and ‘Sunbright Supreme’) were off the chart! they were absolutely gorgeous! I didn’t have enough of them! they had long stems, the right size for arrangements and very striking; About 90% germination in holes 6x6 in. in landscape fabric; Strong stem, multi branching.

**Problems:** None (3); Not that this is a “problem” per say, but the reason I’m not more keen on this cultivar is that it’s just the

same old boring sunflower as so many other cultivars already out there; It seemed to be a bit smaller than other sunflowers, I think it needs fewer seeds per foot; Deformity in many flowers, could not use a lot of the flowers; Short, many side buds near flower; Day length sensitive - less flexible; Moderately short day sensitive, flower buds on stem look unattractive; Occasionally drops a petal when handled; Traditional brown center yellow/orange petals not different enough to be a novelty sunflower which command higher prices.

**Similar Cultivars:** Many (2); 'Sunbright' and 'Procut', None that I've grown; 'Vincent Fresh'.

**Postharvest Recommendations:** Chlorine pill and preservative; Used only water; Pick in bud, store in solution of chlorine pill and preservative; Harvested into CVBn and /or Chrysal 1, flowers lasted several weeks; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Cooler at about 40 degrees; CVBn tablet in cutting and shipping buckets.

**Comments:** I like it even though some stems were rather small and needed more stems to make the bunches equal to other cultivars, but it has a lot of potential; Perfect size with 6x6 spacing; Definitely will grow this again; I'm not a sunflower fan, but this one was unique enough that I think I will actually grow it again; I will probably stick with the Procuts and 'Sunbright Supreme', I was not overly impressed with the Vincents because of so many deformities in the flower heads, I was really disappointed in these varieties; We did a late-season trial, this was the earliest to bloom in our patch, attracted the interest of local cut flower growers; Started in greenhouse and transplanted to field may have caused the short stem length; This is close enough to a regular sunflower, but just different enough to interest customers; Should be grown at higher density to get rid of stem buds; Was not as full as 'Vincent Fresh' and did not have as many usable stems, needed to cut first flowers in order to get longer stems for sale.

#### **Sunflower 'Vincent Fresh' (Sakata/Gloeckner)**

**Good Qualities:** Rich yellow color with green center (11); Early flowering (2), 54 days after sowing; Great vase life, strong stem, customers couldn't get enough of them; Nice sturdy stem and neck, easy to grow, all around LOVED it!; These three sunflowers varieties (with 'Vincent Choice' and 'Sunbright Supreme') were off the

chart! they were absolutely gorgeous! I didn't have enough of them! they had long stems, the right size for arrangements and very striking; Fantastic - especially with amaranthus 'Opopeo'; Nice rounded petals and good matching centre disc, upright heads are good for bunching; Unique head shape; Long petals with blunt tips; Fresh upright double overlapping petals, my best-selling sunflower this year; Nice height and bloom size for bouquet work, very uniform, in looks and timing; Harvested 60 days after planting, plants grew to about 4 feet tall, one bloom per stem, excellent companion to 'Vincent Choice'; Had harvested almost all within 7 weeks of planting, stems not too thick but nice and sturdy, green center makes them a novelty so which allow me to keep my pricing up at \$.80/stem and compete against the large growers selling at \$.25/stem; Strong plant and stems.

**Problems:** None (2); A lot of flowers seem distorted when they open. I don't see any noticeable insect damage to cause this so not sure what it is, also, the terminal flower blooms way before the side shoots and the side shoots never develop a longer stem after the terminal is removed, so while this may be a "branching" variety (not sure if it is considered such), you really only get one saleable cut off of it, maybe pinching early would help?; Had to cut first 2 buds in order to get longer stems for sale; It seemed to be a bit smaller than other sunflowers, I think it needs less seeds per foot; Some deformity in flowers, could not use some; Short, many buds near flower; Young flower buds on stem are unsightly, variety prone to early petal drop, moderately sensitive to short days in seedling stage: flowers a week early in 12 hr. daylength; Only about 67% germination, heads can get 8-10 in. which is a little large for bunches.

**Similar Cultivars:** 'Procut Gold' (3); 'Procut Yellow Lite' (2); Similar to 'Teddy Bear' in look but a much larger plant; 'Sunbright' and 'Procut'; 'Vincent Choice'; 'Procut Orange', however I like this one better.

**Postharvest Recommendations:** Cut in bud, store in solution of chlorine pill and preservative; Handled well in cooler and also cutting fresh and selling at farm market; Flower petals curled or "furred" a bit when refrigerated, this made the flowers visually less appealing to most customers, making them look a bit old even when they were fresh; Just used water; Harvested into CVBn and /or Chrysal 1, flowers lasted several weeks; Cut well-hydrated plants in evening and condition overnight in solution with acidifier, sugar, and bleach; Floral

preservative; Cooler at about 40 degrees; One CVBn tablet in cutting bucket and another in retail bucket to keep bacteria at bay worked beautifully.

**Comments:** Definitely will grow this again (2); This was a true find, my flower shops were actually ordering ahead for any I had available; Great sunflower good germination and grew well, might need more space between seeds; Love this sunflower; Good rebloomer, got a nice, smaller second cut; Great addition to bouquets, however, I will probably stick with the Procuts and Sunbright; Part of a late-season trial, these were the first to bloom, attracting attention from customers; Started in greenhouse and transplanted to field may have caused the short stem length; A nice cultivar to make a standard; Grow at higher density than the 9 in. x 9 in. I used here; Although a nice sunflower, I found it needed a larger center and the petals are quite round, I like the 'Sunbright' look.



**'Vincent Fresh'**



**2012 ASCFG Seed Trial Results.** 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 listed, either only one person responded for that category or several responded and all gave the same rating. The single highest score and the single lowest score in each category for each cultivar have been dropped.

Species Cultivar Company	Yield (stems/plant)	Stem length (inches)	Market appreciation rating <sup>1</sup>	Repeat again rating <sup>1</sup>	Ease of cultivation rating <sup>1</sup>	Average postharvest life (days)
Carthamus 'Dark Orange Red' Genesis Seed	<b>2.3</b> 1-20	<b>21.3</b> 8-42	<b>3.0</b> 1-5	<b>3.2</b> 1-5	<b>3.0</b> 1-5	<b>10.0</b> 9-14
Carthamus 'Grenade Orange' Kieft-Pro-Seed	<b>1.0</b> 1-10	<b>19.1</b> 5-28	<b>3.0</b> 1-3	<b>2.1</b> 1-4	<b>3.0</b> 1-5	<b>5.0</b> -
Carthamus 'Grenade White' Kieft-Pro-Seed	<b>2.3</b> 1-10	<b>19.3</b> 5-36	<b>1.5</b> 1-2	<b>1.4</b> 1-3	<b>3.0</b> 1-4	- -
Carthamus 'Orange Head' Genesis Seed	<b>2.1</b> 1-5	<b>18.8</b> 12-32	<b>2.3</b> 1-4	<b>2.3</b> 1-5	<b>3.3</b> 1-5	<b>8.0</b> 4-8
Celosia 'Dark Rose' Genesis Seed	<b>6.6</b> 1-35	<b>20.6</b> 10-40	<b>3.8</b> 1-5	<b>3.8</b> 1-5	<b>4.1</b> 3-5	<b>11.4</b> 7-16
Celosia 'Sunday Orange' Kieft-Pro-Seed	<b>6.3</b> 1-14	<b>15.1</b> 7-21	<b>4.4</b> 1-5	<b>4.3</b> 1-5	<b>4.3</b> 3-5	<b>10.4</b> 9-15
Celosia 'Sunday Wine Red' Kieft-Pro-Seed	<b>7.2</b> 2-18	<b>15.4</b> 7-21	<b>3.2</b> 1-5	<b>3.5</b> 1-5	<b>4.2</b> 1-5	<b>11.0</b> 8-14
Celosia 'Tornado Red' Genesis Seed	<b>3.3</b> 1-13	<b>16.1</b> 8-28	<b>3.8</b> 1-5	<b>3.3</b> 1-5	<b>4.3</b> 1-5	<b>11.0</b> 8-14
Dianthus 'Volcano Mix' Genesis Seed	<b>5.2</b> 2-12	<b>13.2</b> 8-24	<b>3.4</b> 1-5	<b>3.4</b> 1-5	<b>3.8</b> 1-5	<b>11.1</b> 9-16
Gomphrena 'Qis Carmine' Kieft-Pro-Seed	<b>15.4</b> 6-77	<b>17.2</b> 10-24	<b>4.1</b> 2-5	<b>4.4</b> 2-5	<b>4.7</b> 2-5	<b>12.4</b> 9-21
Gomphrena 'Qis Red' Kieft-Pro-Seed	<b>17.7</b> 6-80	<b>17.1</b> 12-24	<b>3.9</b> 1-5	<b>4.4</b> 2-5	<b>4.5</b> 1-5	<b>13.6</b> 9-21
Larkspur 'Galilee Carmin' Genesis Seed	<b>1.7</b> 1-6	<b>22.8</b> 10-33	<b>3.7</b> 2-5	<b>3.3</b> 2-5	<b>3.7</b> 2-5	<b>7.7</b> -

<sup>1</sup> 1 to 5 scale, with 5 being the best. Market ratings are based on sales to wholesales, retailers, or final consumers direct.

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Species Cultivar Company	Yield (stems/plant)	Stem length (inches)	Market appreciation rating <sup>1</sup>	Repeat again rating <sup>1</sup>	Ease of cultivation rating <sup>1</sup>	Average postharvest life (days)
Larkspur 'Galilee Pink Perfection' Genesis Seed	<b>1.6</b> 1-6	<b>23.5</b> 10-33	<b>2.8</b> 2-5	<b>3.9</b> 3-5	<b>3.8</b> 3-5	<b>7.7</b> -
Larkspur 'Galilee Salmon' Genesis Seed	<b>1.3</b> 1-6	<b>24.9</b> 10-33	<b>3.5</b> 2-5	<b>3.3</b> 2-5	<b>3.7</b> 2-5	<b>6.5</b> -
Larkspur 'Galilee White' Genesis Seed	<b>1.2</b> 1-6	<b>25.3</b> 10-42	<b>3.5</b> 2-5	<b>3.5</b> 2-5	<b>3.7</b> 2-5	<b>7.7</b> -
Lisianthus 'Arena II Kilimanjaro' Takii Seed	<b>1.3</b> 1-3	<b>15.3</b> 12-18	<b>4.0</b> 4-4	<b>4.0</b> 1-4	<b>2.8</b> 1-4	<b>11.0</b> -
Lisianthus 'Falda II Yellow' Takii Seed	<b>1.3</b> 1-3	<b>14.5</b> 9-18	<b>4.0</b> 3-4	<b>3.7</b> 1-5	<b>2.8</b> 1-4	- -
Marigold 'Jedi Orange' Gloeckner	<b>10.6</b> 1-43	<b>17.6</b> 7-43	<b>3.7</b> 1-5	<b>3.8</b> 1-5	<b>4.6</b> 1-5	<b>10.8</b> 6-17
Snapdragon 'Chantilly Purple' Takii Seed	<b>4.8</b> 1-21	<b>18.1</b> 14-25	<b>3.7</b> 2-5	<b>3.5</b> 2-5	<b>3.9</b> 2-5	<b>8.1</b> 7-10
Stock 'Carthago White' Takii Seed	<b>1.2</b> 1-5	<b>16.2</b> 12-23	<b>4.0</b> 2-5	<b>3.9</b> 2-5	<b>3.9</b> 3-5	<b>7.8</b> 7-11
Sunflower 'Goldy Double' Genesis Seed	<b>2.2</b> 1-10	<b>35.6</b> 11-60	<b>4.1</b> 2-5	<b>4.1</b> 2-5	<b>4.7</b> 4-5	<b>9.4</b> 8-14
Sunflower 'Sunbright Supreme' Sakata/Gloeckner	<b>1.6</b> 1-13	<b>39.1</b> 11-60	<b>4.4</b> 2-5	<b>4.5</b> 1-5	<b>4.9</b> 4-5	<b>8.9</b> 5-12
Sunflower 'Vincent Choice' Sakata/Gloeckner	<b>1.1</b> 1-5	<b>33.7</b> 12-48	<b>4.1</b> 2-5	<b>3.9</b> 1-5	<b>4.9</b> 4-5	<b>8.9</b> 7-14
Sunflower 'Vincent Fresh' Sakata/Gloeckner	<b>1.5</b> 1-14	<b>31.2</b> 11-48	<b>4.5</b> 2-5	<b>4.2</b> 2-5	<b>4.9</b> 4-5	<b>8.5</b> 4-11

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