

2011 ASCFG CHRYSANTHEMUM TRIAL

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For years the unofficial definition of specialty cut flowers included everything but roses, carnations, and chrysanthemums. Considering that the three species are no longer grown in the U.S. in the numbers they once were, we should welcome roses, carnations and mums back into the specialty cut flower family. We have already done so with roses—we now discuss and grow a broad range of garden and shrub roses. It might be time to welcome back chrysanthemums as well.

Let's consider why the chrysanthemum became so popular in the first place—thousands of cultivars spanning the

range of colors, shapes, and styles. Every color but true blue and true red is available. The shapes and styles range from the charming button mums to the spectacular spider mums. The petals vary from spiky quills to spoon tips to large and flat. Oh, and let's not forget the long postharvest life.

Thus, when Ray Gray of King's Mums suggested an ASCFG mum trial, we gladly agreed. Ray shipped rooted cuttings of six cultivars to 10 trialers in June. Our mums at NSCU performed well; we grew them in crates in the greenhouse and they produced very long stems by harvest time in October

and November. Others grew them in hoopouses or in the field. We had difficulties with thrips—with the good, you must take the bad—which damaged the dark-petaled varieties most. The crop time was quite long, but Ray indicates that if enough growers are interested in the cut mums, he might be able to delay shipping until later in the season.

To be honest it was great to grow mums again and remember why we loved them in the first place: gorgeous colors, cool petal shapes and long vase life. We gave some of the stems to the folks in the department and they were thrilled to get a locally-grown mum. Needless to say, the flowers remained on the desks for a long time.

As you can read from the trial results below, the other trialers also had positive reactions to the mums. One person commented emphatically on the “VERY long-lasting vase life.” Those growing the mums outdoors or in the hoopouse appeared to have fewer problems with thrips. The tradeoff might have been more caterpillars, but those are easier to handle.

A few of the trialers did not disbud the stems and that apparently did not cause problems, but one trialer indicated that the lack of disbudding made flowers smaller. We used support on our plants, and everyone agreed that support is necessary. Since greenhouse space is expensive, the success with growing mums outdoors is good to hear.



‘Yoko Ono’

However, the flowering time will need to be taken into consideration for those in the North or along the cool parts of the West Coast as plants flowered naturally in October and November. Artificial short days can be used to get early flowering, but it is a hassle unless automated, and easiest to do in a greenhouse.

Ratings for all six cultivars were good. The top-rated cultivar was ‘Maryl’ with ratings of all 4’s and 5’s. It produced an average of 11 stems per plant which were 28 inches long. Trialers loved the pink/burgundy spoon-tipped petals with yellow centers. Next most popular was ‘Yoko Ono’ due to its “wonderful zingy green color”. Highlighting the continued popularity of green flowers, one trialer said “This color goes with almost any other color flower.” It produced an average of 11 stems that were 30 inches long. At least 8 stems per plant were harvested for all of the cultivars and stem length was at least 27 inches. Some folks cut them shorter, but also were able to harvest many more stems than the average.

The main question will be how to market home-grown mums to make a profit. Competing directly with low-cost imported mums is not likely to work. Farmers’ markets, specialty supermarkets, and florists who value locally-grown products may be the best route.

Acknowledgments: A hearty thank you to the six evaluators who returned their trial reports and King’s Mums for providing the chrysanthemum cuttings. I would also like to thank Ingram McCall for taking care of the North Carolina State University portion of the trials, and Alicain Carlson, Brigitte Crawford, and Diane Mays for assisting with the NCSU trials. In preparing the report we have edited the participants’ comments for space and clarity; my apologies if we’ve altered the tone or content of anyone’s comments.



‘Judith Baker’



‘Whirlaway’

PARTICIPATING GROWERS

TANIS CLIFTON
Happy Trails Flower Farm
Dennis, Mississippi

CHAZZ HESSELEIN
Alabama Cooperative
Extension System
Mobile, Alabama

INGRAM MCCALL/JOHN DOLE
North Carolina State University
Raleigh, North Carolina

DON MITCHELL
Flora Pacifica
Brookings, Oregon

DIANE SZUKOVATHY
Jello Mold Farm
Mount Vernon, Washington

CHERYL WAGNER
Wagner’s Homestead Farms
Belleville, Michigan

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.

‘Judith Baker’

Good Qualities: Beautiful variation with yellow center to bronze outer petals (3); Perfect color for fall (2); Interesting petal shape, could grow as a disbud; This cultivar had the popular deep bronze quill flowers, stem length was good, I did not disbud for a single stem, but the king flower and the many smaller buds made a nice spray; This cultivar really



‘Maryl’

held up nicely, very interesting, it also held up very nicely in Oasis and VERY long-lasting vase life! Performed well, but were late, possible heat delay? they were grown in the field and not shaded very much due to heat and winds, stems were very strong and great branching on each stem. I would grow them again, but

I would grow them inside so as to be able to cut them earlier in the season; Good focal flowers, stems not disbudded, blended well in mixed bouquets,

Problems: We did not experience any problems in growing this cultivar; however, it was the last to flower and should have had support, we had an October wind blast that knocked the plants over before they had flowered; As I did not disbud or stake, this cultivar laid over, so the stems were not straight, next year I will take the time to disbud and stake and I am sure it will make a tremendous difference in flower size and also produce nice straight stems.

Insects or Diseases: Cut worms on blooms; None; We had a few caterpillars and some leafhoppers but they did not put much pressure on the final cut; No disease problems and the Japanese beetles didn’t bother them.

Similar cultivars: None listed.

Postharvest Recommendations: I used Chrysal Pro2 as post-harvest treatment, stripped the bottom leaves; Floralife and cool water.

Additional Comments: We did not harvest these for sale, because they came on in November in our hoop and we need to get ventilation fans so outer petals don’t mold; We grew this mum in the hoophouse in bulb crates, they did fine in crates, some of our cuts were an entire stem with MANY blooms, some were just side shoot cuts, the entire stem made a beautiful bouquet in itself, the blooms were

4-5 inches in diameter so I know they would have been enormous if we had disbudded, I look forward to next year as a comparison, we had a hard time bunching the stems because they were not straight (because we did not stake them) so we sold them by the bucket full; Disbudding affects bloom size.

‘Maryl’

Good Qualities: The vibrant burgundy color and darker color in the spoon was striking against the bright yellow center (4); The plants grew strong and straight with no need for support; Cultivar was first to flower in this trial (October 1); The spoon type was attractive; Attractive unique bloom, blended well in mixed bouquets, holds color well, good vase life; Performed well, but were late, possible heat delay? they were grown in the field and not shaded very much due to heat and winds, stems were very strong and great branching on each stem, I would grow them again, but I would grow them inside so as to be able to cut them earlier in the season; This variety did not require staking, harvested for over a month.

Problems: We did not experience any problems in growing this cultivar; Flower necks tend to bend when cut; None.

Insects or Diseases: None; No disease problems and the Japanese beetles didn’t bother them; Some leafhopper but not significant damage.

Similar cultivars: None listed.

Postharvest Recommendations: Floralife and cool water; Chrysal Pro2.

Additional Comments: We grew these in crates in a hoophouse, we made two different kinds of cuts, we cut a center stem which made a beautiful bouquet in itself, then we had quite a few terminal cuts below that with smaller clusters of flowers on top.

‘Symphony’

Good Qualities: Nice light bronze color (2); Nice color for fall bouquets, good vase life; Spider flowers, stem length was good, I did not disbud for a single stem, but the king flower and the many smaller buds made a nice spray; This cultivar was very unusual and delicate looking, the color range was varied from yellow to orange to red all within the same bloom.

Problems: Blooms raggedy in appearance unless fully open; We did not experience any problems in growing this cultivar, however, it was among

the last to flower and should have had support, we had an October wind blast that knocked the plants over before they had flowered, even so we had a number of stems suitable for small arrangements; Because we did not disbud, the plants produced tons of stems and blooms but the stems were weak and floppy, we were still able to market to the florist because they were so unusual, however, several florists wondered how they would hold up because of the small stem and thus did not purchase, this would not have been a problem I believe if we had disbudded.

Insects or Diseases: None; Some leafhopper and a few caterpillars but not much pressure by either.

Similar cultivars: None listed.

Postharvest Recommendations: Chrysal Pro2 and cooler.

Additional Comments: Some variation of bloom color in different plants, disbudding affects bloom size; We grew these in a hoop house in bulb crates, because of the late harvest on this cultivar, we were unable to market all of our stems, I wish they bloomed earlier than November 1, I indicated a large number of marketable stems in the survey because they produced so much, however, the thin stems hindered our marketability, if it were not for the fact that they were so unusual and different, I think we would have had a hard time moving them.

‘Vesuvio’

Good Qualities: Gorgeous pure white (2); Very pretty spray; Good stem length, however, all the growth seemed to be vegetative; Performed well, but were late, possible heat delay? they were grown in the field and not shaded very much due to heat and winds, stems were very strong and great branching on each stem, I would grow them again, but I would grow them inside so as to be able to cut them earlier in the season; Unique flower form, several stages appropriate for cutting, blends well in mixed bouquets, often as the central flower.

Problems: This cultivar did not flower

for us, the flower stems, as of November 5, have only very tiny buds, it is doubtful we will have flowers before heavy rains set in; comes on too late for us in northwestern Washington, still not blooming by November 18; Flopped over, needs staking; Limited number of stems.

Insects or Diseases: None; Some leafhopper; No disease problems and the



‘Whirlaway’

Good Qualities: Massive blooms, attractive, well-formed spoon daisy clusters; Spray of light purple flowers with yellow center; The plants grew strong and straight with no need for support, cultivar was second to flower in this trial (October 10), the pink color was nice and the spoon type attractive; Easy

‘Vesuvio’

Japanese beetles didn't bother them.

Similar cultivars: None listed.

Postharvest Recommendations: Chrysal Pro2; Floralife and cool water.

Additional Comments: This was a beautiful pure white bloom, some of the florists called it a “Snowflake” I wish it was a later bloomer for Christmas because it did look like a snowflake and would be striking against red, it would be a beautiful wedding flower, our florists wanted fall colors, not white, when this cultivar came in, started harvesting on October 29 thru December 1, as the flowers aged on the plant, they got a purple hue which was actually quite interesting, this variety fell over so needs staking, we would have had a lot more marketable stems had we staked it, some of the cuts were short, 7 inches or so.

to grow, interesting spoon-shaped petals; Performed well, but were late, possible heat delay? they were grown in the field and not shaded very much due to heat and winds, stems were very strong and great branching on each stem, I would grow them again, but I would grow them inside so as to be able to cut them earlier in the season; No staking or disbudding required.

Problems: Petal color faded, a lot of spindly branches; We did not experience any problems in growing this cultivar; Can't stand the color of pink with yellow center—a taste issue; Older harvested stems did have some pollen.

Insects or Diseases: None (2); No disease problems and the Japanese beetles didn't bother them. Some leafhopper, no significant damage.

Similar cultivars: None listed.

Postharvest Recommendations: Floralife and cool water; Chrysal Pro2.

Additional Comments: Personal taste aside, I think a mum has to be more interesting than this to be able to stand up against the much cheaper imports that are so readily available out there, this was the earliest to bloom in the trial, started harvesting October 20, it was not extremely striking in color and really not the color of choice for the fall, the center stem was a great cut with lots of flowers, the cuts under that were smaller clusters of flowers, I had a hard time marketing this flower, there just did not seem to be much interest by florists.

‘Yoko Ono’

Good Qualities: Wonderful zingy green color (5); Strong stems (2); Perfectly formed spray pompoms; Very nice spray, got a lot of comments on this one; Stem length was good; Stems were very strong and great branching on each stem, I would grow them again, but I would grow them inside so as to be able to cut them earlier in the season; Nice range of color, early cuts are a great lime green color, older cuts are a yellow/green

color—both nice, this color goes with almost any other color flower, produces a lot of cuts.

Problems: Bloom color changed from initial green to chartreuse to yellow quickly in our warm climate; We did not experience any problems in growing this cultivar, however, it was among the last to flower and should have had support, we had an October wind blast that knocked the plants over before they had flowered, the individual flowers were slow to fully open and did not open at once to give that wow appearance; With imported green button mums selling at \$3.25/10 stem bunch at our local wholesaler I don’t see how this could be a worthwhile crop for us, sad, because it is stunning; This cultivar laid over, it requires staking.

Insects or Diseases: None (2); No disease problems and the Japanese beetles didn’t bother them; Leafhopper and some caterpillar, a tiny bit of powdery mildew, but not a problem.

Similar cultivars: ‘Kermit’ (2).

Postharvest Recommendations: Floralife and cool water; Chrysal Pro 2.

Additional Comments: We grew this

cultivar in a hoop house in bulb crates, the florists use a lot of this type mum so it was not new to them, this mum is not unique to them and there is a lot available from wholesalers at rock bottom prices, so it is nice to have, but they do not see value in it, thus the grower cannot make much, one unusual thing I noticed, since we grow in a hoop house that is totally insect screened we do not have much if any insect pressure, however, one day after harvesting mums, I loaded up the buggy outside with buckets and by the time I came out with the last buckets bugs were swarming the buggy...a combination of bees, cucumber beetles, etc., it was odd, they apparently attract a lot of attention from bugs (not a good thing), One last comment, since we did not begin harvesting until end of October and into November, they took up a lot of space in the hoop house (since June) for such a short harvest period, I am not sure it is worth it, I think more money could be generated by lilies or multiple short crop time flowers. Nevertheless, Kings Mums has some gorgeous cultivars and I plan to order some other VERY unique cultivars that would be worth the space.

2011 ASCFG Chrysanthemum 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.

Cultivar	Yield (stems/plant)	Stem length (inches)	Market appreciation rating ¹	Repeat again rating ¹	Ease of cultivation rating ¹	Average postharvest life (days)
‘Judith Baker’	9.5 2-20	34.0 17-55	3.8 3-5	3.7 2-5	4.3 4-5	17.0 14-22
‘Maryl’	8.8 4-24	23.5 18-32	4.6 4-5	4.4 4-5	4.8 4-5	12.3 14-20
‘Symphony’	13.8 3-5	28.9 23-34	3.8 2-5	3.3 1-4	4.5 4-5	15.0 15.0
‘Vesuvio’	8.3 2-60	29.6 7-37	3.6 1-5	3.2 1-5	4.2 3-5	17.7 14-24
‘Whirlaway’	11.0 5-30	27.0 22-31	3.3 2-5	3.2 1-5	4.7 4-5	14.7 12-17
‘Yoko Ono’	10.9 3-25	30.6 12-45	4.2 3-5	3.5 1-5	4.3 4-5	16.7 14-21

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