

Colorado State University



From the Desk of Dr. Klett



The 2021 growing season is upon us and the spring semester classes are completed and grades turned in. Efforts now turn to getting the 2021 Annual and Perennial Trials planted. All the student workers are now able to put in more hours to get our trials planted and cared for.

I am happy to report that the University Pandemic Committee has announced that as of August 1, 2021 we can have public gatherings of up to 300 persons. Therefore we are looking forward to hosting our Evaluation Day in person on Tuesday, August 3, 2021.

We also plan to have a Consumer Day for the public on Saturday July 31, 2021 in the morning with some scheduled tours. We are also excited to announce the refresh of our website - flowertrials.colostate.edu. We have a new home page which is more colorful and easier to use with the most pertinent information convenient to find. The amount of text on each page was reduced and an emphasis was placed on more photos. In particular, the industry had requested that they would like to be able to access the photos more so we have added the "Photo Library" tab on the home page. It is password protected in hopes CSU will be recognized if used in any additional publications but the password is "CSUphotos". The Photo Library is searchable now but the feature will be expanded even more in the future so that it can be searched by company. Let us know what you think. You can email me with your thoughts at jim.klett@colostate.edu.

We have completed our Cool Season Trials. The fall, winter and spring of 2020-21 was a tough one on our Cool Season Trials. This year's snow amount at the trials was higher than in previous years. The length of snow cover, however, did have some negative impacts on the plants in our trial, specifically in February. In February we had a major freezing event after a week of abnormally high temperatures. Our weather data in February showed that over a four day period night temperatures were all well below zero with wind chill factors below -20° F with no snow cover. It was a real test for these cool season crops. Final report will be up on our website and sent to all cooperators in the next several weeks.

Also, I apologize that we forgot to mention Griffen and HC in our list of in-kind donors in the last newsletter for their generous donation of flats and pot for our greenhouse production of this years vegetative annual flowers.

We all look forward to a more normal 2021 growing season and seeing most of you in early August 2021.



Volunteers from the Master Gardener Program help CSU staff get vegetative plugs transplanted in a timely fashion. 4.5" pots used in the greenhouse for 2021 were generously donated by Griffen and HC.



The CSU Horticulture Center greenhouse bays quickly filled up and have gained size prior to planting in the outdoor trial.

"Best Of" Winner *Spotlight* - Dahlia 'Lubega[®] Dark Velvet'
from Benary+



At CSU this was a 'show stopper' due to the strong contrast between the dark purple/velvet foliage and beautiful bicolor blooms. Plants were extremely attractive all by themselves with the dark foliage coloring and uniform compact growth habit. The prolific flowers were held high above the plants to create maximum show. Blooms had single petals which attracted many bees. Plants did not have any sign of powdery mildew even late in the season.

Benary states that this series was bred to be early to bloom, versatile and an all-around performer. Naturally self-branching, these beauties are easy to grow because no pinching is necessary. The large, bright, fully double blooms cover the plant all season. At retail, Lubega dahlias work well in 4.5- to 5.5-inch pots, but can also be sold in patio pots and mixed containers.

General & Information:

Height: 20-24"

Spread: 16-19"

Exposure: Sun

Water: Moist, received 1.5" irrigation per week at CSU trials

Propagation:

- Crop time is about 12 to 14 weeks to a 6-inch pot.
- Stick one cutting per cell.
- Provide proper ventilation and horizontal airflow.

Benary states that rooting takes about three weeks for Lubega dahlias. During December and January you might need to add a week due to low light conditions. The pH level of your soil should be between 5.8 and 6.2. After sticking you should mist cuttings for about two to three weeks. On day five, begin to reduce the frequency of misting. By day 10, reduce even further. By day 14, only mist the cuttings during the day as needed. Take care not to let the plants dry out. Don't cover the URC directly with foil if mist is not available. This will make the URCs rot. Instead, build a tent so the leaves are not damaged.

Greenhouse temperature should be kept at 68° F. If you are producing rooted liners, one week before shipping bring the plants into a normal greenhouse with temperatures at least 63 to 65° F. Keep on giving long days (14 to 16 hours).

Production

After rooting, use a well-balanced fertilizer, 15-5-15 or 14-4-14 at rates of 100 to 150 ppm. One pinch is recommended after the plants have rooted but pinching can be omitted for quick turns in small pots. Maintain temperatures at 64 to 68° F days and 60 to 62° F nights. Lower temperatures lengthen the growing time and have a negative influence on the plant structure. Higher temperatures combined with a lack of light cause too soft a plant structure. The temperature for finished plants can be dropped to 54° F, but temperatures below 54° F can cause tuber formation which will limit flowering.

Dahlias are long-day plants. Provide long days of 14 to 16 hours for three to four weeks after transplant or

use night interruption lighting. This will prevent premature budding and tuber formation and bulk up the plants. Supplemental lighting is most critical during early spring production when temperatures are low. Provide proper ventilation and horizontal airflow especially for late- season turns. Dahlia are susceptible to powdery mildew, so preventative applications of fungicides are beneficial. Especially when conditions are cool and humid.

Plant growth regulators can be beneficial. The introduction of a temperature DIFF, prompt ventilation and high light intensity will also aid compact growth. Avoid over-watering.

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