Irrigate With Less Water And Lots Of Highlights from Darwin Perennials Day















COMING UP THIS WEEK:

When Less is More Perennials Day Recent Introductions A Few More Garden Trials More From the Field Trials



When Less is More

When it comes to watering, it seems like many growers and water technicians irrigate their crops in some instances because it's in their job title or responsibilities rather than the plants actual water needs. Watering because you can may work for some, but this type of irrigation approach often leads to cultural issues, results in larger plants which may require PGRs or plant maintenance and reduces plant quality, not to mention the additional water and cost of labor to apply the irrigation frequently.

The American Floral Endowment (AFE) recently released a report where they summarized research on how various floricultural crops responded to being grown at reduced substrate moisture content. The link to the report is below, but I'll attempt to summarize it for you.

Petunia 'Colorworks Pink Radiance'





Top view of Petunia 'Colorworks Pink Radiance' irrigated with a narrow range drying interval (54-40% SMC) on the left and wide range drying interval (54-20% SMC) on the right. Photo was taken after two weeks of shelf life.

To start, plants were irrigated using either a narrow range drying interval similar to conventional irrigation methods where the growing mix is kept evenly moist or a wide range drying interval where the plants were allowed to dry down to the point where they were starting to show signs of water stress before irrigation was applied. Once the plants were marketable, they were placed in a 24-hour dark period to simulate shipping and then placed back into a greenhouse for two weeks with 50% shade to simulate shelf life.

The Results

- There were no detrimental effects on plant morphology or plant quality with any of the eight plants tested.
- Many plants were more compact with the wide drying range.
- · Several plants produced more flowers and had more root mass with the higher drying range.
- The wider drying range also exhibited equal to or better plant quality attributes (darker leaves, more compact plants and etc.).

This study demonstrates that many crops can be grown with less water without having detrimental effects on plant growth and quality. These reductions can help growers reduce their irrigation frequencies, amounts and the costs associated with higher frequency waterings. With wide range drying intervals leading to more compact plants, growers may be able to grow plants at higher plant densities; therefore, not only can cost savings be obtained, growers could potentially grow more plants and generate more revenue per square foot. Sounds like a win-win management tactic. Less really can be more.

Click HERE to read the entire report.



Perennials Day

Each year Darwin Perennials, in conjunction with Kieft Seeds, hosts a day-long event where they get to proudly show off their new and old perennials in stunning displays at The Gardens at Ball in West Chicago, Illinois.



The weather was absolutely beautiful, 10 degrees cooler than the previous days had been, and the gardens and perennials looked beautiful as always.

From my understanding, there were over 400 people registered to attend Darwin Perennials Day. If I recall correctly, this would be the best attendance since its inception. Congrats to Darwin for achieving this milestone. Now are you ready to see some perennials?



Recent Introductions

Here are several of the new or relatively recent introductions from Kieft Seeds and Darwin Perennials. Since I have lots to show, I won't be giving any commentary, but feel free to click the name of each plant to learn more about each of the varieties. Please allow me to apologize in advance if some of the images aren't as high quality as they could be; it's difficult to take great pictures in the full sun, not to mention I'm an amateur photographer using an iPhone.

Agastache Blue Bayou (click here)



Delphinium x hybrida Red Lark



Echinacea Artisan Series

Yellow Ombre Red Ombre



Oenothera missouriensis Evening Sun



A Few More

Achillea millefolium Milly Rock Yellow Terracotta



Agastache Meant to Bee Queen Nectarine



Echinacea Sombrero Poco Red



Polemonium pulcherrimum Golden Feathers





Garden Trials

Both Darwin and Kieft have many of their plants along with those from other breeders/suppliers in the field trials at The Gardens at Ball. These trials are intended to demonstrate plant performance over time (three years to be exact) in the Zone 5 location in West Chicago. Check out some of the great perennials that caught my eye.

Feel free to click on each plant name to learn more about each plant's attributes, uses, plant hardiness and so much more.

Achillea ptarmica Diadem



Delphinium Delgenius Shelby



Monarda Bee-You Bee-Merry



Salvia Salvatore Blue





More from the Field Trials

Astilbe Fireberry



Heuchera x hybrida Carnival Watermelon



Monarda Electric Neon Purple



Thanks for reading this edition of *Perennial Pulse*. My email is paul@opelgrowers.com if you have any comments, article suggestions or if you'd just like to say "hello."

Paul Pilon

Editor-at-Large—Perennial Pulse Director of Growing—Opel Growers

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