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GREENHOUSE PRODUCT NEWS

**INTRODUCING**  
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**4010**  
UNDER

Turn to page 14 to learn  
about the horticulture  
industry's rising stars

# gpn

GREENHOUSE PRODUCT NEWS

The business magazine for commercial growers

## FEATURES

### 14 Introducing GPN's 40 Under 40

*Keep an eye on these individuals who are setting the pace for the future!*

By Tim Hodson



#### VARIETY INFORMATION

### 30 Winners Circle

*Admired for their beauty and performance, these striking varieties impressed judges across the United States and abroad.*

Compiled by Jasmina Radjevic

#### RESEARCH

### 38 The Greenhouse Environment: Boilermaking Solutions

*Recent research at Purdue aims to improve energy use and cropping efficiency.*

By Christopher J. Currey and Roberto G. Lopez

## CULTURE CONNECTION

### 42 Perennial Solutions: Delosperma 'Mesa Verde'

*With its tidy, succulent appearance and stunning flower coloration, 'Mesa Verde' has great potential in perennial programs.*

By Paul Pilon

### 44 Crop Culture Report: Echinacea Prairie Pillars Series

*Long-lasting, fragrant flowers on sturdy stems are a trademark of the series.*

By Conor Carey and Dan Heims

### 45 New Varieties

*Petunia, calla lily, snapdragon.*

### 46 Variety Spotlight

*Begonia, geranium.*



#### ON THE COVER

*Ecke Ranch's Elegance geraniums produce full flowers in March through early summer. Offered in a full range of striking colors, these Regals will deliver high impact and instance consumer appeal. Turn to page 46 to learn more.*

#### IN EVERY ISSUE

- 6 EDITOR'S REPORT
- 8 NEWS
- 10 CALENDAR
- 41 PRODUCT FOCUS: *Pots & Containers*
- 48 AD INDEX
- 49 PRODUCT SHOWCASE/CLASSIFIEDS

#### COLUMNS

##### THIS MONTH IN DISEASES

### 11 Aster

By A.R. Chase and Margery Daughtrey

##### TECHNICALLY SPEAKING

### 50 High-Temperature Stress of Bedding Plants

By Erik Runkle,  
Michigan State University



# Echinacea Prairie Pillars Series

LONG-LASTING, FRAGRANT FLOWERS ON STURDY STEMS ARE A TRADEMARK OF THIS SERIES.

By *Conor Carey and Dan Heims*

Can you remember what echinacea looked like 10 years ago? Lanky, pale, floppy plants? These were the norm. The older coneflowers in the trade had few blooms and two colors; faded pink and white. Thanks to the work of Jim Ault, Richard Saul, Ari Bloom and our own Harini Korlipara, the spectrum has grown to include luscious oranges, reds, corals and yellows.

Terra Nova has approached this breeding trend with a fervor. These new varieties come in many colors as well as in a range of heights.

Long-lasting, fragrant flowers on sturdy stems are a trademark of the Prairie Pillars series. Branching is vastly improved from the early predecessors and this leads to more flowers per plant. These will bloom from summer to frost with flowers that are sturdy and showy enough to make good cuts. Second-year plants are in the 3-foot range, making them perfect as background plants, specimens, or beacons in the cutting garden. Flower sizes run up to 4 to 5 inches wide, the largest in our range. Second-year plants can have as many as 35 blooms. Flowering plants in gallon containers are generally 2 feet tall. The plants are naturally disease-resistant and are great pollen and food sources for butterflies and birds.

Plants in the Prairie Pillars includes:

- **'Aloha'**: 4-inch apricot-yellow blooms
- **'Flame Thrower'**: 4-inch orange-red blooms in great quantity
- **'Fragrant Angel'**: 5-inch pure white blooms
- **'Hope'**: 4½-inch soft pink blooms
- **'Hot Lava'**: 5-inch hot, red-orange blooms
- **'Leilani'**: 4½-inch deep yellow blooms
- **'Maui Sunshine'**: 5-inch clear yellow blooms
- **'Merlot'**: 5-inch dark pink blooms on black stems
- **'Quills and Thrills'**: 4-inch quilled pink flowers — a novelty!
- **'Ruby Giant'**: 5-inch dark pink blooms — very strong
- **'Tiki Torch'**: 4½-inch dark orange blooms

## Planting

Plant one liner per 4-inch or gallon pot. Make sure not to cover the crown by planting too deep. This is a common failure. The soil level of the pot and liner should match up evenly. A preventative fungicide at potting can be beneficial. A tank mix of mefenoxam and thiophanate-methyl or any other broad-spectrum fungicide will do. Be sure to read the label for desired rates and application intervals. As with any chemical, test on a small group of plants before applying to the entire crop.

## Culture

**Media:** Plant echinacea in a well-drained media with a low organic matter content.

**pH/EC:** Maintain a pH of 5.5 to 6.5 and an EC of 1.0 to 1.8 via the pour-thru method.

**Temperature:** Echinacea does well with a 50 to 55° F night and a 60 to 65° F day.

**Light:** Provide 2,500 to 5,000 foot-candles of light. Echinacea is a long-day plant with a critical day length of between 12 and 13 hours (depending on variety). It is beneficial to bulk plants under short-days and then force flowering. This can be achieved using natural short-days or black cloth. If this is not attainable, bulking under a 24-hour photoperiod is the next best thing. Photoperiods of over 16 hours of light are antagonistic to flowering, but do not stop it entirely. If you receive liners that have already flowered, bulking under a 24-hour photoperiod is necessary. Putting plants that have already flowered under short days may cause dormancy to be initiated. Forcing is best done using daylength extension as opposed to night interruption.

**PGRs:** Configure has proven beneficial to promote basal branching and should be used when bulking the plant. It can sometimes cause distorted growth on the leaf that was emerging at the time of application, but the plant will quickly grow out of it. It is generally better to use lower rates and apply more frequently as opposed to higher rates with a single application.

**Fertilizer/Watering:** Supply a low-medium rate of constant liquid feed at 100- to 150-ppm



of 20-10-20. Allow the plants to dry down between watering as it is critical to maintain wet and dry cycles.

**Pests/Disease:** Thrips can be a problem as the plants begin to flower. Pythium and Phytophthora can be problems if the plants stay waterlogged for prolonged amounts of time. Plants should dry somewhat between waterings. Plants can be susceptible to botrytis if adequate airflow is not maintained. Avoid sending the plants into their night cycle with water on the foliage.

**Scheduling:** Finish time from 72-cell liner to 4-inch pot is four to six weeks. From 72-cell to 1-gallon pot is 12 to 14 weeks. ☒

*Conor Carey is assistant nursery manager, and Dan Heims is president of Terra Nova Nurseries. They can be reached at [conor@terravanurseries.com](mailto:conor@terravanurseries.com) and [dan@terravanurseries.com](mailto:dan@terravanurseries.com), respectively.*