# **CULTURE CONNECTION**

CROP CULTURE REPORT



# Portulaca Cupcake Series

THESE HEAT-LOVING PLANTS BOAST VIBRANT COLORS AND FLORIFEROUS BLOOMS.

### **By Paul Hammer**

ith record-breaking hot summers, Red Fox portulaca Cupcakes are a perfect choice. They do more than simply tolerate heat and drought, they seem to thrive in hot temperatures. In trials in southern states like Texas and North Carolina, both of which experienced hotter than normal temperatures in the summer of 2012, Cupcakes developed their characteristic strong branching and floriferous blooming, with vibrant colors that stood up to the brightest sunshine.

Portulaca Cupcakes are also relatively easy to grow, with low requirements for misting of cuttings, rooting hormones, pinching and PGRs. From rooted liner, you can expect finished product in as little as five weeks in 4-inch pots during early-season production. The importance of reliable stock cannot be ignored; Dümmen stock production is superlative, and virus-free.

### **Propagation**

Unpack cuttings immediately and stick into a disease-free rooting medium. Cuttings can be stored in a cooler with bags open for no longer than 24 hours at 50° F with 100 percent relative humidity. Rooting occurs in seven to 10 days. Provide shade for a maximum of 1,000 foot-candles. Portulaca Cupcake needs minimal misting due to the succulent nature of the plant tissue; excess mist causes disease, uneven and delayed rooting. Total propagation time is three to four weeks. Rooting hormones are not required. Maintain root medium temperature between 68 to 72° F. As roots form discontinue misting, gradually increase light levels up to 4,000 footcandles, reduce humidity and reduce night temperatures to 64 to 68° F. Liners should be pinched to promote early branching.

### Potting

Use a well-drained, well-aerated, loose root medium with a pH of 5.5 to 6.5. It is very important to avoid overly wet root medium. EC should be between 0.5 and 0.9.

### Pinching

Plants grown in 4- to 5-inch pots do not require an additional pinch if liner was pinched. Though generally not needed, larger pots and hanging basket plants can be soft pinched two to three weeks after potting.

#### Temperature

After potting, establish plants at an average daily temperature of 65° F. Once established, grow at 75° F day and 65° F night temperatures.

### Light

Portulaca Cupcakes perform best in full sun. Avoid shading and low light for flowering and improved plant quality. They are very heat and drought tolerant.

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# Scheduling Portulaca Cupcakes - from rooted liner

Container Size	Liners per Pot	Earl <del>y</del> Season*	Late Season*
4 inch (10 cm)	I Ірр	5-7 weeks	4-6 weeks
6 inch (15 cm)	2-3 Ірр	5-7 weeks	4-6 weeks
8 inch (20 cm)	3-4 Ірр	5-7 weeks	4-6 weeks
Hanging basket	4-5 Ірр	8-10 weeks	6-9 weeks

\*weeks after transplant

# Irrigation

Root medium should dry out between waterings. However, don't allow plants to become severely dry because this can damage the roots and make plants more susceptible to disease.

# PGR

Plant growth and quality is best controlled by the environment. Portulaca Cupcakes shouldn't require growth regulators, but when needed, B-Nine or Dazide (daminozide) at 2,500 ppm sprays can provide control.

# **Fertilization**

Apply a complete fertilizer at 150- to 200-ppm nitrogen with a constant feed program. Avoid fertilizers high in ammonium. Avoid high salts in the root medium by leaching and/or periodically watering with clear water. Keep the soil EC between 0.5 and 1.0 for best flowering performance.

# **Insects & Diseases**

Monitor plants for white flies, aphids and thrips. Plants should also be monitored for Botrytis, Pythium and Rhizoctonia. Portulaca is susceptible to several viruses.

# Tip

Best plant quality is achieved when plants are grown with high light, low humidity and not over-watered.

### Scheduling from Rooted Liner

Ranges in weeks are related to growing conditions. For Southern high light climates use the minimum weeks and for Northern low light climates use the maximum weeks.

The scheduling guidelines listed in the



above table must be adjusted for specific greenhouse environments and growing techniques.

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