

Production Guidelines for 5-inch/Quart Pots

Production Goal: SuperCal feature a mounding or trailing form and vigorous growth habit. The following overview is intended to provide a baseline to help produce high quality quart pots **10-12 weeks after sticking.** For more detailed information, visit **www.sakataornamentals.com** and download the complete SuperCal culture guide.

Variety Selection: While all SuperCal varieties make excellent baskets and planters, care should be taken when selecting varieties for quart production. Varieties recommended for quart pot production include the following: SuperCal Premium and SuperCal Artist Rose, Blushing Pink, Cherry Imp, Light Yellow, Pink, and Blue*. The remaining varieties need supplemental lighting and/or more aggressive PGR treatments to finish high quality pots in early spring. (*slightly later to bloom).

Production Notes: High light, temperature and water management are critical to controlling plant height. The best method for minimizing stretch under high density conditions is to use Florel early in propagation followed by PGR applications and cultural controls. Flood floor irrigation is very difficult to implement water restriction practices and not recommended for producing SuperCal in quart pots.

| Production Week | Notes/Comments | | | | |
|------------------------|--|--|--|--|--|
| 0 (Sticking) | Direct stick cuttings into an 84 to102-cell tray filled with a sterile, well-drained and porous media. Moisten the soil prior to sticking. (Do not soak the soil). pH 5.5 to 6.0. Keep media on the moist side, but not saturated as excess moisture slows rooting. Under less than ideal conditions, consider using a rooting hormone with up to 2500 ppm of IBA. Mixtures that also include up to 500 ppm of NAA work as well. Bottom heat enhances root development. Maintain soil temperature between 68-72°F | | | | |
| 1-4 | Cuttings should require mist for the first 5-7 days and then only as needed to help keep cuttings turgid and prevent wilting Maintain moderate humidity (50-60%) and light levels around 1,500-2000 FC A preventative soil drench for Pythium may be applied to assist with root development After 3-7 days from sticking, apply tank mix spray of 1250-2500ppm B-Nine and 500ppm Florel (ethephon). Apply early in the day and without mist to allow for maximum absorption. Take care not to over apply – wet foliage only. | | | | |
| 5-10 | Pinch liners to 3rd node prior to or at transplanting Transplant into quart pots filled with a sterile, well-drained & porous media. (pH 5.5 to 6.0.) Maintain temperature 70°/60° F (day/night) and relative humidity around 50-60% Increase light level to 3500-5000 FC (avoid growing baskets overhead) Long-day lighting is essential for crops transplanted prior to week-10 Allow media to dry in-between irrigations to tone plants and maximize uptake of nutrients. Following root establishment, fertilize at 100-125ppm N CLF with a full minor complement or weekly at 250-300ppm N. Utilizing neutral-reaction fertilizer helps keep media pH from increasing beyond ideal level(Cal-Mag/low ammonium fertilizer such as 15-5-15 work best) Supplemental applications of magnesium sulfate (MgSO4) at 16 lbs/100 gallons every 2 weeks is recommended to promote a deep green leaf color. Target EC level: 1.0 to 1.5 As plants begin to fill-in (7-8 weeks after sticking) apply a B-Nine spray at 2,500 ppm to help maintain a bushy habit. A second application may be required 2-3 weeks later. | | | | |
| Finish (11-15) | SuperCal are vigorous and care must be taken to keep plants in check, especially in qts. Bonzi (paclobutrazol) drenches (2-4 ppm) also work very well prevent to excess stretching Maintain average daily temperatures of 65°F Be sure to tone plants with high light (>5000 foot candles) but maintain the fertilizer at full strength to keep the foliage dark green and healthy. | | | | |

Additional Notes:

- Start with a uniform cutting about ½ to ¾ inches long and 2 sets of leaves.
- Pinching: Some additional shaping of plants may be needed to provide an ideal finished plant.
- Temperature: Cooler temperatures (55-60F) combined with high light (10+ moles/day) produces high quality plants, however, total crop time may be longer by a few weeks with significant lower average daily temperatures.
- The use of a retractable roof greenhouse for full light exposure during the day and frost protection at night is ideal.
- PGR's: Florel must be applied early in the crop (at least 8 weeks prior to shipping) to prevent flower delay.



Variety selection is critical when producing SuperCal® in a quart program.



SuperCal flower response under natural-day conditions (Salinas, CA - April 1st):

SuperCal Blushing Pink (Far Left),

SC Blue (Center), SC Neon Rose (Right).

Later flowering varieties may require supplemental lighting for early season production.

Use the following Attribute Table to assist in production planning:

| SuperCal Variety | Quarts | Earliness* | Bloom Size | Vigor** | Habit | Garden Height | Garden Width |
|------------------------|----------|------------|------------|-------------|---------------|---------------|--------------|
| Artist Rose | X | V. Early | Large | Average | Mounding | 10" to 14" | 12" to 16" |
| Blue | S. Later | Average | Large | Strong | Semi-mounding | 10" to 14" | 12" to 16" |
| Blushing Pink | X | V, Early | Large | Strong | Mounding | 10" to 14" | 12" to 16" |
| Cherry Improved | X | V. Early | Medium | Strong | Semi-mounding | 10" to 14" | 12" to 16" |
| Crimson Red | X | V. Early | Large | Strong | Semi-mounding | 16" to 24" | 20" to 30" |
| Light Yellow | X | V. Early | Large | Strong | Semi-mounding | 10" to 14" | 12" to 16" |
| Neon Rose | | Later | Large | Strong | Trailing | 10" to 14" | 12" to 16" |
| Pink | X | V. Early | Large | Strong | Semi-Upright | 10" to 14" | 12" to 16" |
| Pink Ice | | Average | Medium | Strong | Trailing | 10" to 14" | 12" to 16" |
| Purple | | Later | Large | Very Strong | Trailing | 12" to 16" | 12" to 16" |
| Salmon Glow | | Average | Large | Strong | Trailing | 10" to 14" | 12" to 16" |
| Terracotta | | Average | Large | Very Strong | Mounding | 12" to 16" | 12" to 16" |
| Violet | | Average | Medium | Average | Trailing | 10" to 14" | 12" to 16" |
| Premium Bordeaux | Χ | Early | Large | Average | Mounding | 14" to 20" | 14" to 22" |
| Premium Caramel Yellow | Χ | Early | Large | Average | Mounding | 14" to 20" | 14" to 22" |
| Premium Cinnamon | Χ | Early | Large | Average | Mounding | 14" to 20" | 14" to 22" |
| Premium French Vanilla | X | Early | Large | Strong | Mounding | 16" to 24" | 18" to 26" |
| Premium Sunray Pink | X | Early | Large | Average | Mounding | 14" to 20" | 14" to 22" |

^{*}SuperCal is a facultative irradiant plant and earliness is related to both photoperiod and light intensity.

Crop Time: With high light conditions (10+ moles/day), long-days or LD-lighting, and 65°F ADT; you should finish quart SuperCal in 10-12 weeks from stick date. Regional and seasonal factors influence final results.

| Factor | Effect | | |
|--------------------------------------|---------------------|--|--|
| Day length < 12 hours | Increases crop time | | |
| Day length > 14 hours | Decreases crop time | | |
| Temperature < 60°F/21°C | Increases crop time | | |
| Temperature > 60°F/21°C | Decreases crop time | | |
| Light Level < 5,000 f.c./ 54,000 lux | Increases crop time | | |
| Light Level > 5,000 f.c./ 54,000 lux | Decreases crop time | | |



SuperCal® The All-Weather Petunia! (TM)
Producing SuperCal® in the new branded pots and
premium tags helps differentiate the product at
retail and increase sell-through.

^{**}Vigor rating is relative to the other colors within each category.