

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)	<ul style="list-style-type: none"> Direct stick cuttings into an 84 to 102-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	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> 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)	<ul style="list-style-type: none"> 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	14" to 20"	14" to 20"
Blue	S. Later	Average	Large	Strong	Semi-mounding	16" to 24"	20" to 30"
Cherry Improved	X	Early	Medium	Strong	Semi-mounding	16" to 24"	20" to 30"
Lavender Star	X	Early	Medium	Average	Mounding	16" to 24"	14" to 20"
Light Yellow	X	V. Early	Large	Very Strong	Semi-mounding	16" to 24"	20" to 30"
Neon Rose		Later	Large	Strong	Trailing	16" to 24"	20" to 30"
Pink Improved	X	Early	Large	Strong	Semi-Mounding	16" to 24"	20" to 30"
Pink Ice		Average	Medium	Strong	Trailing	16" to 24"	20" to 30"
Rose	X	Early	Large	Strong	Semi-Mounding	16" to 24"	20" to 30"
Royal Red	X	Early	Large	Strong	Semi-Mounding	16" to 24"	20" to 30"
Snowberry White	X	Early	Medium	Average	Semi-Mounding	14" to 20"	16" to 28"
Terracotta		Average	Large	Very Strong	Mounding	16" to 24"	20" to 30"
Violet		Average	Small-Medium	Average	Trailing	14" to 20"	16" to 25"
Premium Bordeaux	X	Early	Large	Average	Mounding	14" to 20"	14" to 22"
Premium Caramel Yellow	X	Early	Large	Average	Mounding	14" to 20"	14" to 22"
Premium Cinnamon	X	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 Pearl White	X	Early	Large	Average	Mounding	14" to 20"	14" to 22"
Premium Purple Dawn	X	Early	Large	Strong	Mounding	16" to 24"	18" to 26"
Premium Sunray Pink	X	Early	Medium	Average	Mounding	14" to 20"	14" to 22"
Premium Sunset Orange	X	Early	Large	Average	Mounding	14" to 20"	14" to 22"
Premium Yellow Sun	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.

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

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.