

**Cultural Information for:** Petunia SuperCal® Annual

**Common Name:** Petunia

**Botanical Name:** Petchoa hybrids

**Optimum Rooting Temperature:** 68-72°F / 20-22°C

**Optimum Growing Temperature:** 68°F / 20°C

**Optimum pH:** 5.8 – 6.2

**EC – Plug:** 0.9 – 1.3 mmhos/cm (1:2) / 2.1 – 3.5 (SME) / 2.7 - 4.6 (Pour Thru)

**EC – Finishing:** 1.4 – 1.8 mmhos/cm (1:2) / 3.6 – 5.0 (SME) / 4.7 - 6.5 (Pour Thru)

**Propagation: 4 – 5 weeks**

**Rooting:** Avoid applying too much mist in propagation as excess water slows rooting. For the best results use a rooting hormone with up to 2500 ppm of IBA. Mixtures that also include up to 500 ppm of NAA work well too. Bottom heat enhances root development. Maintain soil temperatures between 68-72°F/ 20-22°C. B-Nine® (daminozide) may be applied to prevent stretching.

**Production:**

**Potting:** Plant one rooted cutting per 4 or 6 inch/10 or 15 cm. pot. For 12 inch/30 m. hanging baskets plant 3 per basket for fast cropping.

**Media:** Select a sterile, well-aerated mix. The optimum pH range is between 5.5 and 6.0. Consider that the water-holding capacity that is best for consumer performance may be greater than what is ideal for production.

**Irrigation/Fertilization:** Avoid excessive irrigation when the plants are young. Delay feeding until the roots are well established and then begin feeding with a complete, balanced fertilizer at 200 ppm N constant liquid feed (CLF). Provide a complete minor element program. The optimum pH is 5.8 to 6.2. Iron deficiency is a common problem if the pH rises above 6.5. Correct with an acid fertilizer, such as 21-7-7, plus iron chelate. The use of Osmocote® or other appropriate slow-release fertilizer products may be beneficial in supplementing a CLF program and may provide improved performance for the consumer. Provide periodically clear water applications if excess soluble salts accumulate.

**Temperature/Humidity:** Establish the crop at an average temperature of 65°F/18°C. Once established grow at 70-75°F/21-24°C during the day and at 60-65°F/16-18°C at night. SuperCal Premium responds well to DIF regimes. Always provide good air circulation. Maintain relative humidity below 70% to prevent diseases like Botrytis gray mold.



**SuperCal Premium Bonfire Mix**

**Light:** Bright light is ideal for this crop. Provide a minimum of 4,000 foot candles/43,000 lux. SuperCal Premium is less sensitive to day length than most petunias, but flower quicker under high light and long day conditions.

**Pinching/Florel:** The first pinch is the most important to promote good branching. There should be at least 5 nodes below the pinch. Light pruning, to shape the plants or to correct for stretch, can be done at any time but will delay flowering by 3-4 weeks. Alternatively, apply 500 ppm of Florel to the liner tray one week prior to transplanting.

**Plant Growth Regulators (PGRs):** SuperCal Premium is highly responsive to foliar applications of B-Nine® (daminozide) at 0.25%/2,500 ppm, and A-Rest® (ancymidol) at 5 ppm. Avoid spraying when flower buds appear, since the use of PGRs may delay flowering 1-2 weeks and slightly reduce flower size. For best results, grow SuperCal under high light, cooler temperatures and a slight negative DIF. If additional control is needed later in the production cycle, a Bonzi® (paclobutrazol) drench at 2-5ppm is very effective at controlling plant height without compromising flower size. **B-Nine will change the color of Terracotta from orange to a more muted pink.**

**Insects:** Aphid, caterpillar, fungus gnat, leaf miner, thrip and whitefly.

**Disease:** Botrytis (gray mold), powdery mildew, root and stem rots, viruses.

**Troubleshooting:**

**Symptom: Yellowing of upper foliage:** May be due to a malfunctioning fertilizer injector, high pH (>6.5), or low media iron levels.

**Symptom: Yellowing of lower foliage:** May be due to a malfunctioning injector resulting in low nitrogen levels in soil or tissue, high salts, low magnesium levels, (supplement with magnesium sulfate), or root and stem rot.

**Symptom: Delayed Flowering:** If growing during the short-day conditions of early spring extend the day length with supplemental light to provide 14-16 hours of light. Late applications of plant growth regulators can cause flower delays, so avoid treating plants at visible bud.



**SuperCal Premium Something in the Orange**

*“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions, and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer’s label instructions. Testing a few plants prior to treating the entire crop is best.”*

**Crop Scheduling:** Petchoa SuperCal is a facultative long day and irradiant plant, and timing is based on a combination of light level, photoperiod and temperature. Supplemental lighting with 10 moles for 12 hours is recommended for all early spring production.

Container Size	Cuttings / Pot	Weeks After Pinch	Total Crop Time*
5-6 inch / 12 – 15 cm	1	5-7 weeks	10-12 weeks
8-10 inch / 20 – 25 cm	2-3	6-8 weeks	11-13 weeks
12 inch / 30 cm Basket	3-5	6-8 weeks	11-13 weeks

\*includes a propagation time of 5 weeks at an average daily temperature of 60°F/16°C. Pinch recommended at time of transplanting

## SuperCal®

Variety	Quarts*	Earliness	Bloom Size	Vigor	Habit**
Blue	Yes* (later)	Average	Large	Strong	Semi-Mounding
Blue Eyed Rose	Yes	Early	Medium	Strong	Semi-Mounding
Cherry Improved	Yes	Early	Medium	Strong	Semi-Mounding
Lavender Star	Yes	Early	Medium	Average	Mounding
Light Yellow	Yes	Early	Medium	Strong	Semi-Mounding
Neon Rose	No	Later	Large	Strong	Trailing
Shocking Pink	Yes	Early	Large	Average	Semi-Mounding
Rose	Yes	Early	Large	Strong	Semi-Mounding
Royal Red	Yes	Early	Large	Strong	Semi-Mounding
Snowberry White	Yes	Early	Medium	Slightly Lower	Semi-Mounding

\*These colors work well in 1 Quart / 12 cm pots. Blue will flower later so supplemental lighting is suggested for sales prior to week 16.

## SuperCal® Premium

Variety	Quarts	Earliness	Bloom Size	Vigor	Habit*
Bordeaux	Yes	Very Early	Large	Average	Mounding
Caramel Yellow	Yes	Early	Large	Slightly Lower	Mounding
Cinnamon	Yes	Early	Large	Average	Mounding
Coral Star	Yes	Early	Large	Average	Mounding
French Vanilla	Yes	Early	Medium	Slightly Higher	Mounding
Pearl White	Yes	Early	Large	Lower	Mounding
Pink Mist	Yes	Early	Large	Average	Mounding
Pink Star	Yes	Early	Large	Average	Mounding
Purple Dawn	Yes	Early	Large	Slightly Higher	Mounding
Purple Ice	Yes	Early	Large	Average	Mounding
Red Maple	Yes	Early	Large	Average	Mounding
Rose Pink	Yes	Early	Large	Slightly Lower	Mounding
Rose Star	Yes	Early	Large	Average	Mounding
Sunray Pink	Yes	Early	Large	Average	Mounding
Sunset Orange Improved	Yes	Early	Large	Average	Mounding
Yellow Sun Improved	Yes	Early	Large	Average	Mounding