

Cultural Information for: Petunia ColorWorks™ Annual
Common Name: Petunia
Botanical Name: Petunia hybrida
Optimum Rooting Temperature: 70-75°F / 21-24°C
Optimum Growing Temperature: 65-75°F / 18-24°C

Propagation: 4 weeks

Rooting: For the best results stick one cutting per cell and use a rooting hormone up to 2,500 ppm of IBA. Mixtures that also include up to 500 ppm NAA work well. Mist as needed to maintain the plants turgid. Bottom heat at 70-75°F/ 21-24°C enhances root development. Maintain air temperature at 75°F/24°C during the day and 68°F/20°C at night until roots are present. To prevent plant stretch, apply B-Nine® (daminozide) at 1,500-2,500 ppm / 0.15-0.25%. Remove any visible flowers or buds while in propagation and apply 150 ppm N once a week beginning in week 2.

Transplanting to flower:

Potting: Plant one rooted cutting per 4-6 inch/10-15 cm. pot or 3 cuttings per 10 inch/25 cm. hanging basket.

Media: A light, sterile media with good drainage and aeration is best. The optimum pH range is between 5.5 and 6.0.

Irrigation/Fertilization: Plants should be allowed to dry thoroughly between watering, but do not allow the plants to wilt. Watering early in the day allows the foliage to dry before nightfall. Constant liquid feed (CLF) at 200-300 ppm N with a balanced liquid fertilizer works well. An elevated pH (>6.5) suppresses iron uptake. Correct with an acid fertilizer, such as 21-7-7, plus iron chelate. Periodic applications of magnesium at 30-50 ppm Mg is and promotes a deep green leaf color with. The EC should range from 1.5-2.0 mmhos (2:1 slurry).

Magnesium Sulfate MgSO4	Parts per million
1 ounce per 100 gallons	7.5 ppm
7.5 grams per 100 liters	7.5 ppm

Temperature/Humidity: Establish the crop at an average temperature of 60°F/16°C. After establishing, grow at 55-70°F/13-21°C during the day and 55-60°F/13-15°C at night. Low night temperatures encourage flowering. For fast cropping, establish and grow at 68°F/20°C average daily temperature. Petunias respond well to negative DIF regimes. Provide continuous good air circulation and a relative humidity below 70% to prevent diseases like Botrytis (gray mold).

Light: Petunias thrive under high light. Provide a minimum of 5,000–6,000 foot candles/54,000–65,000 lux.

Photoperiod: ColorWorks™ petunias are long day response plants and naturally flower in late spring when the day length is greater than 14 hours. For early spring production, provide night interruption (10 foot candles/110 lux from 10 PM to 2 AM) or day length extension for 14-16 hours.

Pinching: Pinching the terminal 1-2 weeks after transplant promotes branching. Additional pruning to correct for stretch or uneven plant growth may be necessary but will delay flowering by 3-5 weeks. For fast cropping do not pinch.

Plant Growth Regulators (PGRs): High light, cool temperature and a slight negative DIF is optimum to avoid plant stretching. B-Nine (daminozide) works well to tone and control plant stretch. An initial application of 1,500 ppm/ 0.15% 2-4 weeks after transplant (allowing at least one week after pinching) works well. Increase to 2,500 ppm/0.25% if more growth control is needed. In warm summer climates a Bonzi (paclobutrazol) drench at 1 ppm three weeks after transplant is also an option.

Note: Do not apply chemical plant growth regulators after visible bud as late applications delay flowering.

Spacing: Plants should be established pot tight and then spaced before foliage touches.

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

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

Crop scheduling from transplant:

Pot Size	# of cuttings	Pinch	No Pinch
4 inch /10 cm.	1	6-8 weeks	4-6 weeks
6 inch/15 cm.	1	7-8 weeks	5-7 weeks
10 inch/25 cm.	3	9-11 weeks	7-9 weeks

Trouble Shooting: *Yellowing of young leaves*

- ❖ Malfunctioning fertilizer injector
- ❖ High pH (>6.2) / iron deficiency
- ❖ Low nitrogen levels in soil and tissue
- ❖ High EC level in soil (>2.8 mmhos)
- ❖ Low magnesium levels in soil and tissue.
- ❖ Root or stem rot

Features:

- ❖ Extremely floriferous with striking colors
- ❖ Strong mounding/semi-trailing habit
- ❖ Ideal for both basket and pot production
- ❖ Early to bloom with outstanding garden performance

“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.”