# **GrowerFacts**

# PanAmerican Seed.

# Cool Wave™ F<sub>1</sub> Spreading Pansy

Viola x wittrockiana Approximate seed count: 21,200-32,600 S/oz. (750-1,150 S/g)

Transplant the plugs "on time" to avoid flower bud initiation in the plug stage. Plugs that are initiated and transplanted on time will fill out the finish container.

## **Growing On to Finish**

**Container Size:** 306 packs, 4.5-in. (10.5-cm) pots, Quarts, and 10 to 12-in. (25 to 30-cm) or similar size hanging baskets.

#### Media

Use a well-drained, disease-free media with a pH of 5.4 to 5.8 and a medium initial nutrient charge.

#### **Temperature**

**Night:** 50 to 65°F (10 to 18°C) **Day:** 62 to 70°F (16 to 21°C)

For a faster finish and to increase spread which is particularly important for spring production, grow in a warmer zone for the first several weeks after transplant to encourage growth at 60 to 65°F (15 to 18°C) night temperature. This will encourage lush, vigorous growth and quicker spread. When your plants have reached the desired size, cool down your zone gradually over a few days to your more normal pansy growing conditions. The cool temperatures will tone the plants and encourage more blooms.

#### Light

Keep light levels as high as possible while maintaining appropriate temperatures.

#### **Fertilizer**

Cool Wave<sup>™</sup> pansies require more fertilizer than is usually recommended for standard pansies. For best results starting a week after transplant, apply nitrate-form with low phosphorus fertilizer at rate 4 (225 to 300 ppm N/1.5 to 2.0 mS/cm EC) every other irrigation.

For constant feed programs, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominantly nitrate-form fertilizer with low phosphorus. If needed, alternate with a balanced ammonium and nitrate-form fertilizer to

encourage growth and balance the media pH. Maintain the media EC at 1.50 to 2.00 mS/cm and pH at 5.4 to 5.8. If the media pH is greater than 6.2, take corrective measures.

#### Irrigation

Maintain optimal media moisture, i.e. not too wet or not too dry.

#### **Plant Growth Regulators**

Since this is a spreading type pansy and mostly grown in larger containers such as hanging baskets, minimal to no plant growth regulators are needed.

If needed for pack or 4.5-in (10.5 cm) pot production, you can use tank mix foliar sprays of B-Nine/Alar (daminozide) at 5,000 ppm (5.9 g/l of 85% formulation or 7.8 g/l of 64% formulation) and Cycocel (chlormequat) at 500 ppm (4.3 ml/l of 11.8% formulation or 0.7 ml/l of 75% formulation) to control plant growth.

Northwestern Europe: Temperature control is the best natural growth-controlling factor. Minimal to no plant growth regulators are needed when the crop is being produced at cooler temperatures especially during the spring production.

If needed, apply a tank mix foliar spray of B-Nine/Alar and Cycocel (chlormequat) once after transplant. Apply B-Nine/Alar (daminozide) at 1,280 ppm (1.5 g/l of 85% formulation or 2 g/l of 64% formulation) and Cycocel at 750 ppm (6.4 ml/l of 11.8% formulation or 1 ml/l of 75% formulation) as a tank mix.

### **Pinching**

Pinching is not recommended.

### **Crop Scheduling**

Sow to transplant: It takes approximately 6 weeks to finish a 128-cell size liner. A 288-cell size plug will finish in 5 weeks.

#### Transplant to finish from a 128-cell liner:

Transplant to milen from a 120 con mile.				
Container	Plants/	Weeks from Transplant to Finish		
	Pot or			
	Cell	Autumn	Spring	
306 Pack	1	4 to 5	6 to 7	
4.5 in.	1	4 to 5	6 to 7	

(10.5 cm),			
Quart			
6 in.	1 to 3	5 to 6	7 to 8
(15 cm)			
10 in.	3 to 5	6 to 7	8 to 9
(25 cm)			
basket			
12 in. (25	5 to 7	6 to 8	8 to 10
to 30 cm)			
basket			

Crop time transplant to finish can be 10-14 days longer when grown from a smaller size plug such as a 288-cell size. **Note:** Overcrowding plugs can result in a more mounded basket that will not trail over the sides as much.

Northwestern Europe: Total crop time to finish in 4.5-in. (10.5-cm) pots for autumn production can be approximately 14 weeks from sowing. With autumn sowings for spring production when growing frost free, plan 21-22 weeks from sow for spring production. If producing in bigger containers such as hanging baskets, then it may take approximately 3 weeks additional crop time to finish.

#### **Common Problems**

**Insects:** Check/monitor for fungus gnats and shore flies during plug production and for aphids after transplant.

**Diseases:** Damping-off & black root rot. Regular scouting for powdery mildew and preventative measures are recommended.

**Note:** Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

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