

Pansy Spring Matrix™ F₁ Series

(Viola x wittrockiana)

Annuals Culture (revised 02/22/19)

Your simplest solution for Spring

If you're using another pansy series and you're not happy with the uniformity or plant habit, try Spring Matrix. Spring Matrix is designed for cool-season, short-day growing conditions – or when you need a large bloom that maintains good presentation under cold, dark, wet Winter production.

Plug crop time: 5 weeks

Transplant to finish: Spring 6 to 7 weeks, Autumn 4 to 5 weeks

- *Your best option for shorter days and cool growing* – plants look better, last longer and have the tightest flowering window for less dump.
- Most uniform Spring-flowering series produces large blooms that maintain good presentation under cold, dark, wet Winter production.
- Superior branching without stretching puts more flowers on every plant.

General Information

Exposure	Bloom Season	Height	Spread	Spacing
Partial Sun, Sun	Early Spring, Spring, Autumn, Winter	8 in. (20 cm)	8-10 in. (20-25 cm)	6-8 in. (15-20 cm)

Germination

Seed Form	Recommended Plug Size	Seeds/Cell	Plug Crop Weeks	Days to Germinate	Initial Media pH/EC	Cover Seed
PRM, RAW	288	1	5	3-4	5.5-5.8 pH 0.75 mmhos/cm	Yes

Plug Production

	Stage 1	Stage 2	Stage 3	Stage 4
Moisture	Level 4	Level 3-4	Level 3-4	Level 2-4
Temperature	65-70°F (18-21°C)	60-65°F (16-18°C)	60-65°F (16-18°C)	55-60°F (13-16°C)
Light	Optional	2,500 f.c. (26,900 Lux)	2,500 f.c. (26,900 Lux)	5,000 f.c. (53,800 Lux)
Fertilizer	Less than 100 ppm N - Less than 0.7 EC		100 to 175 ppm N - 0.7 to 1.2 EC	100 to 175 ppm N - 0.7 to 1.2 EC
PGR			ancymidol/5-10 ppm/Spray daminozide/1,500-2,500 ppm/Spray	ancymidol/5-10 ppm/Spray daminozide/1,500-2,500 ppm/Spray

Fertilizer Notation

It is best to use a nitrate-based fertilizer with low phosphorus to reduce stretch. Maintain a media pH of 5.5 to 5.8 and EC at 0.7 to 1.0 mS/cm (1:2 extraction). A higher pH (greater than 6.2) can induce Boron deficiency and also encourages fungal black root rot caused by *Thielaviopsis* sp.

Propagation Key Tips

Adjust PGR rates and frequency of application depending on local conditions in Stages 3 and 4.

Growing on to Finish

Growing on Temperature	Target Media pH/EC	Fertilizer	Daylength
(day) 60-70°F (16-21°C) (night) 50-55°F (10-13°C)	5.5-5.8 pH 1.5-2.0 mmhos/cm	175 to 225 ppm N - 1.2 to 1.5 EC	Facultative Long Day

Crop Scheduling

Container Size	Plugs/Pot	Crop Time	Season	PGR
Cell Pack	1 (ppp)	6-7 (weeks)	Early Spring	daminozide/chlormequat chloride tank mix 1,500/500 ppm Spray
4"/4.5"/Quart	1 (ppp)	6-7 (weeks)	Early Spring	daminozide/chlormequat chloride tank mix 1,500/500 ppm Spray
10" Pot or HB/3 Gallon	7-9 (ppp)	6-7 (weeks)	Early Spring	daminozide/chlormequat chloride tank mix 1,500/500 ppm Spray

Common Problems

Insects: Fungus Gnats and Shore Flies in plug stage and Aphids in early stages after transplant. Disease: Damping off, Black Root Rot, Foliar Leaf Spots, Botrytis

Finishing Key Tips

Adjust PGR rates and frequency of application depending on local conditions. If growing frost-free (northern overwinter culture from Autumn transplant) plan for crop times of 17 to 18 weeks from transplant to finish.

NOTE: Growers should use the information presented here as guidelines only. PanAmerican Seed recommends that growers conduct a trial of products under their own conditions. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. It is the responsibility of the grower to confirm the treatment is available in their region as well as read and follow all the current label directions relating to the products. Nothing herein shall be deemed a warranty or guaranty by PanAmerican Seed of any products listed herein. PanAmerican Seed's terms and conditions of sale shall apply to all products listed herein.

Variety Pictures



Beaconsfield



Blue



Blue Blotch



Blue Wing



Deep Orange



Lavender
Shades



Lemon



Midnight Glow



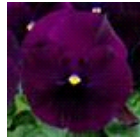
Ocean



Pink Shades



Primrose



Purple



Purple & White



Red Blotch



Rose



Rose Blotch



Sangria



Scarlet



White



White Blotch



Yellow



Yellow Blotch



Blotch Mixture



Clear Mixture



Daffodil Mixture



Mixture



Pastel Mixture



Tricolor Mixture

PanAmericanSeed™

PanAmerican Seed Co.
622 Town Road, West Chicago, Illinois, USA, 60185-2698
630 231-1400 Fax: 630 231-3609 PanAmSeed.com

™ denotes a trademark of and ® denotes a registered trademark of Ball Horticultural Company in the US. It may also be registered in other countries.
©2019 Ball Horticultural Company