

Pansy Matrix[®] F₁ Series

(*Viola x wittrockiana*)

Annuals Culture (revised 08/19/19)

Make your life easier

Matrix is your best option for longer days and warmer growing. Its uniformity of timing and plant habit simply can't be beaten by any other varieties in the marketplace. Only Matrix has a tight bloom window in Autumn production that allows every colour to ship the same week.

Plug crop time: 5 weeks

Transplant to finish: Spring 6 to 8 weeks, Autumn 4 to 6 weeks

- Matrix offers less handling, less waste and exceptional holding power for higher profitability.
- 7-day bloom window across all colours in Autumn production makes scheduling and growing easy.
- Extra-large flowers hold up to the heat and PGR stress in Summer/Autumn production.
- Low-maintenance series gives pro landscapers the best choice for uniform colour striping, plus the most flowers per plant of any large-flowered pansy.

General Information

Exposure	Bloom Season	Height	Spread	Spacing
Sun, Partial Sun	Early Spring, Spring, Autumn, Winter	8 in. (20 cm)	8-10 in. (20-25 cm)	8 in. (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		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. Northwestern Europe: Can use 1 to 2 applications of B-Nine/Alar (daminozide) at 1,280 ppm (1.5 g/l of 85% formulation or 2 g/l of 64% formulation).

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)	4-5 (weeks)	Autumn	daminozide/chlormequat chloride tank mix 2,500/250-5,000/500 ppm Spray
Cell Pack	1 (ppp)	4-5 (weeks)	Autumn	paclobutrazol 0.125 ppm Drench
4"/4.5"/Quart	1 (ppp)	5-6 (weeks)	Autumn	daminozide/chlormequat chloride tank mix 2,500/250-5,000/500 ppm Spray
4"/4.5"/Quart	1 (ppp)	5-6 (weeks)	Autumn	paclobutrazol 0.125 ppm Drench
10" Pot or HB/3 Gallon	7-9 (ppp)	4-5 (weeks)	Autumn	daminozide/chlormequat chloride tank mix 2,500/250-5,000/500 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.

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 Blotch Improved



Deep Blue Blotch



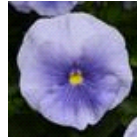
Denim



Lavender Shades



Lemon



Light Blue



Midnight Glow



Morpheus



Ocean



Orange



Primrose



Purple



Red Blotch



Red Wing Improved



Rose



Rose Blotch



Rose Wing



Solar Flare



Sunrise



True Blue



White



White Blotch



Yellow



Yellow Blotch



Yellow Purple Wing



Amber Mixture



Amethyst Mixture



Autumn Blaze Mixture



Blotch Mixture



Citrus Mixture



Clear Mixture



Coastal Sunrise Mixture



Halloween Mixture



Harvest Mixture



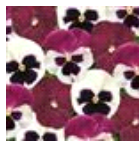
Jewels Mixture



Mixture



Ocean Breeze Mixture



Raspberry Sundae Mixture



Ruby Mixture



Tanzanite Mixture



Topaz and Garnet 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.
©2020 Ball Horticultural Company