

## Mattiola (Stock)

(*Matthiola incana*)

Annuals Culture (revised 01/12/21)

**Plug crop time:** 4 weeks

**Transplant to finish:** 5 to 7 weeks

- Easy-to-select, fully double plugs produce more attractive plants than comparable grey-leaf, non-selectable types that can show up to 50% singles.
- Very well-branched, dwarf plants with fragrant, bright blooms deliver outstanding performance in landscapes and garden beds.

### General Information

Exposure	Bloom Season	Height	Spread	Spacing
Sun	Early Spring, Spring, Autumn	10-16 in. (25-41 cm)	6-8 in. (15-20 cm)	6-8 in. (15-20 cm)

### Germination

Seed Form	Recommended Plug Size	Seeds/Cell	Plug Crop Weeks	Days from 50% to maximum germination	Initial Media pH/EC (1:2)	Cover Seed
RAW	288	1	4-5	3-4	5.5-6.0 pH 0.75 mmhos/cm	Yes

### Plug Production

	Stage 1	Stage 2	Stage 3	Stage 4
<b>Moisture</b>	Level 4	Level 3-4	Level 3-4	Level 3
<b>Temperature</b>	68-72°F (20-22°C)	60-70°F (16-21°C)	60-65°F (16-18°C)	55-60°F (13-16°C)
<b>Light</b>	Optional	1,000-2,500 f.c. (10,800-26,900 Lux)	1,000-2,500 f.c. (10,800-26,900 Lux)	2,500-5,000 f.c. (26,900-53,800 Lux)
<b>Fertilizer</b>		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)

### Propagation Key Tips

Seedlings of double-flowering plants can be selected during plug production based on cotyledon leaf colour (double: pale green; yellow and singles: darker green). Once cotyledons have fully expanded (approximately 11 to 12 days from sowing), seedlings can be moved into a cold chamber/storage set at 40 to 45°F (4 to 7°C) for a period of approximately 3 to 4 days. Hold them in the chamber for a maximum of 4 days, after which they can be grown at cool temperatures (50 to 60°F/10 to 15°C) in a greenhouse until selection. It is possible to differentiate the seedlings starting after they come out of the cold chamber.

### Growing on to Finish

Growing on Temperature	Target Media pH/EC (1:2)	Fertilizer	Daylength
<b>(day)</b> 60-70°F (16-21°C) <b>(night)</b> 50-55°F (10-13°C)	5.8-6.2 pH 1.2-1.5 mmhos/cm	175 to 225 ppm N (1.2 to 1.5 EC)	Day Neutral

### Crop Scheduling

Container Size	Plugs/Pot	Crop Time	Season	PGR
4"/4.5"/Quart/10 cm	1 (ppp)	5-7 (weeks)	Spring	-
5"/6"/1 Gallon/15 cm	3 (ppp)	5-7 (weeks)	Spring	-

## Fertilizer Notation

One week after transplant, begin a constant feed program with 200 ppm N. Maintain EC of 1.5 and pH of 5.8 to 6.2 from transplant to finish. Leach crop with clear water occasionally to prevent any salt accumulation. The constant feed program is better than a weekly feed program, as it will help prevent lower leaf chlorosis as the crop comes into flower.

## Common Problems

Incorporate a fungicide preventative program to control Downy Mildew.

## Finishing Key Tips

Best produced under cooler temperatures for uniformity/quality of flowering and plant habit. In general, PGRs are not required, but can apply Daminozide 2,500 to 3,500 ppm foliar spray about 2 weeks after transplant. Note: If unselected plugs are used, expect to see both single and double flowering plants in the crop.

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

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Hot Rose



Pink



Purple



White



Mixture

PanAmericanSeed™

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