Crop	Stock
Series	Mime
Botanical name	*Matthiola incana*
Plant type	Annual
Seed type	Raw
Seed count	500 seeds / gr
Germination	18-21ºC light favored
Growing	13-18ºC
Optimum pH	5.8-6.2

Plug Culture: 4 weeks (288 cell tray)

Stage 1 (days 1-10) Sow seed into a plug tray filled with a well-drained media. Lightly cover with medium vermiculite and maintain even moisture and a temperature of 18-21ºC. *Selection for double seedlings may be done between days 8 and 13.

Stage 2 (days 11-17) After germination is complete, move seedling trays to a well-lighted area with good ventilation. Fertilize lightly with 100 ppm nitrogen using a well-balanced calcium-nitrate based formulation. Target the day temperature at 16-21ºC with a night temperature of 11-15ºC.

Stage 3 (days 18-25) Fertilize as needed to promote strong growth.

Stage 4 (days 26-30) When the seedlings reach the 4-5 true leaf stage, transplant into pack and pots. Avoid root bound seedlings and delayed transplanting.

*Stock Mime produces 55% double flowers without selection. To increase the percentage of double flowers, use the following procedure.
1. Sow 3-4 seeds a plug cell with Stock Mime seed.
2. 8 days after sowing remove the last to germinate seedling with a tweezers. If only two seedlings germinate wait until the next step.
3. Around day 9-10 allow the soil to dry slightly. This will make the final selection easier. Make the final selection around day 14 before the emergence of the first true leaves.
- The double-flowered seedlings are more vigorous and grow more rapidly.
- Double-flowered seedlings have larger and longer cotyledons with a more irregular/elliptical shape and a lighter green color.
- Single-flowered seedlings will be shorter, with smaller cotyledons with a more round/oval shape and darker green color.
*Please see the below variety as reference on double-flowered seedling selection:
https://www.youtube.com/watch?v=vnYgqQbTDt0

Transplant to Finish: 5-7 weeks

Media: Select a well-drained, disease-free media.
Temperature: The best quality and uniformity are achieved under cooler temperatures.
Day: 16-21ºC
Night: 11-13ºC

Fertilizer: The use of calcium nitrate-based formulations with low phosphorus works best. Stock has a higher need for potassium so supply a 4:2:1 ratio of potassium, calcium and magnesium. Avoid high rates of ammonium since it promotes softer growth and thinner stems. However, the use of 20-10-20 or other nitrate/ammonium based formulations can be used in tandem with Cal/Mag fertilizers to maintain the pH between 5.8 and 6.2.

Note: Excess fertilizer promotes large leaves and soft growth; especially when combined with warm temperatures. Insufficient fertilizer results in smaller leaves and lower leaf yellowing.

Moisture: Water sufficiently during production and

then keep drier from visible bud to first color to promote compact plants and minimize disease.

Plant growth regulators: Generally, not required, but if needed, 2,500 ppm are effective in toning the plants.

Pests: diamondback moths and aphids

Disease: botrytis, pythium, phytophthora, rhizoctonia and sclerotium.

Scheduling: Stock Mime will flower in 9-12 weeks from sowing based on photoperiod and temperature. Warmer temperatures and longer days accelerate development whereas cooler temperatures and shorter days lengthen crop time.

Container	Seedling Stage (288)	Total Crop Time
10.5 cm pots	4 weeks	10-12 weeks