Stock Mime

Cultural Information for: Stock Mime Annual
Common Name: Stock
Botanical Name: Matthiola incana
Seed Count: 14,000 /ounce 500 / gram
Optimum Germination Temperature: 65-70°F / 18-21°C
Optimum Growing Temperature: 55-65°F / 13-18°C
Optimum pH: 5.8 – 6.2
EC – Plug: 0.26 – 0.5 mmhos/cm **(1:2)** / 0.76 – 1.0 **(SME)** / 1.0 - 2.0 **(Pour Thru)**
EC – Finishing: 0.5 – 1.0 mmhos/cm **(1:2)** / 0.76 – 2.0 **(SME)** / 1.0 - 2.6 **(Pour Thru)**

Plug Culture – 4 weeks (288 / 12 x 24 tray)

Stage One (days 1-10) Sow seed into trays filled with a well-drained media. Lightly cover with medium vermiculite and maintain even moisture and a temperature of 65-70°F/18-21°C. ***Selection for double seedlings may be done between days 8 and 13.***

Stage Two (days 11-17) After germination is complete, move seedling trays to a well-lighted area, up to 2,500-foot candles/27,000 lux, with good ventilation. Fertilize lightly with 100 ppm N using a well-balanced calcium-nitrate-based formulation. Target the day temperature at 60-70°F/16-21°C with a night temperature of 55-59°F/11-15°C**.**

Stage Three (days 18-25) Fertilize as needed to promote strong growth and increase light levels to 3,500 -5,000-foot-candles / 8,000 – 54,000 lux and provide good air circulation.

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

**Stock Mime produces 55% double flowers without selection. To increase the percentage of double flowers, use the following procedure.*
1. Triple sow a 288-plug tray with Stock Iron 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.

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: 60 – 70ºF / 16 – 21ºC
Night: 50 – 55ºF / 11 – 13ºC

Light: High light, up to 7,500-foot candles / 81,000 lux promotes strong and healthy plants. Reduce light levels, if needed, to control temperature but avoid excess shading (< 3,500-foot candles / 38,000 lux.

Fertilizer: The use of calcium nitrate-based formulations with low phosphorus works best. Stock has a higher need for potassium so supply a 4K: 2Ca: 1Mg 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 Regulation: Generally, not required, but if needed, B-Nine (daminozide) at 2,500 ppm and Cycocel (chlormequat) at 500 ppm are effective in toning the plants.

Insects: 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	Plug Stage (288)	Total Crop Time
Cell packs	4 weeks	9 - 11 weeks
4 inch / 10.5 cm.	4 weeks	10 - 12 weeks

"All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North America conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions."

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