

Cultural Information for:	Stock Quartet	Annual
Common Name:	Stock	
Botanical Name:	Matthiola incana	
Seed Count:	14,000 /ounce	500 / gram
Optimum Germination Temperature:	65-68°F / 18-20°C	
Optimum Growing Temperature:	50-60°F / 10-16°C	
Optimum pH:	5.8 – 6.2	
EC – Plug:	0.4 – 0.8 mmhos/cm (1:2) / 0.9 – 2.0 (SME) / 1.1 - 2.6 (Pour Thru)	
EC – Finishing:	0.9 – 1.3 mmhos/cm (1:2) / 2.1 – 3.5 (SME) / 2.7 - 4.6 (Pour Thru)	

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

Stage One (days 1-10) Sow seed into seedling trays filled with a well-drained media and lightly cover with medium vermiculite. Maintain even moisture and a temperature of 65-68°F/18-20°C. ***Selection for double seedlings may be done between days 8 and 13.**

Stage Two (days 10-17) When germination is complete, move seedling trays to a well-lighted area with good ventilation. Fertilize lightly with 100 ppm N and reduce temperature to 60°F/16°C days and 50°F/10°C nights.

Stage Three (days 18-25) Fertilize as needed to maintain strong growth and provide plenty of light and good air circulation.

Stage Four (days 26-30) When the seedlings reach the 4-5 true leaf stage, transplant into beds. ***Stock Quartet flowers earlier than other varieties so never delay transplanting into beds.***

** Stock Quartet is about 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 Quartet 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 keep somewhat dry conditions in the soil. This will make the final selection easier.*

The double-flowered seedlings are more vigorous and grow more rapidly. Double-flowered seedlings have larger and longer cotyledons with a lighter green color.

Single-flowered seedlings will be shorter, with smaller and darker green cotyledons.

Cut Flower Production

Bed Preparation: Select a sunny location with good drainage and a fertile soil.

Planting: Plant 5 - 6 inches/12.5 - 15 cm. apart and water regularly. Never allow the media to dry out for the first week. Avoid strong direct sunlight until the plants are established in the cut flower bed.

Note: If plants are pinched please increase spacing by 25% to allow for additional side growth.

Temperature: Stock prefers cooler temperatures and after transplant keep the day temperature under 70°F/21°C with a night temperature of 45-50°F/7-10°C.

Support: Stock Quartet needs supporting nets when the plants are about 12 inches /30 cm. tall. Add additional netting as plants grow up.

Fertilizer: Maintain an EC level around 1.0 mmhos* in clay soil and 1.25 mmhos* in sandy soil and fertilize as needed to maintain healthy plants. Stock has a higher need for potassium so target the N:K ratio at 1: 1.5. Avoid high rates of ammonium since it promotes softer growth and thinner stems. Water sufficiently during production and then keep rather dry from visible bud to harvest. **1:2 dilution*

Moisture: Stock Quartet has a less vigorous root system and needs consistent moisture during the early production phase (do not dry out). Then, reduce moisture (but do not allow wilting) from visible bud to harvest.

Insects: Aphids and diamondback moths

Disease: Botrytis and sclerotium.

Pinch: When color first shows on the lower buds of the central stem, it can be pinched out to create a nice spray shape with 4 even flower spikes. Pinched plants require an additional 2-3 weeks of production compared to non-pinched plants.

Non-pinch: If plants are not pinched there will be a slight gap between the blooming of the center spike and side spikes.

Harvesting: For local sales cut stems with 7-15 open flowers. For long distance shipping cut with 2-3 open flowers.

Scheduling: (Northern Hemisphere)

Area	Sow	Harvest
Cool areas	July	October
	February	May
Mild areas	August	November / December
	October	January / February

Characteristics: Stock Quartet is an early blooming series with a unique spray type and strong stems. Stem length tends to be shorter than single spike Stock, but the strong stems re-hydrate well after cutting.

“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.”