

**Cultural Information for:** Stock Mid Cheerful Annual

**Common Name:** Stock

**Botanical Name:** Matthiola incana

**Seed Count:** 18,000 /ounce 640 / gram

**Optimum Germination Temperature:** 65-68 °F / 18-20 °C

**Optimum Growing Temperature:** 50 °F / 15 °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 a 288-plug tray and lightly cover with medium vermiculite. Maintain even moisture and a temperature between 65-68°F/18-20°C.

**Stage Two** (days 11-17) Following germination is complete, move the seedling trays to a well-lighted area with good ventilation. Fertilize lightly with 100 ppm N and reduce the temperature to 60°F/16°C during the day and 50°F/10°C at night.

**Stage Three** (days 18-25) Fertilize as needed to promote healthy growth. Provide high light up to 7,000-foot candles/75,000 lux and good air circulation.

**Stage Four** (days 26-28) The seedlings have 2 pairs of true leaves and are now ready for transplanting into cut flower beds. The Mid Cheerful series sets buds earlier than common varieties. Never delay transplanting. Due to special breeding techniques the Mid Cheerful series will produce 90% plus fully double flowers. Therefore, no special seedling selection is needed. **Transplant all seedlings!**

### Cut Flower Production – 9-11 weeks

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

**Lighting:** Stock Mid Cheerful is not photoperiodic but a combination of long days and warm temperatures will cause premature flowering. Optimum light level is 4,000-7,000-foot candles/43,000-75,000 lux.

**Planting:** Space 5 inches/12.5 cm. apart and water regularly, never allow the bed to dry out for the first week. Protect from strong sunshine the first week until the crop is established.

**Temperature:** Stock Mid Cheerful is classified as a mid season flowering variety that requires more cooling to initiate flowering. Mid Cheerful requires cool temperatures and after transplant keep the day temperature under 70°F/21°C and 50-60°F/11-15°C at night.

**Support:** Plants need supporting nets when plants are about 12 inches/30 cm. tall. Add additional netting as plants develop.

**Fertilizer:** Maintain an EC level around 1.0 mmhos\* in clay soils and 1.25 mmhos\* in sandy soils and fertilize as needed to maintain healthy plants. Water sufficiently during production and then keep rather dry from visible bud to harvest.

**Insects/Disease:** Spray for diamondback moths and aphids and be on guard against botrytis and sclerotium.

**Harvesting:** Cut stems when spikes have 7-15 open flowers.

### **Scheduling:**

Climate	Sow	Harvest	Sow	Harvest
Cool Areas	Mid July	Mid-October	February	May
Mild Areas	Mid August	Mid-November	October	Jan./Feb.

**Note:** Stock Mid Cheerful matures 1-3 weeks later than Cheerful, depending on temperature. Stock Mid Cheerful is more delayed in warmer temperatures than Cheerful.

*“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 American 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. Testing a few plants prior to treating the entire crop is best.”*