

# Matthiola incana Iron



Iron is a novel type of Japanese-bred stock. Stems are tall, strong and much harder than traditional European varieties, with very tightly spaced florets.

- ✿ Early-Mid season flowering
- ✿ Attractive colour range
- ✿ Approximately 55% double flowering without seedling selection
- ✿ Attractive for mono vases, excellent filler for mixed bouquets



Indoor

GROUP -



60-70 cm



Cut Flower



640/gram; normal



Cool, dry, airtight 8-10°C



## Culture Guide

### Plug Culture

- Stage 1** (days 1-10) Sow seed into seedling trays filled with a well-drained media with a pH of 5.8-6.2 and lightly cover with medium vermiculite. Maintain even moisture and a temperature of 18-21°C.
- Stage 2** (days 10-17) After germination is complete, move seedling trays to a well-lighted area with good ventilation. Fertilize lightly with 100 ppm N and reduce the temperature to 16°C during the day and 10°C at night.
- Stage 3** (days 18-25) Maintain an EC level between 1.0 and 1.4 mmhos (1:2 slurry) and provide plenty of light and good air circulation. Water and fertilize as needed to maintain healthy plugs. An application of 75 ppm N is recommended at least once a week. Avoid using ammonium nitrate and urea based fertilizers as these promote softer growth and thinner stems. Use temperature to control height.
- Stage 4** (days 26-30) When the seedlings have 2 pairs of true leaves they are ready for transplanting into cut flower beds. The Iron series sets buds earlier than common varieties. Never delay transplanting. Reduce fertilizer to prepare the plants for transition to the cut flower bed.

### Plant Culture

- In general** Iron genetically produces shorter stems than other varieties. How to improve stem length? Sow 1 week earlier than normal stocks. This will allow them sufficient time to grow vegetative without flower initiation due to the high temperatures experienced. Provide adequate water until flower buds become visible and provide water until harvesting.
- Media** 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.
- Transplanting** Select a sunny location with good drainage and a fertile soil with a pH between 6.0 to 7.0. Planting/Density: Plant 12.5x 12.5 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. Plants need supporting nets. Add additional netting as plants grow up.
- Watering** Provide adequate water until flower buds become visible, and then reduce water gradually until harvesting. Typically, growers reduce water later in the crop cycle and keep the greenhouse drier to induce flowering on tighter stems. This is not necessary with the Iron series, so to achieve greater stem length keep the greenhouse slightly warmer with higher moisture levels.
- Temperature** Stock prefers cooler temperatures and after transplant, it is best to keep days under 21°C and nights 10-15°C. Stocks are not photoperiodic but a combination of long days and warm temperatures will cause premature flowering.
- Fertilizer** Maintain an EC level around 2.0 mmhos (1:2 slurry) in clay soils and 1.6 mmhos in sandy soils and fertilize as needed to maintain healthy plants.
- Pests & diseases** Spray for moths and Aphids, and be on guard for Botrytis, Sclerotium and Downy Mildew.

<b>Growing</b>	Flowers are initiated after the 10 leaf stage. The Iron series requires night timetemperatures below 15-18°C for 10-21 days for flower bud initiation to occur. Once flower bud initiation has occurred, then warm temperatures and increasing day length will promote flower development.
<b>Crop schedule</b>	<p>Ideal crop schedule for Iron, for the northern hemisphere:</p> <p>In cold areas:</p> <ul style="list-style-type: none"> <li>- Forcing: sowing mid-July, planting mid-August, first harvest end of October (to avoid uneven growth, do not sow seed too early).</li> <li>- Natural Season: sowing August to early September, planting September to early October, first harvest end of November to January (growing schedule can be planned. Temperature affects the growing and flowering time).</li> </ul> <p>In warm areas:</p> <ul style="list-style-type: none"> <li>- Forcing: sowing early September, planting early October, first harvest early February (supplemental lighting is required from the middle of June).</li> <li>- Natural Season: sowing mid-September, planting mid-October, first harvest mid-February to March (growing schedule cannot be planned. Temperature affects the growing and floweringtime).</li> </ul>
<b>Post harvest handling</b>	Use of flower food is highly recommended.

*All information given is intended for general guidance only and is believed to be accurate. Cultural details are based on Northern Hemisphere 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 legislations and manufacturer's label instructions.*