

Callistephus chinensis

Serenade



Serenade is a highly fusarium-tolerant Aster. It produces masses of small rounded flowers with yellow centres.

- ✿ Spray habit with an abundance of semi-double flowers on a single stem
- ✿ Serenade has high Fusarium tolerance like our Matsumoto series
- ✿ Production cycle is approximately 14 weeks from sowing in Spring or from the actual production date, if day length manipulation techniques are applied
- ✿ Available in a wide range of bright colours



 Indoor/outdoor	 Cut Flower
 -	 5,600-7,000/gram; normal
 60-80 cm	 Cool, dry, airtight 8-10°C

Culture Guide

Plug Culture

- Stage 1** (days 1-10) Select a well-drained sterile media with a pH between 5.8-6.2. Prior to sowing, water the plug tray to the point of drip. Sow the seed and cover with medium vermiculite. Do not water the seeds after sowing or the day following sowing. Maintain even moisture and a soil temperature of 21°C. Water the seedlings as needed allowing the media to dry slightly in between watering. An overly wet soil will reduce germination.
- Stage 2** (days 11-21) After seedlings begin to emerge, move the plug trays to a bright greenhouse and reduce the air humidity and temperature to between 15-21°C. Lightly feed with 100 ppm N from a well-balanced fertilizer. Asters are sensitive to boron deficiency, so maintain optimum pH levels (5.8-6.2) and consider applying 0.25 ppm boron with each irrigation/fertilization.
- Stage 3** (days 21-35) Provide plenty of light and air circulation and fertilize the plugs as needed to maintain healthy tissue with 100-150 ppm N from a well-balanced fertilizer. The use of Calcium Nitrate based fertilizer is recommended to help build strong stems and roots.
- Stage 4** (days 35-40) Plugs are ready for transplanting into flower beds. In order to maximize stem length for cut flowers, do not delay transplanting; especially if plugs are being grown under long day conditions (>13 hours).

Plant Culture

- In general** Bud formation begins under long days (> 16 hours) with final development under short day conditions. In general, Aster flowers in 13-14 weeks (90-100 days) after sowing.
- Media** Rich loam with a high amount of organic matter.
- Transplanting** Space plants 12.5x 12.5 cm apart in beds with a rich soil full of organic matter where Asters were not previously grown the year before. Never grow in the same field more than two consecutive years. Asters have sturdy stems, but additional support is generally needed. Chrysanthemum netting is recommended.
- Fertilizer** Fertilize as needed to maintain a soil EC of 0.7 to 1.0 mmhos (1:2 slurry). Soil EC under 0.5 mmhos will cause lower leaves to yellow. Soil EC above 1.0 will result in large foliage, delayed flowering and shorter vase life.
- Pests & diseases** Aphids, Thrips, Botrytis, Fusarium.
- Growing** Growth regulator applications of B-Nine (daminozide), Alar or Cycocel may be applied to prevent stretch.
- Crop schedule** Natural season flowering without photoperiod manipulation:
In warm area: sow in March, harvest in July (16 weeks).

In cool area: sow in April, harvest in July/August (14 weeks).

For Winter flowering, provide 4 hours of supplemental lighting for 3 weeks from 10 p.m. to 2 a.m. at the 5th true leaf stage and then apply short day conditions (<12 hours).

If plants are too short, maintain lighting for longer than 3 weeks to add height and delay flowering.

Stems should be 2/3rd final height at the start of short days.

For late Summer to Autumn flowering, provide short days, (less than 12 hours of light), in the plugs stage when sowing May to July to ensure sufficient stem length.

To ensure proper development and stem length, provide long days by lighting from 10 p.m.-2 a.m. followed by short days when the crop is two thirds final desired height.

**Post harvest
handling**

Cut stems when 2-3 flowers are 1/4 open. Strip off bottom leaves and place stems in water in a cool area to allow for rehydration. 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.