

Crop	Antirrhinum
Series	Candy Showers
Botanical name	Antirrhinum majus
Plant type	Annual
Seed type	Raw
Seed count	6,000-8,000 seeds / gr
Germination	20°C - 5-7 days light favored
Growing	17-20°C
Optimum pH	5.8–6.2

Plug Culture: 5 weeks (288 cell tray)

Stage 1 (days 1-10) Sow multi* seeds into a plug cells filled with a sterile and well-drained media a low starting EC. A 288-plug tray is recommended. Lightly cover the seed with medium vermiculite and provide sufficient moisture to dissolve the pellet. Maintain a temperature of 18-20°C.

*Five or six seeds per cell produces a fuller finished product.

Stage 2 (days 11-18) The cotyledons are now visible, and roots are beginning to form. Maintain the media moist but not saturated to promote healthy root development and penetration. Maintain the air temperature at 18°C and apply a light feeding (50-75 ppm of nitrogen) from a well-balanced calcium nitrate-based formulation.

Stage 3 (days 19-27) The first true leaves are now developed, and roots are beginning to penetrate the media. Allow the media to dry slightly between irrigations to promote healthy root growth. Maintain air temperature between 18-20°C and increase the fertilizer rate to 75-100 ppm of nitrogen. Attempt to maintain approximately 4 potassium: 2 calcium: 1 magnesium in the fertilizer for the best growth. Avoid ammonium-based fertilizers. Do not over fertilize as

Antirrhinum is salt sensitive.

Stage 4 (day 28-35) At the end of stage 4 the seedlings will have 2-3 sets of true leaves and the roots should hold the media together. Optimum air temperature is 15-18°C to tone the seedlings.

Transplanting to finish: 5-8 weeks

Media: Select a sterile and well-drained media with a pH between 5.5-5.8 and low in nutrients.

Temperature: Optimum growing temperature is 15-18°C days and 15°C at night. Once established the night temperature may be reduced to 10-13°C.

Fertilizer: To maintain strong growth, apply 150-200 ppm of nitrogen as needed from a well-balanced calcium nitrate-based formulation. The use of calcium-magnesium formulations, such as15-5-15, work well and supply adequate amounts of magnesium. Avoid high rates of ammonium, especially at low temperatures, which promote softer growth and stretched plants. High pH (>6.5) results in iron chlorosis.

Lighting: Antirrhinum is a facultative long day plant. Providing long days (>14 hours) along with supplemental lighting will hasten development and flowering.

Pests: aphids, thrips and spider mites

Disease: downy mildew, powdery mildew, pythium, rust, tomato spotted wilt virus and INSV (impatiens necrotic spot virus).

Container	Plants per pot	Weeks from sowing
10cm	1 multi-seedling	9-10 weeks
12cm	1 multi-seedling	10-11 weeks
15cm	1 multi-seedling	11-12 weeks
25cm	3 multi-seedling	12-14 weeks
30cm	4 multi-seedling	13-15 weeks

^{*}Depending on day-length and temperature.

Culture Watch Point: Candy Showers becomes receptive to flower bud initiation at 5 pairs of true leaves. To promote sufficient vegetative growth in the final container, transplant when seedlings have around 2 leaf pairs. A photoperiod of 10.5 + hours is necessary to initiate and develop flowers. However, a longer day length yields more flower power.

Outdoors: Candy Showers spreads up to one foot in the garden and grows 10-15 cm tall depending on the climate, soil type and exposure.

All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.