

Celosia Ice Cream

(*Celosia plumosa*)

Germination

Media

Use a well-drained, disease-free media with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC 0.7–1.2 mmhos/cm).

Sowing

Sow 1 seed per cell in a 288 or smaller plug tray. Cover seed lightly with vermiculite. Use a preventative treatment against soil-borne diseases.

Stage 1 – Germination takes 2-4 days

Soil temperature: 70 to 72°F (21 to 22°C)

Light: Light is required.

Moisture: Keep soil moist (level 4) in Stage 1.

Humidity: Maintain 95 to 98% relative humidity (RH) until cotyledons emerge.

Plug Production

Media

Use a well-drained, disease-free media with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC 0.7–1.2 mmhos/cm).

Sowing

Sow 1 seed per cell in a 288 or smaller plug tray. Cover seed lightly with vermiculite. Use a preventative treatment against soil-borne diseases.

Stage 1 – Germination takes 5-7 days

Soil temperature: 70 to 72°F (21 to 22°C)

Light: Light is required.

Moisture: Keep soil moist (level 4) in Stage 1.

Humidity: Maintain 95 to 98% relative humidity (RH) until cotyledons emerge.

Stage 2

Soil temperature: 68 to 72°F (20 to 22°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Maintain soil moisture at the same level (level 4); don't allow the media dry out.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC).

Stage 3

Soil temperature: 68 to 72°F (20 to 22°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Maintain the moisture level constantly medium moist to medium wet (level 3-4). Don't allow the media dry out as water stress could cause premature flowering.

Fertilizer: Apply fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC).

Growth regulators: None

Stage 4

Soil temperature: 68 to 72°F (20 to 22°C)

Light: Up to 5,000 f.c. (53,800 Lux)

Moisture: Keep plug tray uniform moisture.

Fertilizer: Same as Stage 3.

General Remark for Plug stage:

Tips to prevent premature flowering: keep growing plugs under daylength 14 hour or longer due to short day flowering response. Also don't allow medium to dry out.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless media with a pH of 5.8 to 6.2 and an EC of 0.75 mmhos/cm in a well balanced fertilizer

Temperature

Nights: 59 to 61°F (15 to 16°C)

Days: 65 to 70°F (18 to 21°C)

Light

Maintain light levels as high as possible

Photoperiod

Celosia Icecream is a quantitative short day plant and will flower uniformly under day length 13 hours or shorter. When producing under natural day length longer than 13 hours, day length control can be applied. Start day length control no earlier than one week after transplanting.

Irrigation

Maintain media constantly moist to prevent from premature flowering.

Fertilizer

Celosia Icecream is a moderate feeder. Apply fertilizer at lower range of rate 3 (about 175 ppm N/1.2 mS/cm). Celosia is susceptible to high salt levels.

Growth Regulators

Generally, Celosia Icecream does not need PGR. But if necessary, Celosia Icecream is responsive to B-Nine/Alar (daminozide) spray at 2000-3000 ppm (2.4-3.5 g/l, 85% formulation or 3.1-4.7 g/l 64% formulation) depending on weather. If necessary, repeat the treatment.

Pinching

Celosia Icecream does not require pinching.

Crop Scheduling

Sow to transplant (288 cell plug): 3 to 4 weeks

Transplant to flower:

Container Size: Pack

Plants Per Pot: 1

Weeks From Transplant: 8 to 10

Total Weeks: 11 to 14

Container Size: 4 to 5-in. (10.5 to 13-cm)

Plants Per Pot: 1

Weeks From Transplant: 9 to 12

Total Weeks: 12 to 16

Production: Celosia Icecream can be produced year-round under the appropriate climate conditions.

Common Problems

Insect: Aphid, Thrips, Spider mite, Leafminer

Disease: Powdery Mildew, Botrytis

Note: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

