

Celosia Kosmo

(*Celosia spicata*)

Germination

Media

Use a well-drained, disease-free, media with a pH of 5.5 to 6.2 and an EC of 0.75 mmhos/cm.

Sowing

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

Stage 1 – Germination begins at day 4-5 continuing through day 12-20

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

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:

Celosia makes a taproot and is sensitive for root damage.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.2 and an EC of 0.75 mmhos/cm).

Temperature

Nights: 62 to 65°F (17 to 18°C)

Days: 65 to 68°F (18 to 20°C)

Light

Maintain light levels as high as possible; a minimum of 4500 lux (450 FC) is recommended.

Photoperiod

Celosia Kosmo is a quantitative short day plant and will flower uniformly under day length 13 hours or shorter.

Irrigation

Maintain media constantly moist to prevent from premature flowering.

Fertilizer

Celosia Kosmo 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

Celosia Kosmo generally does not need PGR. But if necessary, Alar / B-Nine 2000-2500 ppm (2.4-3.0 g/l 85% formulation or 3.1-4.0 g/l 64% formulation) 2 to 3

applications can be used. Do not treat when flower buds become visible.

with all regulations

Pinching

Celosia Kosmo does not require pinching.

Crop Scheduling

Sow to transplant (288 cell plug): 3 to 4 weeks; after second true leaf pair.

Transplant to flower:

Container Size: 3.5-in (9-cm)

Plants Per Pot: 1

Weeks From Transplant: 9 to 11

Total Weeks: 12 to 15

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

Plants Per Pot: 1

Weeks From Transplant: 10 to 12

Total Weeks: 13 to 16

Container Size: Gallon (18-cm)

Plants Per Pot: 3

Weeks From Transplant: 10 to 12

Total Weeks: 13 to 16

Common Problems

Insect: Aphid, Thrips, Spider mite, Leafminer

Disease: Powdery Mildew, Botrytis

Note:

- In high light conditions during short day periods, cristata type flowers can be formed.
- 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

