

Celosia Flamma, Flamma Grow

Crop	Celosia
Series	Flamma, Flamma Grow
Botanical name	<i>Celosia argentea plumosa</i>
Plant type	Annual
Seed type	Raw
Seed count	1,400-1600 seeds / gr
Germination	25 °C - 5-7 days light inhibited
Growing	18-24°C
Optimum pH	5.8-6.2

Plug Culture: 4 weeks (288 cell tray)

Stage 1 (days 1-10) Sow seeds in a well-drained soil mix and cover lightly with vermiculite. Provide a soil temperature of 21-24°C. Germination takes place in 7-10 days. The root system is very delicate, avoid sowing in open trays and instead sow directly into plug cells.

Stage 2 (days 10-19) After seedlings emerge, place plug trays in a well ventilated area and reduce the temperature to 18-21°C during the day and 16-18°C at night. Fertilize seedlings lightly with 50-100 ppm nitrogen. Over watering will promote disease; especially damping off and botrytis.

Note: Celosia Flamma is a facultative short day plant. Celosia blooms more quickly under short day conditions (< 12 hours). Providing long days (> 14 hours) will delay flowering and build vegetative growth.

Stage 3 (days 20-27) - Maintain good air circulation. Celosia is sensitive to day length and any type of

stress, (moisture, high temperature, root banding), will cause premature budding and stunted growth later in production.

Stage 4 (day 28) Seedlings are ready for transplanting at the 2-3 leaf stage. Holding the seedlings too long in the plug tray will stunt future development of the plant and cause premature budding.

Transplanting to finish: 5-6 weeks

Transplanting: Celosia has a soft stem and delicate root system. When dislodge seedlings, please handle it carefully to avoid damage and only handle seedlings by one leaf. Also avoid deep transplanting to prevent rhizoctonia.

Media: Select a well-drained media with a low starter charge.

Temperature: Maintain the plants at a temperature of 18-24°C. Avoid temperatures below 16°C.

Lighting: Applying long days (>13 hours) early in productions builds vegetative growth.

Plant growth regulators: Not necessary. Do not pinch.

Fertilizer: Celosia must be kept growing vigorously in order to reach favorable size before flowering begins. Apply 100-150 ppm nitrogen as needed to maintain strong growth. It is important to supply sufficient amounts of potassium in the fertilizer. A lack of

potassium causes smaller and abnormal shaped flowers. Boron deficiency causes deformed foliage and a witch's broom effect.

Diseases: downy mildew, pythium and rhizoctonia.

Pests: aphids, cut worms, nematodes, and thrips.

Culture Watch Point: Celosia is sensitive to vaporized gases of certain herbicides like methylurea, methoxy, dichlorophenyl and dichlorobenzonitrile. Do not drench plants with the chemical mefenoxam which causes phytotoxicity.

Flamma Grow:

Around 15 days later flowering and vigorous habit than Flamma series

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.