



Crop	Celosia
Series	Century
Botanical name	<i>Celosia argentea plumosa</i>
Plant type	Annual
Seed type	Raw
Seed count	1,350-1,500 seeds / gr
Germination	25°C - 5-7 days light inhibited
Growing	18-24°C
Optimum pH	5.8-6.2

Plug Stage: 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.

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. Celosia will bloom more quickly under short day conditions. To avoid pre-mature flowering produce seedlings under increasing day length with a minimum of 13 hours.

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: 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 fertilizer.

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

Lighting: High light, full sun is best. Century is a facultative short-day plant so providing long days early in production improves plant growth.

Plant growth regulators: Not necessary. Do not pinch.

Fertilizer: Celosia must be kept growing vigorously in order to reach favorable size before flowering slows their growth. 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.

Disease: botrytis, 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.

Marketing: Celosia Century is excellent for autumn sales in 15 cm pots can be sold in full color.

Cut Flower Production

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

Spacing: Plant at a spacing of 10 x 10 cm.

Media: Well-drained soil rich in organic matter.

Temperature: Minimum temperature of 18°C.

Light: High light, full sun is best.

Pinch: Do not pinch the plants.

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.