

Crop	Celosia
Series	Yukata
Botanical name	Celosia argentea plumosa
Plant type	Annual
Seed type	Raw
Seed count	1,600 seeds /gr
Germination	25⁰C -5-7 days light inhibited
Growing	16-24°C
Optimum pH	5.8-6.2

Plug Culture: 4 weeks (405 cell tray)

Stage 1 (days 1-10) Sow seeds in a well-drained soil mix with a pH between 5.5 and 6.5 and low soluble salts. Cover the seed lightly with media or vermiculite. Provide a soil temperature of 25°C. Germination takes place in 7-10 days. Since the root system is very delicate, either direct sow or transplant from plug trays.

Stage 2 (days 11-20) After seedlings emerge, place plug trays in a well-ventilated area and reduce the temperature to 19-21°C during the day and 16-18°C at night. Fertilize seedlings lightly with 50-100 ppm nitrogen. Over watering promotes disease; especially damping off and botrytis.

Stage 3 (days 21-27) Maintain good air circulation. Celosia is sensitive to day length and any type of stress, such as water, high temperature or root banding. Avoid stressing the seedlings or else they will bud prematurely, causing stunted growth later in production. Celosia blooms more quickly under short day conditions (< 12 hours). Providing long days (> 14 hours) will delay flowering and build vegetative growth. **Stage 4** (day 28) Seedlings are ready for transplanting.

Do not delay transplanting. Holding the seedlings too long in the plug tray will stunt future development of the plant and may cause premature budding.

Transplanting to finish: 4-6 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. Ideal pH is 5.5 to 6.5.

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

Lighting: High light, full sun is best. Yukata is a facultative short-day plant so providing long days (> 14 hours) early in production promotes more vegetative growth.

Plant growth regulators: Not necessary. Do not pinch.

Fertilizer: Feed with 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 flower plumes and abnormal shaped flowers.

Pests: aphids and thrips

Disease: botrytis, downy mildew, pythium and, rhizoctonia

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.