

# Celosia Bright Sparks™

## Culture Guide

**Botanical name:** *Celosia plumosa erecta*

**Product form:** Seed

**Containers:** Quarts, Gallons

**Habit:** Upright

### Garden Specifications

**Garden Height:** 14–18" (35–45 cm) tall

**Garden Width:** 10–12" (25–30 cm) wide

**Exposure:** Full sun

**USDA zone:** 11

**AHS zone:** 12–1

**Product use:** Containers, Landscapes, Patio Pots, Combos

### Germination

Stages 1 & 2

**Germination time:** 2–4 days

**Media temp:** 70–75 °F (21–24 °C)

**Chamber:** Optional

**Light:** Required for germination

**Seed cover:** Yes

**Moisture level: 4 - WET:** Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

**Rec. tray size:** 288-cell tray

**Seeds per cell:** 1

### Young Plant Production

Stages 3 & 4

#### **Temperature**

**Day:** 66–68 °F (19–20 °C)

**Night:** 68–70 °F (20–21 °C)

**Average daily temperature:** 68 °F (20 °C)

#### **Lighting**

**Day extension lighting:** Necessary to 14 hours

**Light intensity:** 4,000–5,000 foot candles (800–1,000 micro mols).

**Day length response:** Facultative short day

**Daily light integral:** 10–12 mols/day

**Media pH:** 5.5–5.9

**Media EC:** SME EC: 0.9–1.3 mS/cm

**Fertilizer:** 75–125 ppm N

**Moisture level:** Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 4.

**2 - MEDIUM:** Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.

**4 - WET:** Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

**Pinching:** No

**Plant growth regulators (PGRs):** PGRs are usually not necessary.

**Plug grow time:** 4–5 weeks in a 288-cell tray

**Comments:** Bright Sparks is a facultative short day variety and will flower faster under short days. If sowing under short days, it is vital to grow the plugs under a day length of at least 14 hours to promote sufficient vegetative growth before flowering.

### Finishing

#### **Temperature**

**Day:** 68–70 °F (20–21 °C)

**Night:** 60–62 °F (16–17 °C)

**Average daily temperature:** 65 °F (18 °C)

#### **Lighting**

**Day extension lighting:** Not necessary

**Light intensity:** 4,000–6,000 foot candles

**Day length response:** Facultative short day

**Daily light integral:** 10–12 mols/day

**Transplanting:** Transplant directly into the finished container. Place the rooting media slightly below the level of media in the container. Make sure the root ball is covered and that the plug is situated in the center of the pot.

**Media pH:** 5.8–6.2

**Media EC:** SME EC: 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm

**Fertilizer:** 125–175 ppm N

**Pinching:** No. Pinching is not recommended or needed.

**Plant growth regulators (PGRs):** If grown in smaller containers or under suboptimal conditions, sprays of B-Nine® WSG at 2,500 ppm are effective at reducing stem length and leaf size. Do not spray after buds have started to show color or flower size will be reduced.

**Tech tip:** If plugs are budded at transplant, provide 14-hour days for at least four weeks to promote bulking of the plants. Keeping soil moist will help prevent premature flowering.



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Bright Sparks™  
Formula Mix

**Moisture level:** Media should stay moist between irrigations. Alternate between moisture level 3 and 4.

**3 - MOIST:** Soil is brown in color, strongly squeezing the soil will extract a few drops of water, and trays are light with no visible bend.

**4 - WET:** Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

**Common pests:** Spider Mites, Thrips, Aphids

**Common diseases:** Botrytis, Pythium, Powdery mildew

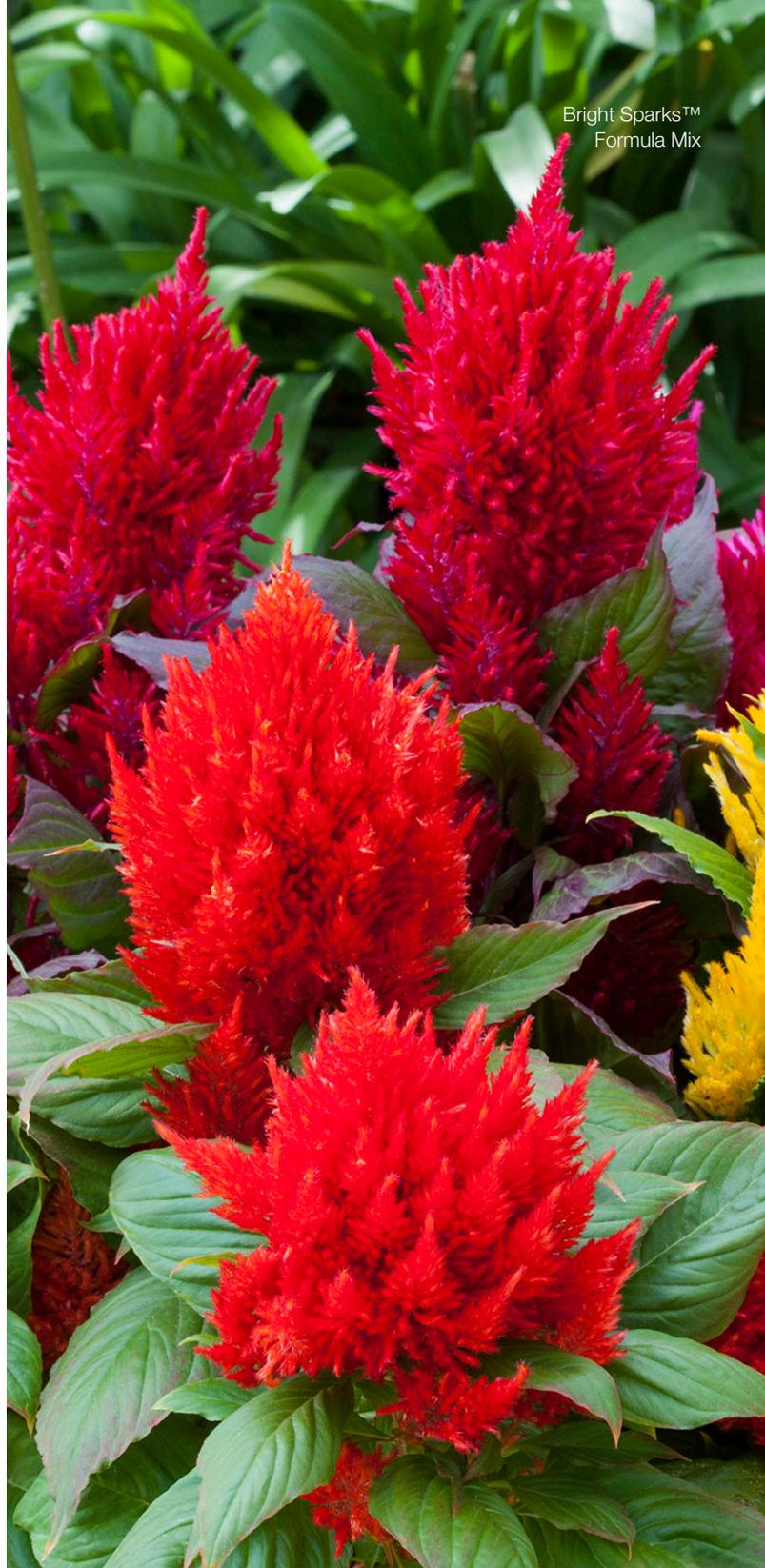
## Scheduling

| Size   | Crop Time | Plants Per Pot |
|--|-----------|----------------|
| 1.0 pint<br>(4 inch)                                 | 5–6 weeks | 1 ppp          |
| 1.0 quart<br>(4.5 to 5 inch)                         | 6–8 weeks | 1 ppp          |
| 1.25 to 2.5 quart<br>(5.5 to 6.5 inch, trade gallon) | 7–9 weeks | 1 ppp          |
| 1.5 gallon hanging basket<br>(10 inch basket)        | 6–7 weeks | 3–4 ppp        |

Estimated finish crop time is from transplant of a 288-cell tray and finished at an average daily temperature (ADT) of 65 °F (18 °C).

## Example crop schedule for a 1.25 quart

| Weeks From Transplant | Description                                    |
|-----------------------|--|
| 1 week                | If plugs are budded provide 14-hour day length |
| 4 weeks               | Spray with B-Nine® WSG at 2,500 ppm if needed  |
| 8 weeks               | Ready to ship                                  |



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