# Cleome Sparkler<sup>™</sup> 2.0

# Culture Guide

F1 Cleome hassleriana

Product form: Seed

Containers: Quarts, Gallons

Habit: Upright

## **Garden Specifications**

**Garden Height:** 36–45" (90–113 cm) tall **Garden Width:** 24–36" (60–90 cm) wide

Exposure: Full sun
USDA zone: 10
AHS zone: 12–1

Product use: Containers, Landscapes, Patio Pots



#### Germination

Stages 1 & 2

Germination time: 4-6 days

Media temp: 80-85 °F (26-30 °C) days; 68-70 °F (20-21 °C) nights

Chamber: No

Light: Required for germination

Seed cover: Yes

**Moisture level:** Media should be allowed to dry between irrigations. Alternate between moisture level 4 and 5.

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.

5 - SATURATED: Soil is dark brown and shiny, free water is present at the surface of the soil, water drips freely from the bottom of the tray, and trays are heavy with a visible bend in the middle.

Rec. tray size: 288-cell tray

Seeds per cell: 1

### **Young Plant Production**

Stage 3 & 4

**Temperature** 

**Day:** 78–80 °F (26–27 °C) **Night:** 68–70 °F (20–21 °C)

Average daily temperature: 69 °F (20 °C)

Lighting

Day extension lighting: Beneficial to 14 hours

Light intensity: 2,000-3,500 foot candles (400-700 micro mols)

Day length response: Facultative long day

Day light integral: 10-12 mols/day

Media pH: 5.5-5.9

Media EC: SME EC: 0.9-1.3 mS/cm

Fertilizer: 125-175 ppm N

**Moisture level:** Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 3.

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

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.

Pinching: No

Plant growth regulators (PGRs): A spray of Bonzi® at 5 ppm or B-Nine® WSG at 2,500 ppm is recommended in the plug to promote better basal branching and fuller plants.

Plug grow time: 3-4 weeks in a 288-cell tray

Comments: Fluctuating day/night temps will help improve germination. Cleome is a heavy feeder; start feeding in the plug about two weeks after sowing.

#### **Finishing**

#### **Temperature**

Day: 76-78 °F (24-26 °C) Night: 62-64 °F (17-18 °C)

Average daily temperature: 69 °F (20 °C)

#### Lighting

Day extension lighting: Beneficial to 14 hours Light intensity: 4,000-6,000 foot candles Day length response: Facultative long day

Day light integral: 16-18 mols/day

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

Media pH: 5.5-5.9

Media EC: SME EC: 2.3-2.8 mS/cm, PourThru EC: 3.5-4.2 mS/cm

Fertilizer: 200-250 ppm N

Pinching: No. Pinching is not recommended or needed.

Plant growth regulators (PGRs): PGRs are necessary to control plant height and create a fuller plant. Recommended are three sprays of Bonzi® at 25 ppm or B-Nine® WSG at 5,000 ppm applied 7-10 days apart, beginning two weeks after transplant. B-Nine® WSG may delay flowering by 4-7 days. A Bonzi® drench at 2-4 ppm when the plant has reached the desired height will help prevent stretch at retail.

Tech tip: Cleome grows best in warm days and high light. They are also heavy feeders, so use a constant liquid feed program using an ammonium-based fertilizer such as 21-5-20.



CHRYSAL Try Chrysal Alesco®, a postharvest foliar spray, to protect ethylene sensitive crops during shipping and retail.

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 3.

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

Common pests: Fungas gnats, Leafminers Common diseases: Pythium, Powdery Mildew

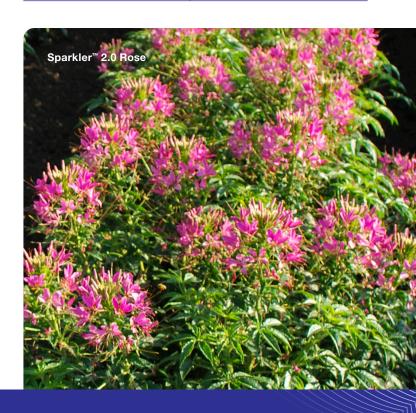
#### **Scheduling**

SIZE	CROP TIME	PLANTS PER POT
1.0 quart (4.5 to 5 inch)	9-11 weeks	1 ppp
1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)	10-12 weeks	1–2 ppp
3.0 quart to 2.0 gallon (7.5 to 10 inch)	10-12 weeks	1–3 ppp

Estimated finish crop time is from transplant of a 288-cell tray and finished at an average daily temperature (ADT) of 69 °F (20 °C).

#### Example crop schedule for a 2.5 quart

WEEKS FROM TRANSPLANT	DESCRIPTION
2 weeks	Spray with Bonzi® at 25 ppm or B-Nine® WSG at 5,000 ppm
4 weeks	Spray with Bonzi® at 25 ppm or B-Nine® WSG at 5,000 ppm
6 weeks	Spray with Bonzi® at 25 ppm or B-Nine® WSG at 5,000 ppm
11 weeks	Drench with Bonzi® at 2–4 ppm if plant has reached the desired height
12 weeks	Ready to ship



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