

# easy grow guide

## celosia bright sparks

(Celosia plumosa)



<b>Sowing/Media:</b>	Use a well-drained, disease-free, peat based plug medium with pH 5.8-6.2, EC 0.7-1.2 mmhos. Sow 1 seed per cell and cover lightly with vermiculite.
<b>Germination Stage 1: (1-10 days)</b>	Keep media uniformly moist, not saturated. Media temperature should be 70-75°F (21-24°C) with high humidity. Light is required for germination. Due to the short day flowering response, maintain a day length of 14 hours or more during the plug stage to avoid premature flowering, using supplementary lighting if this can't be achieved naturally, <2500 f.c. is ideal. Emergence should begin 2-4 days from sowing. Once radicles emerge temperature can be kept around 68-71°F (20-22°C).
<b>Germination Stage 2:</b>	Maintain even moisture and avoid letting the media dry out as this will encourage premature bud formation in the plug trays. You can begin light fertilization with 50-100ppm N, keeping the EC <1.2 mmhos. Keep light levels at <2500 f.c. and maintain temperatures at 68-71°F (20-22°C).
<b>Germination Stage 3:</b>	Maintain temperatures and light levels the same as stage 2, keeping the day length at 14 hours minimum. Make sure media is evenly moist at all times as over watering can promote root diseases and drying out will lead to premature bud formation and stunted growth. Fertilizer rates can be increased to 100-150ppm, keeping EC at 0.7-1.2 mmhos.
<b>Germination Stage 4:</b>	Media temperature can be lowered to 65-70°F (18-21°C). Maintain moisture and fertilizer levels as stage 3. Light levels can be increased to 4000-5000 f.c. PGRs should not be necessary.

### Growing On to Finish: 6 inch (15cm) pots

<b>Media:</b>	Use a well-drained, disease free, peat-based growing mix with pH 5.8-6.2 and EC <1.0 mmhos. It is important to transplant on time as Celosia don't like to be root bound and stunted growth may occur.
<b>Temperatures:</b>	Temperatures for growing on can be maintained at 65-70°F (18-21°C), with a night temperature of 59-62°F (15-17°C), but no lower.
<b>Light:</b>	Light levels should be kept as high as possible. Bright Sparks is a facultative short day variety and will flower faster under short days. If sowing under short days, it is important to grow the seedlings under a day length of at least 14 hours to promote sufficient vegetative growth prior to flowering.
<b>Irrigation:</b>	Maintain even moisture throughout to prevent premature flowering induced by water stress, but avoid over watering.
<b>Fertilizer:</b>	Fertilize with 100-150 ppm N from a higher potassium feed such as a 15-5-30, alternating with a 15-0-15, or 15-5-15 feed occasionally. Maintain EC levels at 1.2mmhos or below and pH 5.8-6.2. Celosia are sensitive to high salt levels.
<b>Growth Regulators:</b>	Bright Sparks does not generally need PGRs if grown under the ideal conditions, but you can use sprays of B-Nine (2000-3000 ppm – 85% formulation) as required. Bonzi and A-Rest are also effective. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements.
<b>Pests:</b>	Spider mites, Thrips, Aphids
<b>Diseases:</b>	Botrytis, Pythium, Powdery Mildew

### Plug Times

<b>512 Plug:</b>	3-4 weeks from sowing to transplant	<b>288 plug:</b>	4-5 weeks from sowing to transplant
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### Transplant to Finish

Container	Plants/Container	Transplant to Finish	Total Crop Time
<b>6 inch (15cm):</b> grown in Northern Europe under a minimum of 14 hours day length throughout	1 x plug	7-9 weeks	12-14 weeks
<b>6 inch (15cm):</b> grown in Southeast Asia under 11-12 hour days from transplant	1 x plug	5-7 weeks	9-11 weeks

Crop times are based on optimum conditions. Alternative environmental conditions and cultural regimes can lengthen the crop times stated above.