

easy grow guide

calendula costa

(OP *Calendula officinalis*)



Plug Production: 288 plugs or larger

Sowing/Media:	Use a well-drained, disease-free, peat based plug medium with no added fertiliser, pH 5.8-6.5, EC <0.75mmhos. Cover seed with vermiculite
Germination Stage 1: (5-10 days)	Keep medium uniformly moist but not saturated, media temperature should be 70-72°F (21-22°C), moderate light levels are beneficial - 1500-2500 f.c.
Germination Stage 2:	Dry down media moderately between irrigations to avoid stretch, lower media temperature to 60-64°F (16-18°C), you can begin to fertilize with 50ppm N from a well balanced fertilizer every other irrigation but keep EC <0.75mmhos.
Germination Stage 3:	Continue with a good wet/dry moisture cycle to help control stretch, keep media temperature at 60-64°F (16-18°C), light levels can be increased to 3500 f.c. or higher from now on as Costa will stretch in low light conditions. Fertilize with 100-150ppm N from 15-5-15, 17-5-17, avoid ammonium based fertilizers, keep media pH at 5.8-6.5 and EC <0.75mmhos.
Germination Stage 4:	Lower temperature to 58-62°F (14-17°C), any higher can cause plants to stretch, otherwise treat as stage 3. Good water, temperature and light management should give good height control but if needed, sprays of B-Nine (1000-1500 ppm) can help to tone plants if the ideal conditions can't be achieved.

Growing On to Finish: Packs, 4" (10cm) pots

Media:	Use a well-drained, disease free, peat-based growing mix with 5.8-6.5 and EC <0.75mmhos.
Temperatures:	Daytime temperatures should be 65-68°F (18-20°C) and night temperatures 52-55°F (11-13°C). You can grow Costa at a constant 50-59°F (10-15°), but this will increase the crop time (see table below). At temperatures lower than 46°F (8°C) Costa will not grow.
Light:	High light levels are recommended as this prevents stretch. Light levels should be 3500 - 5000 f.c. as a guide.
Irrigation:	Practice a good wet/dry moisture cycle. Growing drier in cool conditions is recommended, even allowing plants to wilt slightly before irrigating again.
Fertilizer:	Feed every other irrigation with 125-150 ppm N from 15-5-15, 17-5-17, or 13-2-13 avoiding ammonium based fertilizers. Keep media pH at 5.8-6.5, and EC 0.75-1.0 mmhos. Avoid high nitrogen levels as this can cause a delay in flower initiation and soft stems.
Growth Regulators:	High light, cool temperatures and good water management is the best way to control growth. Sprays of B-Nine (2500-3000 ppm) will help if needed, but it is best that the plants are established and well rooted before applying. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the results
Pests:	Whitefly, Thrips.
Diseases:	Botrytis, Powdery Mildew, Fusarium. A preventative fungicide program is recommended. Maintaining good air movement and watering early in the day is also recommended.

Plug Times:

288 plug:	3-4 weeks from sowing to transplant
------------------	-------------------------------------

Transplant to Finish:

Container	Plants/Container	Transplant to Finish	Total Crop Time
Packs (with coloured buds):	1 x plug per cell	4-5 weeks	7-9 weeks
4 inch (10cm) standard:	1 x plug	5-6 weeks	8-10 weeks
4 inch (10cm) grown cool:	1 x plug	6-8 weeks	9-12 weeks

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