# easy grow guide cosmos apollo

(Cosmos bipinnatus)



## Plug Production: 288 plugs

Sowing/Media:	Use a well-drained, disease-free, peat based plug medium with pH 5.8-6.2, EC <0.75mmhos. Cover seed with a thin layer of vermiculite, media should be moist, not saturated.
Germination Stage 1: (3-5 days)	Keep media uniformly moist until seedlings are hooking above the covering, media temperature should be 61-65°F (16-18°C). Higher temperatures promote faster growth and stretching.
Germination Stage 2:	Dry down slightly to avoid stretch but avoid wilting, keep media temperature at 61-65°F (16-18°C), germination should be complete in 5-7 days. Fertilization can begin with 50-100ppm N from a well balanced fertilizer
Germination Stage 3:	Allow media to dry further between irrigations to improve rooting and control stretch, but avoid wilting. Maintain temperatures the same as stage 2. Light levels should be <3000 f.c. Fertilize with 100-150ppm N from a well balanced fertilizer, keep media pH at 5.8-6.2 and EC <0.75mmhos.
Germination Stage 4:	Keep temperature, moisture and fertilizer levels as per stage 3. Keep light levels <3000 f.c. Apollo is a facultative short day variety. Extending day length to 12-14 hours in the plug stage will help to prevent premature budding.
Growth Regulators:	Some growth control can be achieved naturally by good moisture management as long as the plants don't wilt. If needed, a spray of Bonzi (10-15ppm) will help to control early stretch. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements.

## Growing On to Finish: 4" (10.5cm) up to 8" (20cm) pots

Media:	Use a well-drained, disease free, peat-based growing mix with pH 5.8-6.2, EC 1.0-1.5mmhos		
Temperatures:	Temperatures for growing on should be 65-70°F (18-21°C). Growing under higher temperatures will reduce crop time. Avoid frost.		
Light:	Light levels should be 3000 - 5000 f.c. as a guide. Apollo is a facultative short day variety. Extending day length to 12-14 hours will help to prevent premature budding, but will increase crop times.		
Irrigation:	Practice a good wet/dry moisture cycle, avoiding wilt.		
Fertilizer:	Feed 1–2 times per week with 100-150 ppm N from a well balanced fertilizer, changing to a higher K fertilizer at bud formation. Keep media pH 5.8- 6.2, and media EC 1.0- 1.5mmhos		
Growth Regulators:	Growth can be controlled naturally by good moisture management, avoiding wilt. If needed use sprays of B-Nine (2500 – 5000 ppm) or Bonzi (15 – 30 ppm). It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements		
Pests:	Aphids, Thrips		
Diseases:	Powder Mildew		

### **Plug Times:**

288 plug:	4-5 weeks from sowing to transplant	
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#### **Transplant to Finish:**

Container	Plants/Container	Transplant to Finish	Total Crop Time
4" inch (10.5cm):	1 x plug	5-6 weeks	9-11 weeks
6-7" inch (15-18cm):	3 x plug	5-6 weeks	9-11 weeks

Crop times are based on UK spring trials under natural day length. Alternative environmental and cultural regimes can alter the crop times stated above.