easy grow guide marigold dune (OP Tagetes erecta)



Plug Production: 512 or 288 plugs

Sowing/Media:	Use a well-drained, disease-free, peat based plug medium with pH 6.2-6.5 (avoid pH levels <6.0), EC <0.75mmhos. Cover seed with vermiculite
Germination Stage 1: (3-5 days)	Keep medium uniformly moist until seedlings are hooking above the covering, media temperature should be 68-72°F (20-22°C), keep light levels <1500 f.c.
Germination Stage 2:	Dry down slightly to avoid stretch, keep media temperature at 68-72°F (20-22°C), germination should be complete in 5-7 days.
Germination Stage 3:	Allow media to dry further between irrigations to improve rooting and control stretch, media temperature can be dropped to 65-68°F (18-20°C), light levels should be <3000 f.c. Fertilize with 100-150ppm N from 15-5-15, 17-5-17 or 13-2-13, keep media pH at 6.2-6.5 no lower and EC <1.5mmhos.
Germination Stage 4:	Practice good wet/dry moisture cycle, media temperatures can be lowered to $60-62^{\circ}F$ (15-16°C), keep light levels <3000 f.c. Fertilize with 100-150ppm N from 13-2-13 to help tone the seedlings. If needed, use sprays of B-Nine (1500 – 2500 ppm), A-Rest (3 – 10 ppm), Bonzi (10 – 20 ppm), or Sumagic (2 – 7 ppm) to control growth. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements.

Growing On to Finish: Packs, 4.5 inch (11cm) pots

Media:	Use a well-drained, disease free, peat-based growing mix with pH 6.2-6.5 (no lower) and EC <1.5mmhos. pH levels below 6.0 can induce iron, manganese and sodium toxicity.		
Temperatures:	Temperatures for rooting out after transplant should be 65-68°F (18-20°C) Temperatures for growing on can be lowered to 62-65°F (16-18°C)		
Light:	Light levels should be 3000 - 5000 f.c. as a guide.		
Irrigation:	Practice a good wet/dry moisture cycle.		
Fertilizer:	Feed 1–2 times per week with 150 – 200 ppm N from 15-5-15, 17-5-17, or 13-2-13. Keep media pH 6.0 – 6.5, and media EC 1.25 – 1.75 mmhos (saturated paste). If plugs have buds and poor growth before transplanting, push growth with more NH4 feed, such as 20-10-20, but watch out for lowering media pH too much.		
Growth Regulators:	Use sprays of B-Nine ($2500 - 5000 \text{ ppm}$), Bonzi ($15 - 30 \text{ ppm}$), or Sumagic ($5 - 10 \text{ ppm}$) as needed. Drench with Bonzi ($2 - 5 \text{ ppm}$) or Sumagic ($1 - 2 \text{ ppm}$) when plants are up to size and flowering. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements		
Pests:	Aphids, Whitefly, Thrips, Red Spider mite, Leafminer		
Diseases:	Pythium, Botrytis, Alternaria leafspot. A preventative fungicide program is recommended. Leafspots (bacterial and Alternaria), bronzing or speckling on lower leaves is likely to be caused by media pH <6.0.		

Plug Times:

512 Plug:	3-4 weeks from sowing to transplant	
288 plug:	4-5 weeks from sowing to transplant	

Transplant to Finish:

Container	Plants/Container	Transplant to Finish	Total Crop Time
Packs	1 x plug	6-7 weeks	9-11 weeks
4.5 inch (11cm):	1 x plug	7-8 weeks	10-12 weeks
6 inch (15cm):	1 x plug	9-10 weeks	12-14 weeks

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