

## Carthamus Grenade Series

(*Carthamus tinctorius*)

Cut Flowers Culture (revised 02/25/21)

Features thornless leaves and round flower buds atop stems of uniform length. Best grown as a direct-sown crop, in field and high tunnel applications. Good for fresh and dried use; can also be used green when harvested young.

### General Information

Cultivation Type	Usage	Stem Length	Timing Group
Tunnel, Field grown	Filler	32-40 in. (81-102 cm)	N/A

### Germination

Seed Form	Recommended Plug Size	Seeds/Cell	Plug Crop Weeks	Days from 50% to maximum germination	Initial Media pH/EC (1:2)	Cover Seed
COT	Direct sow		N/A			

### Plug Production

	Stage 1	Stage 2	Stage 3	Stage 4
<b>Moisture</b>				
<b>Temperature</b>	54-60°F (12-16°C)			
<b>Light</b>				
<b>Fertiliser</b>	Less than 100 ppm N (Less than 0.7 EC)			

### Propagation Key Tips

Direct seeding is recommended. Plan for rows to be spaced 12 in. (30 cm) apart; thin seedlings to 2.5 in. (6 cm) within the row. Carthamus forms a taproot, so if attempting to grow from plugs, plan to transplant seedlings 5 to 7 days after sowing.

### Growing on to Finish

Target Media pH/EC (1:2)	Fertiliser	Daylength
5.5-6.5 pH	Less than 100 ppm N (Less than 0.7 EC)	-

### Crop Scheduling

Cultivation Type	Support	Temperature	Density	Crop Time
Tunnel	Recommended	-	4-6 plants/ft² (43-65 plants/m²)	8-12 weeks
Field grown	Recommended	-	6 plants/ft² (65 plants/m²)	8-12 weeks

### Fertiliser Notation

Above average soil fertility will promote excessive vegetative growth and diminish flower production.

### Common Problems

Aphids, Botrytis, Colletotrichum carthamii. A preventive fungicide treatment is advised.

## Finishing Key Tips

Harvest timing is affected by heat and light quality, and reflects direct sow method. If desired, apical bud can be removed to ensure more buds opening at the same time.

## Harvest

Harvest when flowers are starting to open for blooming use. Cut stems young/green for use as green filler.

## Post Harvest

Hydration solution followed by holding solution. Short-term cold storage at 2-4°C (35-40°F) is tolerated. Not ethylene sensitive.

## Vase Life

5-8 days

NOTE: Growers should use the information presented here as guidelines only. PanAmerican Seed recommends that growers conduct a trial of products under their own conditions. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. It is the responsibility of the grower to confirm the treatment is available in their region as well as read and follow all the current label directions relating to the products. Nothing herein shall be deemed a warranty or guaranty by PanAmerican Seed of any products listed herein. PanAmerican Seed's terms and conditions of sale shall apply to all products listed herein.

## Variety Pictures

---



Orange



PanAmerican Seed Co.  
622 Town Road, West Chicago, Illinois, USA, 60185  
+1 800-231-7065 [PanAmSeed.com](http://PanAmSeed.com)

™ denotes a trademark of and ® denotes a registered trademark of Ball Horticultural Company in the US. It may also be registered in other countries.  
©2025 Ball Horticultural Company