GrowerFacts

PanAmerican Seed®

Cosmos Sonata™ Series

(Cosmos bipinnatus)

Annuals Culture (revised 10/16/25)

Plug crop time: 4 to 5 weeks
Transplant to finish: 6 to 7 weeks

- The best-performing garden cosmos.
- Extremely easy to grow; professional growers choose Sonata because of its capabilities for blooming in the pack and pot.
- Recommended for 5 to 6-in./13 to 15-cm pots.

General Information

Exposure	Bloom Season	Height	Spread	Spacing
Sun	Spring, Late Spring, Summer, Late Summer	24 in. (61 cm)	12-14 in. (30-36 cm)	12-16 in. (30-41 cm)

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
RAW	288	1	4-5	3-4	5.7-5.9 pH 0.3-0.5 mmhos/cm	Yes

Plug Production

	Stage 1	Stage 2	Stage 3	Stage 4
Moisture	Level 4	Level 3-4	Level 2-3	Level 2-3
Temperature	61-65°F (16-18°C)	61-65°F (16-18°C)	61-65°F (16-18°C)	61-65°F (16-18°C)
Light	Optional			
Fertiliser		Less than 100 ppm N (Less than 0.7 EC)	100 to 175 ppm N (0.7 to 1.2 EC)	100 to 175 ppm N (0.7 to 1.2 EC)

Propagation Key Tips

Can treat the plugs at early Stage 1 with paclobutrazol at 15 ppm applied as a spray to control early stretch. Daylength extension in the plug stage may be used to prevent premature flowering.

Growing on to Finish

Growing on Temperature	Target Media pH/EC (1:2)	Fertiliser	Daylength
(day) 64-68°F (18-20°C) **(night)** 60-64°F (16-18°C)	5.8-6.2 pH 1.0-1.5 mmhos/cm	100 to 175 ppm N (0.7 to 1.2 EC)	Facultative Short Day

Daylength Notation

Cosmos flowers faster under short days. Daylength extension in the plug stage to more than 12 hours daylength may be used to prevent premature flowering.

Crop Scheduling

Container Size	Plugs/Pot	Crop Time	Season	PGR
4"/4.5"/Quart/10 cm	1 (ppp)	6-7 (weeks)	Spring	-
5"/6"/1 Gallon/15 cm	1 (ppp)	7-8 (weeks)	Spring	-

Fertiliser Notation

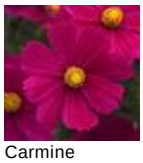
Reduce N and increase K in fertilization closer to bud stage.

Common Problems

Insects: Aphids, Thrips

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

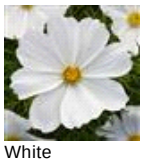

Carmine


Pink


Pink Blush


Purple Shades


Red Shades


White


Complete Mixture

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