

Dianthus Sweet™ F₁ Series

(*Dianthus barbatus*)

Cut Flowers Culture (revised 10/14/25)

Versatile and programmable series can be produced without vernalisation and is the best dianthus for cooler production seasons. A top-notch filler series that features large, long-lasting, very fragrant blooms on strong stems.

General Information

Cultivation Type	Usage	Stem Length	Timing Group
Greenhouse, Tunnel	Filler, Secondary	18-36 in. (46-91 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
PEL	288	1	5-6	3-4	5.8-6.2 pH 0.75 mmhos/cm	Yes

Plug Production

	Stage 1	Stage 2	Stage 3	Stage 4
Moisture	Level 4	Level 3-4	Level 3-4	Level 3
Temperature	64-68°F (18-20°C)	65-70°F (18-21°C)	60-65°F (16-18°C)	55-60°F (13-16°C)
Light	Optional	5-8 mol·m ⁻² ·d ⁻¹	8-10 mol·m ⁻² ·d ⁻¹	10 mol·m ⁻² ·d ⁻¹
Fertiliser		Less than 100 ppm N (Less than 0.7 EC)	Less than 100 ppm N (Less than 0.7 EC)	175 to 225 ppm N (1.2 to 1.5 EC)

Fertiliser Notation

Beginning at Stage 3, start fertilising with 50 ppm N twice a week. As the true leaves develop, increase the fertiliser rate to 100 ppm. Maintain the plug media EC at 0.75 to 1.0 mmhos/cm and pH at 5.8 to 6.2.

Growing on to Finish

Target Media pH/EC (1:2)	Fertiliser	Daylength
5.8-6.5 pH 1.5-2.0 mmhos/cm	175 to 225 ppm N (1.2 to 1.5 EC)	Facultative Long Day

Daylength Notation

Best results are achieved when plants are grown in full sun or in a high-light greenhouse. The combination of high light with high heat will result in shorter stems.

Crop Scheduling

Cultivation Type	Support	Temperature	Density	Crop Time
Tunnel	Required	16-22°C/60-72°F (day) 10-16°C/50-60°F (night)	6-8 plants/ft ² (65-86 plants/m ²)	11-15 weeks
Greenhouse	Required	16-18°C/60-65°F (day) 13-16°C/55-60°F (night)	6-8 plants/ft ² (65-86 plants/m ²)	11-13 weeks

Fertiliser Notation

After plugs are established, apply 200 ppm calcium nitrate per week.

Common Problems

Incorporating a preventative program for Fusarium is strongly recommended. In outdoor production, a preventative rust program is also recommended.

Finishing Key Tips

Sweet dianthus can be transplanted year-round in coastal California or similar climates, where mid-August to February 1 transplants will develop the best stem length. Stem length for the Sweet series from transplants April to July may not be of sufficient length for commercial production depending on the environment. Greenhouse-grown plants generally produce taller stems than plants that are field-grown. Harvest stems with at least 3 open flowers. Plants can be harvested continuously for approximately 2 to 3 weeks. If cut back, a second flush of flowers will be ready to harvest in 8 to 10 weeks. Note: A second crop is only advisable from an Autumn harvest, so the second flush develops under the cooler conditions of late Autumn and Winter and builds stronger plants. A single layer of support netting is recommended.

Harvest

Harvest stems when 20-50% of florets are open.

Post Harvest

Dianthus are sensitive to ethylene; it is recommended to treat with an ethylene-inhibiting product. Hydrate and store in a cooler at 1-3°C (34-38°F) in commercial floral holding solution at the manufacturer's recommended rates.

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

