## PanAmerican Seed...

## **Dianthus Valentine**

Dianthus chinensis



- Valentine dianthus features a unique red flower with a white picotee border that can be finished as a terrific Valentine's Day or Christmas novelty pack or small pot item.
- Valentine dianthus grow 8 to 10 in. (20 to 25 cm) tall, making these sun-lovers great bedding plants.
- Valentine is available as seed and plugs.

#### Germination

No supplemental lighting is required. Use a well-drained, disease-free soilless medium with good aeration and water-holding capacity. Cover seed with vermiculite at sowing. Water well, but allow the soil to dry slightly between waterings. It takes about 3 days to germinate.

#### Plug Production

Plug Tray Size

Best produced in 406-cell plug trays.

Sowing

Use a well-drained, disease-free soilless medium with good aeration and water-holding capacity. Cover seed with vermiculite at sowing. Water well, but allow the soil to dry slightly between waterings. It takes about 3 days to germinate.

Temperature

Germination: 64 to 68°F (18 to 20°C)

Cotyledon emergence: 65 to 70°F (18 to 21°C) days; 60°F (15°C) nights

True leaf expansion: 60°F (15°C) days; 55°F (13°C) nights

Light

No supplemental lighting is required.

Fertilization

Stage 3: Alternate 20-10-20 and 14-0-14 at 50 ppm each week. Maintain EC at 0.75 to 1.0 mmhos/cm, and pH at 5.8 to 6.2.

Stage 4: Same as Stage 3, but increase to 100 ppm.

**Growth Regulators** 

PGRs are not generally needed, although Corona Cherry Magic and Valentine dianthus are responsive to Bonzi and B-Nine. An application of Bonzi spray at 6 ppm in early Stage 3 will tone the plugs.

### Growing On to Finish

Container Size

Valentine dianthus is suitable for production in any pack configuration up to a 4-in. (10-cm) pot. Can be grown pot tight.

#### Temperature

Provide 60 to 72°F (15 to 22°C) days and 50 to 60°F (11 to 15°C) nights.

#### Fertilization

After plants are established, apply a calcium-based fertilizer or 15-5-15 at 150 ppm, 1 to 2 times per week.

#### **Growth Regulators**

Valentine dianthus is very responsive to growth regulators, like other dianthus. For example, an application of Bonzi spray at 20 ppm can be applied 2 weeks after transplanting and another application of Bonzi spray at 20 ppm may be required 10 to 14 days later. A tank mix of B-Nine at 5,000 ppm and Cycocel at 1,000 ppm spray can also be substituted for the Bonzi spray above for a gentler effect.

#### Cultural Tip

Use a powdery mildew preventative program. Pyrrole and Piperalin can cause phytotoxicity.

# PanAmerican Seed...

# **Culture Information**

Seed Count:	Sow to transplant 512 plug					
45360 /oz. 1600 /g.	STAGE 1	STAGE 2	STAGE 3	STAGE 4	Finishing	
Crop Time	3-5 days	7 days	14-21 days	7 days	* see table below	
Temp:						
Soil	70 - 75 ° F.	70 - 75 ° F.	65 - 70 ° F.	60 - 62 ° F.		
Night					50 - 55 ° F.	
Day					55 - 65 ° F.	
Moisture	Medium	Dry	Dry	Dry	Dry	
Light (fc.)						
Cover seed?	No					
Fertilizer:						
Rate (ppm.)		50 - 75	100 - 150	100 - 150	150 - 200	
Form		14-0-14	20-10-20 14-0-14	14-0-14	20-10-20 15-0-15	
Frequency		1X/week	1X/week alternate	1X/week	alternate every other irrigation	
Soil PH	5.5 - 5.8	5.5 - 5.8	5.5 - 5.8	5.5 - 5.8	5.5 - 6.2	
Soil EC (mmhos/cm)	< 0.75	< 0.75	< 1	< 0.75	< 1	
Plant growth regulators			A-Rest Bonzi Cycocel	A-Rest Bonzi Cycocel	A-Rest Bonzi Cycocel	

Finishing Programs						
Container Size Season		Plants/Container	Crop Time (weeks)			
4" Pot	Spring	1	8-9			
4" Pot	Autumn	1	8			