

Vinca Mediterranean XP

(*Catharanthus roseus*)

Germination

Approximate seed count: 12,200 to 24,100 S./oz. (430 to 850 S./g)

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Sowing

Can be produced in 392, 288, or similar cell size plug trays. Cover the seed with vermiculite. Allow 3 to 5 days for germination.

Germination takes 3 to 5 days.

Soil Temperature: 75 to 78°F (24 to 25°C)

Light: Not required

Moisture: Keep soil wet (level 4) during Stage 1.

Humidity: Maintain 95% relative humidity (RH) until the cotyledons emerge.

Plug Production

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Sowing

Can be produced in 392, 288, or similar cell size plug trays. Cover the seed with vermiculite. Allow 3 to 5 days for germination.

Stage 1 – Germination takes 3 to 5 days.

Soil Temperature: 75 to 78°F (24 to 25°C)

Light: Not required

Moisture: Keep soil wet (level 4) during Stage 1.

Humidity: Maintain 95% relative humidity (RH) until the cotyledons emerge.

Stage 2

Soil temperature: 70 to 72°F (21 to 22°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Reduce soil moisture slightly (level 3 to 4) to allow the roots to penetrate into the media.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

Soil temperature: 70 to 72°F (21 to 22°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Allow media to dry further until the surface becomes light brown (level 2) before watering. Keep the moisture to wet-dry cycle (moisture level 4 to 2).

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC). Maintain medium pH of 5.8 to 6.0 and EC between 1.0 and 1.5 mS/cm (1:2 extraction).

Stage 4

Soil temperature: 70 to 72°F (21 to 22°C)

Light: Up to 5,000 f.c. (53,800 Lux) if temperature can be controlled.

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growth Regulators: Not needed.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Temperature

Nights: 65 to 68°F (18 to 20°C)

Days: 75°F (24°C) or above

Light

As high as possible while maintaining optimal production temperatures.

Irrigation

Maintain even moisture. Avoid excessive media and foliage wetness as these conditions are favorable for disease incidence.

Fertilizer

Starting a week after transplant, apply fertilizer at rate 4 (225 to 300 ppm N/1.5 to 2.0 mS/cm) once a week using predominately a nitrate-form fertilizer with low phosphorus and high potassium. Maintain the media EC at 1.5 to 2.0 mS/cm and pH at 5.5 to 6.0. For constant fertilizer program, can apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) while maintaining the above recommended EC and pH ranges.

Growth Regulators

Not required.

Crop Scheduling

Sow to transplant (392, 288, or similar cell plug size): 5 weeks

Total crop time from sow:

Container Size: 4.5-in. (11-cm)

Number of Plants: 1 per pot

Spring: 13-14 weeks

Summer: 10-11 weeks

Container Size: 10 - 12-in. (25 - 30-cm) basket

Number of Plants: 7-9 per basket

Spring: 17-19 weeks

Summer: 13-15 weeks

Common Problems

Diseases: Incorporate a preventative fungicide program for Rhizoctonia, Botrytis and Phytophthora.

