

## Vinca Mediterranean

(*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.

