

Crop	Vinca
Series	Victory
Botanical name	Catharanthus roseus
Plant type	Annual
Seed type	Raw
Seed count	450 seeds / gr
Germination	20 -25°C - 7 days light inhibited
Growing	24-27 ℃
Optimum pH	5.8-6.2

## Plug Culture: 6 Weeks (288 cell tray)

**Stage 1** (days 1-7) Single sow seed into a plug cell filed with sterile and well-drained media. Lightly cover with coarse vermiculite since Victory seed tends to geminate more uniformly in total darkness. Maintain uniform moisture and a temperature of 26-27°C.

**Stage 2** (days 8-14) Remove the seedlings from the germination area and place them in warm, bright and well-ventilated greenhouse. Reduce the humidity to 75% and the temperature to 22-24°C. Apply a light feed of 50-75 ppm of nitrogen using a well-balanced calcium nitrate-based fertilizer as the first true leaves start to appear. Supplemental lighting is beneficial in promoting strong healthy seedlings; especially in low light season. Once full seedling stand is achieved apply a protective fungicide for pythium, rhizoctonia and thielaviopsis.

**Stage 3** (days 15-30) As seedlings develop additional leaves, maintain warm temperatures, and fertilize with 100-150 ppm of nitrogen as needed to promote strong growth. Allowing the seedlings to dry slightly between irrigations will promote a healthy and strong root system. It is best to water early in the morning to allow the foliage to dry before sundown. If height control is needed, apply daminozide or ancymidol are

effective. Paclorbutrazol sprays may cause leaf spotting of the lower foliage, especially at high temperatures.

**Stage 4** (days 31-42) When seedlings have 3-4 true leaves, they are ready to transplant. Reduce fertilizer and irrigations to prepare the seedlings for transplanting or shipping. Do not reduce the temperature too much as Vinca responds negatively to temperatures below 18°C.

## Transplant to finish: 5-6 weeks

**Transplanting**: Select well-drained media with a low fertilizer. Carefully dislodge the seedlings from the plug tray in order to avoid root and stem damage. Also, be careful not to bury the seedlings too deep as this encourages rhizoctonia.

**Fertilizer**: Wait 7-10 days after transplanting, until the roots reach the container sides and bottom, before applying fertilizer. Vinca does best with continuous feed at 100-150 ppm of nitrogen, using a well-balanced fertilizer that is low in phosphorus. At lower nitrogen rates commercial fertilizers may not supply sufficient boron. To avoid a boron deficiency, target 0.25 ppm of boron. High pH causes iron deficiency but applying ammonium nitrate is not recommended. Periodic applications of magnesium using MgSO<sub>4</sub> at 120 grams/100 liters promotes a deep green color.

**Temperature**: Vinca does best grown under warm with high light. Ideal temperatures are 24-27°C, during the day and 20-22°C at night. Do not grow Vinca at lower temperatures (18°C), as this promotes leaf rolling and leaf chlorosis. Lower temperatures (below 15°C) promote flower spotting.

**Disease**: Vinca has few pest problems but can be seriously affected by disease. Thielaviopsis (black root rot) and pythium are major greenhouse problems that are best controlled by practicing good sanitation.

Fungicidal drenches can be applied as a preventive measure. However, good cultural practices, (growing the crop warm, providing good air movement, optimum media pH and allowing the media to dry slightly between irrigations), is the best defense.

**Plant growth regulators**: Moisture stress, moderate fertilizer rates and high light levels are the best tools for controlling height. If necessary, foliar applications of ancymidol, daminozide or paclobutrazol work well. Do not apply growth retardants above 27°C as foliar damage may occur, especially with paclorbutrazol.

**Crop Schedule**: Vinca Victory flowers in 13-14 weeks from sowing.

**Marketing Tips**: Vinca Victory is a uniform series that produces strong upright and bushy plants. Ideal for pots, packs and combination planters. Vinca Victory is available in a wide range of colors.

All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.