

# Begonia x hybrida F1 Viking + Viking XL













Viking is a series developed for landscaping and use in large containers. Viking is available in green, bronze and chocolate leaf. Chocolate-leaved is unique in this class due to the intense dark leaves under all conditions. Viking also has unique colours like Scarlet and Coral Flame.

Viking, with all its unique features, is a must have in any garden or city park. Viking XL is extra vigorous and creates more volume, even under extreme conditions, for spectacular landscape plantings.



- ✿ Outstanding seed quality for excellent YPL production
- ✿ Wide range of standard and unique colours
- ✿ Unique Chocolate leaf, the darkest in the market
- ✿ A proven performer for landscaping and large containers
- ✿ Flowers abundantly under any conditions
- ✿ Excellent performance in mass plantings

 Annual	 Bedding Plant
 Bedding, Landscape	 Sun + half shade
 Mounding	
 50 cm (70 cm XL)	 Pellets
 60 cm (90 cm XL)	 Large pots

## Culture Guide

### Plug Culture

**Stage 1** (days 1-10) Sow pelleted seed into trays (264 or 288, Danish size) filled with a sterile and well-drained media with an EC of 0.6 or less (1:2 slurry). Optimum pH is 5.5 to 6.0. Do not cover the seed as begonias require light to germinate. Provide 220-1,100 lux in the germination chamber. Maintain a temperature of 22-25°C. Maintain sufficient moisture to melt the pellet. The media should be wet to saturated with 100% relative air humidity.

**Stage 2** (days 11-21) The cotyledons are now visible and roots are beginning to form. Maintain the air temperature at 22-25°C. Supplemental lighting at 5,000-7,500 lux following germination greatly reduces crop time. Strong sunlight (>21,000 lux) will cause high leaf temperature and leaf edge burn. Maintain the media moist but not saturated to promote healthy root development and penetration. For irrigation use water with a temperature > 18°C. Reduce air humidity to 70-80%. Begin feeding at 50-75 ppm nitrogen from a well-balanced calcium nitrate based formulation. Avoid using ammonium nitrate which may inhibit root growth during germination and plug development.

**Stage 3** (days 22-48) The first true leaves are developed and roots are beginning to penetrate the media. Reduce air temperature to 18-20°C. Begonias are light accumulators and flowering is directly related to the total amount of light calories received. Allow the media to dry slightly between irrigations as begonia roots require high levels of oxygen. Another important point in growing Begonia is to maintain a high air humidity level of 70-80% (relative humidity) to minimize leaf burning during stage 2 and 3. Increase the fertilizer rate to 100-150 nitrogen once or twice per week to maintain an EC level of 1.0-1.5 (1:2 slurry).

**Stage 4** (days 49-56) At the end of stage 4, the plugs should have 2-3 sets of true leaves and the roots should hold the plug media together. Optimum air temperature is 18-20°C to help tone the plugs. Avoid temperatures below 16°C. Maintain the EC level at 1.0-1.5.

### Pack & Pot Culture

<b>In general</b>	Water early in the day if using overhead irrigation. Applying cool water to warm leaves results in leaf edge burn.
<b>Media</b>	Select a sterile and well-drained media with a pH between 5.5-5.8 and low in nutrients (EC level less than 1.0).
<b>Transplanting</b>	Optimum stage is when the seedling roots reach the edge of the plug and having 4-6 true leaves.
<b>Temperature</b>	Optimum growing temperature is 21-22°C during the day and 18-19°C at night for the first 14 days after transplant. Once established, the temperature may drop to 17°C. About 4 weeks after transplant temperature can be lowered to 14-15°C to avoid too large leaves and to keep the plants compact
<b>Fertilizer</b>	Maintain the media EC between 1.2 to 1.5 (1:2 slurry) by applying 100-150 ppm of nitrogen from a well-balanced calcium nitrate based formulation. The use of Ca/Mg formulations like 15-5-15 work well to supply adequate amounts of magnesium. Tall and stretched plants with few flowers indicates too much or too little phosphorous. Stunted, chlorotic plants with marginal leaf burn indicate a lack of calcium and magnesium. To maintain optimum pH, one may alternate with an ammonium based fertilizer like 20-10-20.
<b>Lighting</b>	Supplemental lighting, up to 2,500 foot candles (26,000 lux) will hasten development and flowering.
<b>Growth regulators</b>	B-Nine/Cycocel (daminozide/chlormequat) tankmixes. Do not use Bonzi (paclobutrazol) as it permanently stunts plant growth.
<b>Pests &amp; diseases</b>	Botrytis.
<b>Crop schedule</b>	Cell packs: 3-4 weeks from transplanting. 12 cm pots: 7-8 weeks from transplanting. 15 cm pots 7-9 weeks from transplanting.

---

*All information given is intended for general guidance only and is believed to be accurate. Cultural details are based on Northern Hemisphere conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local legislations and manufacturer's label instructions.*