Begonia semperflorens F1
President

A popular mix of our green leaf Ambassador series and bronze leaf Senator series.

- A uniform mix with identical crop timing between all colours

Annual	Bedding Plant
Bedding	Shade + half shade
Mounding	70,000/gram (normal seed)
20 cm	Normal, pellet
20 cm	Pack, pot 9-10.5 cm

Culture Guide

Plug Culture

Stage 1 (days 1-10) Sow pelleted seed into trays 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. 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 receiv 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 17-20°C to help tone the plugs. Avoid temperatures below 15°C. Maintain the EC level at 1.0-1.5.

Pack & Pot Culture

In general Water early in the day if using overhead irrigation. Applying cool water to warm leaves results in leaf edge burn.

Media 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).

Transplanting Optimum stage is when the seedling roots reach the edge of the plug and having 4-6 true leaves.

Temperature Optimum growing temperature is 21-22°C during the day and 17-20°C at night. Once established, the night temperature may be reduced to 15°C.

Fertilizer 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

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	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.
Lighting	Supplemental lighting, up to 26,000 lux will hasten development and flowering.
Growth regulators	B-Nine/Cycocel (daminozide/chlormequat) tankmixes. Do not use Bonzi (paclobutrazol) as it permanently stunts plant growth.
Pests & diseases	Botrytis.
Crop schedule	Cell packs: 5-6 weeks from transplanting. 10 cm pots: 6-7 weeks from transplanting. 15 cm pots: 3 plants per pot, 7-8 weeks from transplanting.

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