Begonia semperflorens F_1

Super Olympia®

Performs in the Widest Array of Conditions

- Vigorous semperflorens begonia
- Suitable for landscape application
- Great field performance
- Performs in widest array of conditions
- Green foliage partner to Cocktail®

Crop Time	Spring: 12 - 14 weeks
Height ⌀	11 " / 28 cm
Width ⌀	9 " / 23 cm
Exposure	Sun - Shade
Seed Form	Pelleted Seed
Product Use	Packs, Pots, Hanging Baskets, Mixed Containers, Landscape
Family, Origin	Begoniaceae, South and Central America
Minimum Germ. Rate	90 %

TECHNICAL GUIDE

Begonia semperflorens F_1 Super Olympia®

Flowering
Flowering Type: Day neutral plant, will flower regardless of day length.

Flowering Mechanism: Higher light intensity and warmer temperatures will hasten flowering. Supplemental lighting during germination will benefit but is not necessary.

Plug Culture
Germination: Maintain optimal conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in 6-8 days.

Cover: No covering required. Light is required and will help giving a more uniform germination.

Sowing method: 1-2 seeds or pellets per plug.

Media: pH 5.5-5.8; EC 0.5-0.75.

Temperature: Maintain 22-24 °C (72-76 °F) days 1-11. For irrigation use warm water (above 18 °C/64 °F) only.

Moisture: Begin with a saturated (5) for the first 10 days and on day 11 begin to dry them back slightly to wet (4). This will help the seedlings root into the media. On day 11 begin to alternate between a wet (4) and a moist (3) until day 21. On day 21 it is critical to begin a good wet to dry cycle to prevent algae growth and help with the uptake of nutrients. At this point you can alternate between a wet (4) and a medium (2).

Humidity: 95-100 % until day 11; then reduce to 40-60 %.

Dehumidify: On day 11 dehumidify, moving from 100 % to 40-60 %. Provide proper ventilation and horizontal airflow to improve oxygen levels in the media.

Light: Light is required and will help giving a more uniform germination. If germinating in a chamber supply 10-100 ft. candles (100-1,000 lx); (50 Watt/m^2) to prevent seedling stretch. Protect seedlings from direct light when moving to Stage II. Once established in Stage II the light levels can be increased. On days 12-14 light levels can be increased to provide light levels of 6-8 mol/m^2/day (2,000-2,500 ft. candles or 20,000-25,000 lx).

Fertilizer: Maintain an EC < 1.0. Fertilized water should not exceed an EC of 0.5. Initial feeding should be with a balanced fertilizer low in ammonium. Begin feeding with a 4-4-14; 14-2-14 or 17-5-17 fertilizer at 50-60 ppm.

Plug Bulking and Flower Initiation: Maintain optimal conditions during the vegetative stage from cotyledon expansion to flower initiation. When the seedlings root to the edge of the plug and reach the 4-6 true leaf stage flower initiation will occur.

Media: pH 5.5-5.8; EC 1.25-1.5.

Light: Continue to protect from direct sunlight until they are well established. On day 21-22 the light levels can be raised to 10-12 mol/m^2/day (3,000-3,500 ft. candles or 30,000-35,000 lx).

Temperature: Keep at 20-21 °C (68-70 °F) night and day. When the roots reach the bottom of the cell the temperature can be lowered to 19,5 °C (67 °F).

Moisture: Begin alternating between a wet (4) and a medium (3) on day 12. To prevent algae it is important to begin a wet dry cycle on days 21 where the media will dry back within a 24 hrs. period. Good ventilation and horizontal airflow will

create such an environment.

Fertilizer: Begin fertilizing early to improve seedling quality. Under high light conditions more ammonium based fertilizers can be used (17-5-17) and under low light use a calcium based fertilizer (14-4-14 or 14-2-14). Initial feeding should start at 50-100 ppm and gradually work up to 100-150 ppm.

Growth Regulators: No growth regulators should be necessary since growth can be controlled by temperature and moisture management. If seedlings are uneven a very light application of B-Nine (daminozide) or Cycocel (chlormequat chloride) can be applied.

Fungicides: Scout for botrytis and phytophthora during the plug stage and apply specific fungicides per the recommended rate.

Growing On
Media: pH 5.5-5.8; EC 1.2-1.5.

Light: Provide 12-14 mol/m^2/day (3,500-4,000 ft. candles or 35,000-40,000 lx).

Temperature: Maintain 20-21 °C (68-70 °F) nights, 18-19 °C (64-66 °F) days for the first 14 days or until the roots reach the bottom of the container. Thereafter temperatures may be lowered to 16-18 °C (60-64 °F) day and night. An ADT (average daily temperature) of 19 °C (66 °F) will give the fastest finished crop.

Moisture: Alternate between moisture levels wet (4) and medium (2). Let plants dry back to at least a moist (3) before re-saturating to a wet (4). Extremely dry plants will have a grayish cast to the leaves. Avoid watering plants under high temperature and light when the leaf temperature is excessive.

Humidity: 40-60 % humidity is ideal. Providing good ventilation and horizontal airflow will help lower the humidity and dry back the media, providing oxygen to the roots.

Fertilizer: Moderate fertilization levels are required. Fertilize the crop weekly with 100- 150 ppm nitrogen, using a complete balanced fertilizer. Avoid high ammonium and high nitrogen levels, because the foliage can grow very large. Avoid pH levels above 6.0, as high pH can cause iron deficiency. Watch for low Ca and Mg levels since this can result in stunted plants with marginal leaf edge burn. Under high light conditions use an ammonium-based fertilizer (17-5-17) and under low light use a calcium-based fertilizer (14-4-14).

Growth Regulators: With proper moisture and temperature management there should not be a need for growth regulators. If needed apply Cycocel (chlormequat chloride) at 300-500 ppm one to two weeks after transplant.

Fungicide: Apply fungicides during long periods of low light and high humidity.

Common Diseases: Botrytis.

Pests: Primarily aphids and thrips.

Post Harvest: Fertilize with potassium nitrate at 100 ppm 1-2 weeks prior to shipping.

Plug & Finished Crop Time
Plug Time
288 tray: 7 weeks

Finished Time (from 288 tray)
Packs: 5-6 weeks
9-10 cm (3-4") pots: 5-6 weeks

Timing & Positioning Charts

Moisture Codes

Saturated (5)	Water is easily observed when finger is pressed on cell. Water moves freely from the top of the plug to the bottom.
Wet (4)	Media looks black and is not glistening. The media feels wet to the touch but there is very little water movement.
Moist (3)	Water is not easily visible. When finger is pressed on the cell there is very little movement from top to bottom.
Medium (2)	Media is not black, but now looks medium brown. There is no water movement when pressed with finger.
Dry (1)	Media has changed color to a very light brown and is dry to the touch.

All information in our technical guide is based on our own trials and would therefore be as guideline only. Detailed cultivation aspects vary depending on climate, location, time of year and environmental conditions. Benary expressly disclaims any responsibility for the content of such data/information and makes no representation or warranty for the cultivation of any products listed. It is recommended that growers conduct a trial of products under their own conditions.

COLORS OF THE SERIES

Begonia semperflorens F_1 Super Olympia®

White
BS0305P

Red
BS0303P

Pink
BS0302P

Rose
BS0304P

Bicolor
BS0301P

Mix
BS0399P