Begonia x hybrida F_1

Mega Cool

The Large-Flowered Retail Performer!



- Extremely large flowers
- 10 days earlier flowering than competition
- Fast pot filling
- Impressive retail performance

Crop Time	Spring: 11 - 13 weeks
Height ⌀	18 " / 45 cm
Width ⌀	18 " / 45 cm
Exposure	Sun - Shade
Seed Form	Pelleted Seed
Product Use	Pots, Mixed Containers, Hanging Baskets
Family, Origin	Begoniaceae, South and Central America
Minimum Germ. Rate	90 %

TECHNICAL GUIDE

Begonia x hybrida F_1 Mega Cool

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

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

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

Cover: No cover. Light is required for a uniform germination.

Sowing method: 1-2 pellets per plug

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

Temperature: 22-24 °C (72-76 °F) until radicle emergence. For irrigation use warm water above 18 °C (65 °F) only. Afterwards, ensure 20-21 °C (68-70 °F) during night and day. When the roots reach the bottom of the cell, the temperature can be lowered to 19-20 °C (66-68 °F).

Moisture: Begin with a saturated (5) for the first days of germination. Then alternate between a wet (4) and a moist (3). To prevent algae it is important to maintain a good wet to dry cycle where the media will dry back within a 24 hour period. Good ventilation and horizontal airflow will create such an environment. Avoid overwatering.

Humidity: 95-100 % until radicle emergence; then reduce to 40-60 %. Proper ventilation and horizontal airflow improve oxygen levels in the media

Light: If germinating in a chamber, supply 10-100 ft. candles (100-1,000 lx) to prevent seedling stretch. Protect seedlings from direct light after germination. Once established, the light levels can be increased to 3,000-3,500 ft. candles (30,000-35,000 lx).

Fertilizer: Maintain an EC < 1.0. Fertilized water should not exceed an EC of 0.5. 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.

Plug Bulking and Flower Initiation: Optimum conditions during the vegetative stage from cotyledon expansion to flower initiation. This stage is when the seedlings root to the edge of the plug and reach the 4-6 true leaf stage where flower initiation occurs.

Growth Regulators: Not required, just like pinching. Growth can be controlled by temperature and moisture management.

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

Growing On
Media: pH 5.5-6.0; EC 1.2-1.5.

Light: Provide 3,500-4,000 ft. candles (35,000-40,000 lx).

Temperature: 18-20 °C (64-68 °F) nights, 16-18 °C (60-64 °F) days until the roots reach the bottom of the pot. Thereafter, temperatures can be lowered to minimum 10-12 °C (50-54 °F) day and night. An ADT (average daily temperature) of 18 °C (64 °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 > 6.0, as this can cause iron deficiency. Watch for low Ca and Mg levels since this can result in stunted plants with marginal leaf 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 be no need for growth regulators.

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. Foliage fertilization with magnesium sulfate prevents yellow leaves.

Plug & Finished Crop Time
Rooting Time

288 tray: 6-7 weeks

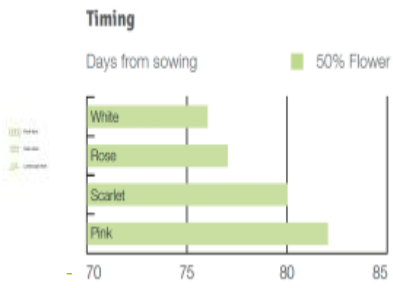
Finished Crop Time

9-11,5 cm (3-5") pots (1*): 5-6 weeks

12-15 cm (5-6") pots (2*): 6-7 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 x hybrida F_1 Mega Cool



White
BH0101P



Scarlet
BH0104P



Pink
BH0106P



Rose
BH0103P



Mix
BH0199P