

BADA™, BAYOU™

begonia semperflorens

Minimum Germination Rate: 90%

Seed Product Form: Pelleted, Raw

FLOWERING

Time Frame when plants are receptive to flower initiation: Days 28 – 35; 4 – 6 leaves present.

Flowering Type: Day-neutral Plant – will flower regardless of daylength.

Specific Flowering Mechanism: Light intensity will trigger flowering. Warm temperatures encourage flower development.

PLUG CULTURE

Germination – *Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion.*

Expect radicle emergence in 6 – 8 days.

Cover: No covering over the seed is required.

Media: • pH: 5.5 – 5.8
• EC: <1.0

Light: Light is not necessary for germination. If utilizing a chamber, providing a light source of 10 – 100 foot candles (100 – 1000 lux) will improve germination and reduce stretch compared to seed germinated in the dark.

Temperature: 72° – 78°F (22° – 26°C) day and night from day 1 – 11.

Moisture: Level saturated (5), from days 1 – 11. Beginning day 12, reduce moisture level to wet (4), until day 15. Afterwards, begin alternating between moisture level wet (4) and moist (3).

Humidity: 100% until day 10.

Dehumidify: On Day 11, lower humidity level to 40%. Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Maintain EC at <1.0. Fertigation water should not be greater than an EC of 0.5.

Plug Bulking/Flower Initiation – *Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell; AND to make the plant receptive to flower initiation.*

Media: • pH: 5.5 – 5.8
• EC: 1.25 – 1.5

Light: Provide 3500 – 4500 foot candles (12 – 20 total moles or 35,000 – 45,000 lux) to hasten flower induction. Supplemental lighting under low light conditions at 350 – 450 foot candles (35,000 – 45,000 lux) will enhance shoot and root growth.

Temperature: 68° – 70°F (20° – 21°C) night and day.

Moisture: Alternate between moisture levels wet (4) and moist (3). Allow media to approach level (3) before re-saturating to level (4). Watch for excess algae growth. Using R/O (Reverse Osmosis) water will help reduce algae levels.

Fertilizers: Under high light conditions, apply an ammonium-based feed (17-5-17) at 50 – 100 ppm Nitrogen. Under low light conditions, apply a calcium-based feed (14-4-14 or 14-2-14) at 50 – 100 ppm Nitrogen.

Growth regulators: Control growth with light, temperature, moisture and fertilizer levels.

Fungicides: Scout for Botrytis in plug growth stages. If needed, apply fungicides according to label directions.

GROWING ON

Transplant Ready: 8 – 10 weeks from a '288' plug tray.

Finish Bulking/Flower Initiation – *Optimum conditions during the vegetative period, beginning at transplant, needed for the root to reach the edge of the container; AND to make the plant receptive to flower initiation.*

Media: • pH: 5.5 – 5.8
• EC: 1.5 – 1.75

Light: Provide 3500 – 4500 foot candles (12 – 20 total moles or 35,000 – 45,000 lux) to hasten flower induction. Supplemental lighting under low light conditions at 350 – 450 foot candles (35,000 – 45,000 lux) will enhance shoot and root growth.

Temperature: 68° – 70°F (20° – 21°C) nights, 64° – 67° (18° – 19°C) days for 14 days or until roots have reached the bottom of the container. Then temperatures may be lowered to 62° – 65°F (16° – 18°C) day and night.

Average Daily Temperature (ADT): 67°F (19°C)

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow soil to reach level (3) before re-saturating to (4).

Humidity: 40% - 70%. Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Feed at 100 – 150 ppm Nitrogen. Under high light conditions, apply an ammonium-based feed (17-5-17). Under low light conditions, apply a calcium-based feed (14-4-14). Under high light and long or extended days, an ammonium-based feed (20-10-20) is preferred. Watch for low Ca and Mg levels which may result in stunted, chlorotic plants with marginal leaf burn.

Growth Regulators: It is best to control growth through moisture, feed and temperature management. If needed, spray Cycocel (chlormequat chloride) two weeks after transplant at 500 – 1000 ppm. Also responds to B-Nine (daminozide), A-Rest (ancymidol), or B-Nine/Cycocel tank mix.

Pre-Shipping Techniques to Enhance Post Harvest Quality

When to Treat: 1 – 2 weeks prior to finish or shipping.

Fertilizer: Potassium nitrate drench at 100 ppm Nitrogen.

Common Diseases: Botrytis; apply preventative fungicides when long periods of low sunshine and high humidity occur.

Common Pests: Aphids, Thrips

SCHEDULING

'Bada' Total crop time: 14 – 16 weeks early spring; 12 – 13 weeks late spring.

'288' Plug crop time: 9 – 10 weeks early spring; 8 – 9 weeks late spring.

Transplant to finish crop time: **Packs:** 4 – 5 weeks

4" crop: 5 – 6 weeks

6" crop: 5 – 7 weeks depending on number of plugs transplanted into pot.

10" Hanging basket: 7 – 9 weeks

'Bayou' Total crop time: 14 – 16 weeks early spring; 12 – 13 weeks late spring.

'288' Plug crop time: 9 – 10 weeks early spring; 8 – 9 weeks late spring.

Transplant to finish crop time: **Packs:** 4 – 5 weeks

4" crop: 5 – 6 weeks

6" crop: 5 – 7 weeks depending on number of plugs transplanted into pot.

PRODUCT USE

Packs, pots, containers, mass plantings, beds, hanging baskets

GARDEN SPECIFICATIONS

Light: Partial shade to full sun

USDA Hardiness Zone: 11

AHS Heat Zone: 12 – 1

'Bada' Garden Height: 8 – 10 inches (20 – 25 cm)

Garden Width: 6 – 8 inches (15 – 20 cm)

'Bayou' Garden Height: 14 – 16 inches (35 – 40 cm)

Garden Width: 10 – 12 inches (25 – 30 cm)

Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.