



Fields™, Tycoon™

AGERATUM HOUSTONIANUM

Minimum Germination Rate: Fields 90%, Tycoon 85%

Seed Product Form: Pelleted, raw

FLOWERING

Time frame when plants are receptive to flower initiation: Days 10 – 14; 2 – 4 leaves present.

Flowering Type: Facultative long-day plant – long days enhance flowering.

Specific Flowering Mechanism: Ageratum is an irradiance indifferent plant. Maturity and daylength have the biggest influence on flowering.

PLUG CULTURE

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

Expect radicle emergence in 2 – 5 days.

Cover: No covering over the seed is required.

Media: • pH: 5.5 – 5.8

• EC: <0.75

Light: Light is necessary for germination. If utilizing a chamber, providing a light source of 10 – 100 foot candles (100 – 1,000 lux) will improve germination and reduce stretch.

Moisture: Saturated (5) from day 1 – 5 or until radicle emergence. On days 6 – 15, lower moisture level to moist (3).

Humidity: 100% until radicle emergence then reduce to 40%.

Temperature: 72° – 75°F (22° – 23°C) until radicle emergence, then reduce temperatures to 65° – 70°F (18° – 21°C) until cotyledons appear.

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

Light: Ageratum is a day-neutral crop. Provide 2,500 – 3,500 foot candles (25,000 lux – 30,000 lux).

Temperature: 62° – 68°F (17° – 20°C) beginning day 16.

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

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow media to approach level (2) before re-saturating to level (4). Brown leaf edges may indicate excessive drying.

Humidity: 40%

Dehumidify: Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Initially feed at 50 – 75 ppm nitrogen with a calcium-based fertilizer (13-2-13 or 14-4-14). Under high light conditions, an ammonium-based feed (17-5-17) can be used. Increase feed to 100 ppm nitrogen as seedlings mature.

Growth Regulators: If needed, apply B-Nine (daminozide) at 2,500 ppm. It can be applied after the first true leaves have developed. A second application can be made at 5,000 ppm once a full stand is established to hold the plugs until transplant.

GROWING ON

Transplant Ready: 5 – 6 weeks from sow in a '288' 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: 5.8 – 6.2

• EC: 1 – 1.2 Leaf necrosis may indicate sodium toxicity.

Light: Provide 2,500 – 3,500 foot candles (12 – 15 total mols or 25,000 – 35,000 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. Light levels <2,500 foot candles (25,000 lux) will delay flowering. Rinse nutrients off leaves if light intensity exceeds 3,000 foot candles (30,000 lux).

Temperature: 60° – 65°F (15° – 18°C) nights; 70° – 75°F (21° – 24°C) days.

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow media to approach level (2) before re-saturating to level (4). Brown leaf edges indicate excessive drying.

Humidity: 40 – 70%

Fertilizers: Feed weekly at 150 – 200 ppm nitrogen using a calcium-based fertilizer.

Growth Regulators: If needed, 1 – 2 applications of B-Nine (daminozide) at 2,500 – 5,000 ppm will control growth. Also responds to A-Rest (ancymidol), Bonzi (paclobutrazol), Sumagic (uniconazol) or a B-Nine/Cycozel (chlormequat chloride) tank mix.

TECHNIQUES TO ENHANCE POST HARVEST QUALITY

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

Growth Regulators: B-Nine at 2,500 – 3,000 ppm.

Fertilizer: Potassium nitrate at 150 ppm nitrogen

Common Diseases: Botrytis Blight, Rhizoctonia, Fusarium, Pythium

Common Pests: Thrips, Aphids, Whitefly

PRODUCT USE	GARDEN SPECIFICATIONS
Tycoon: Packs, pots, containers, border edgings Fields: Packs, pots, containers, mass plantings, add height for interest.	Light: Partial sun to full sun USDA Hardiness Zone: 10 AHS Heat Zone: 12 – 1

	Garden Height	Garden Width
Fields	14 – 16" (35 – 40 cm)	12 – 14" (30 – 35 cm)
Tycoon	6 – 8" (15 – 20 cm)	6 – 8" (15 – 20 cm)

AGERATUM SCHEDULING IN WEEKS

	Fields	Tycoon
Total crop time	12 – 14	10 – 12
'288' plug crop time	5 – 6, 1 week earlier in late spring.	5 – 6, 1 week earlier in late spring.
Transplant to finish crop time		
Packs	6 – 7	5 – 6
4" crop	7 – 8	6 – 7
6" crop	8 – 9	N/A

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.