

Verbena Vegetative Aztec™

(*Verbena peruviana*)

A Ball FloraPlant Product

Propagation

- Choose a well-drained medium with an EC of 0.75 to 0.80 mmhos and a pH of 5.8 to 6.2.
- Stick cuttings within 12 to 24 hours of arrival. Cuttings can be stored overnight, if necessary, at 45 to 50°F (7 to 10°C)
- Soil temperature should be maintained at 68 to 73°F (20 to 23°C) until roots are visible
- Once roots are visible, the media should be kept moderately wet and never saturated. This will prevent iron deficiency and the associated chlorotic foliage which can develop
- As rooted cuttings are removed from mist, apply a broad spectrum (strobilurin) foliar fungicide
- Begin fertilization with 75 to 100 ppm N when roots become visible. Increase to 150 to 200 ppm N as roots develop
- As the rooted cuttings develop, high light and moderate air temperatures should eliminate the need for chemical plant growth regulators (PGR)
- **Aztec** and **Aztec Magic** Verbena do not require pinching during propagation. However, to improve branching and habit, plants can be pinched 7 to 10 days before transplanting
- **Aztec** and **Aztec Magic** Verbena rooted cuttings should be ready for transplanting 24 to 28 days after sticking

Growing On to Finish

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2.

Temperature

- Nights: 62 to 64°F (17 to 18°C)
- Days: 71 to 79°F (21 to 26°C)

Light

- Keep light intensities above 5,000 f.c. (50,000 Lux) while maintaining moderate temperatures
- Low light levels promote stem stretch and poor flowering
- **Aztec** and **Aztec Magic** Verbena flower year-round, although shortest crop times will occur under Spring and Summer conditions

Water

- During the first 10 to 14 days, water sparingly and never saturate the media. Allow the media to dry

somewhat between waterings

- Avoid extended periods where the media is saturated, as this will cause root system problems
- Avoid wet foliage in areas where powdery mildew can be a problem

Fertilizer

- **Aztec** and **Aztec Magic** Verbena have moderate to heavy fertilizer requirements to keep the plants growing vigorously. Reducing the feed causes the plant to become woody and foliage quality to decline
- Use a balanced fertilizer at 225 to 300 ppm every watering to ensure maximum growth and flowering
- Excessive phosphorous and ammoniacal nitrogen will promote unwanted vegetative growth. Both should be provided in very limited quantities
- Controlled-release fertilizer can be used to supplement a liquid feed program
- Leach pots periodically with clear water to avoid build-up of salts

Pinching

- **Aztec** and **Aztec Magic** Verbena should be pinched 7 to 10 days after transplanting. When pinched, plants should be actively growing with roots at or near the edge of the pot
- Plants can be sheared 1 to 2 times as needed if the crop must be held
- Florel promotes branching and improves the habit of Verbena. Any application of Florel should be avoided within 8 weeks of sale. A range of 300 to 400 ppm, applied 1 to 2 times should be used as a guideline

Controlling Growth

- A tank mix of Cycocel (750 to 1,500 ppm) and B-Nine (2,500 to 3,500 ppm) applied 7 to 10 days after pinching will encourage the naturally mounded habit of **Aztec** verbenas
- Similar results occur with a B-Nine spray (3,000 to 4,000 ppm). Multiple applications can be made as needed
- These recommendations for plant growth regulators should be used only as general guidelines. Growers must trial all chemicals under their particular conditions

Common Problems

Insects: Aphids, thrips, whitefly, spider mites, leafminer

Diseases: Botrytis, Rhizoctonia, Pythium, powdery mildew

All **Aztec** and **Aztec Magic** cuttings are derived from culture and virus-indexed stock from the **Ball Certified Plants®** program.

Problem: Plant collapse

Causes: Wet media for an extended period (Pythium, Botrytis)

Problem: Excess vegetative growth

Causes: High ammonia concentration in the soil; Over-fertilization under low light conditions; Low light and over-watering; wet media

Problem: Poor branching

Causes: Low fertilization during early stages

Problem: Foliage necrosis

Causes: Drying out the plant between irrigations; High soluble salts in the soil; Powdery mildew

Problem: Foliage chlorosis

Causes: Low temperatures; Powdery mildew

Aztec & Aztec Magic Trailing Verbena Crop Schedule & Uses

Unrooted cuttings:

4-In. (10-Cm) Pot 1 PP* 8 - 10 weeks

6-In. (15-Cm) Pot 2 PP* 10 - 11 weeks

10-In. (25-Cm) Hanging Basket 3–4 PP* 12 - 14 weeks

12-In. (30-Cm) Hanging Basket 4–5 PP* 13 - 16 weeks

Rooted cuttings:

4-In. (10-Cm) Pot 1 PP* 5 - 7 weeks

6-In. (15-Cm) Pot 2 PP* 7 - 8 weeks

10-In. (25-Cm) Hanging Basket 3–4 PP* 9 - 11 weeks

12-In. (30-Cm) Hanging Basket 4–5 PP* 10 - 13 weeks

*PP: Plants per pot or basket

NOTE: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

