

Angelonia Serenita®

(*Angelonia angustifolia*)

Germination

Approximate seed count (pelleted): 28,500 S./oz.
(1,000 S./g)

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm with a 1:2 extraction).

Sowing

Plug tray size from 288 to 128. Do not cover or bury the seed.

Stage 1 – Germination takes 4 to 5 days.

Soil temperature: 71 to 76°F (22 to 24°C)

Light: 10 f.c. (100 Lux) or higher. Light is required for germination. Seeds will not germinate in the dark.

Moisture: Keep soil moist but not saturated (level 4) during Stage 1 for optimal germination.

Humidity: Maintain 95% relative humidity (RH) until radicle emergence.

Plug Production

Media

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Humidity: Maintain 95% relative humidity (RH) until radicle emergence.

Stage 2

Soil temperature: 68 to 73°F (20 to 23°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Start to slightly reduce soil moisture (level 3) to allow the roots to penetrate into the media.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

Soil temperature: 65 to 70°F (18 to 21°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Allow the media to further dry until the surface becomes light brown (level 2) before watering. Keep the moisture level at wet-dry cycle (moisture level 4 to 2). Do not allow the seedlings to wilt as they do not recover very well.

Fertilizer: Increase the fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC).

Growth regulators: Growth regulators are generally not needed in plug stage.

Stage 4

Soil temperature: 65 to 67°F (18 to 19°C)

Light: Up to 5,000 f.c. (53,800 Lux) if optimal temperature can be maintained.

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.4 to 6.2 and a medium initial nutrient charge.

Temperature

Nights: 65 to 67°F (18 to 19°C)

Days: 65 to 76°F (18 to 24°C)

Daily average temperatures below 65°F (18°C) will slow down the crop growth rate dramatically.

Light

Keep light as high as possible while maintaining recommended temperatures.

Irrigation

Avoid both excessive watering and drought.

Fertilizer

Feed plants weekly at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominantly nitrate-form fertilizer with low phosphorus and high potassium. Maintain the media EC at 1.5 to 2.0 mS/cm and pH at 5.8 to 6.2.

Growth Regulators

Serenita requires less plant growth regulators than Serena varieties as it is more compact and naturally shorter than Serena. It may not need any growth regulators, especially under cooler conditions. However, if necessary, a tank mix of B-Nine/Alar (daminozide) 2,500 ppm (3.0 g/l 85% formulation or 4.0 g/l of 64% formulation) mixed with Cycocel (chlormequat) 500 to 750 ppm (4.2 to 6.4 ml/l 11.8% formulation or 0.7 to 1.0 g/l of 75% formulation) is good for Serenita. Cycocel rates can be adjusted depending on environmental conditions. Use lower rates under cooler and shorter daylength conditions, and higher rates under warmer and longer daylength conditions. Growth regulators can be started 2 weeks after transplanting. Repeat as needed.

For growers in warmer climates, a Bonzi (paclobutrazol) drench at 3-5ppm (1.3 to 2.5 ml/l, 0.4% formulation) can be used 2 weeks after transplant instead of the B-Nine/Cycocel tank mix.

Pinching

Do not pinch the plants! Seed angelonia has excellent natural basal-branching. Pinching will only delay flowering and make the plant habit unattractive.

Crop Scheduling

Sow to transplant (288 to 128-cell plug tray): 5 to 6 weeks

Transplant from 288-tray to saleable finished container:

Container Size: 306 pack

Plants Per Pot: 1

Weeks From Transplant: 8-9

Total Weeks: 13-15

Container Size: 4 to 4.5-in. (10 to 11-cm pot)

Plants Per Pot: 1

Weeks From Transplant: 9-10

Total Weeks: 13-15

Container Size: 6 to 6.5-in. (15 to 16-cm) pot

Plants Per Pot: 3

Weeks From Transplant: 9-10

Total Weeks: 14-16

Container Size: Gallon

Plants Per Pot: 3

Weeks From Transplant: 9-10

Total Weeks: 14-16

NOTE: When transplanted from a 128-tray, finish crop time for Serenita can be reduced by 1 to 2 weeks.

Common Problems

Insects: No serious problems

Diseases: No serious problems

Garden and Landscape Information

Location: Full sun

Height: 8 to 10 in. (20 to 25 cm)

Florida-like conditions: 15 to 18 in. (40 to 45 cm)



Spread: 12 to 14 in. (30 to 36 cm)

Florida-like conditions: 14 to 16 in. (36 to 40 cm)

Spacing: 8 in. (20 cm) apart

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.

