

# Serena™ Series Angelonia

*Angelonia augustifolia*

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

## Plug Production

### 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 406 to 128. Do not cover or bury the seed. Germination takes 4 to 5 days.

### Temperature

**Germination:** 72 to 76°F (22 to 24°C)

**Cotyledon stage:** 68 to 72°F (20 to 22°C)

**True leaves:** 65 to 70°F (18 to 21°C)

**Hold plugs:** 64 to 68°F (18 to 20°C)

### Light

**Stage 1:** 10 f.c. (100 Lux) or higher. Light is required for germination. Seeds will not germinate in the dark.

**After germination:** 1,000 to 2,500 f.c. (10,000 to 30,000 Lux)

**Seedling maturity:** Up to 5,000 f.c. (54,000 Lux) if temperature can be controlled.

### Humidity

Maintain 95% relative humidity until cotyledons emerge.

### Soil Moisture

Keep soil moist but do not saturate during Stage 1. Reduce moisture levels after the radicle penetrates the medium. Do not allow the seedlings to wilt as they do not recover very well.

### Fertilizing

**At radicle emergence:** Apply 50 to 75 ppm N from 15-0-15.

**As cotyledons expand:** Increase to 100 to 150 ppm N.

### Growth Regulators

Growth regulators are generally not needed in plug stage. If necessary, B-Nine 5,000 ppm spray can be used.

**In Northern Europe:** 1 to 3 applications of Alar (64%) at 2 g/l spray has been tested and shown effective if needed.

## Growing On To Finish

### Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge.

### Temperature

**Nights:** 64 to 66°F (18 to 19°C)

**Days:** 66 to 75°F (19 to 24°C)

Daily average temperatures below 64°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 with 200 ppm N in a complete fertilizer.

### Growth Regulators

A tank mix of B-Nine 2,500 ppm and Cycocel 750 to 1,500 ppm is the most effective growth regulator for Angelonia. 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 5 ppm drench can be used 2 weeks after transplant instead of the B-Nine/Cycocel tank mix.

**In Northern Europe:** 1 to 2 applications of Alar (64%) 5 gr/l plus Cycocel (75%) 0.5 ml/l has been tested and shown effective.

### 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 (400 to 128-cell plug tray):** 5 to 6 weeks

**Transplant from 400 to 288-tray to saleable finished container:**

Container Size	Plants Per Pot	Weeks From Transplant	Total Weeks
306 pack	1	8-9	13-15
4-4.5-in. (10-11-cm pot)	1	9-10	13-15
6-6.5-in. (15-16-cm) pot	3	9-10	14-16
Gallon	3	9-10	14-16

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

### Common Problems

**Insects:** No serious problems

**Diseases:** No serious problems

### Garden Information

**Location:** Full sun

**Height:** 10 to 12 in. (25 to 30 cm)

**Florida-like conditions:** 18 in. (45 cm)

**Spread:** 14 to 16 in. (35 to 41 cm)

**Florida-like conditions:** 25 in. (63 cm)

**Spacing:** 8 in. (20 cm) apart

# PanAmerican Seed™

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