**NUTRITION**

**pH:** 5.8 – 6.2  
**EC:** (2:1 extraction method) .6 – .9  
Constant feeding at 150 – 200ppm nitrogen with a fertilizer selected for grower’s water quality and soil mix is recommended.

**TEMPERATURE**

**Rooting out:** 65 – 72 F  
**Growing on:** 65 – 72 F  
**Holding:** 65 – 68 F

**WATERING**

Maintain moderate soil moisture. Allow the soil to cycle from moist to dry. Avoid both severe dry downs/wilting and long periods of wet soil, especially at cooler temperatures. To avoid lower leaf soft rots in lower light, cooler temperatures, or higher humidity situations, water early in the day as needed to avoid prolonged exposures of water on lower foliage. Proper air movement is helpful.

**TIMING**

**4” – 5”:** 4 – 5 weeks with one 42 cell Supernova® plant per container.  
**6”/1GL Royale™:** 7 – 9 weeks in 6” Royales with one to two Supernova 42s per container.  
**8”:** 8 – 9 weeks with three 42 cell Supernova plants per container.

Supernova 42 liners are used at Four Star and are recommended for best flower timing, flower count, and plant size in smaller containers. If Standard 84s are used for spring production, supplemental lighting, additional crop time, pinching, and additional PGR (plant growth regulator) applications are required. Standard 84 liners and Summer 42 liners are recommended for summer to fall finished crops.

**PLANTING**

Angelface® Angelonias should be planted into a well drained soil mix selected to match individual water quality and fertilizer blends. Water in thoroughly without saturating the mix and maintain a constant moderate soil moisture level for the first seven to 10 days to establish new rooting. Plants have already been pinched – when using Supernova liners, further pinching is not recommended. If using Standard 84 liner plants, a second pinch may be needed in the case of taller material at time of planting or with plants for larger containers. This second pinch can be given for larger containers, usually two to four weeks after planting.

**LIGHT/LIGHTING**

Angelface Angelonias should be grown in a high light area of the greenhouse for optimal flowering and plant development. Supernova liners have been treated for earlier flowering and will not require additional grower lighting. If very early crops are scheduled well before the onset of 12-hour natural daylengths, daylength extension lighting is helpful. For scheduling considerations Blue, Pink, Wedgwood Blue, and White flower in roughly this order. Also, if growing from Standard 84 liners, additional lighting to 14 hours/day lighting is required for early spring to mid-spring finish dates. Additional PGR treatments will also be required on non-Supernova treated plants.

**Angelface® Blue – 4.25” Grande™ at 4 weeks**
**GROWTH REGULATORS**

If required, either a light spray of Sumagic® (uniconazole) at 2ppm – 5ppm or a more thorough application (just to the point of runoff) of B-Nine® (daminozide) at 2,500ppm – 5,000ppm is effective. Proper growing temperatures and especially drier growing practices can be very helpful at managing plant size. Blue, Pink, Wedgwood Blue, and White can be treated as needed with a Sumagic spray at 2ppm – 5ppm or B-Nine spray at 2,500ppm – 5,000ppm rate. Drenches of Bonzi® (paclobutrazol) can be applied at 1ppm to Blue, Pink, Wedgwood Blue, and White.

Treatments are usually made to smaller containers: seven to 14 days after planting. Treatments to larger containers can be made when a desired “pre-finished” size is attained (two to four weeks after planting). Watch for the “softening” look and lighter green appearance of new growth as an indication for PGR treatment needs. In more northern areas, the lower rates should be used as a starting base while in more southern areas, the higher rates will probably be needed.

Other materials such as Topflor® (flurprimidol) and Piccolo® (paclobutrazol) can be used at rates that correspond with the degree of treatment recommended for Sumagic or Bonzi. Florel® (ethephon) should not be used, due to possible leaf tip burn and distortion.

When using Supernova liners, please refer to the Supernova Culture Guide for specific PGR recommendations. Florel is not recommended for use with Supernovas, except possibly with *Nemesia* and *Diascia*.

**PEST and DISEASE MANAGEMENT**

Leaf spotting and soft rots due to improper watering are the most common disease issue. Proper watering practices, high light conditions, and good air movement will greatly reduce any possible issues. Aphids are the most common pest, with whiteflies also a concern.

**OUTDOOR GROWING SCHEDULE**

*Angelface Angelonia* should be grown outdoors only after the danger of frost has past (approximately mid to late May in Michigan). The foliage can be damaged from a very light frost. This recommendation is based on average spring weather and should be adjusted for unseasonably severe or unseasonably mild conditions.

**OTHER TIPS**

Supernova treated liners are highly recommended for most grower uses. For best combination planting performance, vigor considerations should be made of all plants used, if you are mixing Supernova treated plants with non-Supernova treated plants. *Angelonia* as a genera is a high light and heat loving plant. It is best suited for mid-spring and summer production. If grown too cool, plants can be stunted. The four varieties of *Angelface Angelonia* available in the 28 count Supernova Thriller™ tray are designed to be used for possible fast finish in larger monoculture containers and especially as the center “Thriller” plant in upright combination plantings.