

# Nemesia

Bluebird and Innocence®



## NUTRITION

**pH:** 5.5 – 5.8

**EC:** (2:1 extraction method) .6 – .9

Constant feeding at 150ppm – 200ppm nitrogen with a fertilizer selected for grower's water quality and soil mix is recommended.

## TEMPERATURE

**Rooting out:** 65 – 72 F

**Growing on:** 55 – 68 F

**Holding:** 50 – 60 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 in cooler temperature, low light, and high humidity conditions.

## TIMING

**4" – 5":** 4 – 5 weeks with one 42 cell or 84 cell Supernova® plant per container, or one 84 or 104 cell plant per container with Opal Innocence® (not offered as a Supernova).

**6"/1GL Royale™:** 5 – 7 weeks with one or two 42 cell or 84 cell Supernova plants per container, or one to two 84 or 104 cell plants per container with Opal Innocence (not offered as a Supernova).

**8":** 7 – 9 weeks with two or three 42 cell or 84 cell Supernova plants per container, or two to three 84 or 104 cell plants per container with Opal Innocence (not offered as a Supernova).

**10" – 12" Hanging Basket:** 9 – 12 weeks with three to five 84 or 104 cell 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.** Supernova 84s can also be considered. Supernova 84s may finish about one week later than the Supernova 42s. The Supernova 84 finishes faster and more consistently than 84 and 104 Liners. They offer an option that balances shipping costs with improved performance. If 84s and 104s are used for spring production, supplemental lighting, additional crop time, pinching, and additional PGR applications are required.

Supernovas are not recommended or required for baskets and large containers. But many growers are beginning to use them for early hanging basket and upright needs. Growth habit and timing may be different from 84 and 104 Liners, but flowering time and "retail ready" containers can be produced in portions of the year when not possible from 84s or 104s. If mixing Supernova and 84 and 104 Liners in combination plantings, a pre-plant drench of Sumagic® (uniconazole) or Bonzi® (paclobutrazol) to the 84s and 104s may be helpful to even out plant growth and vigor.

## PLANTING

*Nemesia* rooted liners 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 and further pinching should not be needed, except in the case of taller material at time of planting or a second pinch on plants for larger containers. This second pinch can be given for larger containers, usually three to four weeks after planting.

## LIGHT/LIGHTING

These plants should be grown in a high light area of the greenhouse for optimal flowering and plant development. They flower quite early and lighting should not be needed for regular season crops. Daylength extension lighting of 14 to 16 hours total daylength can be helpful for early finish crops. This is especially true if using 84 or 104 Liner tray plants.

## GROWTH REGULATORS

A light spray application of 5ppm – 10ppm Sumagic or a 1ppm Bonzi drench can be applied as needed, based on plant growth and growing conditions. Opal Innocence should not require any PGR treatments if grown properly. 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.



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The rates and chemicals listed are based on our southeast Michigan growing conditions, and are not recommended for nationwide application. Please adjust the rates and spray applications to your location and facility.



Watering practices, weather, and greenhouse environment can greatly affect plant growth and performance.

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

## PEST and DISEASE MANAGEMENT

Proper temperature, light levels, and water management will eliminate most disease issues. Avoid darker, warmer, and more humid areas with poor air movement. A broad spectrum fungicide such as Banrot® (etrifiazole plus thiophanate-methyl) can be helpful when applied at transplant, if desired. In earlier crops and poor growing conditions, watch for Botrytis. Maintain a soil pH of 5.5 – 5.8.

## OUTDOOR GROWING SCHEDULE

- Bluebird *Nemesia* can be grown outdoors in the second earliest spring conditions (approximately frost to 28 F, or mid-to late April in Michigan), if frost protection is provided. Once acclimated, they are quite cold-tolerant and perform well as an early spring blooming plant.
- Opal Innocence should be grown indoors until consistently warm temperatures are reached for the season (late May to June in Michigan). While very cold-tolerant, it is difficult to size up due to its smaller and more compact nature in cooler outdoor environments.

These recommendations are based on average spring weather and should be adjusted for unseasonably severe or unseasonably mild conditions.

## OTHER TIPS

- A well-drained soil mix will lead to better water management and root growth.
- Maintain cooler growing temperatures, moderate soil moisture, proper soil pH, bright growing conditions, controlled humidity levels, and good air movement for best plant performance.
- Opal Innocence can be grouped separately and treated based on its needs. This plant usually will require fewer irrigations and little or no PGR applications.
- To help reduce flowering early in the crop cycle before plants “size up for sale,” a spray application of Florel® (ethephon) at 500ppm can be applied. Plants should re-flower in three to four weeks for sale.
- Care should be taken with Opal Innocence to avoid plant stunting. No more than one application of Florel should be made and trialing at 300ppm – 350ppm may be best.