Begonia (Tuberous)

Funky™ Pink, Illumination®, Nonstop®, On Top®

NUTRITION

pH: 5.5 – 6.0
EC: (2:1 extraction method) .6 – .9
Constant feeding at 75ppm – 100ppm nitrogen with a fertilizer selected for grower's water quality and soil mix is recommended. Or, feed 200ppm once per week if preferred.

TEMPERATURE

Rooting out: 68 – 72 F
Growing on: 68 – 72 F
Holding: 66 – 70 F

WATERING

Maintain moderate soil moisture. Allow the soil to cycle from moist to moderate levels. Avoid both dry downs and long periods of wet soil, especially in poor weather conditions. Also, avoid excessive soil moisture levels with freshly transplanted plants.

To prevent water spotting or burning on sunny days, it is best to water earlier in the morning or later in the afternoon.

TIMING

4" – 5": 5 – 6 weeks with one 72 cell plant per container.
6"/1GL Royale™: 6 – 8 weeks with one 72 cell plant per container.
8": 7 – 9 weeks with one 72 cell plant per container.
10" – 12" Hanging Basket: 10 – 12 weeks with three to five 72 cell plants per container.

PLANTING

Standard 72 liner cell plants should be planted into a well drained soil mix selected to match individual water quality and fertilizer blends. **Care should be taken when removing plants from the 72 tray. *Begonias* can root very firmly into the cell and can "snap off" at the soil line if not dislodged from the cell.** When planting baskets or upright containers using multiple 72 cell plants, be certain to plant each plant with its leaf tips/growing shoot facing outward. This will produce a fuller and more attractive container.

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. Pinching should not be needed except in the case of taller material at time of planting.

LIGHT/LIGHTING

Tuberous *Begonias* require long days of 12 hours or more for proper growth. If exposed to short days (less than 12 hours) tubers can form and plants will go dormant. **If crops are planted before April 1st, 14-hour daylength extension or night interruption lighting should be provided**. These plants should be grown in a moderate light area of the greenhouse for optimal flowering and plant development. If desired, continued supplemental lighting throughout the crop will shorten crop time and improve quality, even after the onset of long days.

GROWTH REGULATORS

If required, a spray application of Cycocel® (chlormequat) at 150ppm – 250ppm is effective to control growth. Desired plant habit and quality can also be achieved by controlling soil moisture levels, greenhouse temperatures and humidity levels, and by supplying proper light levels to the plant.

Illumination® Salmon Pink, Nonstop® Joy™ Yellow and Nonstop® Yellow are more vigorous than others and are good indicator plants for planning PGR applications.

PEST and DISEASE MANAGEMENT

There should be little instance of disease if basic cultural guidelines are followed. Over-watering can lead to Botrytis, Powdery Mildew, Stem Rot, or Fungus Gnat issues. Control humidity levels and provide adequate air movement.

OUTDOOR GROWING SCHEDULE

Tuberous *Begonias* finish best in a controlled greenhouse environment but can be moved outdoors after all threat of frost has passed and weather is consistently warm (approximately late May to early June in Michigan). This recommendation is based on average spring weather and should be adjusted for unseasonably severe or unseasonably mild conditions.

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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.

Begonia (Tuberous) Continued

OTHER TIPS

- **Dislodge the 72 liners from their cell within the liner tray when planting. This will avoid breaking the plant at the soil line or "tearing" the roots from the tray's cell.**
- When planting baskets or upright containers using multiple 72 cell plants, be certain to plant each plant with its leaf tips/growing shoot facing outward. This will produce a fuller and more attractive container.
- Under short days, provide the plants with daylength extension or night interruption lighting to avoid tuber formation.
- **Do not allow temperatures to fall below 60 F or tubers/dormancy can occur, even if providing long day lighting**.
- Avoid over-watering and over-feeding *Begonias*. Both can cause serious plant health issues.
- Pinching can be done if needed to control height or shape containers.
- When planting multi-planted containers, it is helpful to "size match" the plants used in each container.