

Begonia Dragon Wing[®], San Francisco[™], Santa Cruz[®], and Surefire[®]



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: 65 – 70 F

Holding: 60 – 65 F

WATERING

Maintain moderate soil moisture. Allow the soil to cycle from moist to moderately dry levels. Avoid both severe 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": 6 – 7 weeks with one 72 cell plant per container.

6"/1GL Royale[™]: 8 – 9 weeks with one 72 cell plant per container.

8": 9 – 10 weeks with one 72 cell plant per container.

10" – 12" Hanging Basket: 9 – 11 weeks with three to four 72 cell plants per container.

PLANTING

The 72 Liner 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

These *Begonias* do not require long days to avoid tuber formation or dormancy. No daylength lighting is required. These plants should be grown in a high light area of the greenhouse for optimal flowering and plant development. Reduced light levels will delay flowering time, flower coverage, and plant habit.

GROWTH REGULATORS

Growing these *Begonias* "on the drier side" will produce a plant that requires fewer PGR treatments. If required, a light spray application of Bonzi[®] (paclobutrazol) at 3ppm – 5ppm is effective to control Dragon Wing[®]. It is best to spray San Francisco[™] and Santa Cruz[®] with Cycocel[®] (chlormequat) at 250ppm as needed. 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.

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

Dragon Wing, San Francisco, Santa Cruz, and Surefire[®] *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 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.**
- Provide high light levels for best flowering and plant habit.
- Temperatures can be lowered to 60 – 65 F toward the end of crop times for “toning” the plants.
- Avoid over-watering and over-feeding *Begonias*. Both can cause serious plant health issues and delay flowering.
- Pinching can be done if needed to control height or shape containers.
- San Francisco does not branch as heavily as Santa Cruz. Watch for earlier PGR needs. Provide proper growing environment and adequate spacing. Can receive an additional pinch as needed to shape.

