

# Solenostemon (Coleus) & Perilla



## NUTRITION

**pH:** 5.8 – 6.2

**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:** 65 – 72 F

**Holding:** 60 – 62 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. Growing at lower moisture levels can be beneficial towards producing a more compact plant with fewer PGRs (plant growth regulators) required. This practice can also be used to help "hold" plants.

## TIMING

**4" – 5":** 4 – 5 weeks with one 84 cell plant per container.

**6"/1GL Royale™:** 6 – 7 weeks with one 84 cell plant per container.

**8":** 8 – 9 weeks with one 84 cell plant per container.

## PLANTING

Standard 84 liner cell plants 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. Pinching should not be needed except in the case of taller material at time of planting or a pinch on plants for larger containers. This pinch can be given for larger containers usually two to four weeks after planting. Pinching will increase crop time by two to three weeks.

## LIGHT/LIGHTING

These plants should be grown in a medium to high light area of the greenhouse for optimal plant development. **Most have been bred to grow in full sun.** Growing in a heavy shaded area will produce taller and softer growth that is less attractive and more disease-prone.

## GROWTH REGULATORS

If required, a spray application of B-Nine® (daminozide) at 2,500ppm is effective. Also, a tank mix spray of B-Nine at 2,500ppm and Cycocel® (chlormequat) at 1,000ppm – 1,500 ppm can be applied. Other materials such as Sumagic® (unicomazole), Bonzi® (paclobutrazol), Topflor® (flurprimidol) and Piccolo® (paclobutrazol) can be used, but care should be taken. Coleus and *Perilla* are very responsive to these products and small trials should be done before large scale applications are made. Cooler growing temperatures and especially **drier growing practices can be very helpful at managing plant size.**

## PEST and DISEASE MANAGEMENT

There should be little instance of disease if basic cultural guidelines are followed. Botrytis and soft stem rots can occur in poor growing conditions. Control excessive humidity levels in the greenhouse and provide adequate air movement. Avoid over-watering or periods of excessive moisture on the plants' foliage. **Provide adequate space** for the plants. A preventative broad spectrum fungicide application at or shortly after transplant can be helpful if problems have occurred in the past. Whiteflies, Thrips, and Aphids can be pests of concern.

## OUTDOOR GROWING SCHEDULE

*Solenostemon* and *Perilla* finish best in a controlled greenhouse environment, but can be moved outdoors after all threat of frost has passed and weather is consistently warm (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.

## OTHER TIPS

Coleus and *Perilla* are relatively easy to grow if proper growing conditions and watering practices are followed. Grow on the moderate to slightly drier side, provide good air movement and give adequate spacing to the plants. For the most accurate finishing dates of Coleus and *Perilla*:

- Add an additional week of crop time to Sedona, Keystone Kopper®, Merlin's Magic, and Pink Chaos
- Reduce by 1 week crop times for Apple Brandy®, Lime Time™, and Velvetreen®.



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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.