

GROWERTALKS

Culture Notes

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Real Series: Presto Geranium

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The best geraniums begin with the four Cs: Consistency, Cleanliness, Callus and Culture. Any seasoned geranium grower would agree that if you lose one of the four Cs, your crop could turn ugly quick. Here's how to grow the perfect geranium every time.

Consistency

Uniformity equals consistency—at the production farm, in the cuttings you receive and throughout the production cycle. As a “Real Series,” all Presto Geraniums from Ball FloraPlant will 1) flower and ship on the same week; 2) share the same cultural recommendation; and 3) be the most uniform in their class.

Cleanliness

Cleanliness standards don't end at the farm. Growers should prepare their propagation zone prior to the cuttings' arrival. GreenShield or Physan at the labeled rate is an effective tool to clean floors, benches and walkways. This also carries over to the zone you transplant in. It's important to note that all production areas should be kept free of plant debris and plant handling should be kept at a minimum.

Second, always start with clean media, no matter what step in the production process. For propagation, you'll need clean trays and clean, fresh stick media. For finished production, clean pots and soil media is a must to avoid pathogen problems.

Callus

The perfect Presto Geranium always starts with callusing the cutting. Stick cuttings immediately—this is the same for unrooted cuttings or if you're working with Genesis cuttings, which are pre-callused. Presto Genesis cuttings are graded twice and stuck at the farm on the right day, so the consistency of the callus for each color in the series is perfect when they arrive at your door. If you're going to callus your own unrooted cutting, correct propagation temperature—along with the right light intensity—are imperative to quickly callusing an unrooted Presto Geranium cutting.

Culture

The final C is all the details remaining from propagation through the finished pot. There are many important topics related to geraniums—from when to apply growth regulator to optimal light conditions. The information below is a breakdown of important points to follow closely to ensure your Presto Geraniums are the best available at retail.

Crop time: Rooted liner to finish

Container Size	Plants Per Pot	Crop Time
4-in. to 1-qt. Pots	1	8 to 9 Weeks
6-in. to 2.5-qt. Pots	1 to 2	9 to 10 Weeks
10- to 12-in. Pots or Baskets	3 to 5	11 to 13 Weeks

Propagation

Use a well-drained media with an EC of 0.75 to 0.80 mmhos (SME) and a pH of 6.2 to 6.6. Rooting hormone is generally not needed and may be used to promote more uniform rooting. A protective fungicide application should be made within 12 hours of sticking to reduce the risk of botrytis. Soil temperatures should be maintained at 68 to 73F (20 to 22C). Light during propagation should be kept at 1,500 to 2,000 f.c. to reduce plant stress.

Callus formation typically occurs between day 9 and 11. Mist frequency and run times should be constantly monitored to maintain a high relative humidity at and around the cut. You may need to reduce mist as soon as 3 to 5 days after stick, as the goal is to not have free water at the cut end.

Transplanting

Use a light, well-drained media with a starting pH of 6.2 to 6.6. Test the medium regularly during production, as Presto Geraniums tend to acidify the soil in which they're potted, resulting in a lower-than-optimum pH. Early symptoms include cupping of the older leaves and a light brown, circular leaf spot. Symptoms typically appear 7 to 10 weeks after transplanting. Corrective actions begin with stopping the acidification of irrigation water and switching to a nitrate-based fertilizer. Flowable limestone or potassium bicarbonate can be applied for a more rapid correction. Presto Geraniums don't require a pinch.

Temperatures

Presto Geraniums grow best at a transplant temperature of 71 to 76F (21 to 24C) for the first couple weeks. As the crop matures, night temperatures should be maintained at 62 to 67F (16 to 19C) with day temperatures of 65 to 76F (18 to 24C). Geraniums grown with lower night temperatures will see a delay in crop times, while excessive day temperatures will result in stretch. A negative DIF of 3 to 5F can be used to control growth in Presto Geraniums.

Light levels & photoperiod

Zonal geraniums require moderate light levels and grow best at 3,500 to 6,000 f.c. with no hanging baskets above them.

Fertilizer & pH

Use a balanced liquid feed at a rate of 225 to 300 ppm N on a constant feed basis. Maintain a pH range of

6.0 to 6.5, while checking the soluble salts regularly to maintain EC reading between 1.5 and 2.0 mmhos (SME).

PGRs

Under most conditions, PGRs won't be needed for Presto Geraniums. Presto is more compact, so they create an advantage for the grower with no or less PGRs needed. Presto can be treated in the early growth stage with Florel to increase branching and remove flower buds. Applications between 200 to 350 ppm can be applied 1 to 3 times on 7 to 10 day intervals, depending on local conditions and container sizes. No Florel should be applied within the final 8 weeks of the production cycle. To control finished height, Cycocel at 750 to 1,500 ppm can be applied 1 to 2 times at 7 to 14 day intervals. These recommendations should only be used as general guidelines; growers must trial all chemicals in their conditions.

Insects & diseases

Proper sanitation and IPM practices are the best way to avoid insect and disease problems with Presto Geranium. Growers should actively scout for common geranium pests, such as whitefly, thrips, aphids, mites, leafminers and fungus gnats and treat accordingly. Growers should also regularly scout for pathogens such as botrytis and pythium. **GT**

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