

ask? us

About Plant Growth Regulators



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Q How can I use PGRs to manage perennials planted during the summer for sales during fall or the following spring?

A For summer-planted crops, your goal that first growing season is to fill the pot and maximize root growth. So, except for extremely vigorous crops, do not use the liner dip of a growth retardant prior to planting. Although growth retardants affect root growth less than shoot growth, higher rates or actual root applications through liner dips or drenches can reduce root growth.

The goal is to reduce shoot growth to limit the number of times that you have to prune or space the crop. On vigorous crops, begin your growth-control regime with spray applications just after the plants are established (10 to 14 days after planting). You want to manage growth throughout the summer season. Other growers prefer to begin a growth retardant regime after the first pruning. Then they know the pot is filled out.

If you are using a soil-active growth retardant, consider using a sprench application (a high-volume spray) to give you more residual activity with the additional PGR in the medium. Once the crop is established, you can treat the plants with higher spray rates to control shoot growth or use a drench or watering-in application to provide longer lasting control. Plan to make multiple applications. Be careful with your rates of application, especially as you change the volume applied.

Some growers have reduced weekly pruning or mowing of a crop down to once a month with a weekly PGR spray — and documented labor savings with the process.

Q How should I use growth regulators on impatiens to produce attractive plants without stopping flowering?

A Impatiens is a crop where the appearance of the final product can be greatly enhanced with effective use of PGRs. PGRs on impatiens can keep them looking good in the garden center later in the season when the temperatures are warmer. In production, impatiens can be a problem if sales are slow and they have to be held in the greenhouse after they have reached the desired size.

B-Nine or Dazide (daminozide) and Cycocel (chlormequat chloride) products do not work very well on impatiens unless temperatures are cool. Better chemicals include paclobutrazol, uniconazole and Topflor (flurprimidol). A-Rest (ancymidol) is very good on impatiens plugs. Impatiens respond well to these PGRs and they can be applied by drench, spray or liner dip. However, the downside is that if the effect is a little too strong, flower buds are affected and are slow to open, which can increase crop time. In general, the earlier the PGR is applied, the less effect it will have on flowering. Drench and liner dip applications will also generally have less effect on flowering than sprays.

With impatiens, it is important to provide good environmental and cultural control so that less PGR is needed. Early in the crop, apply some PGR so the plants are growing slower as they reach final size. For the early application, most growers use a moderate rate that tones or hardens the plants but does not stop growth. The timing of this application may be three to six weeks before finish, depending on product size and how quickly the plants are growing.

The step that will keep impatiens from getting too overgrown while being held in the greenhouse or in retail is a PGR drench near the end of the crop as they reach desired size. If the plants are in smaller containers that will be transplanted into beds, the PGR rate should be only moderate, to control growth for about two weeks. If the impatiens are in baskets or other display containers, apply a higher rate to give a longer effect and keep the plants from getting overgrown for the consumer.

Do you have a question for our panel of experts? Send your disease, pest or growth-control questions to the appropriate person, and look for the answer in an upcoming issue of GPN.



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