GROWERTALKS

Columns

4/28/2017

A Grower's Guide to PGRs: Tips for Ornamentals & Veggies

Joanne Lutz

PGRs are used to manage plant growth in spring production, especially when unseasonably warm temperatures encourage excessive elongation. Use of these products can yield a variety of benefits, such as enhanced plant quality, improved foliage color, extended shelf life, more efficient use of production space and enhanced profitability. Non-chemical growth-management strategies include cultivar selection, pinching, plant spacing, and cultural and environmental control measures.

Plant Structure/ Branching	Regulate Shoot Growth	Promote Growth
Florel	A-Rest	Fascination
Configure, Riteway	B-Nine	
	Cycocel	
	Bonzi, Paclo Pro, Paczol	
	Sumagic	
	Topflor	

Table 1: Primary PGR Effects

Table 1 highlights the primary effects on plant growth created by various PGRs. Despite the extensive research behind the use of PGRs, growers are encouraged to trial them under their growing conditions before widespread use.

All of the listed products can be applied as foliar sprays. Bonzi, Paclo Pro, Paczol Sumagic and Topflor can also be applied as soil drenches. Compared to foliar sprays, drenches are less likely to delay bloom or reduce flower size while providing remarkable control of internode elongation. Of course, the proper rates must be used to achieve the desired performance. Consult your supplier for direction as needed.

• Florel lessens the need for pinching by releasing apical dominance of all nodes down the stem plus the growing tip, yielding more branches and flowers than one hand-pinch. Florel can reduce the spread of sap-transmitted viruses by eliminating the need for hand trimming. Using Florel to time crops and prevent premature blooming can also reduce thrips pressure.

- Configure and RiteWay can improve lateral branching on many herbaceous perennials and woody plants.
- A-Rest is used primarily on seed plugs and lilies for predictable linear responses.
- B-Nine effectively reduces internode elongation for one to two weeks, so multiple applications are often needed. Good coverage is required for uniform results. B-Nine is effective on a wide range of crops.
- Cycocel also functions to reduce internode elongation, especially in the early stages of crop production. Foliar sprays must be applied only to the point of glisten to prevent yellowing, which will occur where spray droplets puddle up.
- Bonzi, Paczol and Paclo Pro are most effective when applied as a drench, reducing internode elongation for a longer period of time with less negative impact on blooming when compared to foliar sprays. Some plants respond favorably with increased bud set. Foliar sprays must target stems, so apply at a 45-degree angle while avoiding the spray running down the stems into the soil.
- Topflor may be applied as a foliar spray or a drench application. A granular formulation is available, offering an advantage to growers who irrigate container-grown crops overhead, including many perennials and semi-woody ornamentals. Some growers prefer to use the granular form on container-grown annuals as well.
- Sumagic is the only PGR that can be used as a foliar spray on the following edible crops: tomato, pepper, eggplant, groundcherry, pepino and tomatillo transplants. When used as directed, Sumagic results in compact transplants with thicker stems that are less likely to be damaged during shipping and are more appealing to consumers. The supplemental vegetable label must be in the applicator's possession at the time of application; this label can be acquired by contacting your supplier.
- Fascination combines two types of plant growth hormones. This product is labeled for use on Easter lilies to reduce lower-leaf yellowing and extend blooms up to 24 days. Other uses include overcoming accidental PGR applications, safely adding height to a wide range of crops and expanding poinsettia bract expansion. Fascination can also be applied to unrooted geraniums (ivy and zonal) to reduce the onset of yellowing induced by ethylene during shipping.

Always read and follow all label directions. Products other than those mentioned here may also be safe and effective. **GT**

Joanne Lutz is a GGSPro Technical Support Representative for Griffin. She can be reached at ggsprotech@griffinmail.com.