



PGRs on Garden Mums and More: Valuable Tools to Ensure a Quality Finish

June 2014

Mum growing season is upon us! Growers can take advantage of several plant growth regulators (PGRs) to help provide branching and manage crop height to ensure beautiful and marketable garden mums. Other important fall crops, including ornamental cabbage and kale, can also benefit from the use of PGRs for control of height and width.

Florel® is an essential PGR found in the pesticide cabinet of most garden mum growers. Its active ingredient, ethephon, increases branching, discourages premature budding and inhibits internode elongation; all of which help produce a full, compact plant. Florel is applied as a spray, at a rate of 500 ppm (1.6 oz./gal.) when mum plugs arrive, with a repeat application



Garden mums with Florel treatment (left) and without (right)

14 days later to keep plants vegetative. The last application should be made on or before July 1st to avoid a delay in flowering. The use of Florel eliminates the need for hand pinching.

Note: Florel recommendations apply only to the production of garden mums. Trialing has indicated that Florel has no positive impact on pot mums; in fact, the use of Florel on pot mums has been shown to have negative effects on finished plants.

Another commonly used PGR in garden mum production is **Bonzi**®, with the active ingredient paclobutrazol. Bonzi drenches have proven to be effective at producing compact and attractive plants. The earlier in the crop that a drench is

Several PGRs are available to help ensure beautiful and marketable fall crops, including garden mums and ornamental cabbage & kale.

applied, the less ppm required to achieve the same level of control. Bonzi at a 1ppm (3.33 oz./100 gals.) can be applied as early as the foliage reaching the sides of the pot. If applying Bonzi later when the mum reaches 75% of the finished size, a 2-3ppm drench (6.66-10 oz./100 gals.) can be applied. Growers report no negative impact on blooms from Bonzi drench applications. **Paclo Pro**® contains the same active ingredient as Bonzi.

B-Nine® (active ingredient: daminozide) is a traditional option for garden mums. B-Nine is applied at a foliar spray rate of 2500-5000 ppm, and can be used on new shoots when they are 1-2 inches long. To obtain desired height control, a repeat application may be made 14 days after the initial spray. Additional applications can delay bloom and/or cause “clubby” plants.

Ornamental cabbage and kale also respond well to Bonzi. Kale usually requires a single application of Bonzi to maintain the desired size (excluding the Peacock series and feather types). Cabbage, on the other hand, may require repeat applications for best results. When plants have nearly covered the top of the pot, Bonzi may be used at 30 ppm (2 Tbls./gal.), spraying the crown so that the Bonzi begins to run down the stems; a 1 ppm (3.33 oz./100 gals.) Bonzi drench is another option. A repeat application can be made when the leaves cover the top of the pot, and again at 2- to 3-week intervals as needed.

Note: One spray of Bonzi at 20 ppm while plants are in cell packs helps keep plants from stretching in the flats. B-Nine at 5,000 ppm may also be used as a foliar spray, but is not as effective or long-lasting as Bonzi on ornamental cabbage and kale.



Ornamental Kale Nagoya Red from Sakata Seed America

Remember: If your crop may be used as an edible, PGR use of any kind is prohibited.

Always read and follow all label directions. Consult GGSPRO or your GGSPRO Technical Reference Guide for application rates and methods.

Featured Products

Product	Size	Item No.
Bonzi	1 qt.	70-1260
B-Nine WSG 85%	1 lb.	73-12511
Paclo Pro	1 gal.	73-1830
Florel	1 qt.	608-395