



# PERFECT *HYDRANGEA* *ARBORESCENS* WITH PGRs

Plant growth regulators (PGRs) can significantly improve your *Hydrangea arborescens* crop. They encourage shorter internodes, stiffer stems, and darker foliage, all of which ensure safer shipping and long-lasting appeal at retail. Applying PGRs is a simple process, but proper timing is crucial for success.

## When to Apply

The PGR regimen starts in spring, the second season after potting your liners. While dormant, trim plants to 4-6" (10-15.2cm) above pot level. After they flush out and put on two nodes of new growth, applications should begin.

## What and How to Apply

*Important: Read the labels before you apply any chemicals. Chemicals should only be applied by trained and certified applicators.*

We recommend using daminozide (we use B-Nine®), with a starting rate of 5,000 – 7,000 ppm. If a stronger solution is required (see below), tank mix with chlormequat chloride (we use Cycocel®) at 500-1,500 ppm.

The solution should be applied to the foliage and stems – do not use as a drench. Spray for even coverage, until leaves begin to drip the solution. Use any convenient sprayer and nozzle type. We've used hand pump sprayers for small crops, 50 gallon power sprayers for larger ones, and did not find any significant difference with the results.

It's best to spray on cloudy days, though early morning or late evening sprays are also acceptable. The longer the foliage stays wet from the solution, the more effective it will be, so avoid applying when sun or heat would dry it too quickly. High light intensity can also scorch recently sprayed leaves.

## How Often to Apply

Multiple applications are recommended for best results, though it is difficult to give an exact number or frequency. Light, temperature, and fertility all influence when you will need to spray your crop. When plants have put on 2 nodes of new growth, spray with the PGR solution again. Light green new growth and longer internodes are additional cues that another application is required.

Continue to spray plants in this manner until flower buds appear in the flush of new growth. If the weather warms considerably during the process, consider using

the stronger mix described above. Important: using the daminozide + chlormequat mix can greatly slow plant growth and potentially affect production schedules. Trial small groups of plants before applying to entire crop.

Stop applying the PGR solution when the flush of new growth reveals flower buds. Plants may be shipped at this point or held until they show some color.

## Growing Advice

Never apply PGRs when the plant has flower buds the size of a dime or larger. Doing so will result in uneven blooming/smaller flowers.

Plants should be spaced appropriately in the nursery – close spacing will result in a narrow, upright, "stovepipe" habit with flowers just at the top instead of broad and rounded with even flower distribution.

If you have INVINCIBELLE® series or INCREDIBALL® series plants leftover, they will rebloom the same year for fall sales. Cut plants back, wait until new growth reaches 4-6" tall, then repeat the PGR process above.

Dwarf varieties of *H. arborescens* (INVINCIBELLE LIMETTA®, INVINCIBELLE MINI MAUVETTE™, INVINCIBELLE WEE WHITE®) may need fewer PGR applications than the full sized varieties will (INCREDIBALL®, INCREDIBALL® Blush, INVINCIBELLE® Ruby, INVINCIBELLE® Spirit II, LIME RICKEY®).

The INVINCIBELLE® and INCREDIBALL® series can be forced for out-of-season bloom. A 60-90 day dormancy at 40°F/4.4°C is required first. Plants should then be brought into 70°F (21.1°C) and the PGR protocol applied. Provide high light levels and allow roughly 3 months to come into bloom.