



# Hydrangea Production

## Gibberellins

Producing finished hydrangeas is not without its challenges. Standard textbook production will help you with many of these challenges. However where the textbook falls short is Early season growing. Textbook info is great for Easter, Mother's Day, summer finishing schedules. Early season growing from the purposes listed here will be defined as any hydrangea set for finishing in December, January, February and into March. With this early finishing time there are many growing factors that interact differently than with a traditional time line. This interaction can lead to plants of shorter and uneven stature.

Hence the application of "Gibb" has become a staple and recommendation of many growers. In many instances growers consider it a requirement. "Gibb" being gibberellic acid. This is a growth regulator that is not a retardant but rather an accelerant. The 2 primary forms of Gibb that are being used are;

**Fascination® 1.8% Gibberellins A4A7**

**ProGibb® 4% Gibberellic Acid**

Both these named products are registered to Valent. There are other off brands of similar or "like" product. One of the more popular manufacturers of them would be Fine Americas. Of these 2 the use of fascination is more prevalent. Some are of the opinion that the GA/BA combination in the Fascination produces a better "quality" of growth acceleration.

Hydrangeas naturally grow during the spring and into summer. Conditions which favor these plants and produce what could be called normal growing conditions. Some of the key factors during this normal growing season are;

**Day length/long days**

**Light intensity/quality of light**

**Positive Diff/ night vs Day temperature**

During Early season growth some of these aforementioned growing conditions are affected negatively. Generally greenhouse forcing during this early season can be lacking in the following areas;

**Short days/day length decreasing**

**Quality of light/light levels are less than desired**

**Negative Diff/nearly even day and night temperatures**

These are some of the key reasons why a hydrangea being forced Early season ends up shorter and to some extent more "uneven" than those forced during standard forcing seasons. Obviously finding ways to prevent these conditions can help. Some growers choose to use night interruption lighting, HID lighting, heating the greenhouse to produce a 10-15 degree positive Diff. However all of these methods cost money. And saving money is the name of the game. This is where it has become so critical to be employing Gibb. When used on its own or preferably with cultural methods to counter act some of the above mentioned growing issues you will really see a difference.

## Rates & Methods

The first thing to consider is do not go into the crop thinking you must apply a growth retardant. The most common of which is B-Nine®. Yes in the end some may be needed but often time's growers may not be using any or at most a light "toning" application(s) towards the end of the crop.

First applications of Gibb should be considered at approximately 7-10 days after planting. However applications are safe and effective all the way until flowers are visible at dime size. Applications made after flowers are larger than a dime can often lead to "floppy" and unmanageable flower heads.

Rates vary and should be trialed and worked on individually for your specific conditions and size of plant desired. However, rates we have seen employed with success range from 2.5ppm-20ppm of Gibb. With the average falling on a 5ppm or 10ppm usage. Spray timing can vary from 1-4 applications. Generally speaking 5-10 days apart depending upon development and number of applications programed. With most producers settling in the 1-2 application range. Applying multiple times at medium to lower rates should produce the best results. However you also have to take into consideration the window for applying. Generally speaking there is only about a 30 day window for proper application.

This chemical can and should be applied as a direct overhead spray. With the first applications coming in the 7-10 day after planting range which would correlate to your plants 1<sup>st</sup> and possibly 2<sup>nd</sup> sets of leaves "leafing out" ready to accept the spray.

Many factors can affect your applications and like B-Nine® not all varieties will take the same rates. Additionally how much you are trying to "bump up" a plant in size in relation to overall finishing pot size vs. initial liners root ball should be considered. Of course your desired finishing height will play a factor in this as well. Often times any Gibb effect on the plants can also be counteracted with growth retardants. Many growers for these early season plants look to apply "toning" retardant applications once the plants reach silver dollar flower size. During the early season these growth retardant applications are often times much less then would be normally recommended during peak or standard season growth.

## Benefits

The Benefits of this Gibb applications can be numerous. In addition to naturally counteracting the previously mentioned cultural conditions. The Plant benefits include but are not limited to;

**Increased overall plant height**

**Increased Flower Size**

**Even stem elongation**

**Even flower development**

**Larger leaf size**

**Larger stem Size**

**Increased plant longevity**

Gibb applications on Early season crops should be a part of your production plan.

Kurt Miller  
Dahlstrom & Watt Bulb Farm Inc  
[kurt@dahlwatt.com](mailto:kurt@dahlwatt.com)  
[www.dahlwatt.com](http://www.dahlwatt.com)  
707-487-3961