



# Aldershot Greenhouses HBA Kanmara Hydrangea Forcing Guide

## Aldershot Greenhouses Ltd. Partnership with the HBA.

With an exclusive partnership between Aldershot Greenhouses Ltd. and the Hydrangea Breeding Association, we are pleased to provide North America with the latest varieties and trends in Hydrangea cultivation. HBA Varieties are known to be compact, strong, free branching, and in a full range of colours.

## About the Prefinished Plants.

Hydrangeas develop their flower buds during the previous autumn, and are already present in the cane tips. It is important not to cut back or break off tips.

- Shipped as de-leafed dormant material.
- 1,000 hours of recommended dormancy has already been achieved and plants are ready for forcing upon arrival.
- All plant material has been graded a minimum 6 times before being shipped.
- On blue varieties aluminum sulphate has already been applied 7-9 times during the previous year to assist in pH regulation and additional aluminum when forcing.  
*\* Varieties that have been shipped as blue cannot be made pink, the plants have already taken in aluminum in the previous year, and have stored it in plant tissues.*
- Aldershot Greenhouses Ltd. recommends that plants should be finished in the pots they are received in. In the previous year

the plants have been restricted in growth to have a much more compact size at forcing.

- If plant material is to be stored before forcing it is recommended to be stored at a temperature of 2°C or 35°F. *\* Soil can still dry out in cold storage, check periodically and water if necessary.*

## Forcing Temperature

- Different factors can contribute to the bloom time, temperature can be used to increase or decrease the rate of growth.
- Hydrangea should be forced at an average day and night temperature of 19°C or 66°F
- Throughout the growing cycle it is important to chart growth, and make changes to temperature as needed.
- If growth is too rapid decrease day average temperature. If growth is too slow increase temperature.
- Increase or decrease only a 1-2 degrees at a time. Continue adjusting as needed, based on weekly tracking.

## Lighting

- Day length and light intensity will also affect bloom times
- As days lengthen and sunlight quality improves, bloom time will become faster.
- Shading is not necessary during forcing, however a maximum of 3,000 foot candles (32,000 lux) will prevent sepals from burning.
- If wilting is observed on sunny days, 40-45% white wash on roof is recommended.

## Spacing

- Spacing should occur 2 weeks after forcing begins.
- It is very important to space on time, if done late plants can stretch, flowering will be uneven, and botrytis can develop.

Minimum Spacing Requirement		
Kanmara Pots	4.5 pots/m <sup>2</sup>	1 pot/2ft <sup>2</sup>

## Watering

- Plants require frequent watering as the develop and gain size.
- Drip or Sub irrigation is recommended, overhead irrigation is not.
- When sepals begin to colour before sales, use clear water every other watering. This will help increase shelf life.
- DO NOT allow plants to wilt, especially in later stages of development. This can result in irreversible damage to flowers, and leaf margins.

## Fertilizing

- Fertilizing hydrangea is broken down into two categories: those that will bloom pink, red, and white and those that will bloom blue.
- Blue varieties will need to have aluminum sulphate applications to bring out the blue colour.
- All Blue varieties have been previously treated with aluminum, and should continue with aluminum sulphate treatments for better colour. *\*Aluminum and phosphorus will bind in solution to form aluminum phosphate. Aluminum phosphate is not available to plants and will not assist in turning plants blue.*
- Apply aluminum sulphate at 12g/L of at hose end.
  - Apply aluminum sulphate to the soil as a drench, begin applications as leaves

develop and repeat every 7-10 days for a minimum of 5 applications.

- Aluminum sulphate can help decrease pH and acidification with acids are not always needed to get desired pH.
- It is recommended that once or twice through the growing cycle fertilizer containing phosphorous is applied to the blue varieties. If phosphorous is not applied to the crop the plants will become extremely deficient. *\*If using drip irrigation the lines must be flushed with fresh water before and after, if not the aluminum and phosphorus will plug the lines.*

## Plant Growth Regulators (PGR)

- PGR's are important tools to control height and also even out crop growth.
- PGR's also play an important role in growing times.
- B-Nine is the most commonly used PGR in Hydrangea finishing.
- For early season crop plants may not need

Colour Control		
	Blue Varieties	Pink Varieties
pH	4.5-5.0	5.5-6.0
Phosphorous	Low	High
Fertilizer	14-0-14	20-8-20
Acid Injection	Sulfuric, or Nitric	Phosphoric

any B-Nine, but as light intensity increases the plants will get stronger and PGR applications will be needed.

- If control is needed start at 750ppm of B-Nine and increase to 2500ppm if needed.
- Apply every 10 days
- It is better to use PGRs early in the crop as later application can decrease flower size.

## Pest and Diseases

- All plant material has been inspected and certified pest and disease free by the Canadian Food Inspection Agency. During

forcing however certain pests and disease can become an issue.

- Spider mite and aphids are of concern
- Powdery Mildew can be found on the leaves, and botrytis can be found in the flowers.

- Hydrangeas can be sensitive to certain

B-Nine can be applied until the flowers reach the size of 1" in diameter, with minimal delay in crop timing, and up to 2" later in the growing season.

chemicals, always test chemicals before applying.

Flower Development	
8 Weeks to Sale	Buds are dime size
6 Weeks to Sale	Buds are nickel size
4 Weeks to Sale	Buds are quarter size
2 Weeks to Sale	Sepals begin to show colour

*\*All information provided is to be used as a reference only. Depending on location, climate, and facilities crop timing, vigour, and quality can vary.*