# **Endless Summer**

### **The Original Culture Sheet**

Endless Summer<sup>®</sup> The Original Bigleaf Hydrangea *Hydrangea macrophylla* 'Bailmer' PP15,298



## The Original

Deciduous/Evergreen: Deciduous

Northern/Midwest Region Container Production

**pH**: 5.5-6 **EC**: 1.5-2.0 in MN and 2.2-2.7 in IL

Hardiness: Zone 4-9

Fertilization Requirements	Incorp at planting (Polyon 17-3-10) at 10 lbs per yard and uncoated aluminum sulfate at 16 lbs per yard. Top dress in second season with 22-3-8 at 15 grams per gallon pot.
Overwintering Practices and Temperatures	In MN, the plants are overwintered in two ways; in a covered structure or outside using double poly method. Covered structure: coldframe or greenhouse structure are covered in a dual-side black and white poly and heated to keep temperature at a minimum of 28°F. Double poly method: In colder climates, plants are consolidated, tipped, and covered with alternating layers of 3-4 mil poly and 3" of sudan grass. With this method, temperatures remain constant from 28-32°F. At the IL location, plants are consolidated into poly houses and covered with a frost cloth where temperatures stay safely at or above 22°F. If long durations of cold occur, it is recommended to add an additional blanket. The blanket/frost cloth is removed in early March to help keep the plants dormant until they naturally wake up with warming temperatures. In general, we remove the blanket after temperatures have been consistently 50s in the greenhouses with the doors shut. We have also opened doors and left the blankets on to cool the inside of the houses in late February and early March with good success in more mild years.
Light Levels	Full sun
Water Requirements	Prefer to run on the drier side during vegetative growth, to limit growth (over watering will keep plant vegetative). When flowers are present, do not dry stress or flowers will burn. Use acidified water if needed.
Planting Season	Planting is from March 15th to September 1st.
Pest/Disease Management	Anthracnose, powdery mildew, aphids and mites can be a problem. H. macrophyllas are very sensitive to pre-emergent herbicide. Do not use the miticide; Spiromesifen on Hydrangeas.
PGR Application	Common chemicals used are daminozide and paclobutrazol.
Flowers on new or old wood	Blooms on new and old wood.
Special Notes	Lots of buds form in fall or early spring. If cut back end of May/June, will get a light show of flowers. When it is extremely hot, water to cool. Shade could benefit to keep flowers from burning. It is important to keep them hydrated when they start to bloom as this will cause the blooms to stay fresher, longer. May need to water late morning and then later in the afternoon during hot weather.

#### **Estimated Finishing Times**

Estimated Timoning Times				
	8" container	#2 container	#3 container	#5 container
Liner	Finish in 10 weeks using LO 38 plug.	Finish in 14-16 weeks using LO 38 plug. Finish in 10-12 weeks using Jumpstarts™.	Finish in 10 weeks using #1 bareroot liner. Finish in 6-8 weeks using 8" upshift.	Finish in 10-12 weeks using #1 bareroot liner. Finish in 8-10 weeks using 8" upshift.
JumpStarts™	6-8 weeks	8-10 weeks	14 weeks	

# Pacific Northwest Region Container Production pH: 4-5.5 EC: 0.5-2

Fertilization Requirements	8 month (Polyon 18-6-11) incorp at planting. Coated aluminum sulfate is added at 10 lbs per yard.	
Overwintering Practices and Temperatures	Plants are able to overwinter outside, spaced in growing lines. Poly houses are used in late winter in early spring to force plants for early spring sales. Temperatures remain around 20°F.	
Light Levels	Full Sun	
Water Requirements	Medium to high water requirements.	
Planting Season	Plugs are planted in May and bareroot is planted in fall.	
Pest/Disease Management	Aphids and two spotted spider mites have been observed. Do not use the miticide; Spiromesifen on Hydrangeas.	
PGR Application	Daminozide and paclobutrazol have been used.	
Flowers on new or old wood	Blooms on new and old wood.	
Special Notes	Shade to keep blooms from burning.	

### **Estimated Finishing Times**

Liner	8" container	#2 container	#3 container	#5 container
LO 38 plug	Finish in 14 weeks.	Finish in 16-18 weeks.		
JumpStarts™	7 weeks	12 weeks	16 weeks	6 months
Bareroot		Finish in 10-12 weeks using #1 liner.	Finish in 12-14 weeks using #1 liner.	Finish in 16-18 weeks using #1 liner.
upshift			Finish in 14 weeks using 8" container.	Finish in 16-18 weeks using 8" container.

### Southern Region Container Production pH: 5.5-6.5 EC: 0.5-1.5

<u>*</u>		
Fertilization Requirements	Composted pine bark amended with 9 lbs (15-6-11) controlled release fertilizer. Supplement with weekly application of liquid feed (12-3-6) from mid-summer until fall.	
Overwintering Practices and Temperatures	Plants are consolidated. Use frost blanket if temperatures reach 22-23 °F. Remove when temperatures are around 50°F or when watering is needed. It is also recommended that plants go fully dormant avoid winter injury.	
Light Levels	Plants are kept under 47% shade starting April 1st.	
Water Requirements	Medium to high water requirements. Do not overwater.	
Planting Season	Early spring to summer.	
Pest/Disease Management Spray every 15-21 days all summer with common fungicides, insecticides, and miticides. I any pre-emergent herbicide.		
PGR Application	No experience with PGRs.	
Flowers on new or old wood	Blooms on new and old wood.	
Special Notes	Applied low to medium rate of Florikan Sapphire Aluminum sulfate.	
- 4 1 m · 1 · m ·		

### **Estimated Finishing Times**

	8" container	#3 container
Liner	Finish in 3 months using 2 1/2" plug.	Finish in 1 year using 2 1/2" plug. Upshift using 8" container, will be ready the following
		season.

### Minnesota Bud & Bloom (Greenhouse) Production

**pH**: 5.5-6 **EC**: 1.5-2.0

<u>*</u>		
Fertilization Requirements	Incorp at planting (Polyon 17-3-10) at 10 lbs per yard and Aluminum sulfate at 16 lbs per yard. In fall drench with Aluminum sulfate at 20lbs/100 gal. Top dress second season at (Polyon 17-5-10) at 30 grams per #2 pot and do a spring drench of Aluminum at 12 grams per #2 pot.	
Overwintering Practices and Temperatures	Overwintering temperatures are kept at 35 °F. Greenhouse is covered with black/white poly to main tain stable temperatures.	
Light Levels	Full sun	
Water Requirements	Prefer to run on the drier side during vegetative growth, to limit growth. When flowers are present, do not dry stress or flowers will burn. Use acidified water if needed.	
Planting Season	Plant overwintered quart liner in spring to force for next year's bud & bloom production.	
Pest/Disease Management	Anthracnose, powdery mildew, aphids and mites can be a problem. H. macrophyllas are very sensitive to pre-emergent herbicide.	
PGR Application	Daminozide is used. Applied every 10-14 days during rapid growth.	
Flowers on new or old wood	ers on new or old wood Blooms on new and old wood.	
Special Notes	It is important that the pH of the soil is between 4.5-5.8 and has the presence of aluminum in the soil during and after flower bud development to turn blue. This crop is a terminal bud crop. Last cut back date is July 25th. PGRs are applied to keep plant at 6-7" going into winter. Growing temperatures need to be at 50°F. If temperatures are warmer, it will cause the flowers to flop when in color.	

#### **Estimated Finishing Times**

0		
	8" container	#2 container
Terminal Crop	Finish in 55 days at 50°F	Finish in 65 days at 50°F

#### Edited 08/15/2018

Note: The information presented should be considered as a starting point for best practices. Production times and product applications will vary depending on the growing region and conditions. It is the responsibility of the applicator to follow all current manufacturer label directions in a responsible manner.