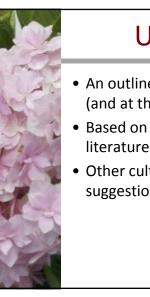


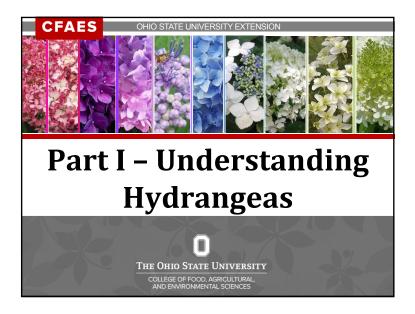
Chart go.osu.edu/hydrangeas Presentation go.osu.edu/totallybeautiful Factsheet go.osu.edu/hydrangeafacts **Where trade names are used, no discrimination is intended and no audoraseasch by Oblic Stana Italianchy E-tendon is implied ***Whet year's flowers that figure and a word are generally formed from August to October: ***All typicare tribuld be planted in well-amended, high organic matter ol with a dequate drainage. **By Eric Barrett, OSU Extension., Chart go osu edu/hydrangeas **Presentation go.osu edu/totallybeautiful for acceptance for the supplied and not be recorded from August to October: ***All typicare tribuld be planted in well-amended, high organic matter ol with a dequate drainage. By Eric Barrett, OSU Extension., Chart go osu edu/hydrangeas **Presentation go.osu edu/totallybeautiful for acceptance for a control of the control of t

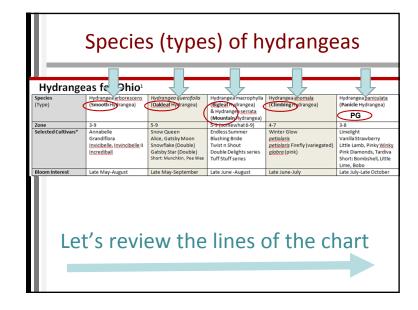
	Hydrangea arborescens (Smooth Hydrangea)	Hydrangea quercifolia (Oakleaf Hydrangea)	Hydrangea macrophylla (Bigleaf Hydrangea) & Hydrangea serrata	Hydrangea anomala (Climbing Hydrangea)	Hydrangea paniculata (Panicle Hydrangea)
Cultivar Name					
Flowers/Features					
Blooms on					
Height					
Notes					
Cultivar Name					
Flowers/Features	بد ا	in' oi	40 04	char	
Blooms on		10 SI	oe oi	CHAL	I
Height		יא פוי	40 0.	Oriai	
Notes Cultivar Name					
Cultivar Name					
Flowers/Features					
Blooms on					
Height					
Notes					
Cultivar Name					
Flowers/Features					
Blooms on					
Height Notes					

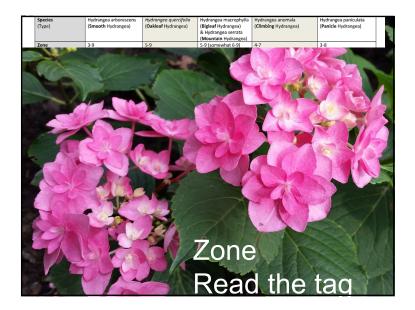


Use the chart

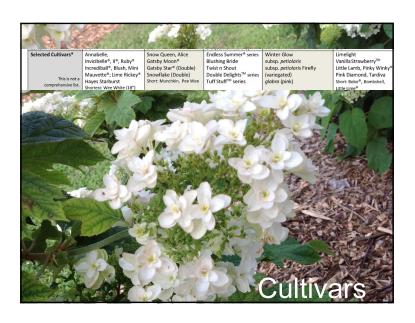
- An outline for you to use for your garden (and at the garden center!)
- Based on personal experience and the literature
- Other cultivars will grow, these are just suggestions to get started



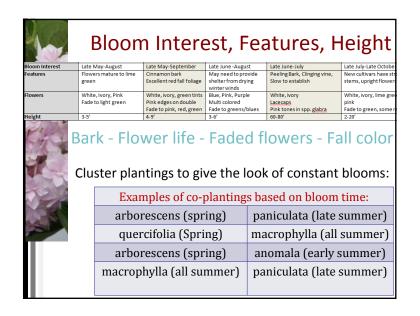




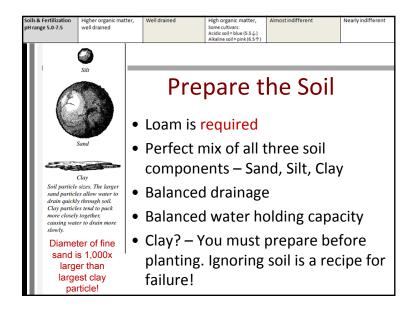


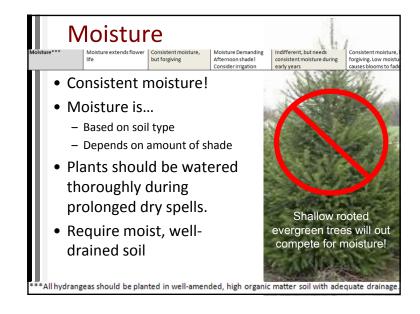




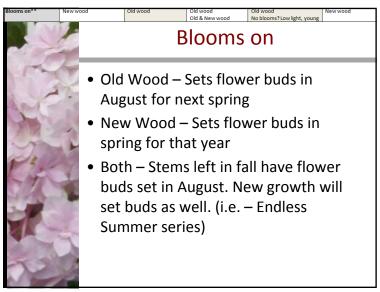


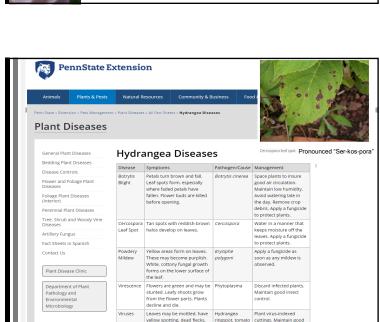






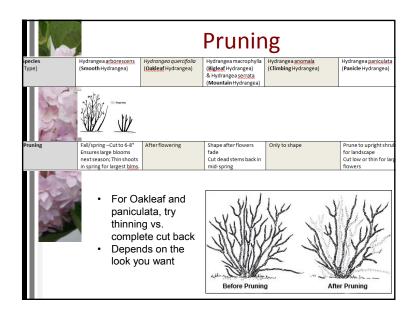


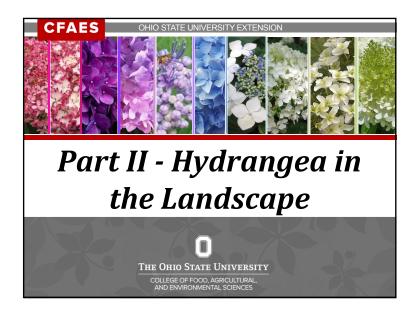




line or ringspot patterns.
Plants may be distorted or

insect and mite control







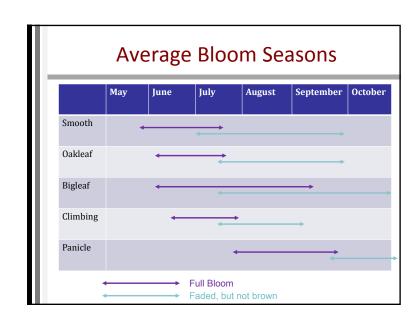








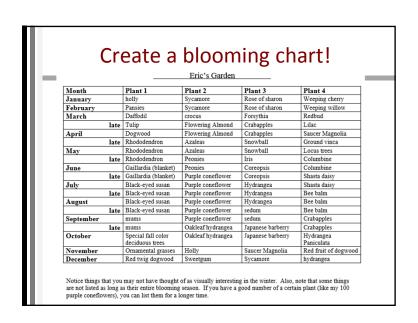




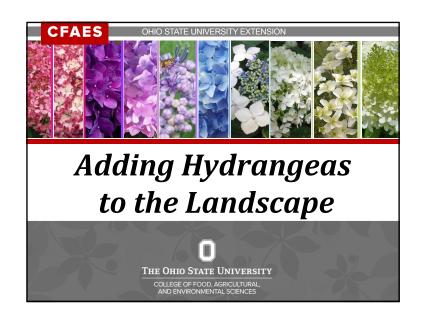


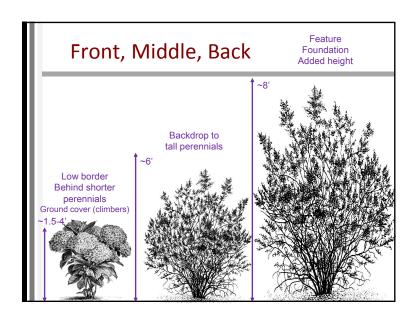
















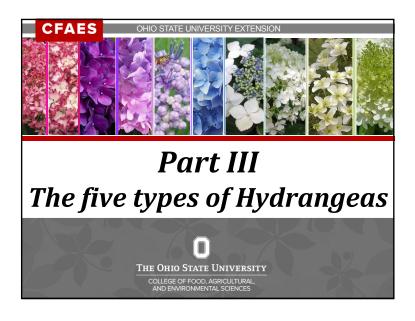


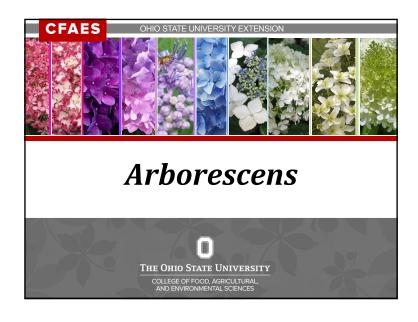








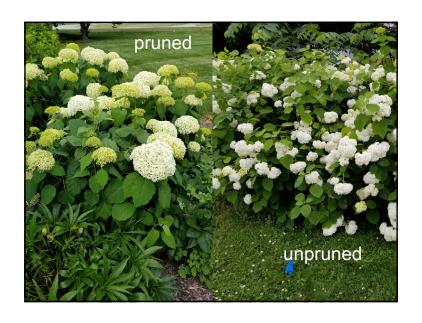






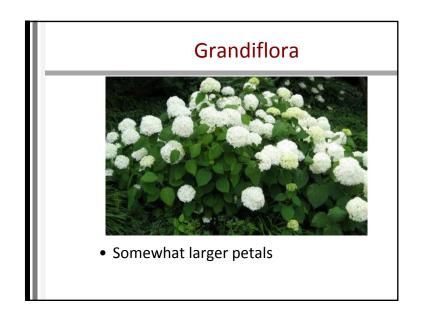
Arborescens

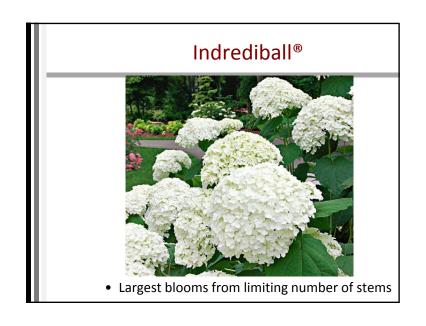
- I consider this the easiest to grow!
- Native to North America
- Easy to propagate
- Treat it like a perennial Cut to ground in late fall/early spring
 - Unless you want scraggly blooms
 - Selective pruning in early spring
 - Less stems = Larger blooms
- Early bloomer















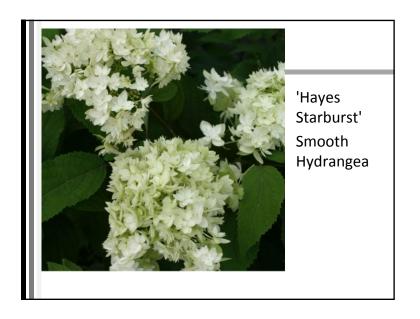










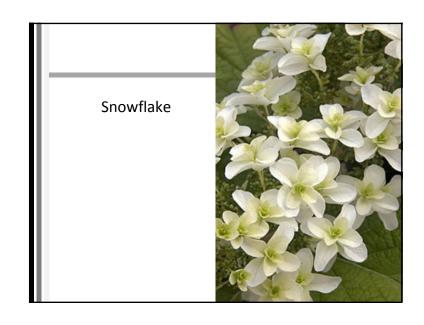




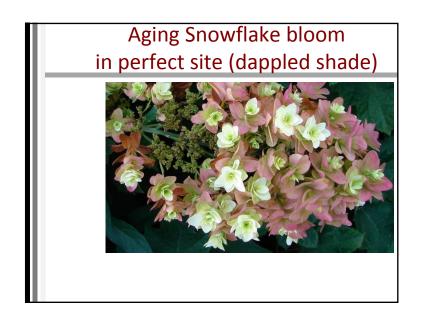


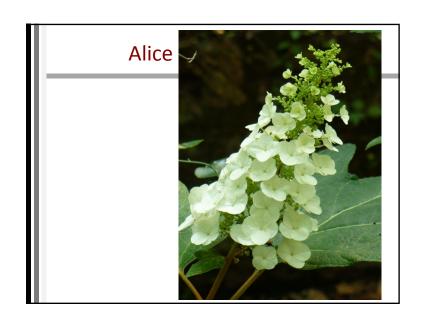


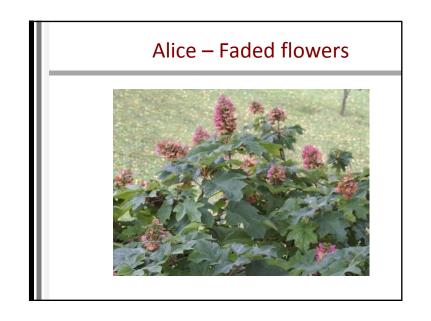










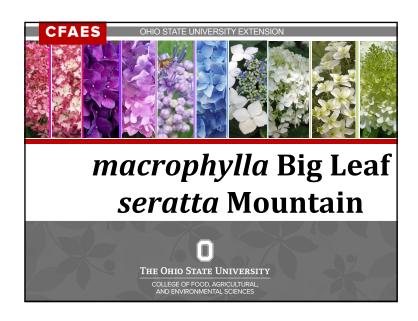














Pink & Blue in Zone 5?

- This means the roots are hardy to zone (root hardy)
- If bloom ONLY on old wood, flowering is unlikely or sporatic in zone 5
 - Yes, some of you are lucky...
- Hydrangea serrata (Mountain Hydrangea) IS related to macrophylla and is somewhat hardier







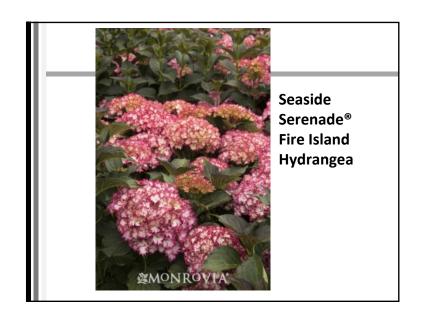


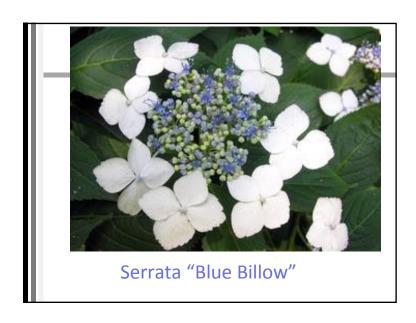






























Blue or Pink?



- Soil pH and corresponding available aluminum.
- At lower pH levels (acid soils), aluminum is more readily available - flowers become blue.
- At higher **pH ranges** (more alkaline soils), aluminum is less available flowers are **pink.**
- Changing soil pH is a gradual process and requires a soil test for accuracy.
 - Blue: _____ wettable sulfur per 10 square feet and water-in
 - Pink: _____ dolomitic lime per 10 square feet and water-in
 - Raising pH takes longer than lowering. It may be next year before a noticeable change to pink flowers.

Fertilization

- Fertilize:
 - Mother's Day
 - Memorial Day
 - 4th of July
 - Labor Day (maybe...)

Common formulations. IS there a best one? 24-8-16 15-30-15 0-10-10

Hint - Excess P ties up aluminum

Soil Test is a MUST!

Winter Care?

- Lack of winter/spring protection may be the reason you are not seeing earlier flowers
- Your Options
 - May prune back some before protecting
 - Cover with mulch (like a rose)
 - Cover with a container, tub, etc
- MUST cover for April frosts!
- These are all SECONDARY to proper soil conditions!

endlesssummerblooms.com

Overwintering:

If you live in an area with freezing temperatures, it is a good idea to protect your plants from freezing winter temperatures. Since Endless Summer® Hydrangeas bloom on last year's growth ("old wood") as well as the current season's growth ("new wood"), you will get the most flowers by protecting the flower buds on the old wood. To do this, do NOT prune or cut back your shrubs after August 1st. Leaving the fall blooms on your plants over the winter provides winter interest, and ensures you aren't removing buds that will become flowers in the spring and summer. Leaves, wood mulch and/or straw are good options to insulate your plants. Mound the mulch or leaves around your plants at least 12" high to protect the flower buds that will bloom early next year.

in the spring, do not remove the mulch too fast; wait until all danger of frost has passed before uncovering to ensure beautiful blooms from old and new wood. The "old wood" buds will provide early season color and the blooms forming on current season growth will typically

occur roughly six weeks later and last through the end of the season. If your hydrangeas are planted in a container, bring the entire container into your garage or a cool basement for the winter months, and follow the same steps as garden-planted hydrangeas. Container plants will not require as much mulch, but should be lightly watered throughout the winter months since they will not receive moisture from snow and rain.





Success

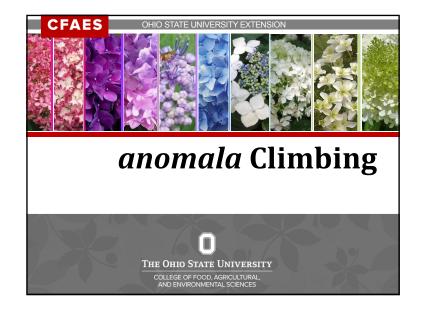
- For most success in Ohio
 - Shade to part shade
 - Consistent moisture
- When it comes to macrophylla
 - Soil conditions must be 1st
 - Plan to watering (min 1" per week)
 - Some form of winter wind protection to preserve blooms on old wood (although many bloom on new wood)
 - Spring protection from late frosts
 - Heavy feeders



No simple answer

- Cultivar old vs. new wood
- Location
- Pruning
- Winter protection
- Fertilization Too much N!
- Water/Shade



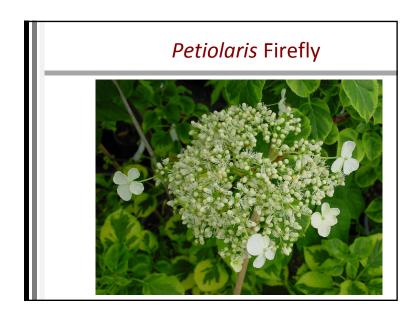




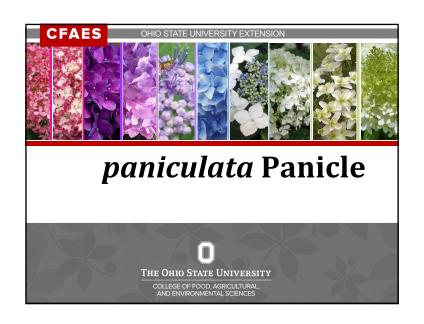


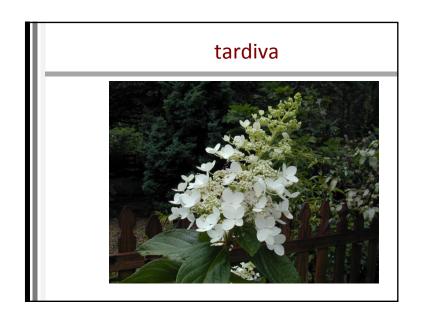
Climbing Hydrangeas

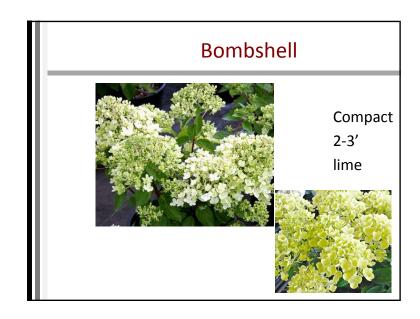
- Hydrangea anomala
 - Stains, but doesn't get into mortar
 - Slower grower at first
 - Faster after 3 years
- North side? Protected?
 - Mine back at the home farm was killed by the April wind/freeze in 2007, otherwise they are generally easy to grow and keep!
 - This has NOT happened since then!



















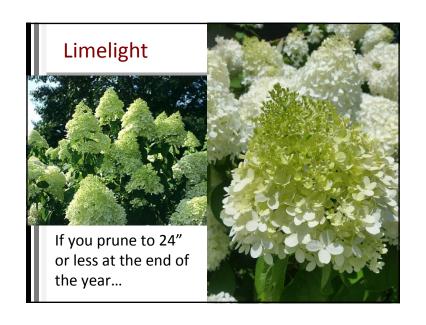




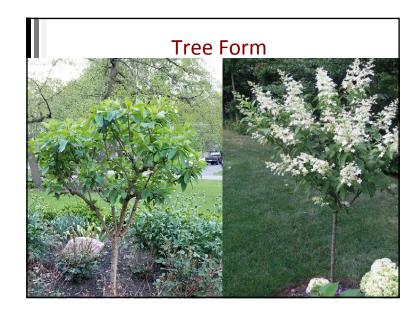












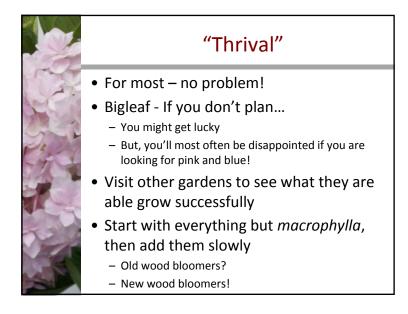






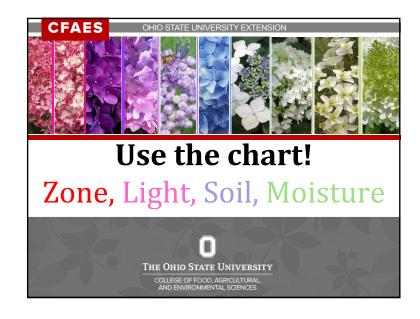
Planting

- Even after soil, etc the site will make you or break you!
 - -Air & Sunlight
 - Morning Sun, dappled afternoon shade
- Loosen Roots
- Crown at soil line, not ↓↑

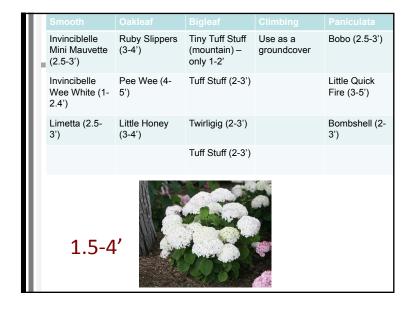








CFAES OHIO STATE UNIVERSITY EXTENSION Hydrangeas for Ohio ¹							
Species (Type)	Hydrangea arborescens (Smooth Hydrangea)	Hydrangea quercifolia (Oakleaf Hydrangea)	Hydrangea macrophylla (Bigleaf Hydrangea) & Hydrangea serrata (Mountain Hydrangea)	Hydrangea anomala (Climbing Hydrangea)	Hydrangea paniculata (Panicle Hydrangea)		
Zone	3-9	5-9	5-9 (somewhat 6-9)	4-7	3-8		
Selected Cultivars* This is not a comprehensive list.	Annabelle, Invicibelle [®] , II [®] , Ruby [®] Incrediball [®] , Blush, Mini Mauvette [®] ; Lime Rickey [®] Hayes Starburst Shortest: Wee White (18°)	Snow Queen, Alice Gatsby Moon ⁶ Gatsby Star ⁸ (Double) Snowflake (Double) Short: Munchkin, Pee Wee	Endless Summer® series Blushing Bride Twist n Shout Double Delights™ series Tuff Stuff™ series	Winter Glow subsp. petiolaris subsp. petiolaris Firefly (variegated) glabra (pink)	Limelight Vanilla Strawberry TM Little Lamb, Pinky Wink Pink Diamond, Tardiva Short: Bobo®, Bombshell, Little Lime®		
Bloom Interest	Late May-August	Late May-September	Late June -August	Late June-July	Late July-Late October		
Features & Notes	Flowers mature to lime green	Cinnamon bark Excellent red fall foliage	Winter protection may be needed.	Peeling Bark, Clinging vine, Slow to establish	New cultivars have stro stems, upright flowers		
Flowers	White, Ivory, Pink, red/purple hues Fade to light green	White, ivory, green tints Pink edges on double Fade to pink, red, green	Blue, Pink, Purple Multi colored Fade to greens/blues	White, ivory Lacecap Pink tones in spp. glabra	White, ivory, lime green pink Fade to green, some rec		
Height	3-5'	4-9'	3-6'	60-80'	2-20'		
Light	Part Sun to Shade	Part Sun to Shade	Part to 'nearly' full shade for best results	Sun to Part Shade	Sun to Part Shade Full shade limits flowers		
Soils & Fertilization pH range 5.0-7.5	Higher organic matter, well drained	Well drained	High organic matter, Acidic soil = blue (少5.5) Alkaline soil = pink (个6.5) High P ties up aluminum	Almost indifferent	Nearly indifferent		
Moisture***	Moisture extends flower life	Consistent moisture, but forgiving	Moisture Demanding Afternoon shade!! Consider irrigation	Indifferent, but needs consistent moisture during early years	Consistent moisture, but forgiving. Low moisture causes blooms to fade		
Blooms on**	New wood	Old wood	Old wood Old & New wood	Old wood No blooms? Low light, young	New wood		
Pruning	Fall/spring –Cut to 2-6" Ensures large blooms next season; Thin shoots in spring - largest blooms	After flowering	Shape after flowers fade Cut dead stems back in mid-spring	Only to shape	Can prune to tree form Cut low or thin for large flowers		



_				
				Paniculata
ı	'Hayes Starburst' (4- 5')	Snow Queen (4-5')	Endless Summer (3-5')	Fire Light (4.5-6')
	White Dome (4-6')	Snowflake (4-6')	Blue Billow (4-5')	Little Lamb (4-6')
ı	Incrediball (4-5')			Little Lime (3-5')
ı	Invincibelle (4-5')			
	4-6′			

