For many of us, remembering big pom-poms of blue, pink or white flowers in our grandmother’s garden brings fond memories and the strong desire to grow hydrangeas. Or, maybe you are craving the new hydrangea varieties that grow so comfortably in the south, producing flowers in both spring and summer? Growers are working fervently to bring these to our market and cultivate them to thrive in our colder winter temperatures and drying winds.

Whether your garden has a partly shaded spot for one hydrangea or space for a mass of these showy shrubs, hydrangeas truly are old but reliable members for today's gardens.

There are many types of hydrangeas, each with different habits and cultural requirements. Knowing more about hydrangeas will help you choose the best variety to grace your garden with healthy plants, impressive blooms and all-season interest.

**Bigleaf Hydrangeas – spring bloom varieties**

<table>
<thead>
<tr>
<th>Species</th>
<th>Hydrangea macrophylla</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular varieties</td>
<td>Nikko Blue, Variegated,</td>
</tr>
<tr>
<td>Description</td>
<td>These are the old-fashioned varieties found in southern gardens, and they are only minimally hardy in Kansas City. They bloom on old wood only and must be protected from winter cold and heavily mulched to prevent the developing flower buds from freezing.</td>
</tr>
<tr>
<td>Bloom time</td>
<td>Early summer only</td>
</tr>
<tr>
<td>Exposure</td>
<td>Morning sun to light shade, protected from winter cold and summer wind</td>
</tr>
<tr>
<td>Size</td>
<td>3-4 ft tall and wide. Often dies back to the ground in hard winters, which means there will be no flowers.</td>
</tr>
<tr>
<td>Flower color</td>
<td>Flower color varies depending on soil pH. Alkaline soils (pH of 6.5 and higher) will encourage pink flowers and acid soils (pH of 5.0 to 5.5) produce blue flowers. In our area, most soils are naturally alkaline so local hydrangeas will be mostly pink. You can lower the pH and get more blue/purple flowers by adding sulfur. Aluminum sulfate can be used to alter flower color but will</td>
</tr>
</tbody>
</table>

**What does “old wood” and “new wood” mean?**

Most discussions about hydrangeas refer to plants flowering on old wood and new wood. **Old wood** means a plant makes flowers on stems (wood) that grew the previous year. Plants that bloom on old wood should be pruned after they have flowered in the spring. **New wood** refers to a plant that makes flowers on stems that grow during the current growing season.
not change pH. If you have acid soil and desire pink flowers you can add lime to raise the pH. Always follow the directions on the soil amendment package.

Pruning
Because bigleaf hydrangeas are often damaged in winter and can die back to the ground, they rarely get large enough to need much pruning. If you must prune, wait until after the spring bloom. Even if the flowers are frozen, the shrub has landscape value for its shape and foliage. The variegated hydrangea can be grown for its foliage alone.

Bigleaf Hydrangeas—re-blooming varieties

<table>
<thead>
<tr>
<th>Species</th>
<th>Hydrangea macrophylla</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular varieties</td>
<td>Blushing Bride, Endless Summer, Glowing Embers, Lady in Red, Cityline Series, Twist-n-Shout, Bloomstruck, Let’s Dance Series, Forever and Ever Series,</td>
</tr>
<tr>
<td>Description</td>
<td>Unlike the older spring-blooming varieties, these hydrangeas bloom twice a year—once on the old wood from the previous year, then again on new wood grown the current year. This means that even if the spring blooms are damaged by winter cold, the plant will produce a new set of flowers later in the summer. There are two different bloom shapes. Mophead flowers are large, round balls reminiscent of the old-fashioned hydrangeas. The lacecap flower form is broad and flat.</td>
</tr>
<tr>
<td>Bloom time</td>
<td>Early summer if not winter-damaged, then re-bloom in July-August. However, summer flowering in the Kansas City area can be disappointing. They require consistently moist soil for best growth and bloom potential.</td>
</tr>
<tr>
<td>Exposure</td>
<td>Part sun, protected from winter cold and summer wind.</td>
</tr>
<tr>
<td>Size</td>
<td>3-4 ft. tall and wide for standard varieties, some dwarf varieties only 18 in. tall.</td>
</tr>
<tr>
<td>Flower color</td>
<td>Some varieties are influenced by soil pH, others have a specific flower color. Read the plant tag carefully.</td>
</tr>
<tr>
<td>Pruning</td>
<td>If the spring flower buds are not winter damaged, you may prune right after the spring bloom period. If the plant has winter damage, prune in the spring to encourage new growth and increase summer bloom.</td>
</tr>
</tbody>
</table>

Smooth Hydrangeas

<table>
<thead>
<tr>
<th>Species</th>
<th>Hydrangea arborescens</th>
</tr>
</thead>
<tbody>
<tr>
<td>Popular varieties</td>
<td>Annabelle, Incrediball, Invincibelle Spirit, Mini Mauvette, Limetta, Wee White</td>
</tr>
</tbody>
</table>
Hydrangeas

Description
Smooth hydrangeas have large balls of white flowers. (Invincibelle is a new pink variety.) They change color from white to light green, and finally brown. They are one of the easiest hydrangeas to grow and very reliable. Because of their shallow root system, smooth hydrangeas prefer a highly organic and moist soil.

Bloom time
Late spring into summer. The flower heads stay on the plant all winter.

Exposure
Sun to part shade, stronger stems in sunnier locations

Size
3-4 ft. tall and wide. The weight of the large Annabelle flowers can cause the plant to arch to the ground. Newer varieties are advertised as having stronger stems.

Pruning
Smooth hydrangeas bloom on new wood. Prune in late winter to early spring before the onset of new growth.

Panicle Hydrangeas

Species
*Hydrangea paniculata*

Popular varieties
Limelight, Pinky Winky, Pee Gee, Tardiva, Zinfin Doll, Bobo, Pinky Winky, Bombshell, Little Lime, Vanilla Strawberry, Quick Fire

Description
Panicle hydrangeas are the most cold hardy of all hydrangeas. They are noted for their large cone-shaped clusters of flowers. Flowers start out white, turn shades of pink as they age, and then turn a rust color in the fall.

Bloom time
Mid-summer to autumn.

Exposure
Panicle hydrangeas need more sun than other varieties to produce good flowers. Plant in sun to light shade.

Size
6-8 ft. tall. Tree forms are also available.

Pruning
Panicle hydrangeas bloom on new wood. Prune in late winter to early spring before the onset of new growth.

Oakleaf hydrangeas

Species
*Hydrangea quercifolia*

Popular varieties
Alice, Pee Wee, Sikes Dwarf, Snowflake, Snow Queen, Ruby Slippers, Gatsby Series

Description
Oakleaf hydrangeas provide beauty of leaf, flower and plant structure for year-round beauty. The dark green foliage, resembling large oak leaves, turns brilliant colors of red and burgundy in the fall. This hydrangea blooms in June and the large, cone-shaped flower clusters last for several weeks, changing from white to pinkish with maturity. The flowers dry to bronze and remain on the plant after blooming. The papery bark peels off in strips, which adds winter interest.
Hydrangeas

Bloom time
May/June

Exposure
Oakleaf hydrangeas can tolerate more sun and heat than other types of hydrangeas. They will need moist soil with plenty of organic matter. Plant in sun to partial shade.

Size
4-6 ft. tall and wide. Some dwarf varieties stay within 2-3 ft.

Pruning
Flowers develop on old wood. Prune after flowering as needed. They grow slowly and tend to have an open, sprawling habit. Careful pruning of oldest stems to the base can stimulate new growth and create a dense habit.

Climbing Hydrangea

Species
Hydrangea anomala subspecies petiolaris

Common name
Early Light, Miranda, Skylands Giant

Description
Climbing hydrangeas are flowering woody vines that work well on walls or trellises. They will grow up into trees and also work as a sprawling ground cover. The vines have distinctive red-brown branches covered with lustrous, heart-shaped, dark green or variegated leaves. The lacecap flowers are white and fragrant. In winter, the red-brown bark provides interest. They like fertile, well-drained and organic soil. Although slow to establish, vines are long lived and trouble free.

Bloom time
May/June

Exposure
Plant in partial sun to light shade.

Size
Sources list it at 60 ft, but 20 ft. is more realistic in our area. It is a true, clinging vine that develops its own “holdfasts” at the leaf nodes.

Pruning
Climbing hydrangeas flower on old wood. No pruning is needed beyond removing the occasional damaged branch, or training the vine in the direction you want it to grow.

Sources
• “Learn2Grow.” http://www.learn2grow.com/ (March 2010)
• Nolting, Emily, Ph.D. “Hydrangeas.” Kansas State University.

Updated 1-8-20

"Kansas State University Agricultural Experiment Station and Cooperative Extension Service"
K-State Research and Extension is committed to making its services, activities, and programs accessible to all participants. If you have special requirements due to a physical, vision, or hearing disability, please contact Johnson County Extension at 913.715.7000. K-State Research and Extension is an equal opportunity provider and employer.

Johnson County K-State Research and Extension
11811 S. Sunset Drive, Suite 1500, Olathe, KS 66061
913-715-7000 — www.johnson.k-state.edu

Published by the Johnson County Extension
Master Gardeners, a volunteer program of
K-State Research and Extension, Johnson County