

Hydrangea Podcast by:  
Certified Master Gardeners; Rutherford County TN. Barbara and LaVon

---

General Terms / Hydrangea Overview

- Latin scientific naming system : Genus species 'variety'
    - Scientific name = *Hydrangea macrophylla* 'Endless Summer® collection, Twist-n-Shout' Patent#
  - Plant Zones. The Bigger the #, the warmer. Middle TN = 7a, Cold hardy for temps (0 to 5 °F)
  - Hydrangeas: Hardy perennial woody deciduous bush, with impressive long lasting blooms. There are 6 different types of hydrangeas.
  - Place of origin: All types originate in Japan/China/Korea except for 2: Oakleaf & Smooth types.
  - Hydrangea Flowers: Color of flower can be tones of white/cream, green, pink, blue or bicolors. Their ornamental flower heads can be cut for fresh or dried for display.
  - Growing Preferences: plant hardiness Zones for the different types of hydrangeas range between (3/4/5/6) - (8/9), Prefer rich but well-drained soil (with a pH range between 5 - 7); warm, morning sun with cooler afternoon shade (for a total of ~ 4 to 5 hours of direct sun per day)
  - Beware: Hydrangeas are poisonous when consumed by mammals (cyanide)
- 

Types of Hydrangeas (Only 4 of the 6 types will grow well in TN)

1. **Bigleaf** (*H. macrophylla*): Zone 4-9, flower colors vary between pink/ blue/ purple based on soil pH. Blooms on OLD wood with some exceptions. Propagate bigleaf hydrangeas by layering. Bigleaf is further divided into 2 groups:
  - A. Mophead Group (hortensia); Large ball-shaped "mop head" flower
    - 'Endless Summer Collections' is very popular, exception → Blooms on NEW & OLD wood
  - B. Lacecap Group (normalis); Large flattened flower, looks like a ~ pinwheel. Blooms on OLD wood.
    - 'Blue Wave': Blooms July-Aug vary between blue ←→ lilac pink based pH
2. **Oakleaf** (*H. quercifolia*): Native to SE of US, Zones 5-9. White cone-shaped tall flowers turn pinkish with age to give fall/winter interest; blooms on OLD wood, large coarse textured lobed leaves resemble that of an oak tree, (leaf size varies between 4-10 inches H&W). It will have a peeling cinnamon-brown bark after blooming. Propagate Oakleaf hydrangeas by cuttings or "plantlet".
  - 'Snow Queen': Very popular variety (6-ft H & W), very long lasting floral display
  - 'Ruby Slippers': A more compact size 3-4 ft H & W. Flowers age to a reddish color.
3. **Panicle** (*H. paniculata*): These are the easiest hydrangea to grow. A cold hardy type, Zone 3-9. Panicle is the only hydrangea that can grow well in full sun. Size 4-15 ft H, large blooms (6-18" long) are cone shaped (ie panicle) and color changes from white to pink tones in the fall. Blooms on NEW wood. A Panicle hydrangea "trained to be a tree-formed shape" is called "Peegee". It is possible to propagate a panicle hydrangeas by cuttings or by layering.
  - 'Grandiflora' and 'Limelight' are two common varieties

Friday, June 10, 2022

4. **Smooth** (*H. arborescens*): Native to Eastern US. Another cold hardy type, Zone 3-9. Slender stems support large globe-shaped white flowers that bloom on **NEW** wood. Smooth types require consistent watering, especially during hot summer. Smooth hydrangeas spread by stolons to form colonies. Can also be propagated by cuttings, layering, or by seed.
  - ‘Annabell’ : Size 4-6 ft H & W, 12” snow white ball shaped flowers on strong stems.
  - ‘Invincibelle Spirit II’. (Proven Winner) Size 4-5 ft H & W, balls of hot pink flowers with rose overtones continuously bloom early summer to fall, rounded habit, sturdy stems.
5. **Mountain** (*H. serrata*): Not common in TN because they struggle in extreme cold and need consistent watering during a dry hot summer. In Japan, amacha tea is made from the sweet leaves of *H. serrata*.
6. **Climbing** (*H. anomala*): The climbing type is not common in TN due to its slow growth rate in our warmer climate. This 30-50 ft woody vine enjoys cool woodlands, stream banks and rocky mountain slopes. This cinnamon bark climber has 6-8” white blooms with a sweet fragrance.

---

### Planting Hydrangeas

1. When to Plant: fall is best, spring is next best, and summer requires a lot of watering.
2. Where to Plant: Plant zone, get a soil test (pH), Examine potential sites for: sun light/day, air circulation, landscape considerations (soil drainage, tree roots, drip lines, watering ease, underground utility lines, color coordination)
3. How to Plant: Dig a hole diameter size at least 2x wider than container. Add organic matter (peat moss, seasoned compost, purchased soil conditioner...) to amend native soil until drainage is good. If heavy clay is under the hole, dig a larger hole. Carefully remove the hydrangea from its container, gently loosen roots around the outside edge, test the placement of the hydrangea in your prepared hole, add/subtract soil to make sure the root ball rests directly on the soil and the plant is the same ground surface placement as it was in the container. Water thoroughly around the perimeter base. Apply 2-3 inches of mulch around the diameter (but do not put mulch in contact with the stem).

---

### Maintenance Hydrangeas

1. Fails to Bloom: may be too much shade, winter cold injury to early buds, or pruning errors
2. Pruning: Always remove sick, damaged, or dead branches.
  - Prune repeat bloomers at any time.
  - Prune varieties that bloom on NEW wood (fresh growth of current season) in late winter or early spring. Hard prune only to control the size of the bush.
  - Prune hydrangeas that bloom on OLD wood (last years growth) immediately after they finish flowering.
3. Potential pests and disease: aphids, mildew, dark spots on leaves, ... Best to avoid problems by watering around the base of the Hydrangea (not on top), avoid overhanging “drips” from trees/buildings, and provide good air circulation.
4. Fertilizer:
  - 3-major nutrients: **NPK**, stands for “Nitrogen, Phosphorus, and Potassium”.
  - > TIP: **N**- green on top **P**- pretty flowers/fruit **K**- “aok” quality & health

Friday, June 10, 2022

- Apply fertilizer only if necessary, after the plant is established. Use a slow-release fertilizer during the spring or early summer, just before flowering. For “Blue” cultivars, apply acidic fertilizers (12-4-8). For “Pink/Red” cultivars, use a general-purpose fertilizer (NPK of equal values).

---

### COLOR of Hydrangea flowers:

- **Altering Soil pH to Change Color:** pH stands for “potential of Hydrogen” that is within the soil. Only the flowers of BigLeaf and Mountain hydrangeas can be altered by soil pH levels.
- A soil pH level above 7 will result in pink or reddish flowers; and below 6.0 for blue flowers.

---

### How to Preserve Hydrangea Flowers

- **Drying:** In general, the vibrant color of the bloom will be a muted color after drying. To optimize color and shape, cut the stem (to the desired length) when the flower is half-way into the bloom cycle.
- **Vase Display:** Remove the bottom half or all of the leaves from the stem, and place flowers in a vase with 1-2 inches of water. Place the vase in a cool area, away from direct sunlight. When the water is gone, they will completely dry and last indefinitely.

---

### Propagating Hydrangeas:

First check to see if your variety of hydrangea is currently patented. If so, do not propagate except for your own personal landscape usage. Asexual reproduction of plants protected by the Plant Patent Act is prohibited during the life of the patent.

- **Methods:** Layering, Stem Cuttings, root Suckering / Stolons (strawberry runners) / Plantlett, and Seeds

---

### Companion plants for Hydrangeas to consider:

Viburnum, Deutzia shrub, Astilbe, Coral Bells/Heuchera, or other shade plants, and Dogwood tree,...

---

### Summary:

Do your homework before making a purchase. The right plant for the right place leads to success.

---

### References:

1. **Types of Hydrangeas:** <https://southernlivingplants.com/plan-your-garden/guide-to-hydrangeas-getting-to-know-the-4-main-types/>
2. **Mountain variety:** <https://hydrangea.com/collections/mountain-hydrangea>
3. **Climbing variety:** <https://plants.ces.ncsu.edu/plants/hydrangea-anomala/>
4. **Propagation & more:** <https://extension.tennessee.edu/publications/documents/pb1840-a.pdf>
5. **Photos:** <https://extension.tennessee.edu/publications/Documents/W304.pdf>
6. **Planting & care:** <http://extension.msstate.edu/publications/publications/hydrangeas-for-mississippi-gardens>
7. **ID/Treat Disease:** <https://www.allaboutgardening.com/hydrangea-diseases/>
8. **New Zone map:** <https://www.ars.usda.gov/oc/br/zonemap/zonemap/>
9. **Zone by zip code:** <https://planthardiness.ars.usda.gov>