

Growing Hydrangea

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There are many branches to the Hydrangea family. Each has a unique makeup, acts differently, and commands its own handling for proper growth and bloom. Whenever there's a flowering problem, it's almost always because of improper siting or mis-timed pruning. It's not complicated: it's just a matter of matching up the type with its treatment routine. This guide should help you out.

General Guidelines That Apply To

All Hydrangeas

Hydrangeas like rich, moist soil. We recommend amending the soil with Complete Planting Mix and using Root N Gro root stimulator when planting. While they can't live in water, they are big drinkers. On hot days, their fleshy leaves and stems call for lots of water. If your planting site has poor soil, enrich it with organic matter, and generous mulching is recommended to preserve moisture. All will bloom in sun, but too much sun stresses the foliage. Ideally, the site should get morning sun. Most cultivars of Hydrangea benefit from a touch of afternoon shade to relieve the heat stress posed to the foliage by the most intense heat and light of the day. At the opposite extreme, Hydrangeas will not bloom reliably in deep shade. If you've sited your plant in most or all day shade, wait till late winter then re-transplant it to a location that gets more light.

Pruning Guidelines For Specific Branches of the Hydrangea Family

NOTE: Pruning is one of the most abused garden activities. Pruning for the sake of pruning doesn't address specific needs and almost always does more harm than good.

Hydrangea macrophylla (Mophead Hydrangea) - Typical cultivars: Nikko Blue, Big Daddy, Larnarth White They get their flower buds from last year's wood (what we call "old wood"). Pruning should be done only when necessary, and they'll suffer a lack of flowering if severely pruned. Once growth begins in spring and you can see parts that are not going to sprout, cut off those dead branch portions, then let them be!

Hydrangea "newly discovered" mopheads - Typical cultivars: Let's Dance Series, Endless Summer Series Recent discoveries have uncovered mophead cultivars that bloom on old wood and somewhat on new wood. These are less affected by an overzealous pruner because they are not depending strictly on the old wood to produce blooms. If needed, prune in winter then leave be if at all possible. Later on, if parts of stems do not sprout in spring, cut the branch back to the point where growth is taking place.

Hydrangea paniculata (Panicle Hydrangea) - Typical cultivars: Little Lamb, Quickfire, Limelight These bloom on new wood, old wood isn't important. These can be pruned back severely if done at the right time. Pruning fresh growth during summer will upset the maturity and caliper of the stem and disturb flower bud initiation, so the right time to pruning is winter or pre-spring.

Hydrangea quercifolia (Oakleaf Hydrangea) - Typical cultivars: Snow Queen, Alice Sykes Dwarf These bloom only from the old wood. They are best left untrimmed. If pruning is absolutely necessary, removing entire stems in late winter works best. You can shape it up, but remember, any tip you cut off, you're also cutting off a future flower.

Hydrangea arborescens (Smooth Hydrangea) - Typical cultivars: Annabelle, Incrediball, Invincible Spirit Flowers arrive on new wood: old wood is not necessary for bloom. They can be severely shaped in winter or pre-spring, then leave them be until winter arrives again.

Hydrangea anomala (Climbing Hydrangea) - also includes the genus Schizophragma These are slow-growing, woody vines that cling to structures via air roots. They bloom on old wood with wide, flat, lacecap type flowers. While pruning will eliminate flowering, mature plants are many-stemmed, so some shape-correction or runner-control won't wipe out all your blooms. Pruning is best done in the winter.

Hydrangea serrata (Mountain Hydrangea) - Typical cultivars: Bluebird, Preziosa Most bloom on old wood. Cut off dead branches or branch portions in mid spring when it becomes obvious what won't sprout, then let them be to do their thing.

How Do I Change The Color of My Hydrangea Flowers?

Not all Hydrangeas can be color-manipulated. White Hydrangeas cannot be manipulated to pink or blue. Only those varieties containing color pigments can be changed. Color is dependent upon the pH of the soil solution around the plant.

What is "pH" and what's it do?

pH expresses the level of soil acidity or alkalinity as measured on a scale of zero to 14. A pH of 7 is neutral; neither acidic nor alkaline. Numbers below 7 indicate increasingly acidic conditions. Numbers above 7 designate progressively more alkaline situations. pH does not change what elements are in a soil, rather, it affects the availability of those elements to plants. While an element may be present in a soil, that doesn't mean it's being absorbed. The absorption of elements is determined by how much of the element is there, and if the pH is at a point on the scale to make the element available.

What are these elements and what are their importances?

They are the chemical elements in the soil: nitrogen, potassium, phosphorus, iron, aluminum,

boron, magnesium, calcium and so on. These elements interact with plants, “feed” plants, and support plant processes. Aluminum is the key element concerning Hydrangea color control. Color depends on the availability of aluminum in the soil. Aluminum (when available at acidic pH readings) reacts with the pigments in the plant, turning flower sepals blue. Aluminum ions are increasingly available for plant absorption as the pH becomes more acidic. Blue tones can be obtained at a potent acid level. That level is attained by acidifying your soil to get it to a pH between 5.5 and 4.5. Inversely, deep pinks are obtained by approaching more neutral levels (the 6.0-6.5 pH range).

How can I acidify my soil and get blue tones?

For to-be-planted beds, deeply rotivate 1-2 pounds of aluminum sulphate per each Hydrangea plant to be installed. For established beds, spread aluminum sulphate over the root areas. Apply 1-2 pounds of aluminum sulphate per bush, twice: once in November then repeat in March. Stay towards the 1 pound rate for light sandy soils; favor the 2 pound rate for heavy clay soils. These rates should drop the pH by about 1.5 points. In other words it will lower a pH from 6.5 to a pH of 5.0.

Once you have the desired pH (and bloom color), does it need to be maintained? That depends on the soils in your area as well as any amendments brought into your site. Soils in the east and northwest United States tend to be naturally acidic, made so by frequent rains washing natural acids from the atmosphere. Soils in the drier mid-west and southwest tend to be alkaline. Some localized regions have deposits of calcium rock, giving their soils an alkalinity. And concrete foundations and walks are made primarily of limestone that can leach into your soil. So, watch your plants. If they seem to be losing blue tone, then you’ll need to restock the soil with aluminum. You can do this by making an annual surface application as described above. A side note:

fertilizers high in ammonium and potassium slightly enhance blue tones in Hydrangea.

How do I increase alkalinity for pink tones?

For to-be-planted beds, deeply rotivate 1 lb. of ground limestone per each Hydrangea plant to be installed. For established beds, spread ground limestone over the root areas once in November and again in March. As a general guide, apply 1 lb. per bush at each application. Should any chlorosis occur (because iron starvation can happen around a neutral pH), additions of iron will be needed. If this happens, mix 1 ounce of iron sulphate in a gallon of water and water in around each plant. Note: high phosphorus fertilizers slightly enhance pink tones in Hydrangea.

How long does it take to see changes?

It isn’t instantaneous. These elements are long lasting and slow-moving in the soil. Neither limestone nor aluminum are highly soluble so lots of watering and time are essential to move the material into the soil. Exhausting the elements stored in the soil as well as in a Hydrangea’s system, and re-charging those systems with different elements, may take months. What you do this year will have a strong effect upon what you’ll see happen next year.

How can I determine pH?

Most garden centers and agricultural supply stores carry home kits for testing of pH. They are easy, quick, inexpensive and fairly accurate. Do two or three tests in the area of concern, then use an average. For blue tones, you want to achieve (over time) an ideal pH of 4.5-5.5. For pink tones, do your applications until you reach a pH of 6.0-6.5. As a final note, think safety All the compounds mentioned here are intended for soil feeding, not foliar feeding, so always wash leaves following application if you should get the aluminum, calcium or iron dusts on them. And while aluminum is one of nature’s most common elements it can also be a poison. Don’t use it around edibles.

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