

Growing Tips 5



HYDRANGEAS Color + Fertilizing



Got the bloomin' blues?

To see if you can encourage your hydrangea to produce blue or pink flowers, **determine what kind of hydrangea you have!** Most types of hydrangeas grown in Massachusetts

are listed in the table to the right. ↗

Only bigleaf (*Hydrangea macrophylla*) or mountain hydrangea (*Hydrangea serrata*)

flowers will turn blue. Some cultivars of these are better suited for blue flowers while others are best grown as pink.

Aluminum in the tissue of hydrangea flowers **causes the blue coloration.**

Common Names	Hydrangea Species	Cultivar Examples	Colors
bigleaf hydrangea, French hydrangea (2 types: mophead + lacecap)	<i>H. macrophylla</i> (Some cultivars tend to be blue, others, pink regardless of pH!)	'Endless Summer', 'Nikko Blue', 'Nantucket Nikko'	blue (pH <5.5) mauve (pH 5.5– 6.5) pink (pH >6.5) white (Some cultivars are unaffected by pH.)
mountain hydrangea	<i>H. macrophylla</i> var. <i>serrata</i>	'Bluebird', 'Beni-Gaku'	same as above
smooth hydrangea	<i>H. arborescens</i>	'Annabelle', 'White Dome'	white – pale green
panicle hydrangea	<i>H. paniculata</i>	'Grandiflora', 'Limelight', 'Tardiva'	white – pink/light green
oakleaf hydrangea	<i>H. quercifolia</i>	'Alice', 'Snowqueen'	creamy white - rose
climbing hydrangea	<i>H. anomala</i> subsp. <i>petiolaris</i>	'Skylands Giant'	white

Most soils have enough aluminum, but the aluminum is not available to the plant if the soil pH is high.

For *most* bigleaf hydrangeas, **blue flowers will be produced in acidic soil** (pH <5.5). Plants in **neutral to alkaline soils** (pH >6.5) **will usually produce pink flowers.** Between pH 5.5 and pH 6.5, the flowers will be purple, or a mixture of blue and pink on the same plant.

Adjusting pH – a gradual process

To raise pH, add limestone according to directions on the bag. Too much lime can cause new growth to yellow due to lack of iron.

To lower pH apply an acidic fertilizer such as aluminum sulfate, or wettable sulphur. Mulch with peat or pine bark.

Exact amounts of lime or aluminum sulfate needed to get the flower color you want will vary depending on current soil pH and soil type.

Caution: too much aluminum sulfate will injure plants. Follow application directions carefully.

When and how should hydrangeas be fertilized?

For blue cultivars of bigleaf and mountain hydrangea, fertilize once in spring with a formulation for acid-loving plants.

Phosphorus in the soil tends to bind aluminum so that it isn't readily available for the plant. Use a fertilizer low in phosphorous (the middle number in the content analysis) such as 12-4-8 to encourage production of blue flowers.

For other types of hydrangeas, use a general-purpose fertilizer at recommended rates on the package. Incorporate dry fertilizer into top 2" – 3" of soil and water thoroughly.



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