



## Endless Summer Hydrangea Flowers and Soil Acidity (pH)

The flower color of mophead type hydrangeas (*Hydrangea macrophylla*) can be changed by adjusting the soil pH or acidity. What determines the color is aluminum in the soil. Most soils have aluminum present, but the plant cannot always absorb it due to soil pH. In a more alkaline soil (6.0 to 6.5) aluminum will not be absorbed and the flower color will be pink. At a more acidic soil pH (5.2 to 5.5) aluminum will be absorbed and the flowers will be blue. You may even get a mix of colors if the soil pH is between these ranges.

The soils in our area are generally on the alkaline side. However, we recommend that a soil test be done to determine the actual pH.

Our suggestion is to plant your hydrangea and let it get established before you do any adjusting. Flower color can even work as a rough indicator of soil pH.

If you want your Endless Summer hydrangea to have blue flowers AND you have done a soil test to determine the actual pH, here are a couple of methods to make your soil more acidic.

Apply Soil Sulphur at a rate of 1 to 2 pounds per 100 square feet. This is approximately  $\frac{1}{4}$  to  $\frac{1}{2}$  cup per plant. Sulphur works best when mixed with the soil at the time of planting. Sulphur is slow acting and may take 3 to 4 months to have any effect.

Copperas (Ferrous Sulfate) is faster acting (3 to 4 weeks) but much more chemical is needed. Recommended rate is 2 cups for every 2 feet of plant height. Copperas can be spread around the base of the plant and lightly mixed with the soil. Copperas can leave rusty stains on concrete or brick or even on your clothes, so be careful.

Avoid getting either chemical on the leaves of the plant and water the plant well after applying.

Note: Aluminum Sulfate will also lower soil pH, but we generally do not recommend this chemical. Used on a regular basis aluminum can build up and become toxic to plant roots.