



Why don't you call in and see what other great products we have on offer
We also have an established grow room set up to show you how you too, can get the most of your plants.

Hydroponics ~ pH

pH is the measurement of the hydrogen ion concentration in a particular medium such as water, soil, or nutrient solution. More simply, it refers to the acidity or alkalinity of that medium. PH is measured on a scale ranging from 0- 14, with 7 being neutral, above 7, alkaline and below 7, acidic.

The pH of a medium or nutrient solution is important to plant growth. Each plant has a preferred pH range. PH ranges beyond the preferred for a given plant may cause stunted growth or even death.

Very low pH (< 4.5) or high pH (> 9.0) can severely damage plant roots and have detrimental effects on plant growth.

As the pH level changes, it directly affects the availability of nutrients. The majority of nutrients are available to a plant at a pH range of 6.0 -7.5. Somewhere within that range is the ideal pH level for most plants. When pH levels are extremely high or extremely low, the nutrients become "locked" in solution and unavailable to the plant. At extremely low pH levels some micro-nutrients, such as manganese, may be released at toxic levels.

The newer and more popular growing mediums like perlite, rockwool and expanded clay have a neutral pH and will not alter your nutrient solution. Peat moss, saw dust, vermiculite and some of the other materials that have been used for hydroponic growing in the past are often unstable and will alter the pH of your nutrient solution.

The pH of your nutrient solution should be checked when you first mix it and then checked every few days when it is in your hydroponic reservoir.

Three common methods of testing your pH:

Litmus Paper:

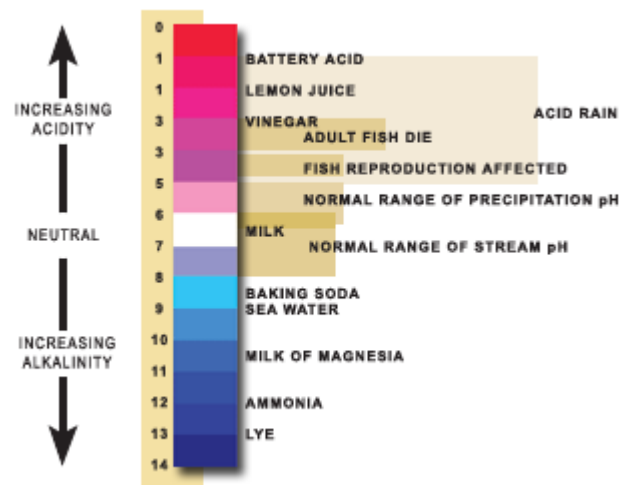
Simply dip the end of the paper into the solution to be tested and then compare the color of the litmus paper (which will have changed when dipped into the solution) to the color on the pH chart to determine the pH.

pH Test Kit:

Take a sample of your solution in a vial and add several drops of the pH indicator. The sample will change color and can then be compared to the pH chart.

pH Test Pen:

pH Pen or Meter. Simply dip the end of the pen, or the probe on a pH meter into the solution and it gives you a digital reading of the pH.



Take a look at Hydrostation's [Accessories & Essentials](#) page for all the meters and buffers you will need to control the pH in your plants and get the most out of your yield.