

# The POWER of pH

## **WHAT is pH?**

pH is a measurement. It is the measurement of how much Hydrogen is present in a solution. The p stands for "potential", and the H stands for "Hydrogen". This measurement is based on a scale from 0-14.

Acidic things have a pH from 0-7.

Basic things have a pH from 7-14.

For example:

Lemon juice and battery acid are acidic and fall in the 0-7 range. Sea water and bleach are basic (alkaline) and fall in the 7-14 pH range. Pure water is neutral, and is 7 on the pH scale.

## **WHY is the pH of my garden soil important?**

The pH of soil (or more precisely the pH of the soil solution) is very important! Soil solution carries nutrients such as Nitrogen (N), Potassium (K), and Phosphorus (P). Plants need these nutrients in specific amounts to grow, thrive and fight off diseases. If the soil solution is too acidic or too basic, plants cannot utilize the N, P, K and other nutrients they need. Think of the pH as a combination lock. You have to get the pH numbers correct in order to "unlock" the N, P, and K. Even if N, P, or K are present in your soil, your plant cannot absorb them if the pH is off. IN FACT...in acidic soils, plants are more likely to take up toxic metals and will eventually die of toxicity (poisoning).

## **WHAT is the best pH for my vegetable garden?**

If your soil is above pH 6.5, apply soil sulfur or iron sulfate. If the soil is below pH 5.5, spread finely ground limestone. Read the label when you buy these materials, there will be recommendations written. You can also contact your local Extension Service for more help if you need it.