



# Soil pH

Soil-net.com

## What is pH ?

- pH is a measure of the acidity or basicity of a solution
- pH depends on the activity of hydrogen ions
- The pH of soils is usually between 3.5 and 8.5

## How is pH measured?

- pH can be determined using a litmus paper
- Litmus is a water-soluble dye extracted from certain lichens



Litmus (pH indicator)	
below pH	above pH
4.5	8.3

Substance	pH
Hydrochloric Acid, 1M	0.1
Battery acid	0.5
Gastric acid	1.5 – 2.0
Lemon juice	2.4
Cola	2.5
Vinegar	2.9
Orange or apple juice	3.5
Beer	4.5
Acid Rain	<5.0
Coffee	5.0
Tea	5.5
Milk	6.5
Pure Water	7.0
Healthy human saliva	6.5 – 7.4
Blood	7.34 – 7.45
Sea water	8.0
Hand soap	9.0 – 10.0
Household ammonia	11.5
Bleach	12.5
Household lye	13.5
Caustic Soda	13.9

## Did you know...?

The *Hydrangea macrophylla* works just like litmus paper as the soil pH determines the colour of the flowers. In **acidic** soils the flowers are blue...



but in **alkaline** soils, the flowers are pink!

Sources : Soil-Net.com/Wikipedia

