Measuring pH in soil

Using MW101 PRO pH Portable Meter with a MA920B/1 pH Electrode for measuring pH in SOIL

pH is a measure of the activity of the hydrogen ion (H+) in the soil solution. If the concentration of H+ is high, the medium is said to be acid. If it is low, it is said to be alkaline. Most agricultural soils are found between the range of 4 to 10 (when measured in water).

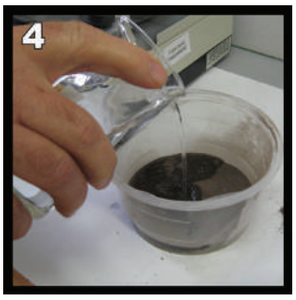
For practical purposes, soil is neutral when pH is between 6 to 8, depending on plant requirements, and it is acidic when pH is less than 6 and alkaline when it is greater than 8.

1. Collect samples of soil.
Take samples from a homogeneous area per 1000m^2.
In smaller places it is also suggested to take at least two samples (the more samples, the more accurate the measurement will be).
Don't take samples from soil where are obvious disorders.

Amount of sample:
Use the same amount of soil for every sample (for example: use identical size sachets)

Spot of sample:
General: take the top 5 cm of the ground
Annuals: from 20-40 cm deep
Fruits: from 20-60 cm deep

Spread the soil on a paper and let it dry out in a shaded place, or put it into a 40°C oven.



2. Shread the dry soil and mix the samples.
You will get a homogeneous sample.
It mustn't contain rocks or organic residues.
Take a sample from this mixture for the measurement.

3. Sift the soil through a 2 mm sifter.

4. Weigh out 1 unit soil (100 g is recommended) and put 2 unit (200 g, 2 dl) destillated water to it.

5. Stir it for 30 seconds.
Wait about five minutes.

6. Stir it again then measure the pH of the solution.

DISTRIBUTOR:-
BLUE HORIZON
Gopal Niwas,135,Princess Street Mumbai-400002 INDIA
Tel: +91 9820206611 Email: sales.bluehorizon@gmail.com

milwaukee

Measuring pH in cheese

Using MW101 PRO pH portable meter with a MA920B/1 pH electrode for measuring pH in cheese

The quality of cheese flavor and texture is the result of well-kept pH and temperature. pH makes sure quality standards have been met; in doing so, they are guaranteeing the safety of the cheese production. Most cheeses range from 5.1 to 5.9 in pH. However, this range will have exceptions to certain types of cheeses such as Camembert cheese which has a pH of 7.4.

During the cheese making process, the pH is measured multiple times. Each type of cheese may have a slightly different process and pH level. It is important for manufacturers and companies to be aware of the differences and treat each cheese variety with the quality and care it deserves. Measuring the pH of cheese essentially gives the manufacturer control of the cheese process.

Cheese making process:

For optimal measurement put a sample into a beaker

1. Addition of the starter culture
(temperature should stay below 20°C)
pH level (rennet-induced): 5.1 -5.3
pH level (acid-induced): 4.

2. Coagulation (temperature 30°C)
Usually the pH level stay between: 5.35 – 5.45
In certain cases it can be as low as pH 4.

3. Pressing (room tempereture:
16-18°C for mild cheeses and 25°C
for hard cheeses
pH will decrease (pH 5.0 – 5.3)

4. Brining in salt solution
(temperature of solution: 15°C)
optimal pH level: 5.2
(except soft cheeses like Roquefort where
the pH level should be kept at pH 4.7)

During ripening pH level will increase till the optimal ready value.
See the table below

Optimal pH values of ready cheeses	
American, mild	4.98
Camembert	7.44
Cheddar	5.90
Cottage	4.75 - 5.02
Cream, Philadelphia	4.10 - 4.79
Dip	5.80
Edem	5.40
Old English	6.15
Roquefort	5.10 - 5.98
Parmesan	5.20 - 5.30
Snippy	5.18 - 5.21
Stilton	5.70
Swiss Gruyere	5.68 - 6.62

DISTRIBUTOR:-
BLUE HORIZON
Gopal Niwas,135,Princess Street Mumbai-400002 INDIA
Tel: +91 9820206611 Email: sales.bluehorizon@gmail.com

milwaukee