Measuring pH in Soil

MW101 with MA918B/1 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 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.

SPECIFICATIONS	
Range	0.00 to 14.00 pH
Resolution	0.01 pH
Accuracy	±0.02 pH
Temp.comp.	manual, 0 to 50°C
Calibration	manual, 2 points through offset and slope trimmers
Electrode	MA918B/1
Environment	0 to 50°C, max RH 95%
Battery type	1 x 9V alkaline (included)
Battery life	approx. 300 hours of use
Dimensions	145 x 80 x 40 mm
Weight	220 g (with battery)

Measuring pH in soil:

1. Collect samples of soil. Take samples from a homogeneous area per 1000m2.
In smaller places it is also suggested to take at least two samples (the more samples you have, the measurement will be more accurate)
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

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

3. 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.

4. Sift the soil through a 2mm sifter.

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

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

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