

Pennysworth Techno Farms P (Ltd)

Coimbatore - 641007

Checking pH of your Soil

A Sure Grow Good Practices Guide by Prof. Nagendhiran Viswanathan

Items Required

- 1. Soil to be tested
- 2. De- Mineralized Water

3. pH testing litmuspaper of range (5 to7.5) for good resolution

Checking the EC of the medium

- 1. Take one-part by weight of moist soil which is neither too dry nor too slushy.
- 2. Take equal part by volume (for 100 gm soil use 100 ml water) of low PPM water (preferably distilled water) at room temperature (between 24 degree centigrade and 30 degree centigrade) and measure its pH.
- 3. Dip the litmus paper into the water for 30 seconds to one minute and compare the colour of the paper with the colour scale on your booklet and determine the pH of the water. The pH of the water should be neutral (7). This step can be skipped if the water is from a reputed brand.
- 4. Now add the one-part weight of soil to the equal part volume water and stir it for half minute and keep aside for a minimum of 20 minutes.
- 5. Stir again for half minute.
- 6. Filter the water from the soil using any fine mesh.
- 7. Dip the litmus paper into the filtered solution for 30 seconds to one minute and compare the colour of the paper with the colour scale on your

- booklet and determine the pH of the filtered solution. This gives a reasonable idea of the pH of the sampled soil.
- 8. This process will be required to be repeated multiple times with different samples.
- 9. The samples need to be from evenly distributed locations horizontally as well as multiple samples in one location at different depths.
- 10. If testing the conditions for deep rooted crops take proportionally more samples at different depths up to where the main root system will reach.
- 11. A very rough thumb rule for the horizontal distribution would be 30 samples for every 40000 square feet, proportionally scaled up as per area. The pattern of locations could be the farthest points on perpendicularly oriented concentric ellipses.
- 12. Demineralized water is recommended but low PPM water (packaged drinking water of reputed brand) will also be enough.

Disclaimer: The above is only a guide. No responsibility is taken for any inconsistencies in readings or non realization of expected results on crops grown based on above laid out procedure of measurement.