

IMPORTANT INFORMATION ABOUT YOUR NEW METER

WHAT IS SOIL FERTILITY?

Soil fertility is simply living soil, rich in organic life and nature's nutrients. It has the power to produce. The use of fertilizers is almost as old as agriculture itself. Early farmers learned by observation that the application of manure from sheep, cattle, ox and horse resulted in larger crops and improved yield. Later experiments led to the use of commercial fertilizers. Although deficiencies of one or more elements have been observed in various soils, it has been commonly necessary to replenish regularly only those utilized in greatest amounts: Nitrogen, Phosphorus and Potash. Low crop production has resulted more commonly from the deficiency of these elements than a lack of any other constituents. Compounds containing only these elements may be applied for soil enrichment. The most important constituent is nitrogen. An abundant supply results in dark green foliage and active vegetative growth.

HOW TO USE YOUR METER TO MEASURE FERTILITY

1. Remove the top 2" of the soil. Break up and crumble the soil underneath to a total depth of 5".
2. Thoroughly wet the soil with water (ideally rain or distilled water) to a mud consistency.
3. Wipe the meter probes clean with a tissue or paper towel.
4. Insert the probes into the soil to within 1" of the casing. Allow approximately 10 seconds for the reading to stabilize.
5. Record the reading. Remove the probes from the soil and clean thoroughly.

The standards by which the instrument is calibrated are as follows:

	Too Little	Ideal Range	Too Much
Nitrogen	50 ppm	50 to 200 ppm	200 ppm
Phosphorous	4 ppm	4 to 14 ppm	14 ppm
Potash	50 ppm	50 to 200 ppm	200 ppm

ppm is defined as parts-per-million

HOW TO INTERPRET YOUR RESULTS

IF THE TESTER READS "TOO LITTLE"

1. Liquid feed with a brand of soluble fertilizer that is recommended for the plants you intend to grow.
2. Liquid feed within 3 weeks after planting or potting and do this every month whenever you water your plants.

IF THE TESTER READS "IDEAL"

1. Water once a month with a soluble fertilizer that is recommended for the plants you are growing.

IF THE TESTER READS "TOO MUCH"

1. Water thoroughly to leach out the excess fertilizer from the soil.
2. For potted plants, repot with new soil.
3. For greenhouse plants water thoroughly to leach excess fertilizer from the soil.
4. Do not add any fertilizer. You can add manure, compost, clippings, plant wastes, residues, leaves and any other organic matter to the soil.

THE VALUE OF NITROGEN

Nitrogen is synonymous with plant nutrition. It is directly responsible for producing leaf growth and green leaves. A deficiency causes yellow leaves and stunted growth. Too much nitrogen causes overabundant foliage with delayed flowering; the plant becomes subject to disease and its fruit is of poor quality.

Soil deficient in nitrogen can be corrected by adding compost, manure or other nitrogen-rich fertilizers such as dried blood, tankage, cottonseed meal and peanut shells. Grass clippings, weeds and garden wastes returned to the soil will increase its humus and nitrogen content.

