

SOIL PH MOISTURE METER



SOIL AND ITS RELATION TO CROP-PRODUCTION

In order to form soil which is able to absorb nutrients effectively, it is necessary to neutralize the soil, i.e, by mixing lime with it. However, if the soil liming is excessive, manganese will be depleted, and manganese deficiency will occur. As a result, the usefulness of the soil may be lost completely. Therefore, when liming, it is important to add only the proper amount for neutralization. Before the application of lime the pH value must be determined-the pH reading indicates its hydrogen ion concentration. To determine this value of the simplified pH Tester is recommended-it has been specifically manufactured for making on-site measurements.

- * pH values suitable for vegetable growth : these are attached to the tester proper.
- * Amount of calcium carbonate necessary to provide soil with a pH value is 6.5, 10 Acres area and 15cm indepth.

SOIL PH MOISTURE METER

HOW TO USE THE pH METER, DM-15

1. If the soil to be tested is dry or contains much manure, the meter will indicate a correct pH value. Therefore, sprinkle about a bucketful of water on the soil, and wait for 20-30 minutes, before testing.
2. Before using the meter, be sure to thoroughly polish its metallic surface with a piece of whetting cloth. When using a brand-new meter, be sure to insert it into the soil a few times in order to remove the oily impurities from its metallic surface.
3. Insert the meter directly into the field or paddy soil under consideration. Completely embed the metallic surface and tamp down the surrounding soil so that it adheres closely to the meter's metallic electrode surface.
4. About one minute after inserting the meter in the soil, the pointer will cease to deflect-the pH value of the soil may then be read. Moisture content, or the pH reading. It is therefore ideal to take an advantage of several measurements.
5. The meter may sometime register different values depending on the soil condition, such as, adhesion to the meter's metallic surface moisture content, or the pH level. It is therefore ideal to take an average of several measurements.
6. In order to determine whether or not liming has been properly done, after one or two weeks mix the soil well and measure its pH value.

HOW TO USE THE DM-15, either as pH or moisture meter

When the DM-15 is inserted in the soil with the white button on its side left un-depressed, it works as an acidity (pH value) meter. When the white button is depressed after it has been inserted in the soil, it works as a moisture meter.

HOW TO USE THE DM-15, as a moisture meter.

Soil moisture control is extreme importance. Soil moisture is usually express in units termed pH, a generally unfamiliar term to people who cultivate. However, the tester, which combines a pH with a moisture meter, is easy to use-soil moisture can be determined at single glance.

1. Insert the meter's metallic electrode in the soil completely, while positioning the electrode as near crop roots as possible.
2. Scale division range from 1 to 8, each of which reads the moisture value according to soil condition.
3. The need for water can be determined by the position of the pointer.