



Soil pH Test Kit

MODEL ST-T • CODE 5024



| QUANTITY | CONTENTS | CODE |
|-----------------|------------------------------|-------------|
| 20 mL | *Duplex Indicator | *2221-F |
| 1 | Spot Plate, plastic | 0159 |
| 1 | Color Chart, Soil, Duplex | 1313 |
| 1 | <i>LaMotte Soil Handbook</i> | 1504 |

*WARNING: Reagents marked with an * are considered to be potential health hazards. To view or print a Material Safety Data Sheet (MSDS) for these reagents see MSDS CD or our web site. To obtain a printed copy, contact us by e-mail, phone or fax.

To order individual reagents or test kit components, use the specified code number.

PROCEDURE

A. COLLECTING THE SOIL SAMPLE

1. Divide garden into sampling areas such that each sample is representative of the soil in which the plants are to be grown.
2. Scrape surface litter from top of soil. Take soil from at least five spots, at random, in each area. Take sample from six inches below top layer. Avoid sampling the soil when it is very wet.
3. Mix the samples taken from each area together. Place mixed samples in a suitable container, such as plastic bag or paper cup.

4. Number the samples, keeping an accurate record of the area represented by each sample. A sketch of the area, noting the location from which the sample was taken, is often helpful.
5. Open the containers to allow the soil samples to air dry.
6. Spread each sample on a piece of paper. Remove foreign material, such as stones.
7. Crush soil with a rolling pin or plastic spatula and put through a sieve (such as a screen or flour sifter).
8. Return this prepared soil to its proper container and proceed with pH test.

B. SOIL pH TEST

1. Fill the large well in the spot plate (0159) with soil sample.
2. Add *Duplex Indicator (2221), drop by drop, until soil is saturated. Let the solution soak into the soil for one minute.
3. Tilt the spot plate to allow the solution to flow into the small well.
4. Match the color of the liquid solution to standards on the Duplex Color Chart (1313). Record as pH.
5. Refer to the following table for interpretation of the test.

- pH 4.0 Very Acid (sour). Needs lime for plants in all groups.
- pH 5.0 Acid (sour). Needs lime for plants in Groups A and B.
- pH 6.0 Slight Acid (sour). Needs lime for plants in Group A only.
- pH 7.0 Neutral. Needs no lime for plants in Group A.
- pH 8.0 Alkaline (sweet). Needs no lime. Needs some souring material for most plants.

To adjust the soil pH to favor your plants, refer to the plant preference list in the *LaMotte Soil Handbook* (1504) and determine which group these plants belong to. Then consult the lime-alum tables and determine any adjustment in soil reaction necessary to give the best results.

It is sometimes desired to make an on-the-spot check for soil pH without previous preparation of a soil sample. This may be done following the regular test procedure, but avoiding soils with an excessive amount of moisture. The resulting reading should be checked later using the recommended procedure for a prepared soil sample.

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