

Why Test Soil?



A good soil provides adequate drainage, moisture retention and proper fertility for healthy plant growth.

In order to have good, healthy, productive plants you must start with fertile, healthy soil. Good soil retains water, releases nutrients and drains well. It must contain adequate nutrients, optimum pH and organic matter to be healthy and fertile.

Guessing about additives for your lawn or garden usually means too little or too much fertilizer gets added. Too little fertilizer may result in unhealthy plants. Too much is wasteful and can threaten our lakes and wetlands. Also, soils vary within the state, your neighborhood, and even your yard. What may

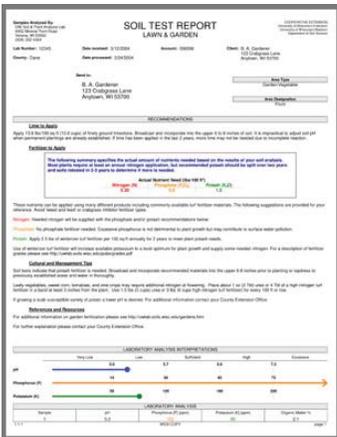


be good for your neighbor or brother's lawn or garden may not be right for yours.

Don't guess or take someone else's recommendations. Find out what your soil needs — take a soil test.

Soil Test Results

A soil test will tell you what nutrients your plants or lawn need and will recommend the amount of fertilizer (N-P-K) to add to your soil. The N stands for nitrogen. Nitrogen encourages fast, green growth. The P stands for phosphorus. Phosphorus stimulates root development, rapid growth, and quality flowers. The K stands for potassium and promotes disease resistance, strong stems, and winter hardiness.



A soil test will evaluate your soil for many factors.

A soil test will also tell the current pH of your soil. Soil pH is a measure of soil acidity. Nutrient availability is influenced by the pH of the soil. Plants need an optimum pH to grow and be productive. Acidic soils have a pH lower than 7.0. Neutral soils have a pH of 7.0. And soils with a pH above 7.0 are called alkaline. Most plants will grow adequately up to a soil pH of 7.5. Some plants, such as blueberries and azaleas, love acidic soil while other plants, such as tomatoes and carrots, prefer alkaline soils.

The results of the soil test also include an analysis of the amount of organic matter in your soil. The amount of organic matter is important because the more organic matter you have in your soil, the better the water holding capacity, drainage, and tilth of your soil. To increase the organic matter level in you soil; you can add materials such as manure, compost, or peat moss.



All fertilizer products must state the amount of nutrients N-P-K.

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Compost is one way to add organic matter to your soil.

Testing Your Soil

You can take soil samples any time the ground isn't frozen. You should get your soil tested by any state certified soil-testing facility. For your convenience, you can get your soil tested through your county UW-Extension office which uses the UW Soil Testing Laboratories in Madison. The following information should be taken into consideration when taking a soil sample to be used for a soil test:

- ✔ Soil should be tested before applying any fertilizers.
- ✔ Always test different types of areas separately. The plants in each area have different nutrient needs. General types of areas considered for soil testing are: lawn, vegetable garden, flower garden, fruit, tree, shrub, and mixed bed.
- ✔ Combine small amounts of soil from at least four locations in each area to be tested so you get a representative sampling of the area you want analyzed. For larger areas or gardens, take samples from at least eight locations.
- ✔ For each area you want tested, you need to submit two cups of air-dried soil. Samples should contain soil from the surface to 6 inches deep and each sample should be placed in a separate bag and labeled.
- ✔ There is a fee for each sample. Results are sent by mail, email, or fax (your choice) to you usually within two weeks.

Call your county UW Extension office for more information on soil testing.

– Ann Wied, University of Wisconsin – Extension, Waukesha County



Take soil from different parts of the area to be tested for best results.



You'll need about 2 cups of soil for each soil test.

Additional Information:

- ✔ UW-Madison Soil Testing Laboratories – at uwlabs.soils.wisc.edu/
- ✔ Sampling Garden Soils and Turf Areas for Testing – UW-Extension Publication A2166 at learningstore.uwex.edu/Assets/pdfs/A2166.pdf
- ✔ Understanding Your Soil Test Results – on the UW-Madison Soil Testing Lab website at uwlabs.soils.wisc.edu/pubs/UnderstandingSoilTestResults.pdf
- ✔ UW Cooperative Extension County Offices – at counties.uwex.edu/