


## Soil Testing

### WHY TEST SOIL?




Is this soil good for growing vegetables? Do I need to buy lime and fertilizer? Is there lead in the soil that will harm my family's health?

By testing the soil, you can determine how suitable your soil is for growing different types of plants. You can also find out if you need to add fertilizer, lime, or other soil amendments to help plants grow.

Some tests help you find out if your soil is polluted with toxic substances. High levels of lead and other heavy metals are a health risk, especially for small children.


### TYPES OF TESTS AVAILABLE

**A pH test** measures the acidity of the soil. It tells you how much lime or sulfur should be added to make the soil suitable for growing plants.




This pH test will let me know if I need to add lime.

**A soil nutrient test** measures the levels of phosphorus, potassium, and other plant nutrients in soil. It tells you how much fertilizer is needed to make up for the lack of certain nutrients in your soil.




I wonder why my plants are not growing well? I'll get my soil tested to see if it's lacking plant nutrients.

**A soil texture test** measures the amounts of sand, silt, and clay in your soil. You can also measure how fast water drains in soil using the soil percolation or "perc" test. The results suggest how to best use or improve the soil.




A soil texture test will tell me if this soil is too sandy to hold enough water for growing vegetables.

You can test your soil for **organic matter**. If levels are too low, you will be given suggestions for adding organic matter.




I'm glad I got the organic matter content of my soil tested. Now I know how much compost to add to improve my soil.

**A salinity test** tells you if your soil is too salty for plants to grow well.



No wonder my seeds won't sprout! The salinity test shows that salt is a problem in this dry climate.

**A heavy metal test** shows how much lead and other heavy metals are in your soil. If toxic amounts are found, you will be given some safety tips.



Look! Old paint is chipping off! Before I grow any vegetables here, I'll have to get this soil tested to see if it has high lead levels.

## HOW TO TEST YOUR SOIL

Garden stores sell kits that you can use to measure the soil pH and nutrient levels of your soil. These kits will give you fairly accurate results. You can send a soil sample to a lab for more accurate measurements of pH and nutrient levels.



You can also send a soil sample to a lab to test for heavy metals, texture, salinity, and organic matter content. Get a soil sample box and information sheet, and follow the directions carefully. Fill in the soil information sheet, and send it with your soil sample to the lab.

The lab sent me the results of my soil test.  
Now I know what I have to do to improve my soil.

Source URL: <https://www.usbg.gov/soil-testing>