

SOIL TESTING



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Question: I'm in the process of creating a new vegetable garden space in my backyard. Before I get ready to plant this spring, I've heard that I probably should get a soil test beforehand. Where can I have this done and how do I go about it?

Answer: Taking a soil test is one of the wisest things you can do. This will provide you with the information you need about the nutrients and micro-nutrients present in your specific soil. It also measures the pH of your soil and soil texture as well as amount of organic matter present.

Soil analysis is invaluable to the home gardener in deciding what blends of fertilizer to use or if you're using too much of a certain fertilizer. By knowing the correct amount of fertilizer to use, this will keep excess fertilizer out of waterways and will save money too.

It's also helpful in an established garden to diagnose problems you see in certain plants, whether they are nutrient deficient or suffering because of an incorrect pH. Do I need to add more compost to my soil? These questions will all be answered by getting a soil test done.

As far as when to test your soil, the best times are in the fall or spring, once the soil is not overly wet or frozen. Sampling soil a few months in advance of planting allows time to make the recommended adjustments before seeds or transplants are put in the ground.

Since conditions change over time, it's a good idea to re-test your soil every three to four years. It's best to take your samples at a consistent month – for example, if you take a sample in March, do it the next time in March as well.

Douglas County Master Gardeners offer soil testing to the public as part of their community outreach. We have our own updated lab and the cost is only \$20 per sample – quite a bargain. Results are mailed out within two weeks or you may choose to have them emailed to you.

Here's how to take your sample: Pick out several areas in your garden plot in a zigzag pattern. Using a trowel



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Using a trowel or small shovel, dig 6-8 inch deep holes in a zigzag pattern within your garden plot. Then, dig another inch down and lift out the soil. Keep your sample in a clean bowl or container.



PHOTO BY GLORIA CETTINA

Soil test results will tell you about soil texture, percentages of humus, nitrogen, phosphorus, potassium, calcium, magnesium and the pH of your soil.

or small shovel, remove any plants, scrape mulch or leaf litter from the soil surface, and dig a hole 6-8 inches deep where the plant roots will be. Be consistent in the depth of your sample throughout as nutrient solutions will change at each depth.

Next dig about 1 inch down behind this hole and lift out the soil. Set this sample in a clean bowl or container, and repeat this for the other areas you marked. Mix the samples thoroughly in your bowl, removing any rocks, roots or worms. The greater the number of samples mixed together, the better the average representation of your soil area.

Put two cups of the sample into a clean pie tin or open container until the sample is quite dry, then transfer it into a Ziploc bag, a clean jar or container with a lid. Label the container with your name, contact information, date and what area of your garden it's from if you have more than one test to be done.



PHOTO BY GLORIA CETTINA

Once you've mixed all your samples together and removed rocks, roots or worms, put two cups of this combined sample into a clean pie tin or open container until the sample is very dry, then transfer to a clean container.

Drop off your soil sample(s) during regular business hours of 9 a.m.- 4 p.m., Monday through Friday, at the OSU Extension Office at 1134 SE Douglas Ave., Roseburg. Payment of \$20 per sample must accompany your sample when brought in, payable by check of cash.

Your test results will not only tell you what kind of soil texture you have, but also percentages of humus, nitrogen, phosphorus, potassium, calcium, magnesium and the pH of your soil.

On the back of the analysis, the results will tell you what you need to do to boost your soil's productivity and what nutrients are in excess or which ones are too low. Then you can make informed decisions on how to treat your soil to get the most out of your crops.

For instance, I recently had a soil test done on my vegetable plot. The test concluded that I need to add more compost to my soil as the humus

content was low. Surprisingly, it also said that the phosphorus content was very high which can interfere with absorption of micronutrients and nitrogen, so I will avoid adding any fertilizer this year that has phosphorus in it.

A good OSU publication on how to interpret your soil test can be found at bit.ly/3KwosXD.

Knowing what is in your garden soil and how you can improve it is vital to successful gardening. This can all be obtained by getting your soil tested. If you have any questions, you can email the DCMG Soils Lab directly at mg.soils.lab@gmail.com.

Do you have a gardening or insect question? Contact the Douglas County Master Gardeners at douglasmg@oregonstate.edu or 541-672-4461 or visit 1134 SE Douglas Ave., Roseburg. Douglas County Master Gardeners are trained volunteers who help the OSU Extension Service serve the people of Douglas County.