

Snohomish County Master Gardener Testing Soil for Nutrients - Why and How?

Hort Short

Why test your soil?

- Healthy soil is the foundation for healthy plants.
- A soil test can help identify several useful things:
 - The texture of the soil,
 - The organic matter content,
 - The pH level (acidity or alkalinity),
 - The nutrient needs, therefore, indicating what fertilizer, if any, is needed.
- The soil test can be run according to the type of garden the soil is from: orchard, vegetable garden, turf, etc.
- With this knowledge, the only fertilizer that is really needed can be applied.
- Testing saves money in the long run; the test costs less than over-fertilizing.
- Overfertilizing causes
 - More work
 - Grass needs to be mowed more frequently
 - Less fruit production
 - Too much nitrogen produces leaves and spindly plants
 - Plant's focus on leaf growth takes energy away from fruit production
 - Costs more money buying product you do not need.
 - Putting down more fertilizer than plants need results in fertilizers being added to water run-off thus causing pollution.
 - Nitrogen is especially prone to leaching out of the soil if not consumed.

How do you test your soil?

- Collecting and submitting a sample is not hard!
- Choose a laboratory. (See below for some recommendations.)
- The lab has instructions on how to collect the sample.
- A form needs to be filled out with client information and what kind of garden the test is for.
- A basic garden soil test typically includes testing for soil pH, phosphorus, potassium, calcium and magnesium.
- Nitrogen results are not as useful because nitrate levels can change rapidly due to plant uptake, leaching, and microbial activity.
- Soil texture and organic matter can also be included in the test results.
- Heavy metals testing is also available if that is a concern.
- Tests should be done every two to four years; there is no need to do yearly, especially if the garden is growing well.

Where do you get a soil test?

Know your Soils - Snohomish Conservation District: <https://snohomishcd.org/know-your-soils>

Simply Soil Testing, in Burlington, WA: <http://www.simplysoiltesting.com/index.html>

University of Massachusetts- Amherst: <https://ag.umass.edu/services/soil-plant-nutrient-testing-laboratory>

Cornell University: <http://soilhealth.cals.cornell.edu/>

Western Laboratories, Inc, in Parma, ID: <https://westernlaboratories.com/>

Resources:

A Home Gardener's Guide to Soils and Fertilizers EM063E <https://pubs.extension.wsu.edu/a-home-gardeners-guide-to-soils-and-fertilizers-home-garden-series>

Snohomish Natural Yard Care. [Natural Yard Care | Snohomish County, WA - Official Website \(snohomishcountywa.gov\)](https://www.snohomishcountywa.gov/natural-yard-care)

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