

## Soil Testing

**Soil testing** is a tool used to help make informed decisions about the management of soil nutrients – whether for a garden, lawn, field, or forest. Soil tests provide information on fertilizer needs, helping to save money and time. Soil tests can also help protect the environment from contaminated runoff or groundwater pollution caused by over-fertilization.

**Soil tests should be taken** in the spring or fall for established sites, and at any time of the year for new seedlings and plantings. Taking a soil test every two to three years is usually adequate to monitor nutrient levels; however, if management practices change, testing more frequently may be necessary.

**Soil will be tested for:** pH, nitrate-nitrogen, phosphate, potassium, magnesium, calcium, sodium, organic matter, and cat ion exchange capacity.

You can send in one sample for smaller acreages, or if you have larger acreages to deal with, you may want to send in a number of samples. With smaller acreages, collect soil in a bucket from areas where it looks like there might be a soil change (high, low, wet, and dry areas). Mix it all together and send in one sample. With larger acreages, collecting soil as different samples where the soil is different may be more beneficial.

**You will need:** (Tip: Be sure your supplies are clean to avoid contaminating the sample)

- Spade, shovel, or soil probe
- Knife
- Bucket
- Soil testing bag, plastic Ziploc bag, or small paper sack

**A sample should represent the area:**

Each sample should typically consist of about 10 to 15 sub-samples taken from random locations within the sampling area.

(Tip: Avoid sampling unusual spots, such as manure piles or swampy areas. Separate samples should be taken if areas are managed differently, or is a different soil type or slope.)

**Step 1:** Remove vegetation and organic material from the surface of the sites to be sampled.

**Step 2:** Take soil samples from the correct depth using the proper method.

- If you use a shovel, dig a hole 4 to 6 inches deep. Take a slice of soil ½ inch thick and 4 to 6 inches deep and keep it on the shovel. Using a knife, from the center of the slice, cut a strip ½ inch wide from the top to the bottom and put it in the bucket. Repeat this step at each sampling site.
- Most soils should be sampled at a depth of 4 to 6 inches, unless you have plowed your soils or have a hardpan near the surface.

**Step 3:** Mix and package the soil sample.

- Thoroughly mix the sub-samples in the bucket. Break up any large clumps of soil.
- Fill the soil sample bag. The lab will need about 2 cups/sample for each test.
- Write on the sample bag the date it was taken, the pasture or field ID (if you have multiple samples), and what was growing there (pasture, crops, etc.)
- Samples should be dried or frozen within 12 hours of collection. Fresh samples can be sent UPS if sent promptly after sampling. Otherwise, refrigerate samples until they are sent. If you want the lab to dry them, **do not** send the samples when they will have to sit all weekend. They may mold and throw off the results.
- If you want to dry your own sample, place soil on a cookie sheet and put it in the oven at 150-200 degrees with the door cracked open until dry. **Or**, you can air dry it if you have time to let it sit.

**Step 4:** Send your soil sample to the lab.

## Soil and Plant Analysis Labs

### **A and L Labs**

10220 Southwest Nimbus Avenue  
Building K-9  
Portland, OR 97223  
(503) 968-9225

### **IFM (Integrated Fertility Management)**

1422 North Miller #8  
Wenatchee, WA 98801  
(800) 662-3179

### **Northwest Agricultural Consultants**

2545 West Falls  
Kennewick, WA 99336  
(509) 783-7450

### **Soiltest Farm Consultants**

2925 Driggs Drive  
Moses Lake, WA 98837  
(800) 765-1622

### **Soil Testing Laboratory**

Oregon State University  
114 Strand Ag Hall  
Corvallis, OR 97331  
Phone: (541) 737-2187  
Fax: (541) 737-5725  
Email: [Central.Analytical.Lab@orst.edu](mailto:Central.Analytical.Lab@orst.edu)

### **Agri-Check, Inc.**

323 Sixth St.  
PO Box 1350  
Umatilla, OR 97882  
(800) 537-1129

### **Cascade Analytical, Inc.**

3019 G.S. Center Road  
Wenatchee, WA 98801  
(509) 662-1888

### **Wm. F. Black Soil Testing**

503 N. Gardner Rd.  
Burlington, WA 98233  
(360) 757 6112

### **Coffey Lab, Inc**

12423 NE Whitaker Way  
Portland, OR 97230  
(503) 254-1794

### **USAg Analytical Services**

1320A E. Spokane St.  
Pasco, WA 99301  
(509) 547-3838

### **Twiss Analytical, Inc.**

26280 Twelve Trees Lane, Ste. C  
Poulsbo, WA 98370  
Phone: (360) 779-5141  
Fax: (360) 779-5150  
Website: [www.twisslabs.com](http://www.twisslabs.com)

### **Custom Dairy Services, Inc.**

8895 Guide Meridian Rd.  
Lynden, WA 98264  
(360) 354-4344

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