

# Soil Samples for Gardens and Landscapes



Extension  
Park County

## Step 1: Collecting a sample

With a soil probe:

1. Push the soil probe into the soil 6 to 8 inches in depth (2 to 3 inches for lawns), then remove probe from soil.
2. Remove soil core from probe (make sure to discard the surface litter, Figure 1) and place in bucket.
3. Repeat steps 1 and 2 from 10 to 15 locations within the desired area.



Figure 1. Soil sample core, discard portion to the right of the black line.

With a shovel or trowel:

1. Dig a small hole that is 6 to 8 inches in depth (2 to 3 inches for lawns).
2. Use the shovel or trowel to shave off an inch thick portion from the length of the sidewall of the hole (make sure to discard the surface litter, figure 2) and take the middle 1-inch wide section from the sample to place in the bucket.
3. Repeat steps 1 and 2 from 10 to 15 locations within the desired area.

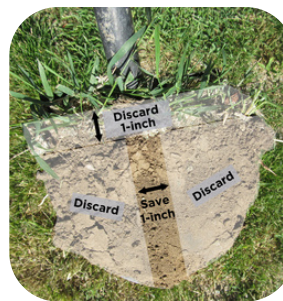


Figure 2. Soil sample with a shovel or trowel. The sample is the middle inch of soil, discard top inch and side portions of soil.

## Step 2: Preparing soil sample

1. Mix all the soil together in the bucket, breaking cores apart and removing debris.
2. With a permanent marker, label a plastic bag with the sample identification name (i.e. front lawn, garden, tulip bed, etc.)
3. Collect two cups of soil from the bucket and place in a plastic bag, Figure 3.
4. Package soil samples and filled out forms in a sturdy box or envelope, and mail to soil lab.



Figure 3. Soil sample ready for shipping.

When in doubt on how to sample – check the lab’s directions for sampling and submission, they usually provide them online.

# General Information

- Contact the soil lab before collecting samples for instructions on which soil analysis you need, the form required and how to fill it out, and shipping requirements.
- The most reliable soil test results come from soil samples that represent the overall garden, lawn, or flower bed. If there is a large difference in the area, such as a garden compared to a lawn or flower bed, or obvious differences in soil type or plant growth between areas, then samples from these areas should be collected separately.
- A representative sample for the area of interest is collected by a systematic (samples taken at equal distance apart) or random sampling pattern that collects 10 to 15 samples, refer to Figure 4.

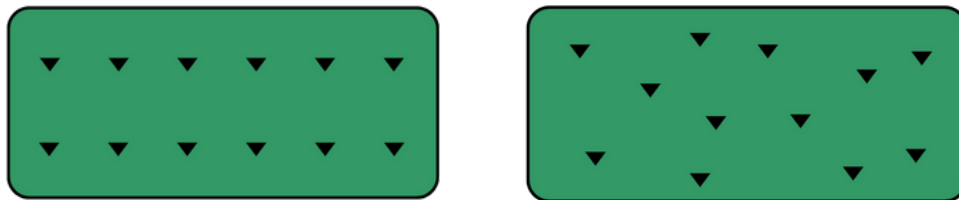


Figure 4. Examples of systematic (left) and random (right) soil sampling in a field. Notice the difference between the two images, the even spacing of the sample locations on the left vs. the uneven spacing on the right.

## Materials Needed

- Shovel or soil probe
- Clean bucket
- Plastic bag
- Permanent marker



- Samples are collected to a depth of 6 to 8 inches from the soil surface, except for lawns (2 to 3 inches deep).
- Make sure to remove surface litter and non-organic debris (crop residue, grass, wood chips, roots, gravel, etc.) from the soil samples.

## Soil Sample Video

<https://buff.ly/9JiZQd6>



## Soil Laboratories

University of Idaho, Analytical Sciences Laboratory  
Address: 2222 West Sixth Street, Moscow, ID 83844  
Phone: (208) 885-7900

Utah State University Analytical Lab  
Address: 1541 North 800 East, North Logan, UT 84341  
Phone: (435) 797-2217

Bighorn Co-op  
Address: 4784 US Hwy 310, Greybull, WY 82426  
Phone: (307) 765-2061

Simplot Grower Solutions  
Address: 857 Road 8, Powell, WY 82435  
Phone: (307) 754-4833