

## AMOUNT OF SAMPLE REQUIRED PER ANALYSIS

### OSU Soil Health Lab

An overview of the volume of sample that should be sent to the lab for each package is outlined in Table 1. Because each sample will vary in field moisture and bulk density, the lab has provided a 'Rough Volume Estimate' to assist customers in planning their sample collection. This estimate also considers that the lab may need additional sample for reruns. Please do not send more soil than the 'Rough Volume Estimate' amount unless you contact the lab ahead of time. Processing more soil than is necessary for a customer leads to longer turnaround times and limits our sample storage capacity.

For an overview of the amount of air-dried sample required per analysis, reference Table 2. Please note that it is best to have enough soil for at least 2-3 replications of an analysis in case an analysis needs to be redone.

Table 1: Volumes of Field Moist Sample Required per Package

<b>Package</b>	<b>Soil or Plant</b>	<b>Rough Volume Estimate</b> (cups/field moist sample)
Western/Eastern OR Basic	Soil	2
Western/Eastern OR Advanced	Soil	2
Complete Assessment of Soil Health	Soil	3-4
Basic Assessment of Soil Health	Soil	3-4
Soil Microbial Assessment	Soil	2
Soil Physical Assessment	Soil	2 + Intact cores
Plant Tissue Analysis	Plant	1
Manure/Compost Analysis	-	2
Heavy-Metal Analysis	Soil or Plant	1

Table 2: Amount of Air-dried Sample Required per Analysis

<b>Analysis</b>	<b>Soil or Plant</b>	<b>Weight (Grams/air-dried sample)</b>
Gravimetric moisture	Soil	10-20
Soil pH	Soil	20
Electrical Conductivity	Soil	20
Sikora Buffer pH	Soil	20
Ammonium acetate	Soil	2
Mehlich 3	Soil	2
DTPA-sorbitol	Soil	10
Calcium phosphate	Soil	10
Potassium chloride	Soil	7.5
Bray	Soil	2
Olsen	Soil	3
Potassium sulfate	Soil	7.50
Microwave Digestion	Plant	0.200
Microwave Digestion	Soil	0.500
Dry Ash	Plant	0.200
Total Ash	Soil or Plant	10
Total Carbon, Nitrogen, Sulfur	Soil or Plant	<1
Potential Cation Exchange Capacity	Soil	10
Effective Cation Exchange Capacity	Soil	2
Bulk Density	Soil	<b>Contact the lab</b>
Texture by Hydrometer	Soil	50
Texture by Sieve & Pipette	Soil	50
Available Water Holding Capacity	Soil	<b>Contact the lab</b>
Loss on ignition	Soil	10
Potentially Mineralizable Nitrogen (7-day)	Soil	20
Potentially Mineralizable Nitrogen (28-day)	Soil	100g air-dried + 10g field moist
Wet Aggregate Stability	Soil	<b>3 TBSP</b>
Active Carbon	Soil	2.5
Microbial Respiration	Soil	40
Microbial Biomass	Soil	15
ACE Protein	Soil	3
B-glucosidase Enzyme	Soil	1