

RESEARCH SAMPLE SUBMITTAL FORM

Please contact the lab before submitting samples.

Name: _____

Email: _____

Project Title: _____
(30 character limit)

Date Sampled: _____

Save samples? _____ Researcher Code _____
(3 digits)

Researcher Sample ID (up to 5 digits)	Soil Lab Number (Lab Use)	Samples per Form
		1
		2
		3
		4
		5
		6
		7
		8
		9
		10
		11
		12
		13
		14
		15
		16
		17
		18
		19
		20

Soil Group Tests (to order - check box)

Code	Test Name	Analytes Reported
01	Routine Soil Test	P, K, Ca, Mg, Zn, 1 M KCl-pH, calculated H ₂ O pH, buffer pH
05	Heavy Metals	Cd, Cr, Ni, Pb, Zn, Cu
07	Soil Texture	Sand, Silt, Clay, Textural class
08	Cation Exchange Capacity & exchangeable bases	CEC, Base saturation, Exchangeable Ca, Mg, K & Na
11	Organic Matter & Nitrogen	OM = C*1.72, TN
12	Carbon & Nitrogen	C, N
20	Water Holding Potential	field capacity H ₂ O, wilting point H ₂ O, plant available H ₂ O
22	Metals	Mn, Cu, Al, Fe
23	Micronutrients	B, Mn, Cu, Fe
24	Soil Water pH & buffer pH	

Soil Individual Tests (to order - check box)

Code	Test Name	Code	Test Name
OM	Organic Matter %	M1	Manganese (lb/ acre)
X3	Carbon %	NA	Sodium (lb/acre)
TN	Nitrogen %	Z2	Zinc (mg/kg)
SS	Conductivity (mmhos/cm)	MA	Aluminum (mg/kg)
BO	Boron (lb/acre)	MF	Iron (mg/kg)
CU	Copper (lb/acre)	Y1	Iron (lb/acre)
C2	Copper (mg/kg)	Y5	Sulfur (lb/acre)
X6	Calcium carbonate equivalence (% by wt)	PA	Potential acidity (tons ag lime/acre)

Code Test Name (to order - check box)

IR	Irrigation Water pH, Conductivity, Alkalinity, NO ₃ -N, P, K, Ca, Mg, Cu, Fe, Mn, Zn, B, Na
GM	Soilless Media pH, Conductivity, NO ₃ -N, P, K, Ca, Mg, Cu, Fe, Mn, Zn, B, Na
AW	Animal Waste N, P ₂ O ₅ , K ₂ O, Ca, Mg, Cu, Fe, Mn, Zn, moisture if solid waste

Additional Tests/Remarks:

Submitting research samples to the Soils Laboratory

General

- ◇ See our website for publications and detailed information about obtaining samples and interpreting results.
<https://www.rs.uky.edu/soil/>
- ◇ Producer samples take precedence over research samples. **Please contact the lab before submitting samples.**
- ◇ Submitting an account number is appreciated to cover the cost of the tests requested. Contact Frank Sikora (fsikora@uky.edu) to submit an account number.

Paperwork to accompany the sample

- ◇ All samples on the form should have the same tests requested. If different tests are required, use more than one form.
- ◇ Only laboratory data will be reported for samples submitted with a research form. If you would like recommendations, submit each sample with the appropriate submittal form (in addition to the research form). Forms to be used for recommendations can be found at <https://www.rs.uky.edu/soil/forms.php>.

Packaging - Samples must be submitted in containers provided by the Soil Testing Lab. Order containers using the form available at <https://www.rs.uky.edu/soil/forms/supplies.pdf>.

Sample Type	Container	Notes
Soil	Bag	Fill to line.
Animal Waste	<i>Liquid</i> – 500 ml bottle & 1 gallon Ziploc <i>Solid</i> – Double bag using 1 Quart Ziploc	Sample bottles are filled 1/2-half full with liquid manure. Bottle is then placed in a gallon size Ziploc bag. *Ziploc bags are not supplied by our lab.
Irrigation Water	250 ml Bottle	
Soilless Media	Use Soil Sample Bag	This test requires more material than a soil test so fill the bag as full as possible
Plant Nutrient Analysis	Use Plant Tissue Bag, paper bag or cardboard box.	Do not use plastic because it degrades the sample.

Identification on sample container:

- ◇ Three-digit Researcher Code
- ◇ Four-digit Sample ID

Important checks:

- ◇ Make sure the four-digit Sample ID on the sample containers match the numbers on the submittal form.
- ◇ Did you remember to indicate if the lab should save your samples? (Please pick up samples as soon as possible.)

Note on units and conversions:

Mehlich values obtained from soil volume with assumptions that soil density=1 g/cm³ and 1 acre represents 2,000,000 pounds of soil.

$$\text{lbs/acre} = \text{pp2m}$$

$$\text{lbs/acre} \times 0.5 = \text{mg/kg} = \text{ppm}$$

$$\text{cmol/kg} = \text{meq/100g}$$

$$\text{mmhos/cm} \times 0.1 = \text{S/m}$$