

# Soil Sample Information for Commercial Fruits, Vegetables and Turfs

Serial No. **A** **T**

## Soil and Plant Testing Laboratory

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Name _____	Date ____ / ____ / ____
Address _____	Account No.: Firm _____ Outlet _____
City _____ State _____ ZIP _____	Firm _____
Phone _____ Fax _____	Address _____
Email _____	City _____ State _____ ZIP _____
County of origin _____ <input type="checkbox"/> Bill county or <input type="checkbox"/> Bill firm	Phone _____ Fax _____
Billing county code _____	Email _____

### Guidelines for major horticultural crops codes

Crop code	Fruits
<b>New plantings</b>	
1	Apples/pears
2	Blueberries
3	Brambles (raspberries, black berries, goose berries)
4	Grapes
5	Stone fruits (peaches, plums, apricots, cherries, nectarines)
6	Strawberries
<b>Established plantings</b>	
7	Apples/pears
8	Blueberries*

9	Brambles (raspberries, black berries, goose berries)
10	Grapes
11	Stone fruits (peaches, plums, apricots, cherries, nectarines)
12	Strawberries
<b>Crop code</b>	
<b>Vegetables</b>	
21	Asparagus, new
22	Asparagus, established
23	Beans/peas
24	Beets
25	Broccoli

26	Brussels sprouts
27	Cabbage
28	Carrots
29	Cauliflower
30	Cucumbers
31	Lettuce
32	Melons (watermelons, cantaloupes)
33	Onions, dry
34	Onions, green
35	Peppers
36	Potatoes
37	Pumpkin/squash
38	Radishes
39	Spinach
40	Sweet corn

41	Sweet potatoes
42	Tomatoes
<b>Crop code</b>	
<b>Prior crops</b>	
51	Alfalfa, good stand
52	Alfalfa, poor stand
53	Birdsfoot trefoil
54	Grass-legume hay
55	Grass-legume pasture
56	Red clover
57	Beans/peas
<b>Crop code</b>	
<b>Turf</b>	
<b>Establishment</b>	
61	Turf establishment or renovation

<b>Maintenance</b>	
62	Athletic field (cool season): bluegrass, fescue, ryegrass
63	Athletic field (warm season): bermudagrass, zoysiagrass, buffalograss
64	Commercial sod (cool season): bermudagrass, zoysiagrass, buffalograss
65	Commercial sod (warm season): bermudagrass, zoysiagrass, buffalograss
66	Low-maintenance turf (cool season): bluegrass, fescue, ryegrass
67	Low-maintenance turf (warm season): bermudagrass, zoysiagrass

<b>Golf courses</b>	
68	Putting green (bentgrass)
69	Fairways (cool season): bentgrass, ryegrass, bluegrass, tall fescue
70	Fairways (warm season): bermudagrass, zoysiagrass
71	Tees (cool season): bentgrass, ryegrass, bluegrass
72	Tees (warm season): bermudagrass, zoysiagrass
<b>Age of trees</b>	
Only blueberries (established plantings) are required to enter ages. If the age is not entered then the default is 1 to 2 years old.	

Lab No. (lab use only)	For instructions, see back of form							Cropping options (1-3)						Send report by: <input type="checkbox"/> Hard copy <input type="checkbox"/> Email <input type="checkbox"/> CSV										NO <sub>3</sub> -N and NH <sub>4</sub> -N sampling depth		
	Includes pH, N.A., P, K, Ca, Mg, CEC and OM							1		2		3		Check (✓) Test(s) Desired												
	Sample	Field/Sample ID No more than 12 letters or numbers	Acres	Irrigated (Y/N)	Topography	Last limed	Soil region	Prior crop code	Crop Code	Age	Crop Code	Age	Crop Code	Age	Regular *	Zinc	Sulfur	Zn, Fe, Mn, Cu	Salts (EC)	Sodium	pH <sub>w</sub>	Nitrate-N	NO <sub>3</sub> -N&NH <sub>4</sub> -N		Boron	Particle size
	1																									
	2																									
	3																									
	4																									

## Instructions for completing soil sample information sheet

Up to four soil samples from one grower may be entered on this form.

### County of origin and billing county codes

These codes are needed for proper mailing of results and billing. Codes are assigned to each county extension office.

### Firm and outlet numbers

Use pre-assigned codes for soil samples being submitted directly to the soil testing lab by a dealer. Billing and payment will be made to the lab, not through a local University of Missouri Extension center.

### Topography

Level upland = 1  
Hilly upland = 2  
Bottomland = 3

### Last limed (years ago)

Less than 1 year = 1  
1 to 5 years = 2  
More than 5 years = 3  
Never = 4  
Unknown = 5

\* Regular fertility test  
Includes pH, N.A., P, K, Ca, Mg, CEC and OM

### Crop code

You can select recommendations for up to three crops by entering the corresponding crop code number. You must complete at least one option in order to receive a fertilizer recommendation, but there is no requirement to complete all options.

### Prior crop code

This information is essential for us to provide the most accurate nitrogen recommendation. Indicate crop grown during the prior growing seasons. *Be sure to use the crop code number from the listing on the front side.*

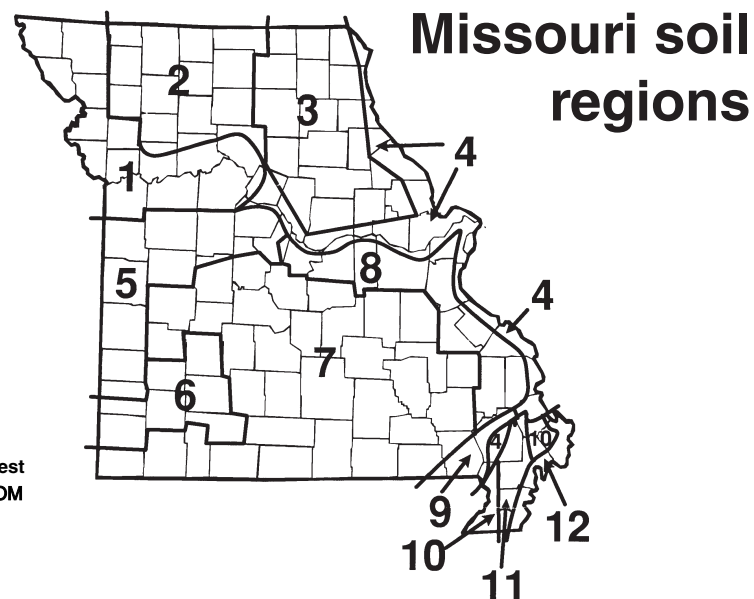
### Tests desired

Indicate the tests desired for each sample.

- **Regular test:** Includes pH, phosphorus, potassium, calcium, magnesium, organic matter, estimated CEC, fertilizer and lime recommendations. Sample the plow layer for vegetables and fruits, or to 3 inches for turf or sod fields.
- **Special tests:** Includes sulfur, zinc, copper, iron, manganese, boron, soluble salts (electrical conductivity). These tests are to be determined only on the plow layer sample.
- **Nitrate-N test (NO<sub>3</sub>-N):** This test requires soil be collected to a depth of 24 inches. There are two options. One is to submit two samples, 0 to 6 inches, and 6- to 24-inch depths. The second is to collect the soil from 0 to 24 inches.

The soil nitrate test is useful only if the sample is collected in the spring before or near planting (April 1 to June 15). Nitrogen fertilizer recommendations will not be based on the analysis of only plow layer samples for nitrate-nitrogen. If only a plow layer sample is submitted, nitrogen recommendations will be based on cropping history, intended crop, yield goal and soil organic matter level.

Samples collected for the nitrate test must be air-dried immediately to slow down microbial activity and sent to the lab within 24 hours. Drying can be accomplished by spreading the soil



in the sun, or placing near a heat source. If only nitrate is to be determined, the samples can be dried in a microwave oven using several two-minute power cycles, stirring between each cycle. Alternatively, samples can be frozen and sent to the lab in a well insulated package.

### Sampling instructions

Divide the field into uniform areas. Each area should have the same soil color and texture, cropping history, and fertilizer, lime and manure treatments. One sample should not represent more than 20 acres on level, uniform landscapes, or 5 acres on hilly or rolling land. Within each area collect 15 to 30 subsamples (cores, boring or spade slices) in a zig-zag pattern throughout the designated field area. The more variable the soil, the more subsamples should be combined per area sampled. Mix the subsamples thoroughly in a clean plastic pail, and fill the sample box or bag to the fill line (1 pint). If samples must be taken wet, they should be dried before being mixed and submitted to the laboratory. Do not exceed a drying temperature of 97 degrees F, and do not use a microwave unless *only* the nitrate test is requested.

**Sample each area as follows:** Scrape off all surface residue. Sample to a depth of 6 to 8 inches (plow layer) for cultivated crops or 3 inches for turf or sod fields. Sample row crop between rows, except for ridgetill plantings. Where RIDGE-TILL is used, take the sample to a depth of 6 to 8 inches on the shoulder of the ridge, avoiding the starter fertilizer band. Also avoid sampling dead or back furrows, terraces, old fence rows, lime or fertilizer spill areas, headlands, eroded knolls, low spots or small saline areas. Sample at least 300 feet away from gravel or crushed limestone roads because their dust changes soil pH.

**Submitting the samples:** You can either submit the samples to a local University of Missouri Extension center or contact the lab and ship it.

### Delivery options for report

The section labeled "Send report by" lists three delivery options. You may select up to two delivery options. If you make no selection, the default delivery option will be to send a hard copy to the address provided.