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## Soil Sample Information for Commercial Fruits, Vegetables and Turfs

Serial No. **A T**

Name _____	Date ____/____/____
Address _____	Account no.: Firm _____ Outlet _____ (if applicable) (if applicable)
City _____ State _____ Zip _____	Firm _____
Phone _____ Fax _____	Address _____
E-mail _____	City _____ State _____ Zip _____
County of origin _____ <input type="checkbox"/> Bill county or <input type="checkbox"/> Bill firm	Phone _____ Fax _____
Billing county code _____	E-mail _____

### Guidelines for major horticultural crops codes

Crop code	Fruits	Crop code	Vegetables
<b>New plantings</b>			
1	Apples/Pears	9	Brambles (Raspberries, Black Berries, Goose Berries)
2	Blueberries	10	Grapes
3	Brambles (Raspberries, Black Berries, Goose Berries)	11	Stone Fruits (Peaches, Plums, Apricots, Cherries, Nectarines)
4	Grapes	12	Strawberries
5	Stone Fruits (Peaches, Plums, Apricots, Cherries, Nectarines)		
6	Strawberries		
<b>Established plantings</b>			
7	Apples/Pears	21	Asparagus, New
8	Blueberries *	22	Asparagus, Estbl.
		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

Crop code	Prior crops
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

Crop code	Turf
61	Turf Establishment or Renovation

Maintenance
62 Athletic field (Cool season): Bluegrass, Fescue, Ryegrass
63 Athletic field (Warm

64 Commercial Sod (Cool season): Bluegrass, Fescue, Ryegrass
65 Commercial Sod (Warm season): Bermuda-grass, Zoysiagrass, Buffalograss
66 Low maintenance turf (Cool season): Bluegrass, Fescue, Ryegrass
67 Low maintenance turf (Warm season): Bermudagrass, Zoysiagrass

Golf courses
68 Putting greens (Bentgrass)

69 Fairways (Cool season): Bentgrass, Ryegrass, Bluegrass, Tall Fescue
70 Fairways (Warm season): Bermuda-grass, Zoysiagrass
71 Tees (Cool season): Bentgrass, Ryegrass, Bluegrass
72 Tees (Warm season): Bermudagrass, Zoysiagrass

**Age of trees**  
 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)			Check (✓) test(s) desired								Sampling depth					
	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	1	2	3	Regular	Zn	S	Fe,Mn,Cu	Salts	Na	pHw	Boron	NO <sub>3</sub> -N	NO <sub>3</sub> -N+NH <sub>4</sub> -N	for NO <sub>3</sub> -N and NH <sub>4</sub> -N test only (inches)		
										Age	Crop code	Age											Crop code	Age	Top
	1																								
	2																								
	3																								
	4																								

# Instructions

(Up to 6 soil samples from one grower may be entered on this form)

## County codes and agronomy areas

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

## Firm and outlet numbers

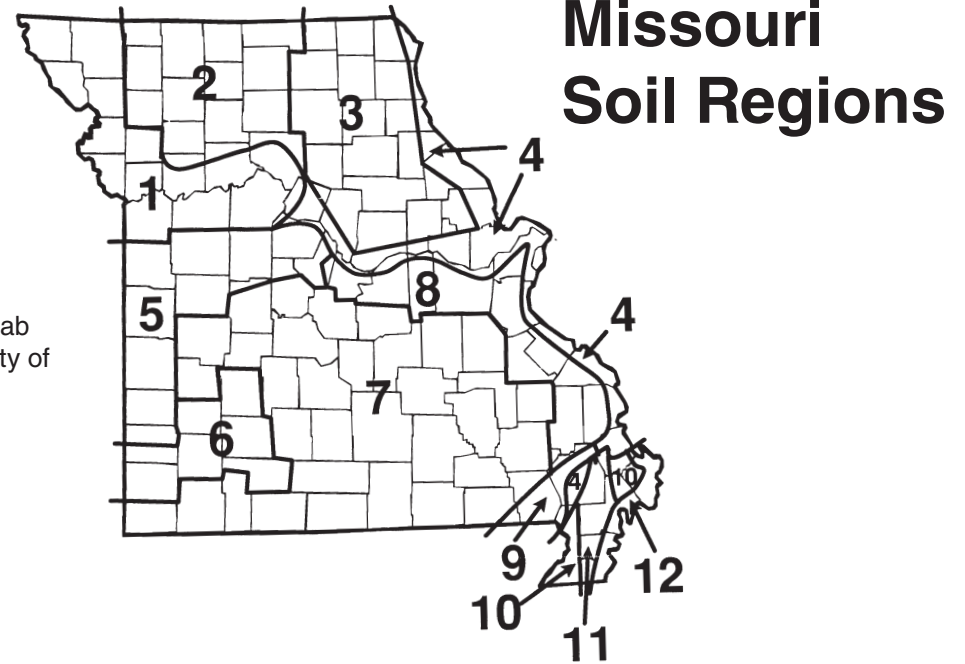
Use pre-assigned codes for soil samples being submitted directly to the soil testing lab by a dealer. Billing and payment will be made to the lab, not through a local University of Missouri Extension center.

## 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



## Instructions for completing soil sample information sheet

**1. 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.

**2. 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.**

**3. 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 2 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.