

Instructions for filling out this form are given on the back side

Sample Location (if different than "Submitter" address) Name _____ Address _____ City, State, Zip _____ Phone _____	Email _____ Sample Location County _____ <input type="checkbox"/> Copy results to my local Extension Service <small>Out-of-state submitters: Visit z.umn.edu/soil-quarantines for a map of quarantined areas.</small> Amount \$ _____ <input type="checkbox"/> check <input type="checkbox"/> cash <input type="checkbox"/> credit card <input type="checkbox"/> account	Submitter Information Name _____ Address _____ City, State, Zip _____ Phone _____
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Sample Identification		1 Crop History						2 Proposed Crops						3 Test(s) Requested (see back page for depth)									
		Before Last Crop Grown		Last Grown Crop		Option 1		Option 2		Option 3		Regular Series*	Sulfur*	Zinc, Iron, Copper, Manganese	Boron	Calcium and Magnesium	Lead	Nutrient Mgmt P	Soluble Salts	Nitrate*			
Laboratory Number (Lab Use Only)	Sample ID	Check if irrigated	Crop Code No.	If Alfalfa check # plants per sq ft	Crop Code No.	If Alfalfa check # plants per sq ft	Crop Code No.	expected yield	Crop Code No.	expected yield	Crop Code No.	expected yield	\$20	\$8.50	\$14.50	\$8.50	\$8.50	\$21	\$8.50	\$8.50	\$8.50	Read about this test on the back. Sampling to 24" is required for this test.	
				<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1		<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																\$8.50 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
				<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1		<input type="checkbox"/> 4+ <input type="checkbox"/> 2-3 <input type="checkbox"/> 0-1																\$8.50 <input type="checkbox"/> 0-6"/6-24" sample <input type="checkbox"/> 0-24" sample	
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Recommendations available for these crops:

*See #3 on the back of this page.

Prices effective January 2024. Subject to change.

Crop Code LEGUMES 01. Alfalfa, new seed tons/acre 02. Alfalfa, established tons/acre 03. Birdsfoot Trefoil tons/acre 04. Legume/Grass Hay tons/acre 05. Legume/Grass Pasture - 06. Red Clover tons/acre CORN 07. Corn, grain bu/acre 08. Corn, silage tons/acre 09. Sweet Corn tons/acre	SMALL GRAINS 10. Barley bu/acre 11. Oats bu/acre 12. Rye/Triticale bu/acre 13. Wheat bu/acre MISCELLANEOUS 14. Buckwheat lb/acre 15. Edible Beans lb/acre 16. Fallow 17. Flax bu/acre 18. Grass Hay tons/acre 19. Grass Seed Prod. lb/acre 20. Grass Pasture - 21. Millet lb/acre 22. Native Grasses tons/acre 23. Potatoes cwt/acre	MISCELLANEOUS (continued) 24. Rape/Mustard/Canola cwt/acre 25. Sorghum Sudan - 26. Soybeans bu/acre 27. Sugarbeets tons/acre 28. Sunflowers lb/acre 29. Wild Rice - VEGETABLES 30. Asparagus, new planting 31. Asparagus, establ. planting 32. Beans, snap 33. Beets, table 34. Broccoli 35. Brussels Sprouts 36. Cabbage 37. Cauliflower 38. Carrots	VEGETABLES (continued) 39. Celery 40. Cucumbers 41. Lettuce 42. Melons 43. Onions, dry 44. Onions, green 45. Parsnips 46. Peas 47. Peppers 48. Pumpkins/Squash 49. Radishes 50. Turnips 51. Rhubarb 52. Rutabagas 53. Spinach 54. Tomatoes	FRUITS 55. Apples 56. Blueberries 57. Grapes 58. Raspberries/Brambles 59. Strawberries TURF 60. Cultured Sod NURSERY - FIELD STOCK TREES/SCRUBS Suggested tests: Regular, Soluble Salts, Nitrate. For sampling instructions, please see Nursery Form 62. Other _____
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Instructions for Completing this Soil Sample Analysis Request Sheet - complete information will provide the most accurate recommendations possible.

1 - Crop History: Indicate crops grown in the past **two** growing seasons using the Crop Codes from the list at the bottom of the first page. If alfalfa was grown indicate the number of plants (crowns) per sq. ft.

2 - Proposed Crops: Request recommendations for up to **three crops or three yield goals for one crop**. At least one option must be completed to receive a fertilizer recommendation. For CRP acres, list the crop most similar to that being seeded (e.g., 04 for legume/grass hay or 22 for native grasses.)

3 - Test(s) Requested: Indicate test choices for each sample. **Before selecting nitrate, read the information below for Nitrate Test** to see if it applies to your area or crop.

Regular Series: Includes phosphorus, potassium, pH (lime, if needed), percent organic matter, estimated texture. Sample the plow layer for cultivated land or to 3 inches for pastures/sod fields.

Special Tests: These tests are conducted only on the plow layer depth. Includes zinc, copper, iron, manganese, boron, calcium, magnesium, soluble salts. Copper recommendations apply only for peat or muck soils. Research has shown that for Minnesota soils, tests for iron and manganese are not practical; they are included to accommodate special requests.

Sulfur Test: The sulfur test is not a reliable predictor of sulfur needs. Sulfur recommendations are based on crop and soil texture. Contact your county extension educator for details.

Nutrient Management P: This test is designed for situations where the soil test level for phosphorus is expected to be in the high range (>50 ppm Olsen) and is required for nutrient management decisions. Range is 20–250 ppm extractable Olsen P.

Nitrate Test: For the N recommendation to be based on the nitrate value, **the soil MUST be collected to a depth of 24 inches**. There are two options for a Nitrate Only test: 1) submit two separate samples, a 0-6" depth sample and a 6"-24" depth sample, or; 2) collect the soil from 0-24". The nitrate test applies to non-sandy soils in western Minnesota with an exception noted below. This test is preferred for making N recommendations for the counties west of and including Lake of the Woods, Beltrami, Becker, Otter Tail, Douglas, Pope, Kandiyohi, Renville, Redwood, Cottonwood, and Jackson. In these counties, the nitrate test is used in making N recommendations for corn, small grains, potatoes, and sugar beets.

For the counties EAST of those noted above, the nitrate test is used to recommend N only if the sample is collected in the spring before or near planting (April 1 – June 15).

N 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, N recommendations will be based on cropping history, intended crop, yield goal, and soil organic matter level.

Samples collected for the nitrate test should be frozen or air-dried immediately. 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. Please use an insulated container for shipping frozen samples, as premature thawing can affect nitrate test results.

Sampling Instructions

Submit one sample for each area of the field. Each area should have fairly uniform soil color and texture, cropping history, 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 15-30 sub-samples (cores, borings, or spade slices) in a grid pattern. The more variable the soil, the more sub-samples should be combined per area sampled. Mix the sub-samples thoroughly in a clean pail, **fill a bag or other clean container with approximately 2 cups of soil**. If the soil samples are wet, they should be dried before being mixed and submitted to the laboratory. Do not exceed a drying temperature of 97°F, and do not use a microwave oven unless only the nitrate test is requested.

Sample by first scraping off the surface residue. **Sample to the plow layer (6-8") for cultivated land or 3" for pastures/sod fields**. Sample row crop fields between rows. For ridge-till plantings take the sample on the shoulder of the ridge (avoiding the starter fertilizer band). 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.

Mail or deliver the sample(s), this completed request sheet and payment (check made out to the University of Minnesota - or you may pay with a credit card) to (you may park along the curb in front of the building):

Soil Testing Laboratory - University of Minnesota
135 Crops Research Building
1902 Dudley Avenue
St. Paul, MN 55108

Laboratory Hours
Monday-Friday
8am-4:30pm

Prices effective January 2024. Visit z.umn.edu/farm-field to check for price changes.

For additional information visit our website at <https://soiltest.cfans.umn.edu>, call us at (612) 625-3101, or contact your local county extension office.

