

Soil Sampling Instructions

- Sampling can be done at any time; but if pH adjustments are necessary, test as early as possible prior to planting.
- Avoid sampling soils that have very recently been fertilized.

Soil Sampling Procedure

1. Soils that are distinctly different as judged by appearance, crop growth or past treatment should be sampled separately.
2. Each Sample submitted for testing should be a composite or mixture of approximately 12 separate scattered subsamples taken over a well-defined area.
3. Look your field or property over. Define a sample area based on uniformity of texture, slope, drainage, color, and past pest and fertility management.
4. Avoid sampling very wet soils. In soils where fertilizer has been placed in bands (rows), do not sample directly in a band. It is best **not** to obtain samples very near the edge of the field or plot.
5. Using a clean spade, auger, or sampling tube **obtain soil from the surface through the primary rooting zone of the crop. Rooting depth will vary with crop type.** For most plants the top 6-8 inches is appropriate. For established grasses sample the top 3-4 inches.
6. Place each of the 12 randomly spaced samplings in a clean container (pail or bag) and mix thoroughly. Spread the mixture out on a clean paper to air-dry (do not place soil in an oven)
7. Mix the soil again. Obtain a one cup measure of the soil mixture add place it in a zip-lock type bag. **Label the outside of the bag clearly with your name, address, and your name for the sample (ID).**

Why Test Your Soil?

- to optimize crop production.
- to protect the environment from contamination by runoff and leaching of excess fertilizers.
- to aid in the diagnosis of plant culture problems.
- to improve the soil's nutritional balance.
- to save money and conserve energy by applying only the amount of fertilizer needed.
- to identify soils contaminated with lead or other heavy metals.

** A soil test can be a valuable tool in assessing and preventing horticultural, agronomic, and some environmental problems. The tests listed above do not identify plant growth problems associated with soil drainage, insects, plant diseases (whether soil-borne or not), weeds, winter injury and the misuse of pesticides.

** Pesticide residues and petroleum contaminants are not identified by these tests. Analyses for these are expensive, but may be obtained through the private sector.



UMass Extension Newsletters

Garden Clippings... for home gardeners; Provides a checklist of monthly gardening activities; Monthly March through October; \$10.00/year, check payable to UMass; **Send to:** Garden Clippings, French Hall, 230 Stockbridge Road, UMass, Amherst, MA 01003.

Hort Notes... for professional landscapers and grounds managers; Alerts reader to emerging landscape pests and timely plant health care problems; Bi-weekly from March through October; \$20.00/year, check payable to UMass; **Send to:** Hort Notes, French Hall, 230 Stockbridge Road, UMass, Amherst, MA 01003.

This form and more information on soil testing are available online at:

<http://www.umass.edu/plsoils/soiltest>

UMassAmherst



Soil Testing



West Experiment Station

2005-2006

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Name _____

Address _____

City, State _____ Zip _____

Telephone _____

Mail samples, questionnaire and payment to:

Soil and Plant Tissue Testing Laboratory
West Experiment Station
682 North Pleasant St.
University of Massachusetts
Amherst, MA 01003

***Soil Sampling
 Instructions
 on Reverse
 Side***

Web: <http://www.umass.edu/plsoils/soiltest>

Recommendation Codes

Home Landscape

Crop	Code
Vegetables	HV
Flowers & Herbs	HF
Existing Lawn	HEL
New Lawn (unplanted)	HNL
Needleleaf Trees & Shrubs	HN
Deciduous Trees & Shrubs	HD
Acid-loving Trees & Shrubs	HA
Strawberries	HS
Blueberries	HB
Raspberries	HR
Grapes	HG

Commercial Grower – Fruit

Crop	Code
Tree Fruit	TF
Blueberries	BL
Brambles	BR
Cranberries	CR
Grapes	GR
Strawberries	ST

Commercial Grower – Ornamentals

Crop	Code
Commercial Turf	CT
Golf Fairways	GF
Golf Greens & Tees	GG
Nursery Deciduous	ND
Nursery Needleleaf	NN
Nursery Acid-loving	NA

Commercial Grower – Field Crops

Crop	Code
Alfalfa	AL
Field Corn	FC
Hay & Pasture	HP

Commercial Grower – Vegetables

Crop	Code
Asparagus	AS
Beets, Swiss Chard	BS
Cauliflower, Cabbage	CC
Carrots, Parsnip	CP
Celery	CE
Eggplant	EP
Gourds (ornamental)	GO
Lettuce, Endive, Escarole	LE
Melons, Cucumbers	MC
Onions, Leeks	OL
Peas	PE
Peppers	PP
Potatoes	PO
Pumpkins, Squash	PS
Radishes	RA
Rutabagas, Turnips	RT
Snap Beans	SB
Sweet Corn	SC
Spinach	SP
Tomatoes	TO
Other	OT
(explain) _____	

Please print clearly. Use one box per sample submitted

Sample Name: _____	Crop Code _____
A B C D E	Fee \$ _____
Sample Name: _____	Crop Code _____
A B C D E	Fee \$ _____
Sample Name: _____	Crop Code _____
A B C D E	Fee \$ _____
Sample Name: _____	Crop Code _____
A B C D E	Fee \$ _____
Sample Name: _____	Crop Code _____
A B C D E	Fee \$ _____
\$2 Fee if you want results sent by more than one method	
Order Total	Fee \$ _____
	\$ _____

Comments: _____

Method of receiving results

(Choose one or include \$2 fee for additional format)

US Mail (address above)

Fax(_____) _____ - _____

E-mail _____ @ _____

Soil Test Types & Price List (2005-2006)

A. Soil pH \$4.00

Provides a simple soil pH test and an estimate of how much lime, sulfur, or other additive is needed to correct soil pH.

B. Standard Soil Test \$9.00

Provides pH, Buffer pH, Extractable Nutrients, Extractable Heavy Metals (e.g. Lead), Cation Exchange Capacity, and Percent Base Saturation. Recommendations for nutrient and pH adjustment are included with results.

**C. Standard Soil Test \$13.00
w/ Organic Matter**

Same as Standard Soil Test plus a determination and interpretation of the Percent Organic Matter in the soil sample.

D. Soil Texture (only) \$50.00

Provides a determination of the USDA Textural Classification by combined Hydrometer Analysis of silts and clays and Dry Sieving of sands. Results presented in tabular format. This test **does not** include the Standard Soil Test.

E. Soluble Salts \$3.00

Provides a measure of Electrical Conductivity of a 1:2 (soil:water) water extract.