



Soil Sampling Questions and Answers

For more information on soil sampling and fertilizer recommendations contact your local MU Extension Office.

Q – Why should I do a soil test?

A – To determine the pH, phosphorus and potassium levels in the soil. A soil test can save you money on your fertilizer budget and increase production.

Q – When is the best time during the year to take a soil sample?

A – A soil sample can be taken at any time during the year, but is it best to do when the soil is moist during the spring and fall.

Q – How often should I take a soil sample?

A – Fields should be retested every two to four years to keep track of soil fertility changes.

Q – What depth should I go to get a sample?

A – For an established field such as fescue or orchard grass or the average home lawn, the sample should be a representation of the top four to six inches. For newly established fields, a six inch depth is required.

Q – How do I take a soil sample?

A – For fields, collect ten to fifteen samples from each area that you wish to test. Your sample should represent 20 acres or less. Get the samples from random locations to represent the area well. Sample areas of a field separately if they are composed of different topography, such as low wet areas, slopes, hilltops, etc. And, you should test each field, or area of a field, separately that has been or will be fertilized or cropped differently, avoid the edges, waste spots, feeding and watering areas.

For a home lawn or garden area, collect samples from six to ten different areas, depending on the size of the area to be tested.

Collect a small amount of the top four to six inches and place in a plastic bucket. When all the samples have been collected, break and mix it all together. Collect your half pint sample from this mixture. See guide sheet G9100 for more detail.

Q – How much soil do I need?

A – The sample which represents each field or home lawn/garden should be about a half pint. (a cup full works well)

Q – How many samples do I need?

A – You should test each field separately that has been or will be fertilized or cropped differently.

Q – How much does the test cost?

A – The cost of routine soil analysis is \$15 when they are brought to the Phelps County Extension Office. (actual cost may vary by county)

Q – How long will I have to wait for my results?

A – From the time a sample is sent to MU Soil Lab from our office, it will be seven to ten days before we receive the analysis and mail you the recommendations. Phelps County normally mails tests out on Fridays.

Q – What do my soil test results mean?

A – A soil test provides two sets of information, what is in the soil, such as the pH (measure of Hydrogen ions present in the soil), organic matter, P, K, Mg, and Ca levels, and a recommendation on the amount of these nutrients needed to grow the desired crop. See guide sheets G9111 and G 9112 for more detail.

Q – From my soil test results, how do I determine the appropriate amount of fertilizer to apply in order to add the recommended amount of nutrient?

A – Assume your recommendation calls for a supply of N at the rate of 90lbs/acre; you can apply N using urea base at 45% N or ammonium nitrate at 34% N. For example using urea to supply N at the rate of 90lbs/acre will require (90lbs/acre x 100%) 45% - 200 lbs of urea/acre. For more information on determining the appropriate amount of fertilizer to apply contact your local fertilizer dealer or your county extension office.

Q – How do I determine how much limestone I need?

A – To determine how much limestone you need in tons/acre, divide the ENM requirement on your soil test result by the EMN index for the liming material to be used (the dealer should provide you with the ENM index of the liming material to be used.)

Q – What is ENM?

A – ENM is the Effective Neutralizing Material. The ENM for a soil is determined based upon the level of neutralizable acidity and pH.