### **Frequently Asked Questions**

### Q: When and how often should soils be test-ed?

A: Take soil samples at any convenient time. However, to receive an analysis and the recommendations early enough to enable getting the lime and fertilizer needed, it is best to sample in the Fall or early Spring. It is generally recommended staying consistent. If original samples were taken in the Fall, try to take new samples in the Fall also. Seasonal variation of some nutrients may occur. Soil should be sampled every 1 to 3 years. Fertility level and soil type can alter this schedule.

# Q: How soon will I get my results back (turn -around-time)?

A: In general, results are received within 72 hrs. of receiving the samples in the lab.

#### Q: Who do I contact regarding my soil test results and recommendations if I don't understand the numbers?

A: The Soil Test Report provides an interpretation of all soil tests done by AgroLab and is accompanied by appropriate nutrient and lime recommendations. If you need further information about your test results, contact the office at 302-566-6094.

# **Q:** How much does the kit cost and how do I pay?

A: The kit is 30.00 per sample. This includes a graphic report with appropriate nutrient and lime recommendations and a postage paid return envelope. You will also receive, along with your test results, our fact sheets to help with interpreting the report. You can include a check with your sample or you can provide your credit card information on the bottom of the soil sample submission form. You can order these kits online at www.agrolab.us.



### Homeowner Lawn/Garden Testing includes:

Soil pH (1:1), Buffer pH, Organic matter (%), Cation exchange capacity/sum of the cations (meq/100g), Phosphorus (ppm P), Phosphorus Saturation Ratio, Potassium (ppm K), Calcium (ppm Ca), Magnesium (ppm Mg), Cation base saturations, Sulfur (ppm SO4-S), Manganese (ppm Mn), Zinc (ppm Zn), Boron (ppm B), Copper (ppm Cu), Iron (ppm Fe), Sodium (ppm Na), Aluminum (ppm Al) Soluble Salts (mmho/cm), and Nitrate (ppm NO3-N) with graph and recom-



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A Matrix Sciences Company

# SOIL TESTING

### For Home Lawns, Gardens and Wildlife Food Plots



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Visit us Online at www.agrolab.us

#### The Importance of Taking Good Soil Samples

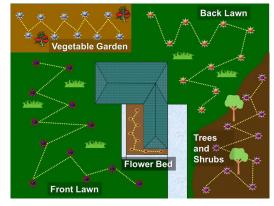
A soil test is the only practical way of telling whether lime or fertilizer are needed. However, if the soil sample does not represent the general soil condition of the field or area from which the sample was taken, the recommendation and decisions may be wrong or misleading. An acre of soil to the depth of the root zone weighs approximately 1,000 tons. Ten grams or less of soil is used for each test in the laboratory. Therefore, it is very important that the soil sample be characteristic of the field or area from which it was taken. The following guidance will help to take proper soil samples.

#### **Sampling Area**

Areas selected for sampling should be as uniform as possible. Do not mix soils of differing color and/or texture. As a general rule of thumb, anywhere that the soil differs because of significant factor; soil type, drainage, elevation, topography, productivity, management practice, tillage, etc. should be sampled separately.

Sample Depth

In general, soil samples should be taken to the root zone depth of 3 to 4 inches for yard and 6 to 8 inches for garden and food plots.



The area should be divided according to vegetation and soil characteristics. The dots indicate sampling points. Use a zig-zag approach when taking samples.

### **Materials Needed**

Materials needed include: plastic pail, soil probe or shovel, and the bag provided in the AgroLab kit. Plastic material is recommended. Metals, such as

#### **Sampling Procedures**

1. Clear the ground surface of grass thatch or mulch. 2. Push a probe into your soil to collect the soil. If you do not have a probe, use a trowel or sharp spade. Push the tool down into the ground until you reach the desired depth . Pull the soil probe back out of the soil, and check to make sure it contains the soil. If using another tool, scoop the soil onto the tool and bring it back to you.

**3.** Repeat step 2 until you collect at least five samples from random spots .

**4.** Release the soil samples into a bucket. Confirm that the bucket is not made out of bronze, brass or aluminum because these materials potentially could contaminate your samples with traces of micronutrients. Use a plastic bucket instead.

**5.** Break up chunks in the soil and remove rocks and stones present. Mix the soil samples together thoroughly.

6. Place the soil samples in a clean, labeled sample bag.



### **Tips & Warnings**

• When using a probe or other tools, make sure the tools are plastic, chrome-plated or stainless steel and not galvanized, which can contaminate your soil samples.

• Check the tools to ensure they are free of fertilizer, lime or old soil, which can make your soil sample test results inaccurate as well.

### **General Fertilizer Tips**

- AgroLab fertilizer recommendations are based on the annual demand and provide as N - P<sub>2</sub>O<sub>5</sub>
  - K<sub>2</sub>O. Fertilizer values are also expressed in N - P<sub>2</sub>O<sub>5</sub> - K<sub>2</sub>O. 100 lbs of 18-0-10 represents 18 lbs N, 0 lbs P<sub>2</sub>O<sub>5</sub> and 10 lbs of K<sub>2</sub>O.
- Good fertilizer practices will promote healthy plant growth and reduce nutrient runoff.
- For a single annual fertilizer application in the fall (Sept.-Oct.), nitrogen should not exceed 1 lb per 1,000 square feet unless the fertilizer is a controlled release fertilizer.
- For soil phosphorus with a test level of sufficient or greater, do not apply phosphorus; for low or deficient levels, do not apply more than 1 lb of P<sub>2</sub>O<sub>5</sub> per 1,000 sq. ft. per year.
- For multiple fertilizer applications, "spoon" feeding the nitrogen is best when applied in the fall and spring. Summer applications should be avoided unless irrigation is in place.
- Phosphorus, Potassium and Lime in general should be applied in the early fall (Sept.-Oct.).
- Avoid plant stress: Stress is commonly seen and caused by under fertilization, over fertilization, weed pressure, compaction, cutting lawns too short, overwatering, removing clippings and disease pressure.

