

## **Soil Sampling Guide**

Soil analysis is necessary for any fertility program especially today when the farmer wants to maximize yields and profits while minimizing costs. Soil tests can help determine and overcome:

- Acid soils
- Low yields due to lack of fertility
- Using the wrong fertilizer
- Wasting fertilizer to maximize yields

As a rule, test soils every year for a field on crop rotation or every 2 years when growing same crop. Testing is used as a guideline for a specific crop.

The soil test made will only be as accurate as the sample is representative of the field being sampled. Therefore, a good sampling method is important in getting good soil test results.

### **When to Sample**

Soil sampling can be done at any time, but remember the following:

- Spring sampling tends to leave one short when requiring fertilizer and limestone recommendations for planting that year;
- Fall sampling assures you that your results are returned in time for your next planting and allows for planning; and,
- Early fall sampling allows you to receive results for fall liming.

### **Tools Required**

Uniformity of samples is necessary for representative, or composite, field samples. The tools required are:

- A soil auger or probe; or, a shovel or spade
- A clean pail for mixing
- Sample bags and information sheets



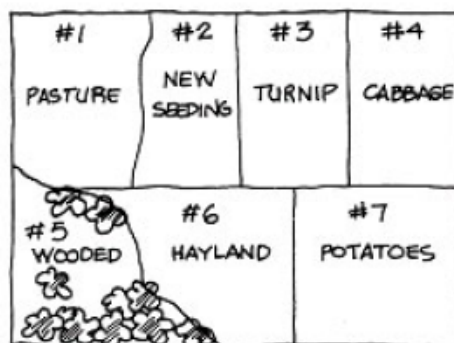
*Note: Sample bags and information sheets are available from your local Agriculture Representative's office.*

### **Taking the Samples**

Make sure you have completed the following: Map of the farm indicating the crop to be grown in field(s), and assign each field a number. Use the same field numbers as used in previous testing.

Samples should be taken from each field that appears uniform. Sections to be sampled separately are:

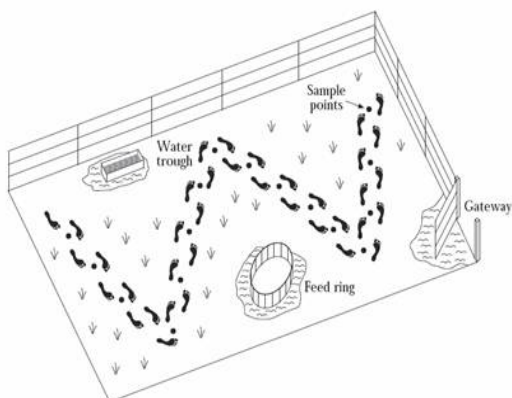
- Bottom and uplands soil
- Large low or poorly drained areas
- Soils of different color and texture
- Soils of different liming, fertilizing or cropping practices



*Note: Avoid sampling in areas where organic waste or lime has been piled; and areas close to trees, fence-lines, roads or windrow.*

Walk a “W” pattern and take ten (10) individual samples from **each field of 5 hectares or less.**

A soil probe or auger is the best tool for taking soil samples, but more often a shovel is readily available. If a shovel is used, follow these directions.



**Dig** a V-shaped hole in the soil, being careful to clear away the surface litter.



**Take** a slice down one side of the hole to a depth of 20 cm. Six (6) cm is suitable for sod crops



**Trim** both sides of this slice to leave a 3-cm width of soil. This is an individual sample to be placed in a clean pail. Take 10 such samples and mix them thoroughly to make a representative, or composite, field sample.



**Take** about 500 grams (2 cups) of the soil and place it in a soil sample bag and seal it.

### Sample Submission

Complete the SOIL SAMPLE SUBMISSION FORM with information including crop grown previously and crop to be grown; year and time of previous application of limestone and how much per hectare; field size in hectares; and problems occurred in the past.

Make sure to include information on the front of soil sample bags, especially field number(s) and crop(s) to be grown, along with your name and date the sample was taken.

*Note: Where no crop to be grown is specified, fertilizer and limestone recommendations cannot be made.*

Send soil samples and the completed SOIL SAMPLE SUBMISSION FORM with fee to the lab, address indicated in the header of this guide.

**For more information, contact Soil Fertility Specialist at 709.637.2685**