

Collecting soil samples is an important part of farming. Soil fertility should be sampled every three years, although annual sampling is ideal in many production systems. Soil analysis provides valuable information to determine the inputs required for sustainable production. The fall is a great time to sample soil fertility as it provides the producer an opportunity to plan for the next season. The best time to soil sample in the fall is directly after the crop is removed. Soil test levels change during the season therefore samples need to be taken at the same time of the year so that samples can be compared over time.

### Taking a Sample

It is important that your sampling technique is correct. Improper sampling technique can affect results and provide an inaccurate picture of the soil conditions. Some general information on sampling is included in this article. A soil probe will make sampling easier, although a shovel can also be used. Take a number of samples over the entire field to obtain a representative composite sample. Choose a zigzag pattern when walking through the field to take subsamples that represent the entire field. Take 10 to 20 subsamples per field (depending upon field size) and mix thoroughly in the plastic bucket. Don't use a metal pail because it can contaminate the results. Sample depth varies with the type of crop. Sample most crops to the plow layer (about 15 cm (6 in) deep). In permanent sod, minimum or no till conditions, sample 5 to 8 cm (2 to 3 in) deep. Remove all non-soil particles from the sample, such as grass, thatch, leaves, and rocks. Sample any areas with different slope, colour, texture, drainage and cropping practices separately, as well as areas that are managed differently. If there is an abnormal area which may have poor crop growth, take separate soil samples. Name and record these special samples and areas on a field map. Don't sample field entrances, edges, depressions, hill tops, near water ways, old burn sites, and areas where animals congregate.

### Need some more resources to help you sample?

- Perennia has prepared a couple of YouTube videos on soil sampling equipment and sample collection. These can be seen at: <http://www.youtube.com/watch?v=TYo9htjBo88>.
- The NSDA has also prepared a "How to Take a Soil Test Factsheet". It is available at: <http://novascotia.ca/agri/documents/lab-services/analytical-lab-howto-soiltest.pdf>.
- The EFP program has soil probes available for farmers to sign out and use. Contact the EFP team at 893-2293 or stop into the NSFA office to pick up a soil probe.

### Interpreting the Results

Proper interpretation of the results will help ensure that nutrient applications meet crop requirements and don't lead to excessive levels. The results will also provide liming recommendations and can be used to indicate if there are any excessive or deficient nutrients. Interpreting your soil test results can be a daunting task if you are not used to doing it. The Nova Scotia Department of Agriculture has developed a factsheet "Understanding the Soil Test Report" that helps interpret the results: <http://novascotia.ca/agri/documents/lab-services/analytical-lab-understand-soil.pdf>. Certified nutrient management planners are also available to assist farms with developing a three year nutrient management plan (NMP) for their farm. A list of planners is available at:

[brm/nutrient-mgmt-planners.pdf](#). This past year, new NMPs were funded at 100% while renewals were 50% funded. For more information on funding, visit: <http://novascotia.ca/agri/programs-and-services/financial-funding/growing-forward2/innovation/>