



Soil testing: A simple task with lasting impacts

Don't guess, soil test. Soil testing has a long history on farms across Canada and is one of the most important management practices any operation can make to improve yields, profitability and reduce environmental impacts.

In most regions of the country, soil tests are completed in each field every three or four years, primarily to monitor phosphorus (P) and potassium (K) levels, as well as key soil metrics that include pH, cation exchange capacity (CEC) and organic matter. More recent options include soil nitrate tests to estimate levels of available N, which is especially useful to maximize nutrient use efficiency in regions with significant precipitation.

Soil sampling is important as it:

- Accurately measures various soil nutrient levels currently in the field.
- Identifies soil nutrients that are lacking or are in excess.
- Aids in determining a responsible nutrient-management strategy to increase or maintain yields in subsequent crops and reduce off-field nutrient loss from leaching or run-off.

Before you get started:

- If you do not already have a farm map, draw one with outlined boundaries and

field(s), identified with a permanent name or number.

- Decide whether you are going to do your own soil sampling or work with a third party.

Sampling Steps:

- Take one composite sample for every 25 acres (10 Ha).
- The number of cores in each composite sample should be at least 20 taken randomly, but in a uniform pattern throughout the field.
- Samples should be taken at a depth of 15-20 cm. Remove residue and break up large clumps.
- Place samples in a container with sample number, field identifier and other pertinent information.
- Co-ordinate sending of the sample to an accredited lab for analysis.
- Work with a knowledgeable agronomist to interpret the soil test results and develop a customized nutrient-management strategy.

As harvest wraps up and the are off the fields, it's the time of year to get those fields soil tested.

To find more about soil health in Canada, visit the Soil Conservation Council of Canada's website at www.soilcc.ca



Sources:

Ontario Ministry of Agriculture Food and Rural Affairs. Soil Sampling Analysis. 2020.

Perennia. Importance of Soil Sampling. 2018.