



Soil Sampling Season is Here!

As the 2019 season gets rolling, it's time to think of this year's crop and the condition of your soil. World famous engineer and mathematician W. Edwards Deming once said, *"Without data, you're just another person with an opinion"*. This is quite fitting as without a current and comprehensive soil test, your fertility requirements for the growing season are merely a guesstimate at best. Given the significant investment of nutritional products needed to produce high yielding crops, a soil test is a small but critical step to optimize your overall crop input investment.

If you missed taking soil samples last fall and are taking samples this spring, here are a few useful tips to keep in mind:

Sampling Tools

When sampling various soils at different times of the season it is important to use the proper equipment. A soil probe, either a hand tube or hydraulic probe, can be used under most conditions. A small wooden rod may be helpful in removing the soil core from the tube. The soil auger is especially useful when sampling frozen ground or heavily compacted soil that a soil tube can't penetrate.

If using a pail to collect the soil, it should be plastic to avoid any contamination from trace metals. For instance, soil will pick up zinc from a galvanized pail.

When sampling wet soils, vegetable oil or mineral oil may be used to lubricate the probe to minimize soil pushing ahead of the probe.

Sample Preparation

Mix cores or slices together in a clean plastic container and take enough subsample to fill the special soil sample bag provided by A&L Laboratories. There is no need to process the sample further before shipment. At A&L Laboratories, the sample received is dried, ground, and sieved by experienced technicians. Send a separate bag if the Nematode Test is needed in addition to the Basic Tests.



Understanding Field Variability

To have good information by which to plan your future fertility programs, an intensive soil sampling program such as site-specific sampling or soil audit is highly recommended. The more intensive your soil sampling regimen is, the better equipped you will be with information to make an informed business decision. Site specific sampling will clearly highlight the fact that all fields have great variability and can be managed to address those field differences for optimal input applications.

Sampling Reduced Tillage & No-Till

No till and reduced tillage have different meanings to various people. When referred to here we mean any tillage that doesn't incorporate soil much more than 3 inches. Remember most disks, chisel plows or vertical tillage equipment, if run 3-6 inches deep, are only incorporating to one-half that depth.

To get a representative soil sample under these conditions, soil samples can be taken from two depths. Take one from the surface 2 inches and one from the 0-6-inch depth. The 0-6-inch depth should be used for general fertilizer recommendations. The 0-2-inch sample should be used to adjust the fertilizer program placement and to provide for accurate herbicide programs. Generally, at the surface you will find higher fertility, higher organic matter content, and lower pH, all of which affect the fertility and herbicide programs.

Usually a basic test is adequate for the 0-2-inch depth. However, a more complete test should be run in some situations. Zinc deficiencies have been seen under reduced tillage, even though the 0-6-inch sample showed adequate levels.

Understanding Soil Tests

Soil tests are a valuable agronomic resource if they are fully used and properly understood.

Plant nutrition and plant to soil interactions are complex mechanism with several environmental and external conditions affecting the process. There are many elements involved in plant nutrition, some of which are supplied naturally that we have little control over such as temperature and moisture, and many that are supplied by soil and or by fertilizer applications such as the major macro nutrients.

Therefore, it is important when interpreting soil analysis and designing a fertility program to keep balanced nutrition, source, timing and proper placement of these nutrients in mind.



Key Trends – Soils Across Canada

A & L is continually assessing the soil analyses conducted across many geographies. Looking back at A&L Canada's 2018 aggregate soil analysis results, we see interesting trends pertaining to critical primary, secondary and micro nutrients such as Potassium (K), Sulfur (S), Boron (B) and Calcium (Ca) levels:

Maritime provinces (PEI, NB, NS)

- Average soil Calcium of 926 ppm, >80% of soil samples at very low or low concentrations
- Average soil Boron of .3 ppm, >90% of soil samples at very low or low concentrations
- Average soil Potassium of 130 ppm, 12% of soil samples at very low or low concentrations

Eastern Canada (ON, PQ)

- Average soil Sulfur of 23 ppm, >85% of soil samples at very low or low concentrations
- Average soil Boron of .6 ppm, >60% of soil samples at very low or low concentrations
- Average soil Potassium of 147 ppm, 17% of soil samples at very low or low concentrations

Western Canada (MB, SK, AB)

- Average soil Sulfur of 127 ppm, >70% of soil samples at very low or low concentrations
- Average soil Boron of .8 ppm, >40% of soil samples at very low or low concentrations
- Average soil Potassium of 127 ppm, 20% of soil samples at very low or low concentrations

West Coast (BC)

- Average soil Sulfur of 58 ppm, >75% of soil samples at very low or low concentrations
- Average soil Boron of .5 ppm, >60% of soil samples at very low or low concentrations
- Average soil Potassium of 58 ppm, 75% of soil samples at very low or low concentrations

Northern US (MI, OH, NY)

- Average soil Sulfur of 10 ppm, >80% of soil samples at very low or low concentrations
- Average soil Boron of .3 ppm, >80% of soil samples at very low or low concentrations
- Average soil Potassium of 117 ppm, 12% of soil samples at very low or low concentrations

A&L Professional Agronomy Perspectives for 2019

If not addressed, low levels of key nutrients may become limiting factors to achieving yields growers are targeting for 2019. Using current soil analysis and understanding crop yield targets for the year ahead is critical in determining the right fertility plan for the coming season.



A&L Customers Can Now Access Their Test Data Easier Than Ever!

A&L Canada Laboratories has updated and improved the way clients can access their reports, soil test results & analysis.

To easily access their A&L soil test data, customers can now login to the updated A&L Laboratories online DataWeb client portal or can view their soil data via the Climate FieldView™ platform.

The new, updated [A&L DataWeb Client Portal](https://services.alcanada.com/dataweb2018/login) is now live, offering customers a more comprehensive and easier-to-use access of A&L Reports and Analysis <https://services.alcanada.com/dataweb2018/login>. The new portal:

- Can be customized for personal use
- Has expanded availability of A&L reports (not just soils)
- Allows for access to precision ag maps
- Allows users to access past Reports for in-depth analysis

A brief online training video is also available to help clients quickly access and utilize the portal <https://www.youtube.com/watch?v=2RAA6zQFd6g>.



Submit Your Samples on the Go!

A&L Smart Submit App is a mobile solution provided to A&L customers to submit their soil submission information electronically. The App is available for download free in the App Store and is suitable for both Apple and Android devices.

A&L SMART SUBMIT APP

Sample submission for:



- ✓ Soil
- ✓ Plant tissue
- ✓ Feed
- ✓ Disease Diagnostics



The A&L Smart Submit App is an efficient and accurate way to submit your samples while on the go! For more information please watch this instructional video.

[Watch Instructions Video on YouTube](#)

A&L Canada and Deveron Expand Soil Sampling Services

A&L Canada Laboratories Inc., and Deveron UAS Corp. (CSE: DVR), both innovative leaders in agricultural services and technologies, are pleased to announce they have entered into an agreement where A&L Canada Laboratories Inc. (“A&L”) will engage Deveron to execute and extend A&L’s soil sampling collection service across North America.



A&L has historically maintained a soil sampling service for numerous farmers and enterprise customers. A result of this agreement, A&L will extend the physical collection of soil samples through Deveron's network. Deveron's personnel will collect samples as part of a larger portfolio of services offered to clients in regions across North America.

If you need soil sample collection services this spring, please contact A&L toll free at 1-(855)-837-8347 or Deveron at <https://www.deveronuas.com/contact-us/>.

Deveron and A&L believe that one of the major limiting factors to maximizing yield on the farm is the understanding of soil. This co-operation will allow A&L to continue offering industry leading soil analysis while allowing Deveron to leverage its network of on-demand data acquisition experts to collect soil samples. Ultimately, both companies believe current and prospective customers will benefit from this integrated relationship which will see an expansion in the coverage of soil sampling services across North America.



A&L Canada Laboratories is pleased to have resources available coast to coast to answer your questions and support your 2019 growing needs!



MEET OUR TEAM

AGRONOMY AND BUSINESS DEVELOPMENT REPRESENTATIVES

CHRIS MEIER
CENTRAL + EAST
ONTARIO | QUEBEC
cmeier@alcanada.com

MIKE FOLKARD
SW ONTARIO
mfolkard@alcanada.com

ERICA MACDONALD
MARITIME PROVINCES
emacdonald@alcanada.com

JILL DEBENHAM
MANITOBA | SASK
jdebentham@alcanada.com

NOAH BERTHOLET
SASKATCHEWAN
nbertholet@alcanada.com

NORM DUECK
ALBERTA | B.C.
ndueck@alcanada.com

CASE DEYOUNG
US MARKET
Horticulture and Business Development
Manager
cdeyoung@alcanada.com

BRIAN COUTTS
NORTH AMERICA - Food & Pharma
Strategy and Business Development
Manager
bcoutts@alcanada.com

CUSTOMER SERVICE

JULIE MOLLARD
jmollard@alcanada.com
1-855-837-8347

A&L Canada Laboratories Inc.
www.alcanada.com

