



## Plant Tissue Analysis

Competing in today's agricultural market requires precision crop production beginning with choosing the correct crop varieties and hybrids through proper harvest and storage. Plant Tissue Analysis is a tool that assists in understanding nutrients that crops are utilizing from the soil.

When evaluating crops, there are many visual indicators to gauge the health and growth of the plants. Rainfall can be measured, plant populations can be counted and pest and/or weed infestation can be seen. However, the nutrient status of the plant cannot be determined by visual methods. CVAS offers laboratory analysis of plant tissue for nitrogen, nitrates, as well as a variety of minerals and heavy metals (see page 2 for a listing of test packages and options). These results can provide information to diagnose problems, allowing for corrective fertilizer application during the current growing season or for future applications.

When sending samples to CVAS for Plant Tissue Analysis, it is critical to sample at the correct stage of growth and the correct part of the plant. General sampling guidelines are below, for more extensive instructions and a full list of stage and plant part to sample, see CVAS Tech Note: Plant Tissue Analysis – Sampling Guidelines.

1. Sample plants from the entire field unless you are trouble-shooting a specific area, then select plants from only inside that affected area.
2. Collect samples at the correct stage of growth and only the correct portion of the plant.
3. Samples should be collected in a paper bag or clean plastic bucket (do not use a metal bucket).
4. Remove any dust or residue from the plant parts. Do not include roots in the sample.
5. Ship the sample to CVAS in a paper bag or paper envelope. Do not use plastic or polystyrene shipping containers. Overnight shipping is recommended.

### Pricing:

Domestic Pricing for Plant Tissue Analysis is below. Samples evaluated for Nitrate, Nitrogen, Carbon or Sulfur without a Standard Plant Tissue package will incur a \$6.00 processing charge in addition to the prices below.

Standard Plant Tissue Analysis - \$46.25

Trace Minerals (Cadmium, Cobalt, Lead, Molybdenum, Nickel) - \$42.25 each

Nitrate - \$12.00

Total Nitrogen - \$7.50

Total Carbon - \$28.00

Total Sulfur - \$7.50



ANALYSIS RESULTS	Standard Package	Available Individually
Nitrogen	X	X
Nitrates		X
Boron	X	
Cadium		X
Calcium	X	
Carbon		X
Cobalt		X
Copper	X	
Iron	X	
Lead		X
Magnesium	X	
Manganese	X	
Molybdenum		X
Nickel		X
Phosphorous	X	
Potassium	X	
Sodium	X	
Sulfur	X	X
Zinc	X	

Tips for Best Plant Tissue Analysis Results *
Time the sampling correctly. Each crop has distinct time that works best for sampling.
Select samples representative of the field or area being sample.
Collect the proper amounts.
Handle the sample correctly prior to shipping.
Ship to the lab as quickly as possible.
*see CVAS Tech Note: Plant Tissue Analysis – Sampling Guidelines

**References**

Kelling, K.A., Combs, S.M., Peters, J.B., Sampling for Plant Analysis

**Resources**

Tech Notes – Plant Tissue Analysis – Sampling Guidelines

For more information on any of our Plant Tissue Analysis Packages, please contact us at 1-800-CVASLAB or via e-mail at [mail@foragelab.com](mailto:mail@foragelab.com).