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MVTL Newsletter
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Cornstalk Nitrates ...

The cornstalk nitrate test can be a very useful tool to help identify late season nitrogen uptake. The ability to *estimate* these nitrogen levels may not always reveal a need for changes in the nitrogen management plan, but nonetheless, it will *help* verify overall crop uptake as excessive, optimum, or deficient. Call for perforated bags if needed, or place cornstalk segments in a small cardboard box prior to shipping.

- **Timing & Collection of Samples**
  - Kernels reach 80% black-layer
    - => Year to year consistency is vital.
    - => Stalk continues feeding plant with nutrients.
  - Collect 15 (“8” stalk segments)
    - => These segments are best taken 6-14” above the soil surface.
  - Discard sheath’s and damaged material
    - => Damaged material will contaminate the sample.
  - Try to keep stalks aerated as done with plant analysis.
- **Monitoring Tool for Nitrogen Efficiency**
  - Tool is for all corn production systems with *emphasis* on:
    - => Continuous corn
    - => Corn following alfalfa
    - => Corn with a manure history
- **Correlates Nitrogen Concentration to Yield**
  - 1200 ppm is considered the optimum level
    - => Low (0-250) ppm
    - => Marginal (250-750) ppm
    - => Optimum (700-2000) ppm
    - => Excessive (>2000) ppm