



## UConn Soil Nutrient Analysis Laboratory

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**UConn**  
COLLEGE OF AGRICULTURE,  
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RESOURCES  
EXTENSION & PLANT SCIENCE  
AND LANDSCAPE ARCHITECTURE

## **Instructions for Collecting End-of-Season Cornstalk Sections**

The cost to analyze cornstalks for nitrate is \$10.00 per sample.

1. Cut stalks at 6 and 14 inches above ground level. Save the resulting 8-inch segment. Stalks severely damaged by disease or insects should not be used. **It is extremely important to cut the stalks at the 6- and 14-inch height above the ground, because cutting lower or higher will result in incorrect assessment of nitrogen availability.** Consistently cutting below 6 inches will result in higher than expected stalk nitrate concentrations and consistently cutting above 14 inches will result in lower than expected stalk nitrate concentrations.
2. The collection of samples for corn harvested for silage and corn harvested for grain are identical except for the time of sampling.

Silage corn: collect stalk sections from one week before you plan to chop the corn until one day after the corn is chopped. The easiest method to collect a sample is to walk or drive across the field up to 24 hours after harvest and cut the stalk sections from the stubble. If your stubble height is normally less than 14 inches tall, I recommend you raise the corn head for about 50 feet in a few places in the field and collect your stalk sections from the stubble in those areas.

Grain corn: collect stalk sections one to three weeks after physiological maturity of the plant (when about 80% of the kernels have developed black layers).

3. Collect fifteen 8-inch segments to form a single sample. These should be collected at random within an area not larger than 15 acres. Areas differing in soil types or management histories should be sampled separately. An easy method for collecting a sample is to collect 3 to 5 stalk segments from each of several small areas (less than an acre) that seem to be representative of larger areas within a field.
4. Send samples to the Soil Testing Laboratory at the University of Connecticut for analysis within one day of collection. Samples should be placed in paper (not plastic) bags to enable some drying and to minimize growth of mold. The test results will be incorrect if the samples are stored for more than one day before shipment to the lab. The time normally required to mail samples to the laboratory is not a problem.
5. Label the bags with a field ID and provide your mailing address.
6. Mail the samples and check (payable to UConn) to: UConn Soil Nutrient Analysis Laboratory, 6 Sherman Place, Box U-5102, Storrs, CT, 06269. The United Parcel Service might be more reliable for overnight delivery because they deliver directly to the Soil Testing Laboratory.