UConn Soil Nutrient Analysis Laboratory
6 Sherman Place, Union Cottage, Unit 5102
Storrs, CT 06269-5102
860-486-4274
soiltesting.cahnr.uconn.edu

UCONN
COLLEGE OF AGRICULTURE, HEALTH AND NATURAL RESOURCES
EXTENSION & PLANT SCIENCE AND LANDSCAPE ARCHITECTURE

SAMPLING DIRECTIONS FOR PRESIDEDRESS SOIL NITRATE TEST (PSNT)

Cost is $10/sample. Checks payable to: University of Connecticut.

Mail or drop off samples to: June Nitrate Test
UConn Soil Nutrient Analysis Lab
6 Sherman Place, Box U-5102
Storrs, CT 06269

1. Sample when corn is 8 to 12 inches tall:

    a. Sample the surface soil to a 12-inch depth for accurate results and N fertilizer recommendations.

    b. Obtain 15 to 20 cores per sample area. If the field to be sampled is larger than 15 acres, divide the field into 2 or more sample areas, if it is convenient and feasible to do so.

    c. Avoid row fertilizer bands (e.g., starter) by sampling midway between the rows. Avoid sampling areas where manure was piled of where manure application was usually heavy or light.

    d. Mix cores thoroughly in a clean pail; take 1 cup as the sample. Place sample in cloth bag (provided by lab), pull closed, and make sure to write name and sample ID on yellow tag attached to bag.

    e. Fill out PSNT sample submission form.

2. Use of cloth bags eliminates the need to store and transport samples in coolers. The use of cloth bags does not eliminate the need to protect moist soil samples from temperatures above 75 degrees F. Cloth sample bags can be obtained free of charge from the Lab.

3. Refrigerate samples if they cannot be analyzed within three days. Samples expected to spend more than three days without refrigeration should be dried as soon as possible. Samples can be air-dried by spreading in a thin layer – a fan will accelerate drying.

4. Samples that are extremely wet or muddy should be dried before shipping or storage. Incorrect results will be obtained if water drips from the samples.

5. Mailing samples usually poses no problem if samples spend no more than three days without refrigeration. Overnight delivery is preferable.

6. The UConn Soil Nutrient Analysis Laboratory typically emails the results and recommendations to commercial growers the day after receiving the samples. The results also can be mailed to the grower upon request.

7. We strongly recommend that you make every effort to obtain a 12-inch deep sample because our research data demonstrates that the most accurate recommendation are obtained from 12-inch samples. But, if you cannot sample this deep, please note the average depth of sampling (e.g. 8 inches) in the column provided. This information will be used to adjust your N recommendation. A higher rate of N will be recommended for most soils because nitrate concentrations normally decrease with depth.

For more information or to request cloth bags, contact the UConn Soil Nutrient Analysis Lab at (860)486-4274.