

Soil Nutrient Analysis Laboratory



Soil Nutrient Analysis Laboratory; 6 Sherman Place, Unit 5102, Storrs, CT 06269-5102

Phone: 860-486-4274 • Fax: 860-486-4562 • Location: Inion Cottage, Depot Campus, Mansfield

Sampling Turf for Plant Analysis

Turf Grass Sample Collection

Bluegrass, tall fescue, and perennial ryegrass samples submitted for testing should consist of one to two cups of clippings collected during the summer.

Suggested Cleaning Methods for Turfgrass Samples

Turfgrass that has recently been sprayed with micronutrients or pesticides should not be used for testing. Washing clippings to remove soil and dust particles is recommended prior to sending the samples to the lab for analysis. If you rinse one collection of clippings and not all, the nutritional analyses may not be comparable because the concentration of some nutrients, such as K, is mobile and a portion of the K may be removed during washing. Unwashed samples may appear to have a higher concentration than washed samples, and there may be a deficiency in the washed samples when, in fact, an adequate supply of K exists. <http://edis.ifas.ufl.edu/ss317>

Washing: Using a clean bucket, wash each sample separately. Fill the bucket with water that is at least 4 times the volume of the clippings. Mix clippings into the water by hand or with a mixing spoon so that debris such as fertilizer granules or sand particles are washed off of the tissue and sink to the bottom. The tissue will float.

Drying: Find an area that is dry and not in a windy spot. Label pieces of newspaper to match labels on sample containers. Remove the clippings that are floating on the surface of the water and squeeze to get rid of excess water. Spread the washed clippings into a thin layer (less than 1 inch deep) on the newspaper to air dry. Do not use an oven or microwave. Allow the clippings to dry completely (in a dry room, overnight is usually sufficient). When dry, the tissues will blow away easily so be careful in handling them to prevent cross-contamination of samples. Once the tissue has dried, they are stable and will not decay.

Packaging and shipping: Place clippings into a new, clean appropriately labeled paper bag that is appropriately labeled, roll the bag to secure the tissues inside and place a rubber band around the bag to prevent loss of the sample. Ship to an analytical laboratory for analysis. http://www.paceturf.org/PTRI/Documents/Soil_tis/0201.pdf

General Sampling Instructions

- 1) Sample an average of 10 - 30 plants of one variety from a representative area.
- 2) If there is a plant growth problem, submit a sample from the problem area along with a sample where normal growth is occurring.
- 3) Collect appropriate number of leaves/petioles/clippings per sample. Call us at (860) 486-4274 or go to our website for specific collection information for various plant species not listed on this sheet.
- 4) If plant samples have soil, fertilizer, dust or spray residues, they will need to be cleaned. Try brushing with a soft brush. For persistent residues, wash leaves/petioles with a dilute (phosphate-free) dishwashing detergent in tap or distilled (preferred) water quickly (less than one minute). Rinse well, shake excess water from, and air dry at room temperature on paper towels or other clean, absorbent surface. Do not let plant samples sit in water as nutrients will leach out.
- 5) Place dried leaves in clean paper bags and submit to UConn Soil Nutrient Analysis Laboratory along with questionnaire and check for \$20, payable to the University of Connecticut. Fresh, rinsed samples may be brought directly to lab or shipped overnight to:

University of Connecticut
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