CEH-6-IG

Plant Leaf Tissue Sampling

Dr. W. Garrett Owen (wgowen@uky.edu)
Delia Scott (delia.scott@uky.edu)
University of Kentucky, Department of Horticulture, Lexington, KY

To best identify nutrient disorders or to determine the nutrient status of a crop, growers should sample leaf tissue for nutrient analysis. To sample leaf tissue for general routine nutrient analysis, follow this general procedure:

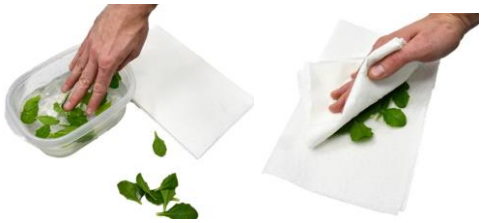
STEPS

1 Select plants of the same species and cultivar to sample.

QUICK TIP Smaller-leaved species may require sampling more plants to obtain enough leaf tissue than species with larger leaves.

2 Collect 20 to 30 leaves by removing recently matured, fully expanded leaves from upper plant parts.

3 Gently wash sampled leaves in distilled water for 20 to 30 seconds and pat dry.



QUICK TIP Removes fertilizer, spray residues, or other contaminates. Follow your preferred lab-specific sampling and preparation procedures.

4 Place leaf samples in a paper bag or lab issued envelopes and label with sample date, crop/cultivar, and location for sample.

QUICK TIP Do not place leaf samples in plastic bags due to the potential of rot.

5 Provide all requested information to your preferred lab such as crop notes, fertility regimen, chemical applications, and/or when the symptoms were first noticed.

6 Mail or ship leaf tissue sample(s) within 24 hours.

Photos by: W. Garrett Owen, Ph.D.