

Instructions for Apple Leaf Sample Collection – Vermont

1. **Time to Sample:** Between July 20th and August 20th.
2. **What to Sample:** Select 60 to 100 leaves from the middle of current season terminal shoots. If sampling is done later than July 25th, select the first full-sized, mature leaf behind the shoot tip. Select 1 or 2 leaves per shoot from several shoots on each of several trees exposed to light. Shoots to be sampled should be 5 to 7 feet above ground level in larger-sized trees and 3 to 6 feet above ground level in smaller-sized trees (young trees, trellised or spindle plantings). Shoots sampled should be of average vigor (length and diameter) for the trees in the planting.

AVOID excessively strong shoots (near pruning cuts) and extremely weak shoots.

DO NOT include spur leaves.

DO NOT include leaves damaged by disease, insects, weather, or mechanical injury.

DO NOT mix leaves from trees of different varieties.

3. **TREES SAMPLED** should represent the average conditions within the orchard unless special samples are being taken to determine cause(s) of a distinct problem or condition.
4. **SOIL CONDITIONS, PAST FERTILIZER PRACTICES, AND SPRAY PROGRAMS** should be uniform (similar) over the entire area sampled. If any of these conditions are different in various parts of the orchard, it will be necessary to sample these areas separately.
5. **COLLECTING AND HANDLING SAMPLES:** Remove the leaves by pulling downward so the petiole remains attached to the leaf. Place leaves in a dry paper bag or perforated plastic bag and immediately label the bag so that you will know where it came from.

WASH the leaves before they wilt to remove spray residues and dirt. Gently rub the leaves together in a mild detergent solution (dish washing detergent in tap water. **SEE FOLLOWING DIRECTIONS FOR WASHING LEAVES.** Place sample in a dry paper bag, with top open, and let dry at room temperature until leaves are brittle.

6. **FILL OUT** a sample information sheet. **BE SURE** that the leaf sample bag **and** the information sheet have been marked **with the same sample identification information.**

The sample info sheet should have:

- Your name and / or orchard
- Address
- Sample identifying information, such as: Variety and age, block ID number, letter, or name

7. **MAKE OUT** a check or money order payable to **UVM**, and enclose check, information sheets, and leaf sample in a mailing carton.

COST PER SAMPLE: \$30.00, INCLUDES N, K, Ca, Mg, P, B, Mn, Zn, N:K and N:Mg

8. Seal the carton with tape appropriate for shipping.
9. Mail or bring the carton to the **Agricultural Testing Lab, Rm. 262 Jeffords Hall, 63 Carrigan Dr, University of Vermont, Burlington, VT 05405-1737.**

Washing Leaf Samples

1. Wash the leaf samples while still fresh, **before they wilt**. If a large number of samples is involved, they can be stored overnight in a cold storage, refrigerator, or ice chest to keep them from drying out.
2. Use distilled water, available at most drugstores, for washing and rinsing the samples. Change the water as it becomes dirty or after 8 to 10 samples (whichever occurs first). **Gently** and **lightly** scrub the leaves together in a mild detergent solution (most dish washing detergents are satisfactory).
3. Shake to remove the excess water and immediately rinse the sample in clean distilled water. Again shake to remove excess water.
4. Spread out sample on clean paper towels until leaf surfaces are dry.
5. Transfer sample to paper bag, with top open, and dry at room temperature until the leaves are brittle.

NOTE: Do not let leaves stand in water—complete the washing and rinsing process in one minute or less.