Grapevine Leaf Blade Sampling

Why Sample Leaf Tissue?

Sampling leaf tissue at critical times of the season (bloom & veraison) is the best way to get feedback in the current season with regard to how your vines are responding to the growing conditions, your fertilization program, and seasonal fluctuations in temperature and rainfall. Unlike a soil analysis, the results of a plant tissue analysis can provide real-time input on how well vines are taking up and assimilating nutrients.

Leaf analysis tells us what the vine has taken up from the soil.

Soil analysis tells us what mineral nutrients are available in the soil for vines to access.
Leaf Blade Sampling at Bloom

Sampling at bloom gives you the chance to optimize vine nutrition to improve cluster growth and berry ripening.

Beginning of flowering or trace bloom 0-30% caps fallen

Flower Cap

Bloom or full bloom 50-75% caps fallen

Bloom or full bloom 50-75% caps fallen
Flower cluster in various stages of bloom and fruit set.
Sample time range is from 1 week before to 1 week after bloom.

Quick Tip:
The optimal time for bloom nutrient sampling is when your earliest variety is at 25-50% bloom.

Sample leaves with petioles attached from a location adjacent to flowers. Be consistent – if sampling adjacent to 2nd cluster, repeat for all samples in block.
Leaf Blade Sampling at Veraison

Sampling at veraison allows you to see how effective your fertilization program was for the current season and what nutrients your vines need before bloom of the next season.

**Beginning of flowering or trace bloom 0-30% caps fallen**

**Quick Tip:**

Optimally, veraison sampling should start when your earliest red variety is from 25-50% of color change or at berry softening for white grapes.

**Collect the 6th or 7th leaf down from the shoot tip.**
Leaf Sampling Tips

- Avoid sampling from end rows or end vines.
- Sample each block and variety separately.
- Collect 40-75 leaves per block (40 leaves for 2 acres or less and 50 to 75 leaves for 3 acres or more).
- I recommend testing at both bloom and veraison, but if time or money constraints only allow for sampling once per year, sample at veraison.
- I use Waypoint Analytical – Memphis for all of my vineyard clients and Academy members, and members and clients receive 15% off when using Waypoint.
- You do not need to wash your leaves if sending them to Waypoint Analytical – Memphis simply place each sample in separately labeled brown paper bags, seal the bags, and ship them to the lab. If you are using another lab, you will need to wash and prepare your leaves before sending them in (see the Appendix for more information).
Appendix

If you are not using Waypoint Analytical – Memphis, you will need to follow the steps below to prepare your leaf sample for shipment to the lab.

1. Prepare a cleaning solution of water and a drop or two of phosphate free soap (Palmolive or Dawn are common brands).

2. Rinse leaf blades first with clean tap water and then with distilled or deionized water for a final rinse.
3. Drain and spin or pat dry.

4. Place clean, air dried leaves in a brown paper bag, seal and send to the laboratory. Leaves need not be completely dry, but should not have free moisture on them. Do not ship in plastic bags!

5. Label each sample by vineyard block and grape variety. Staple or tape bag shut.

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