

PETIOLE AND LEAF SAMPLING INSTRUCTIONS

Sampling Procedure –

From an actively growing shoot, take the most recently expanded – mature leaf. Never take an older leaf below the second fully expanded leaf. Sampled leaves should have the color and texture of other matured leaves NOT the lighter, shinier, tender appearance of young, expanding leaves or old tough ones.

When to Sample Petioles – always from Single Management block with same variety and root stock –

Minimal Program – General Survey at only one critical stage of growth.

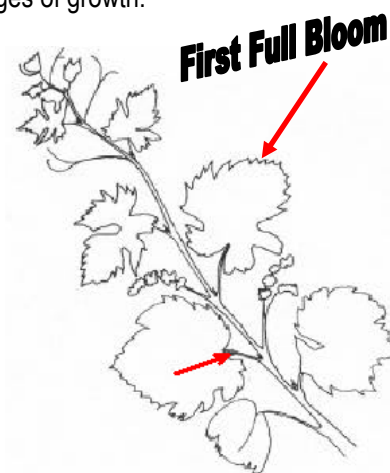
- A. Leaf Petiole at bloom – from opposite flower cluster, near full bloom is best. When 2/3rds of caps have loosened or fallen. This gives same physiological stage regardless of seasonal difference at various locations. Different Soil and Vine growth samples should be separated when in same block.

Schedule For Optimum Quality and Maximum Economical Yields (MEY) – at least 4 stages of growth.

- 1. At Season's first fully expanded-mature leaf.
- 2. At Bloom (per A. above).
- 3. At mid-fruit development (3-6 weeks) after bloom.
- 4. At **veraison** (Berry Softening-Ripening) 6-10 weeks after bloom (still time to supplement nutrients).

TPSL®'s Ask The Plant®- Full Program for MEY using Best Management Practices (BMP).

- 5. During development (3-5 more times) for a Full Crop Logging Program to adjust fertility several times for **Maximum Quality and Yields**.
- 6. At maturity, just before harvest, perform a **Leaf Analysis** (Total to-date nutritional uptake analysis to adjust yearly fertility program for next season).



PAIRED COMPARISONS – From Normal vs. Abnormal Vines of areas to correct problems.

Sampling Area – same distinct soil and vine variety and appearance.

Sample Size – 20-40 specific petioles so sufficient weight (to make two grams – dried) is available for proper analysis. The smaller the petiole, the greater the quantity needed. Leaves - 30.

HANDLING

- 1. If recently foliar sprayed, thoroughly wash using a **NON-PHOSPHATE DETERGENT** such as Ivory, Joy or other dishwashing liquid. **Whether washed or not, always thoroughly rinse.**
- 2. **Dry** on vehicle dashboard – hair drier or fan before shipping (low heat) – **don't scorch.**
- 3. Use **plain paper bags** to allow samples to breathe without decomposing (deteriorating) while in transit.

CALIBRATE your plants' uptake with in-depth profiles of your soil using **TPSL®'s Plant Natural®** Soil Tests.

Select petiole opposite either basal cluster during bloom

Collect petioles and discard the blade for nutrient analysis

Leaf Blade (discard)

Petiole (save)

Break Here

Collect petioles taken from recently mature, full-size leaves at veraison

Sample each vineyard area separately

Example Soil Profiles

Zinfandel	Chardonnay
A. deep sandy loam	C. shallow loam
B. medium depth fine sandy loam	D.
	E.