

Texas Plant & Soil Lab

Since 1938 - Still The First Soil Lab In Texas
Making Better Crops For Growers Around The World.

5115 West Monte Cristo Road
Edinburg, Texas 78541-8852
Telephone: 956-383-0739 ♦ FAX: 956-383-0730
www.TexasPlantAndSoilLab.com



LAB N^{OS} FROM _____ TO _____
 CLIENT N^O: _____
 RECEIVED: _____
 BY: _____
 RELEASED: _____
 BY: _____
 REPORT SENT: _____

ASK THE PLANT[®]

GRAPE PETIOLE or LEAF SUBMITTAL

and CHAIN OF CUSTODY

SEE **ASK THE PLANT[®]** PETIOLE AND LEAF SAMPLING INSTRUCTIONS FOR GRAPES.

NAME: _____ TELEPHONE: _____
 COMPANY: _____ E-MAIL: _____
 ADDRESS: _____ City: _____ State: _____ Zip: _____
 CONSULTANT Name/Address: _____
 CONSULTANT TELEPHONE: _____ E-MAIL: _____
 SEND REPORT BY: E-MAIL (FASTEST - PREFERRED) POSTAL MAIL
 SEND REPORT TO: CLIENT CONSULTANT

PUT DRIED SAMPLES IN PAPER BAGS

DATE SAMPLES TAKEN: _____ SAMPLES TAKEN BY: _____
 FIELD LOCATION: _____ VARIETY: _____
 DATE OF PLANTING: _____ SAMPLE AGE After 1st Bloom (Days): _____ PLANT POPULATION (Vines/ac): _____
 IRRIGATION METHOD: NONE FLOOD SPRINKLER PIVOT DRIP MICROJET OTHER COMMENT BELOW
 WATER SOURCE: MUNICIPAL/CO-OP WELL - Depth _____ LAKE RIVER EFFLUENT
 PROBLEMS OR COMMENTS: _____

HISTORY (Initial Samples Only) (Please furnish as much information as possible – including previous fertilizers, lime, sulfur, inoculants, crops, yields, etc. This allows us to provide you better interpretations and recommendations):

LINE	LAB N ^O <small>(LAB USE ONLY)</small>	FIELD / STATION ID. <small>(MAX. 6 CHARS)</small>	TIME SAMPLE TAKEN	VINE HEIGHT INCHES	VINE DEVELOPMENT STAGE NUMBER <small>SEE BELOW</small>	LEAF COLOR	GROWTH	DAMAGE INSECT WIND/HAIL WATER	CLUSTER DENSITY	SURFACE MOISTURE DEPTH	VARIETY <small>(Use Back Of Page For Comments / Applications)</small>
						DARK GOOD YELLOW	FAST GOOD POOR STUNTED	NONE LIGHT MILD HEAVY DISEASE	STRAGGLY VERY LOOSE LOOSE WELL FILLED COMPACT	+++ MUDDY ++ <= 2" + > 2" -- > 4" = WILTED	
1			:								
2			:								
3			:								
4			:								

Use separate sheet(s) for more than 4 management blocks or different varieties. All fields on this sheet will be on the same report. Field IDs remain the same throughout the growing season. **NUMBER OF PETIOLES (Full Leaf Stems) PER SAMPLE: 20 to 40 – as required to make at least 0.07 oz (two grams) dry weight.**

VINE DEVELOPMENT STAGE:
PETIOLES: 1 – At Season's first fully-expanded mature leaf 2 – At Bloom 3 – At Mid-fruit
 4 – At Veraison 5 – 2-3 Weeks After Veraison **LEAVES:** 6 – At Maturity (30 per sample)

SEE **ASK THE PLANT[®]** PLANT NUTRITION MONITORING FOR GRAPES PETIOLE AND LEAF SAMPLING INSTRUCTIONS SHEET (GRAPE INSTR) FOR DETAILS. SAMPLES MUST BE THOROUGHLY WASHED AND DRIED.

INTERNATIONAL SAMPLES – Import permits required. See www.TexasPlantAndSoilLab.com for forms.

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GRAPEVINE

ASK THE PLANT®

PETIOLE / LEAF TEST DESCRIPTION and ORDER

Prices effective February 10th, 2012
 and are subject to change without prior notice.

DISCOUNTS

Apply to Samples received in one lot only.

1 to 6 Samples - \$75.00
 7 to 12 Samples - \$72.00
 13 + Samples - \$69.00

Reports include Lab Analysis with our EXCLUSIVE
 COLOR-CODED REPORTS WITH CUSTOM RECOMMENDATIONS AND
 TELEPHONE (to 15 minutes) OR LOCAL FIELD CONSULTATIONS.

Analysis includes –

♦ Petiole (Leaf Stem): Sap NO₃ & PO₄ (Future Uptake) OR
 Plant Leaf: % Nitrogen [N] and Phosphorus [P] (Historic Uptake)

– AND –

- ♦ Potassium [K]
- ♦ Calcium [Ca]
- ♦ Magnesium [Mg]
- ♦ Sodium [Na]

- ♦ Zinc [Zn]
- ♦ Iron [Fe]
- ♦ Manganese [Mn]
- ♦ Copper [Cu]

- ♦ Boron [B]
- ♦ Sulfur [S]
- ♦ Molybdenum [Mo]

TOTAL NUMBER OF SAMPLES	TOTAL CHARGE
	\$

PAYMENT BY: Check (No. _____) Credit Card Money Order Cash
 - CREDIT CARD CHARGE INFORMATION -
 NAME ON CARD: _____ TYPE: Discover American Express VISA MasterCard
 BILLING ADDRESS: _____ CITY: _____ STATE: _____ ZIP: _____
 CREDIT CARD NUMBER: _____ EXPIRES: ____/____/____ 3 or 4-DIGIT SECURITY CODE: _____
 AUTHORIZED SIGNATURE: _____

CREDIT CARD INFORMATION MAY BE CALLED OR FAXED IN IF YOU DO NOT WISH TO PROVIDE IT HERE.

SAMPLE No.	COMMENTS – OBSERVATIONS - APPLICATIONS
1	
2	
3	
4	

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.

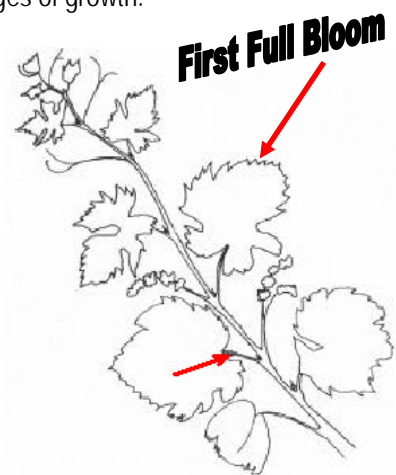
- A. Leaf Petiole at bloom – from opposite flower cluster, near full bloom is best. When 2/3^{rds} of caps have loosened or fallen. This gives same physiological stage regardless of seasonal difference at various locations. Different Soil and Vine growth samples should be separated when in same block.

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; otherwise, at least thoroughly rinse.
- 2. Dry on vehicle dashboard – hair drier or fan before shipping (low heat) – **don't scorch**.
- 3. Use **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 ASK THE PLANT®**

Select petiole opposite either basal cluster during bloom

Collect petioles and discard the blade for nutrient analysis

Leaf Blade (discard)

Break Here

Petiole (save)

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.