

Agri *Resource*

Soil Sample Collection Vineyards

Timing: The best times to soil sample are in the autumn and spring. When sampling a vineyard be consistent, pick autumn or spring, and stick to it. If you are working to correct an agronomic problem, sample each year. Otherwise, sampling every 3-5 years is sufficient.

Where to Sample: Composite samples should not represent more than 10-15 acres assuming uniform conditions exist. Separate samples should be taken where:

- Soil texture changes (sand, silt, clay)
- Substantial changes in slope
- Irrigated vs. non-irrigated

Irrigated: Soil samples should be taken between the row and the wheel track

Non-irrigated: Anywhere is permissible within the vineyard

Tools:

- Soil core sampler
- Shovel/trowel

Method:

- 1) Clear away weeds and other loose organic material
- 2) Take at least three (3) soil samples at each site
- 3) Proper samples identification is required. Identifying the depth and location in the vineyard, ensures good record keeping. Example, block/site 1, row 5, panel 5/GPS coordinates, grape variety.

Depth of sample required: When sampling for nutrient analysis, depth of vine roots is the determining factor as nutrients past that point are unavailable to the plant. Use a shovel or trowel and dig a hole to determine the depth of the root zone. Normal depths are 0 to 24 inches.

Assumptions to be made:

- Age of vine
- Soil type
- Soil pH (large changes in pH may restrict root growth)
- Soil salinity (high salinity levels at depth will restrict root growth and or performance)