

Rapid Phenolic Analysis as an Evaluation Tool for Grapes and Wine

This program is an example of how many clients are using the ETS phenolic analysis tools to respond to grape and wine phenolic content to reach target phenolic levels.

Rapid Phenolic Panel for Grapes

A measurement of the phenolic content of grapes at harvest gives winemakers a snapshot of the raw material coming into the winery. The analysis describes grape potential. It characterizes block to block variation and variation between vintages and is often the first alert that a wine lot may have high or low tannin, unripe seeds or potential color problems.

Clients have had the best results sampling directly from the vineyard rather than picking bins. A 20 to 40 cluster sample is recommended. All the berries should be removed, the berries mixed, and a 350 g (0.75 lbs) sample sent to ETS. The panel includes tannin, polymeric anthocyanins, total anthocyanins and catechin. Results are returned within 48 hours.

Rapid Phenolic Panel for Wine

The extraction of phenolic compounds in wine can be monitored with the ETS Rapid Phenolic Panel for Wine. The panel measures the same four components as the Rapid Grape Panel with next day results. Wine lots can be sampled at key points in the fermentation/maceration process to provide a basis for adjusting the fermentation variables. Typical sampling points are at the end of a cold soak, at the start of fermentation around fifteen Brix, at Dryness, before pressing and free run at pressing.

Information on tannin, seed extraction and potential color can help guide decisions on adjusting fermentation temperatures, oxygenation regimes to fix color, rack and returns to increase extraction, tannin or enzyme additions, extended maceration and many other winemaking techniques that influence phenolic content.



Implementing a Phenolic Program for Evaluation of Grapes and Wine

A phenolic evaluation program can be initiated at the time of harvest. Additional sampling during fermentation provides information that can be used to adjust fermentation conditions, and will serve as an important historical record to guide future vintages.

The cost of a simple phenolic program is moderate considering the value of the product, the financial implications of problems and the profit potential of upgrading wine quality. A single Rapid Phenolic Panel for Grapes at harvest plus four Rapid Phenolic Panels for wine during fermentation/maceration is approximately \$400 depending on the number of samples.

Example of Phenolic Program for Evaluating Grapes and Wine:		
Rapid Phenolic Panel for Grapes	1 sample	\$110
Rapid Phenolic Panel for Wine and Juice taken at:	Cold Soak	\$75
	Fermentation	\$75
	Pressing	\$75
	Free Run	\$75

This document is a compilation of information and views from various sources provided for the convenience of our clients. Information provided in this document is provided "as is" without warranty of any kind, either expressed or implied, including but not limited to the warranties of merchantability, fitness for a particular purpose and freedom from infringement. User assumes the entire risk as to the accuracy and the use of this document. This document may be copied and distributed subject to the following conditions: 1) All text must be copied without modification and all pages must be included 2) All copies must contain ETS' copyright notice and any other notices provided therein 3) This document may not be distributed for profit. All trademarks are acknowledged. Copyright © ETS Laboratories 2001-2008.