Juice Analysis

Juice analysis is an important harvest tool for winemakers. Vinquiry offers two juice panels that provide information on fruit maturity, composition, and balance that will affect the characteristics of the finished wine. Evaluating juice will also reveal nutrient deficiencies and aid in yeast selection and microbiological monitoring.

Juice Panel, Panel 3, includes:

- Brix by Refractometer
- Ammonia
- Assimilable Amino Nitrogen
- Organic Acid Profile (Malic, Tartaric, Lactic, Acetic)
- pH
- Titratable Acidity
- Potassium
- Botrytis Risk Assessment

Core Juice Panel, Panel 3.5, includes:

- Brix by Refractometer
- Ammonia
- Assimilable Amino Nitrogen
- pH
- Titratable Acidity
- Malic Acid

Components of the Juice Panel

The **Brix** level of the juice is a ripening indicator and can be used to predict the approximate alcohol level by volume of the finished wine.
The **pH** level of juice will indicate the level of monitoring needed for microbiological growth, such as Lactobacillus and Brettanomyces.
Knowing the **Titratable Acidity (TA)** of juice will determine whether acid adjustments are needed to prevent spoilage and "flat tasting" wine.
The **Organic Acid Profile** includes four major wine acids. **Malic Acid** levels will give a baseline for malolactic (ML) fermentation. If lactic acid is present, then ML fermentation has begun. Acetic acid indicates the presence of spoilage, and tartaric acid is a large component that contributes to TA.
Ammonia and **Assimilable Amino Nitrogen** combine to form total yeast available nitrogen (YAN), which is a large portion of available nutrients in juice. Total nutrient levels will specify how much DAP and yeast nutrients (Fermaid K, Actiferm 1 & 2, and Fermaid 2133,) will be needed in order to have a successful fermentation.
High **Potassium** levels in juice often result in high pH levels, causing spoilage to become a concern.
Botrytis Risk Assessment provides semi-quantitative analysis of *Botrytis cinerea* where contamination is measured on a percentage-rot scale.

Sampling

Vinquiry must receive juice samples before fermentation begins. They can be dropped off at any of Vinquiry's three offices, picked up by courier, or shipped. If shipping, Vinquiry recommends freezing samples in a plastic/Nalgene container and ship by Next Day Air with ice packs. Please note on the bottle how the sample has been treated.
Please do not use glass containers in order to maintain the safety of our analysts. Using plastic bottles will also reduce the risk of sample loss due to leaking under pressure.
Do not add excessive amounts of potassium metabisulfite to prevent fermentation; it may interfere with analysis.