

# Winemaking—From Harvest to Bottle

## Lecture 4

Why do we care as a consumer if the grapes are hand-picked? We care because it can mean a higher cost per bottle, as it can be an expensive process, but it can also mean better fruit and higher quality, as the individual picker decides which clusters (and in some cases, berries) to pick.

### WINES FOR THIS LECTURE:

#### WHITES

- A St. Supéry Sauvignon Blanc
- A Robert Mondavi Fumé Blanc

#### REDS

- A Rioja Crianza or Reserva
- A Rioja Gran Reserva



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Part of a winemaker's job is to determine when the grapes are ready to be picked to make your wine just the way you want it. If you pick too early, the flavors will taste underripe—too green, sour, and astringent. If you pick too late, your wine will taste unbalanced—too alcoholic, not fresh enough, or the fruit can taste too ripe, like dried fruit. So how does a winemaker make that call?

The modern winemaker uses a combination of ancient and new techniques. As harvest time approaches, winemakers begin tasting grapes, relying on their own senses. But they will also use **refractometers** to determine the berries' exact level of sugar, which is measured in units called **Brix**. The winemakers' personal senses and experience are combined with the very objective data to make a determination.

Ripening is a rapid progress, so harvesting must be quick to capture the one perfect moment. Although some wineries harvest grapes by machine, many

still pick by hand—a back-breaking, labor-intensive but more selective, gentle, and precise process.

Wineries come in all shapes and sizes, but they their winemaking processes are usually much the same. Whether machine- or hand-picked, the grapes are sorted by hand to remove bad fruit and extraneous matter, like leaves and bugs. After sorting, the grapes are most often destemmed by machine,

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**Yeasts are just like people. We look different, we smell different, we have different energy levels, we work at different speeds, and each of us has a unique set of skills.**

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then brought to a pressing room. At this stage, the skins are removed from the white wines but left in the juice, or **must**, for the reds.

Here, at the start of fermentation, is where processes begin to diverge. The must may be left to ferment via the **wild yeasts** present on the fruit and in the air, or it may be inoculated to these wild yeasts and exposed to a specific yeast strain. The type of yeast will change the nature of the wine. Wild yeast is less predictable but can produce more complexity to a wine.

The must ferments in tanks made of stainless steel or of oak. Stainless steel is an inert metal and does not impart flavor to the wine, leaving that job to the grapes and yeast. Oak barrels, on the other hand, can react with the wine in several different ways, adding flavors and tannins. The choice of stainless steel versus oak is a stylistic decision.

Fermentation is complete once all of the grapes' sugar has turned into alcohol. But this may not be the end of the process. Some wines are bottled immediately, some are filtered first, and some are matured in oak barrels. Just like different grape varieties have different flavors, different types of oak add different types of flavors. French oak adds more tannins and fewer aromatics than American oak, which is known for more intense aromas. On the palate, American oak makes a wine more coarse, while French oak produces more finesse. Toasted oak barrels add more vanillin flavor. The age and size of the barrel can affect the intensity of the flavors. These barrels, while watertight, are not airtight, and so the wine oxidizes as it ages. Aged white wines take



on a golden hue, and red wines go from purple to ruby red to a tawny brown. Again, the winemaker must decide among all of these factors which style works best for the grapes at hand.

When it is time to bottle the wine, one final decision must be made. The majority of quality wines are placed in bottles stoppered with corks, and wine in a screw-cap bottle has long been disdained. But corks, like oak, are porous, allowing the wine inside to oxidize. High-quality wines that will improve with age should always be celled with corked bottles. However, screw caps may be the superior choice for wines meant to be drunk young and savored in their youthful fruitiness and freshness, especially whites. More and more quality producers are using screw caps, so do not dismiss a wine out of hand for how it is bottled. Consider how, and for how long, the wine will be stored. ■

### Important Terms

**Brix:** The unit of measure for the sugar concentration of a grape, developed by German engineer Adolf Brix.

**must:** The unfiltered liquid that comes from crushed grapes.

**refractometer:** An instrument for measuring the ripeness of grapes still on the vine based on the refraction of sunlight through the berry.

**wild yeast:** The yeast already present on the grapes' skins or in the air at the winery, which are sometimes used in wine fermentation.

### Tasting Notes

In this lecture, we taste two styles of Sauvignon Blanc and two styles of Rioja. Both pairs are examples of the effects of oak aging on wines made from the same grape and grown in the same region.

### Whites

	St. Supéry Sauvignon Blanc	Robert Mondavi Fumé Blanc
Grape	100% Sauvignon Blanc	90–100% Sauvignon Blanc
Region	Napa Valley, California	Napa Valley, California
Oaked?	No	Yes
Color		
Aromas		
Acid/Sweetness		
Body		
Finish/Length		

### Reds

	Rioja Crianza or Reserva	Rioja Gran Reserva
Grape	Tempranillo blend (most likely Tempranillo-Garnacha)	Tempranillo blend (most likely Tempranillo-Garnacha)
Region	Rioja, Spain	Rioja, Spain
Time in Oak	1 year	2 years
Color		
Aromas		
Acid/Sweetness		
Body		
Finish/Length		

#4

# Campo Viejo Rioja Reserva

# \$11.99

750ml



## Taste Profile

Elegant, Black Cherry, Vanilla, Medium-bodied

Vintage	NI (5 pts.)	FI (25 pts.)	FC (10 pts.)	B (5 pts.)	L (5 pts.)	Sum	+ 50	Final

**Style Red:** Concentrated, Intense, Fresh, Elegant, Sweet

**Flavors:** Cherry, Strawberry, Raspberry, Blackberry, Plum, Other: \_\_\_\_\_

**Acidity:** High, Medium, Low

**Tannins:** Firm Tannins, Ripe Tannins, Soft Tannins, Easy Drinking

**Body:** Light, Medium, Full

Nose Intensity(NI)	Fruit Intensity(FI)	Flavor Characteristics(FC)	Balance(B)	Length(L)		
1- Light	1-10 None	1-2 Undrinkable	1- Off	1- None		
2- Average	11-15 Soft	3-4 Ordinary	2- Slightly Off	2- Fades Quickly		
3- Pleasant	16-18 Ample	5-6 Good	3- Proportional	3- Lingering (30 secs)		
4- Inviting	19-20 Abundant	7-8 Very Good	4- Harmonious	4- Lengthy ( up to 1 minute)		
5- Highly Aromatic	21-23 Bountiful	9-10 Outstanding	5- Perfect	5- Everlasting ( > 1 minute)		
24-25 Powerful						
<b>95-100</b> Classic	<b>90-94</b> Outstanding	<b>85-89</b> Very Good	<b>80-84</b> Good	<b>76-79</b> Average	<b>71-75</b> Below Average	<b>65-70</b> Poor

Date Tasted: \_\_\_\_\_

Notes:

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#4

# Mondavi Napa Fume Blanc

# \$15.49

750ml



**Review**  
 Napa, CA- A mouthwatering, dry, light-bodied white wine, with richly layered flavors of fresh citrus and hints of nectarine, with a lingering fresh lime and lemon verbena finish.

**Taste Profile**  
 Crisp, Citrus, Nectarine, Light-bodied

Vintage	NI (5 pts.)	FI (25 pts.)	FC (10 pts.)	B (5 pts.)	L (5 pts.)	Sum	+ 50	Final

**Style White:** Crisp, Oak, Elegant, Off-dry, Sweet  
**Flavors:** Apple, Pear, Pineapple, Melon, Grapefruit, Orange, Other: \_\_\_\_\_  
**Acidity:** High, Medium, Low  
**Oak Level:** High, Medium, Touch of, None  
**Body:** Light, Medium, Full

Nose Intensity(NI)	Fruit Intensity(FI)	Flavor Characteristics(FC)	Balance(B)	Length(L)
1- Light	1-10 None	1-2 Undrinkable	1- Off	1- None
2- Average	11-15 Soft	3-4 Ordinary	2- Slightly Off	2- Fades Quickly
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24-25 Powerful				

  

95-100 Classic	90-94 Outstanding	85-89 Very Good	80-84 Good	76-79 Average	71-75 Below Average	65-70 Poor
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Date Tasted: \_\_\_\_\_  
 Notes: \_\_\_\_\_



#4

**St Supery Sauvignon Blanc**

**\$13.99**

750ml



Vintage	NI (5 pts.)	FI (25 pts.)	FC (10 pts.)	B (5 pts.)	L (5 pts.)	Sum	+ 50	Final

**Style White:** Crisp, Oak, Elegant, Off-dry, Sweet

**Flavors:** Apple, Pear, Pineapple, Melon, Grapefruit, Orange, Other: \_\_\_\_\_

**Acidity:** High, Medium, Low

**Oak Level:** High, Medium, Touch of, None

**Body:** Light, Medium, Full

Nose Intensity(NI)	Fruit Intensity(FI)	Flavor Characteristics(FC)	Balance(B)	Length(L)		
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<b>95-100 Classic</b>	<b>90-94 Outstanding</b>	<b>85-89 Very Good</b>	<b>80-84 Good</b>	<b>76-79 Average</b>	<b>71-75 Below Average</b>	<b>65-70 Poor</b>

Date Tasted: \_\_\_\_\_

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



**Valserrano Rioja Gran Reserva 2008**

**\$29.99**

750ml



**Rating**  
Wine Advocate - 92

**Review**  
Rioja, Spain- "I enjoyed the classical profile of the 2008 Valserrano Gran Reserva, a Tempranillo with 10% Graciano that was aged for 33 months in barriques. Its textbook aromas of cigar box, cedar wood, smoke, incense and spice..."

**Taste Profile**  
Elegant, Cherry, Raspberry, Mint, Full-bodied

Vintage	NI (5 pts.)	FI (25 pts.)	FC (10 pts.)	B (5 pts.)	L (5 pts.)	Sum	+ 50	Final

**Style Red:** Concentrated, Intense, Fresh, Elegant, Sweet  
**Flavors:** Cherry, Strawberry, Raspberry, Blackberry, Plum, Other: \_\_\_\_\_  
**Acidity:** High, Medium, Low  
**Tannins:** Firm Tannins, Ripe Tannins, Soft Tannins, Easy Drinking  
**Body:** Light, Medium, Full

Nose Intensity(NI)	Fruit Intensity(FI)	Flavor Characteristics(FC)	Balance(B)	Length(L)
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24-25 Powerful				

Date Tasted: \_\_\_\_\_  
Notes: \_\_\_\_\_

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