



INTRODUCTION TO WINE APPRECIATION

SESSION TWO

VITICULTURE AND VINIFICATION

EUROPEAN UNION WINE LEGISLATION

STORING AND SERVING WINES

The main aims of the theory section of Session Two were to outline:

- the WSET seven key factors determining the final type, style and quality of a wine;
- basic definitions used in winemaking;
- key issues on viticulture;
- the composition of grapes and role played by each in winemaking;
- key issues on general vinification methods and outline how certain specific outcomes are achieved (colour and tannin in red wine; sweetness in white wines)
- key issues in relation to the maturation of wines;
- the final stages of preparing wines for bottling;
- basic EU table and quality wine structure;
- storing and serving wines;
- key issues regarding the current state of the UK wine market.

THE WSET SEVEN KEY FACTORS

As you will already know, wines can differ greatly, including wines made from the same grape variety in different countries and even wines made from the same grape variety in the same wine-producing region. This is all part of the fascination of wine.

The WSET book, Looking Behind the Label, identifies six key factors at the beginning of Chapter 3 which affect the final taste and style of a wine. These are:

- grape varieties
- climate
- annual weather variations
- soil
- viticulture
- vinification

In fact there is also a seventh:

- time

as wines change as they age and therefore the time a wine is aged also affects its final taste and style.

The six factors listed really are the key to understanding why one wine is different from another. You will always find yourself coming back to these to help you understand why the wine that you are drinking is as it is. So it well worth understanding them early on.

DEFINITIONS

A wine is normally described as a “varietal wine” if it is made from a grape variety (or varieties) that are clearly stated on the label.

The term “vintage” is used in several senses:

- it may mean the harvest, the point at which the grapes are picked (“the vintage has begun”);
- it may be used to describe a year’s harvest (“this year’s vintage is very good”)
- it may mean the year when the wine was made (“this wine is from the 2008 vintage”)

“Viticulture” is everything to do with growing vines and producing grapes.
“Vinification” is everything to do with the process of making wine.

VITICULTURE – KEY ISSUES

Vine Species and Grape Varieties

Vines are part of a huge botanical family of plants. Vines are a genus (known as *Vitis*) and the genus is divided into a number of different species including:

<i>Vitis vinifera</i> (<i>V. vinifera</i>)	of European origin
<i>Vitis rupestris</i> (<i>V. rupestris</i>)	
<i>Vitis berlandieri</i> (<i>V. berlandieri</i>)	
<i>Vitis riparia</i> (<i>V. riparia</i>)	all three of Northern American origin

V. vinifera (literally the wine grape) is that one that we are really concerned with as it is responsible for nearly all winemaking in the world and certainly for making everything that we regard as quality wine. This is because the other species are considered to produce wine that tastes less attractive (though in the Eastern USA wine is produced from a species called *V. labrusca*, particularly the variety known as Concord).

V. vinifera then divides into a considerable number of varieties (or subspecies) including all the varieties we know such as Chardonnay and Cabernet Sauvignon (just as apples divide into Cox, Golden Delicious, Granny Smith, etc.). Looking Behind the Label states that there are over 3,000 varieties of *V. vinifera* in the world and it is said that there are more than 1,000 varieties in Italy alone. Many of them are very rare or are just grown in one or two places. Many of them do not make very interesting wine. In practice, the great bulk of the world’s wine is produced from fewer than 100 of the 3,000 varieties.

New varieties are being produced all the time by cross-pollinating different varieties of *V. vinifera*. (Incidentally, vines do not breed true from their own seeds, and nor do apples.) These new vines are called crossings. The aim of these crossings is to try to combine various desirable characteristics. We will meet examples of crossings in particular when we come to Germany.

Although the American species mentioned are not important in terms of grape production, they play a vital role when it comes to providing rootstocks for vines.

Looking Behind the Label talks of a number of “noble varieties”: varieties that have proved their worth not only in their home countries/regions but have also shown that they can move successfully to other countries. You will often find such varieties (including Chardonnay, Cabernet Sauvignon and Merlot) referred to as “international varieties”.

Different varieties have different characteristics including:

- flavour
- acidity
- sugar
- colour
- tannin
- ability of the resulting wine to age

This is why the grape variety is one the WSET’s key factors.

Production Regions

Grapes for wine production are grown between latitudes 30°N and 50°N, and between 30°S and 50°S. There is a map showing these latitudes in Looking Behind the Label. These latitudes broadly match the 10°C and 20°C isothermic bands (bands of equal average annual temperatures).

Grapes can certainly be grown closer to the Equator than 30°N or S but the problem is that it does not get cold enough in winter for the vines to shut down and stop growing (giving them a period of winter

dormancy). So they keep growing and produce two crops a year – this is fine for table grapes but the vines quickly become exhausted and die after just a few years. For quality wine production, the vines must have grown to maturity as they produce better quality wine when older (and in general vines will not be used for wine producing until they are around 5 years old).

Further away from the Equator than 50°N or S, the grapes simply will not ripen fully.

We have said that the latitude bands broadly follow the temperature (isothermic) bands. Where the isothermic bands diverge from the bands of latitude, it may be possible to grow grapes for wine outside the normal ranges. The best example is the effect of the warm Gulf Stream on the UK and Northern Europe – it is possible to produce grapes for quality wine production as far north as 52°N

Climate

Climate is the long-term weather pattern of a country or region, taken over a period of years. It is what could be described as the settled picture of precipitation and temperatures over the growing season.

There is a range of climates across the wine-producing countries of the world. The larger the country, the greater the likelihood of there being more than one climate in the country.

Some of the major types of climate are:

- Maritime e.g. UK, the Atlantic coast of France, Bordeaux
- Continental e.g. Burgundy, much of Central Europe
- Mediterranean e.g. Provence and the Languedoc in France, much of Italy, coastal Southern Spain

There are a number of major factors that influence climate such as:

- latitude
- altitude
- large bodies of water
- ocean currents

In terms of latitude, the closer a region is to the Equator, the warmer its climate will be. Height above sea-level is a significant factor: the higher you go, the cooler it becomes – the difference is 3°C per 1000 metres of additional altitude. This means that if vineyards are planted high up, the conditions will be cooler than the latitude might suggest.

The presence of water will always have a moderating effect. Ocean currents may be warm or cold. We have already mentioned the effect of the warm Gulf Stream on the UK and Northern Europe. There are a number of important cold currents which influence wine production in various countries:

- the Humboldt currents along the coast of Chile makes it possible to extent wine production closer to the Equator than 30°S and also gives some cool climate conditions close to the Chilean coast
- the Benguela current from Antarctica gives cooler conditions in the coastal areas of Cape Province in South Africa than the latitude would suggest;
- the currents off the coast of California cause the famous fogs that move into San Francisco Bay and produce cooler growing conditions in the vineyard areas close to San Francisco Bay.

Annual Weather Variation

If climate is the long-term pattern for an area, the weather is what happens on an annual basis.

An example is frost. In maritime climates frosts are rare whereas in a continental climate spring frosts may be part of the established pattern of events and growers will have equipment in place to mitigate the effects. The devastating spring frost of 1991 in western France, affecting Bordeaux and the western Loire Valley, was a significant annual weather variation as growers were not prepared.

Annual weather variations can affect:

- frost (can kill young buds but not the vines)
- winter temperatures (can kill the vines)
- precipitation and timing (devastating at harvest)
- sunshine levels and timing (necessary during the ripening season)
- wind speeds and timing (can disrupt pollination)

In areas subject to significant annual weather variations, such as Bordeaux, it is essential to know what the conditions were like in each vintage.

Soil

Grapes are grown in a huge variety of situation and on a huge range of types of soil. There are two really crucial requirements for quality wine production:

- low fertility
- good drainage

Vines are often found growing in situations where other crops (except perhaps olives in Mediterranean climates) cannot grow. But even in less extreme situations growers avoid fertile soils – they do not want their vines to over-crop as this is detrimental to grape quality. If vines are grown on poor soils, the roots have to go deep to find the water and nutrients. Rootstocks are therefore a critical choice when establishing a vineyard.

No vines like to have roots standing in water – hence the importance of good drainage. Some varieties cope better than others with damp soils. (When you come to Session Three on France, you will find that Merlot is favoured on heavy soils, such as clay, as it copes better with damp feet.)

Growing the Vines

Growing grapes is, in many ways, much the same as growing any other soft fruit – there is an annual cycle of work. [Looking Behind the Label](#) describes this annual cycle using Northern Hemisphere dates and you should study the diagram there. (For Southern Hemisphere countries simply substitute March for September and work from there).

The vine is a climbing plant. Left to itself, most of its energy would go into growing the permanent part and it would climb into trees or writhe across the ground. Pruning is vital to control the shape of the plant and to restrict yield. This forces the plant to concentrate as much of its energy as possible into ripening the grapes.

Pests and Diseases

Like any plant the vine is prone to all kinds of pests and diseases, many of which require treatment by the grower. *V. vinifera* varieties have a life-threatening enemy in the form of a small louse that mainly lives underground. This is *Phylloxera vastatrix*, usually referred to as phylloxera. The louse feeds on the roots of the vines and the vines cannot repair the damage. Eventually the vines will die.

Phylloxera arrived in the mid-19th century from the USA via Kew Gardens and spread rapidly throughout Europe and then into the New World. It continues to spread. The solution is to graft the *V. vinifera* vine (or scion) onto a non-*vinifera* rootstock which is resistant to the louse.

Almost all vines are now grafted on to American rootstocks. There are other benefits to be gained from the use of rootstocks: they can help vines resist drought or dampness, they can promote or reduce vigour in the vine, and they can even speed up the ripening of the grapes.

There are just a few parts of the world where phylloxera has not spread. One is Chile (protected by desert to the north, the ocean to the west, the Andes to the east and Antarctica to the south). Another is the state of South Australia which is protected by enormous quarantine restrictions. There is even part of France (the southern Rhône) that is phylloxera-free because the grapes are grown in sandy conditions and phylloxera cannot travel through sand.

Although phylloxera is by far the most serious threat, there are many other pests (birds, insects, wild boar, deer, rabbits, etc.) and diseases which threaten the health of vines. In addition to pests, vines are also susceptible to several fungal diseases including:

- Powdery Mildew (*Oidium*)
 - thrives in cold, damp conditions
 - produces a white powder on the leaves and the grapes
 - causes grapes to split and shrivel
 - treated by the use of powdered sulphur
- Downy Mildew (*Peronospera*)
 - thrives in humid conditions
 - produces oily transparent patches on leaves
 - treated by spraying with Bordeaux mixture (copper-based)
- Grey Rot (*Botrytis Cinerea*)
 - thrives in humid conditions and covers leaves and grapes with a grey mould
 - destroys colour pigments in black grapes
 - gives grapes an unpleasant taste
 - treated by anti-rot sprays.

Although not mentioned in Looking Behind the Label, vines also suffer from a number of viruses, which affect their general health and productivity.

Grey and Noble Rot

Most diseases are a bad thing but there is one that in the right circumstances is a blessing to the grower. We have described above the malevolent form of grey rot but in the right conditions it becomes known as noble rot and is responsible for many of the world's greatest sweet light wines.

It takes hold in humid, misty circumstances in the autumn but hot daytime sunshine disperses the mist and dries the grapes. With thin-skinned varieties such as Sémillon, the botrytis fungus draws water out of the grapes causing them to shrivel and concentrating the sugars. The key factor is that the skin remains intact so the berry shrivels rather than splits. The unpleasant taste of botrytis does not pass to the juice inside the grape. These wines can be very expensive because picking may have to be done grape by grape, over a number of successive forays, to obtain the grapes at their best. The finest grapes and wines include:

- Sémillon in the Sauternes region of Bordeaux
- Chenin Blanc in the Layon Valley in the Loire
- Riesling in the Mosel and Rhine valleys in Germany
- Furmint in Tokaji in Hungary

Harvesting the Grapes

The harvest normally takes place around one hundred days after the vines flowered. As the grapes ripen in the run-up to the harvest, sugar levels increase rapidly and acidity levels drop. Given a free hand, the grower will harvest the grapes at the moment he or she judges that there is the best balance of sugars, acids, and flavours.

The grapes may be harvested by hand or by machine. Hand harvesting is slow and expensive, and you have to have enough pickers available at the right time but it is selective and enables damaged or unripe grapes to be eliminated.

Harvesting by machine is quick and is not labour-intensive (and can be done at night – a great help in hot climates as the grapes will be in better condition) but the vineyard layout has to be designed for machine picking.

The grapes for certain wines have to be picked by hand:

- for wines where whole bunches are required (Champagne and top quality sparkling wines, Beaujolais)
- where careful selection is required (as with sweet wines made from nobly rotted grapes)
- where slopes are too steep (parts of the Mosel, the Douro and Madeira)

Grape Composition

There is a picture of a grape in Looking Behind the Label. The key parts of the grape are:

- the stalk (contains tannins)
- the skin (contains tannins, flavour, and colour)
- the pulp (contains sugar, fruit acids, proteins, and water)
- the pips (contain bitter oils and tannins)

All good quality black grapes have white flesh and hence white juice, as you will see if you peel a black grape. This is why most Champagne is white even though it is made predominantly from black grapes.

For white wine all that's needed is the juice – winemakers do not want colour and tannin from the skin and certainly do not want the bitterness from the pips or stalks.

For red wines the winemaker needs colour and this must be extracted from the skins by soaking (macerating) the grapes in the fermenting must. This will inevitably extract some tannins as well, though there are ways of limiting this. If the winemaker wants additional tannins, then the maceration can be extended.

The skin of ripe grapes has dull, whitish, waxy film known as the bloom. This consists of two types of yeasts (up to ten million wild yeasts and up to one hundred thousand wine yeasts on a single grape). If these yeasts come into contact with the sugar in the grape juice, fermentation will start – this is why grapes that split on the vine can start fermenting on their own.

VINIFICATION – KEY ISSUES

Alcoholic Fermentation

The definition of wine, as we saw in Session One, is that it is a product obtained by the total or partial alcoholic fermentation of fresh grapes . . . a formula, expressed in words, that is very simple:

yeast + sugar = alcohol + carbon dioxide

The level of sugar will determine the level of alcohol in the final wine.

Must Enrichment (“chaptalisation”)

This is the process of adding sugar to the grape juice before fermentation. The additional sugar is fermented with the natural sugars in the grape juice and produces additional alcohol.

This may seem an odd thing to do but, as Looking Behind the Label explains, grapes in cooler areas may not ripen fully and therefore there may not be the necessary level of natural sugar in the grape juice required by the winemaker.

In the EU this process is closely controlled and is only permitted in more northerly areas – in France it is permitted in Bordeaux and Burgundy but not in the Mediterranean areas.

Fermentation

As already mentioned, the skins of the ripe grapes are covered in yeasts; it is a natural process. The wild yeasts on the skin will start the fermentation and take it to around 4% alcohol. At this point the wild yeasts die and the wine yeasts, again from the bloom on the skins, take the fermentation forward. Once the alcoholic fermentation is complete acetic bacteria (spoilage bacteria) will degrade the alcohol to vinegar. Wine vinegar is widely produced – originally as a result of fermentation that went wrong – and is the natural end point of an alcoholic fermentation. If we want wine, we must ensure that alcohol does not degrade further by excluding oxygen.

Most modern fermentation involves killing the wild yeasts and the bacteria on the skins by the use of sulphur dioxide and relying only on the wine yeasts. Many winemakers, especially in the New World, go one step further and use cultivated or cultured yeasts specifically bred to encourage a reliable fermentation.

Fermentation Temperatures

Yeasts will not work if the temperature is too cold (below 5°C) or too hot (above 35°C). In practice most white wines are fermented at between 15°C and 20°C. Some are fermented at lower temperatures to preserve more aromas and flavours in the wine.

Most red wines are fermented between 25°C and 30°C. The higher temperature helps with the extraction of colour from the skins. If the temperature rises above 30°C the winemaker will cool the fermentation using different methods of temperature control (e.g. stainless steel vats with cold water running down the outside).

Stopping Fermentation

The fermentation will normally continue until the yeasts have used up all the sugars in the juice, producing a wine that is naturally dry. There are circumstances, however, in which the fermentation will either stop naturally or can be stopped artificially:

- if the temperature falls, or is deliberately reduced below 5°C
- if the alcohol naturally reaches a level approaching 15%
- by the addition of sulphur dioxide
- by the addition of grape spirit to take the alcohol above 15% abv
- by sterile filtration

In each case, the yeast will be either killed or removed and will leave some residual sugar in the wine.

Fermentation Vessels

Wine can be fermented in many types of containers. Most wine is fermented in what are called inert containers such as: concrete vats, stainless steel vats, fibreglass. Some wine is fermented in barrels, usually made of oak. For white wines these can be very small (225L) but for red wines they will be much larger.

Malo-lactic Fermentation

This sounds as though it is similar to the alcoholic fermentation but it is, in fact a bacterial degradation of sharp-tasting malic acid (*malus* is the Latin for apple) to softer-tasting lactic acid. It produces carbon dioxide as a by-product.

The malo-lactic fermentation is always used with red wines; with white wines it is an option. It alters the taste of the wine not only in producing softer acids but it also adds a buttery compound called diacetyl which does not always suit the wine. It is very often used with Chardonnay but rarely, if ever, with Riesling or other aromatic varieties.

Winery Equipment

The main pieces of equipment in the winery are:

- de-stalker (removes grapes from the stalks – almost always used)
- crusher (breaks the skins and starts the juice running)
- press (presses the grapes either before or after fermentation)
- fermentation vessels (sufficient for each cuvée)
- temperature control (often computer controlled for each tank)
- pumps (for moving wine and juice from one tank to another)
- maturation vessels (may be the same as for fermentation)
- filtration (essential for clarification, may be sterile)
- bottling line (expensive, may be mobile)

Key Stages

There are important differences between making white wine and making red wine. With white wine the aim is to separate the juice from the grapes as quickly as possible:

- the grapes are destalked and crushed
- the grapes are crushed gently
- the juice is then fermented off the skins

With red wines, colour and some tannin (more or less according to the nature of the wine to be made) is needed and this is contained in the skins so the skins must be kept in contact with the juice. Here the sequence is:

- the grapes are de-stalked and crushed (unless the winemaking method relies on whole bunches as with Beaujolais or Champagne)
- the crushed grapes are left to macerate on their skins as fermentation begins
- at a certain point the skins are removed (this can be before fermentation is complete, simultaneous with the end of the alcoholic fermentation, or the grapes may be left for a further period of maceration to extract more colour, tannin and flavour)
- the skins are then pressed (part or all of this press wine may be added to the wine from the free-run juice)

For making a rosé (pink) wine, the normal method is to start as for a red wine but run off some of the juice after just a few hours and then ferment it as a white wine.

Colour and Tannin

Some black grapes have thicker or darker skins than others. Darker skins will have more colour. Thicker skins will also probably have more colour and will have more tannins. For example, Cabernet Sauvignon has a much darker skin than Pinot Noir so wine made from Cabernet Sauvignon will have a deeper colour than wine made from Pinot Noir, as you will see if you will see if you compare wines from Bordeaux and Burgundy.

The key to extracting the colour and the tannin from the skins of black grapes is to macerating the skins in the fermenting juice – anything from a week to four weeks is normal. Fermentation itself normally lasts for 7 – 8 days. During the maceration the mass of fermenting juice will be 'worked' to assist in the extraction of colour and tannins (think of what happens when you dunk a teabag). This may be achieved by:

- Plunging the cap by hand
- Pumping the juice over the cap
- Submerging the cap

Blending in the press wine will add colour and particularly tannins (as these are pressed out of the skins).

MATURING WINES – KEY ISSUES

Not all wines need lengthy ageing (maturation) once the fermentation has finished. Most Sauvignon Blanc, for example, is bottled very quickly and you will find southern hemisphere Sauvignon Blanc on the supermarket shelves in October following the March/April harvest.

One element is common to all maturation, however long or short it may be:

- The wine must be kept in containers that are clean and regularly topped up to replace wine lost through evaporation. This is to avoid contact with air that could lead to acetic spoilage. Large tanks are often blanketed with an inert gas, such as nitrogen, to completely prevent oxidation.

Ageing will be done either in cement or in stainless steel vats if preservation of the varietal aromas is of prime importance. This is common practice with most aromatic whites (Riesling and Sauvignon Blanc) and

with inexpensive wines that will not benefit from ageing. There is nothing wrong with young, aromatic wines!

If maturation before bottling is required (as in fine white Burgundy, red Bordeaux, and many other high quality wines) then the wine will be aged, usually in oak barrels of 225L capacity known as barriques. The oak will be 'toasted' during barrel manufacture and will impact a distinctive 'smoky' flavour to the wine. During its time in barrel the wine's tannins will also soften and complex flavours will develop. Wines can be aged in barrel for many years before release but 18 – 24 months is common.

Factors which influence the degree of oak perceptible in the wine include:

- Age of oak (newer barrels give more flavour)
- Size of barrel (the smaller the more flavour)
- Origin of oak (American oak is more intense than French)

Today, there are many alternatives to barrels as barrels remain an extremely expensive option (approximately 3 USD per bottle only for the barrel itself). Oak chips, oak powder, and inner staves are all common alternatives.

PRE-BOTTLING – KEY ISSUES

During maturation and before bottling the wine may go through a series of final treatments. Generally the finer the wine, the fewer the treatments required.

Racking: the wine will be removed from (racked off) all the sediment (the lees) that will have accumulated in the bottom of the storage vessel.

Fining: the wine may contain substances which, due to an electrostatic charge, will not settle. To remove these substances, the winemaker will add a fining material (e.g. egg whites, bentonite) which has an opposite charge. The fining material is mixed with the wine, attracts the particles, and settles. The wine is then racked off the deposits.

Stabilisation: particularly in the case of white wines, the winemaker is likely to want to minimise the risk of tartrate crystals developing. (These are entirely natural and harmless, but people sometimes think they are pieces of glass!). To remove these the wine is chilled to -3°C to encourage precipitation in tank.

Filtration: the wine may already have been passed through a filter to remove any remaining yeast cells, etc. Just before bottling, it will normally be filtered again, using a very fine filter to remove any bacteria or yeasts which could spoil the wine in bottle or cause it to start re-fermenting. This is particularly important if there is any residual sugar in the wine as this could easily re-ferment in the bottle.

SO₂: sulphur dioxide is probably the most useful tool available to the winemaker in terms of protecting the wine. It is used at various stages in the winemaking process. At the bottling stage, the winemaker will adjust the level of sulphur dioxide in the wine to ensure a long shelf life.

EUROPEAN UNION WINE LEGISLATION

Wine is regarded by the EU as a foodstuff. It is therefore controlled by much of the food legislation (translated into UK law) but it also has its own specific legislation. The EU has established a basic structure for classifying wines. This distinguishes between:

- table wines
- quality wines

Table wines are the more basic wines and are subject to fewer controls. Quality wines (known as Quality Wine Produced in a Specific Region (QWPSR)) are subject to more controls.

Each EU member state that produces wine is required to set up a national structure for classifying wines into table wines and quality wines. These two main categories may be sub-divided. Most countries have

divided each into two. Remember that basic table wines (without geographical description) cannot display either a grape varieties or a vintage.

The rules for QWPSR cover:

- the boundaries of each defined wine region
- permitted grape varieties
- maximum yields
- any prescribed viticultural practices
- minimum natural alcohol levels (and occasionally maximum)
- any prescribed vinification methods
- ageing requirements

The detail for each of the above is decided by each country. France, for example, is free to take different decisions from Germany or Italy. Within France, Bordeaux can opt for different rules from those for Burgundy or the Rhône Valley. Everything, however, has to be done within the EU framework.

The EU also exercises controls in terms of wines imported into the EU. For example, there is a village in the French speaking part of Switzerland which happens to be called Champagne. It produces wine but the wine cannot be imported into the EU as Vin de Champagne.

Wine producing regions and grape varieties in other countries have to be registered with the EU if the wines wish to carry those descriptions. Thus in the case of Australia, Barossa Valley, Coonawarra and Clare Valley (all wine-producing regions of South Australia) are registered with the EU. Similarly, Shiraz, as a grape name, is also registered.

The EU does not permit inter-regional blending of quality wine in member countries. In France, for example, quality wine from Bordeaux cannot be blended with quality wine from Burgundy (admittedly an unlikely combination) or from the Languedoc, and wine from the Rhône cannot be blended with wine from the Languedoc.

This also applies to wines from other countries, so to accommodate local practices, some countries have created some very large regions indeed. Thus each Australian state (South Australia, Victoria, New South Wales, etc.) is a registered region. South-Eastern Australia, whilst it doesn't exist geographically, is a term used to denote wines blended from South Australia, Victoria and New South Wales, allowing wines to be made from grapes grown over a huge area. This is what fuels the New World's branded wines.

The EU also controls the way in which alcohol levels are stated on label – the figure has to be rounded to the nearest 0.5% – so 12.0% and 12.5% are both permissible but 12.3% is not.

The EU controls varietal labelling. For a wine to be labelled as a single varietal at least 85% of the wine must be the named variety.

STORING AND SERVING WINES – KEY ISSUES

Storage

If you wish to keep wine for an extended period the key points to bear in mind include:

- a constant temperature - 13°C is ideal (higher, and the wine matures more quickly, lower and it matures more slowly)
- dark
- vibration free

If you do not have such perfect conditions (few people do) then you may consider using a wine-merchant or bonded warehouse (check their cellars before you commit). A few companies specialise in building spiral cellars that fit neatly almost anywhere. Numerous temperature-controlled cabinets are also available but they also need to control humidity.

Do not store any wines, particularly Champagne, in the fridge. It's too cold and may damage the wine.

Service

Your wine will taste best if you serve it at the appropriate temperature. It is possible to buy a very useful temperature gauge that clips on a bottle. Here are few guidelines:

- Sparkling Wines: these should be well chilled (8°C). It can be dangerous to open an unchilled bottle – the pressure in a bottle of Champagne at 20°C is equivalent to a tyre of a double-decker bus.
- Sweet Wines: treat as sparkling
- Dry White Wines: Looking Behind the Label advises cellar temperature (10°C- 15°C). Serve less expensive wines cooler. Treat fine white wine as light reds.
- Light Red Wines: Beaujolais and other low-tannin reds drink well at 15°C.
- Full-bodied Red Wines: the usual statement is “room temperature” and Looking Behind the Label talks of 15° to 20°C. Remember that room temperature refers to pre-central heating so it is better to err on the side of caution. Reds that are too warm taste alcoholic and, in any case, the wine will soon warm up in the glass.

Decanting wines is a fine idea and essential if there is a sediment. To remove a wine from its sediment the bottle must be stored upright for a few hours prior to decanting. Pour it carefully and slowly into the decanter with a light shining up through the neck of the bottle. Stop when the sediment begins to rise – this is much easier in Bordeaux-shaped bottles. If you wish to allow the wine to breathe you must decant, preferably a couple of hours before drinking – removing the cork is insufficient.

Wine Faults

Sadly, despite everyone’s efforts, there is no guarantee that every bottle of wine will arrive in perfect condition. There is therefore more than a chance that a faulty bottle will emerge among the wines you will taste on the course – this can be a useful learning experience!

The most common faults in wine are:

- Cork Taint: this does not refer to bit of cork that may have broken off when the wine was opened. It results from chlorine contamination of the closure (yes, screw caps can be corked!). New technology means that corkiness is on the wane but it remains the most common fault and results in a musty, cardboard smell. It is much easier to detect from the wine rather than from the cork so smelling the cork is not a reliable guide.
- Oxidation: as the name implies, this means that too much oxygen has contacted the wine (normally through cork failure). A lightly oxidised wine will taste flat; a heavily oxidised wine will smell like sherry and may have deepened in colour.
- Acetic Spoilage: this means that a part of the alcohol has turned to vinegar. In mild cases it is barely noticeable and some wines are bottled with volatile acidity levels (as it’s known) above the legal minimum. In more severe cases it is easily recognisable.

All faulty wines should be returned whether in a shop or in a restaurant.

WineMatters