

OzLeisure Grapevine – Episode 6: Show notes

How wine is made - Part 1.

General information

- Wine comes from the grapevine (Vitis Vinifera)
- To achieve quality fruit, the balance of nature must be right in the vineyard
 - o Good soil
 - Good irrigation
 - Topography (positioning of the vines)
 - Altitude
 - Slope
 - Aspect
 - o Canopy management and micro-climate
 - Climate can be hot or cool

Climate guide

Barossa: Hot

Riverland: Very hot Tasmania: Cool

Ripening grapes

Winter

Pruning

Spring

Bud burst

<u>Summer</u>

Berry set - Veraison will be achieved

Fruit ripening

Colours and flavours develop

Measuring of sugar and acid levels

- Measured using a hydrometer

Baume: Equates to alcohol

<u>Autumn</u>

Vintage starts

Picking

Harvesting

- Mostly conducted by machine (tractor with short/soft fingers that beat the bunches off the stem)
- Collected on plates
- Minimal damage

- Can be done by hand in smaller vineyards (Especially in France)
- Often done at night to retain moisture and flavour

Winemaking

In Australia there are fewer rules for classification as opposed to other parts of the world.

BASIC PROCESS

1. Crushing and de-stemming

- The crushing of the berries is to release the juice (whilst not crushing the pips which contain bitter acids), and to remove the stalks. This is achieved by passing the bunch through rollers which crush and separate. The resultant juice is known as the "must"
- Whites are separated from skins and seeds, unless skin contact is desired to give a richer, fuller flavor
- Reds usually keep the skins, juice and seed in contact
- Sulfur Dioxide is added at this point to prevent oxidation of the must and dry is used to form a "carbon blanket" before the must goes to press

2. Pressing

- The pressing of whole bunches of grapes lessens the release of Phenolic compounds which may give a bitter taste
- The best juice is the free run which exudes naturally from the crushed mass and gives the lightest and finest wines
- The earliest form of the press (after use of the foot) is the "Basket press" which is still widely used
- More modern versions include pneumatic presses which use inflatable bags

3. Fermentation

Wine is the fermented juice of grapes; fermentation is a metabolic process that results in chemical changes brought about by Enzymes of micro-organisms. It is based on a chemical reaction; basically sugars + yeast – convert which create alcohol + Carbon dioxide + heat

- This occurs in vats.
- In Australia it is mostly done in stainless steel (older styles were to ferment in open wood barrels)

- To allow cap plunging, modern tanks have Rotofermenters which stir the must during fermentation greater extraction of colour
- Fermentation stops when all of the sugar has been converted to alcohol (dry style)
- When the temperature is lowered (non-dry style)
- When the yeasts are removed
- When the desired alcohol content is achieved

4. Racking

- After fermentation, the wine is left to settle and mature for a period of time
- Every few months, it is racked off it's Lees by syphoning to a new tank or barrel
- This leaves the old solids behind and creates a bright wine

5. Fining

Virtually all wines are fined

- A fining agent is used (usually egg whites although other agents such as Gelatine or Bentonite can be used)
- Labelling laws require that the use of these products in the wine production be shown on the label

6. Maturation

- Most high-quality reds and whites spend some time (months or years) in oak barrels to extract flavours
- The trend nowadays with cheaper wines is to mature in steel tanks and to add wood chips (this saves cost)
- Barrels are made by people called "Coopers"
- Barrels can be "toasted" using flames prior to use; the amount of time spend toasting contributes to defining the taste characteristics of the final product

7. Cold stabilisation

 The wine is held at just above freezing temperature (-4°C) for a couple of weeks to precipitate out Tartrate crystals (which are harmless, but unsightly in the bottle)

8. Filtration

- Once stable, most (but not all) wines are filtered through various grades of filters to remove levels of particles
- Some of the finest filters can also remove flavour from the wine
- Amon-Ra is an example on an unfiltered Shiraz

9. Bottling

- In-bottle sterilisation; where the wine is heated to 54°C, bottled and cooled slowly (in order to kill bacteria).
- Or, wine is pasteurised by bottling cold then heating to 84°C then cooling. This method is normally used on bulk wines but damages the flavour
- Bottles are then labelled, packaged and distributed

Best buys

WHITE WINE

Hayshed Hill 2007 Semillon / Sauvignon Blanc

This is an easy drinking style that's more complex than straight sauvignon blancs. The Semillon adds slightly savoury, spicy fruit characters and additional palate length and depth of flavour. It's lively and zesty with summery notes.

Price: \$18

RED WINE

Kalleske 2005 Pirathon Shiraz

The name Pirathon is an ancient word for pinnacle; this wine is full-bodied and has all the flavours and structure of North West Barossa with it's higher altitudes and slopes giving unique flavours. The grapes are sourced from the great sub-regions; Greenock, Moppa, Stonewell and Koonunga districts.

Winemaker Troy Kalleske was voted 2007 Young gun of the year.

Price: \$22

BEER

Murray's Sassy Blond from the Murray's Craft Brewing Company

It's a Belgian Pale Ale that is deep golden in colour, with a tight, off-white head. Displays a spicy, orange flavour with hints of toasty, biscuity malt, and finishes with a restrained bitterness. Great with seafood.

Price: \$3.99 a bottle or \$15 for a four-pack