

## Chapter 4 – Wine Producing Countries – Champagne

**Champagne** is a sparkling wine produced from grapes grown in the champagne region of France. Champagne is also known as ‘Celebration Drink’ or drink for celebrations.

Champagne is a protected name in European Regulations and for any wine to be called as Champagne, it needs to qualify three rules –

1. Grapes used in production should be grown in the region of Champagne, France.
2. Champagne has to be produced in Champagne region.
3. Methode Champenoise – A traditional method in which secondary fermentation needs to happen in bottle.



(Champagne Celebration Party Free Photo, n.d.)

Champagne wine region of France and is produced under the rules of the appellation. This alcoholic drink is produced from specific types of grapes grown in the Champagne region following rules that demand, among other things, specific vineyard practices, sourcing of grapes exclusively from designated places within the Champagne region, specific grape-pressing methods and secondary fermentation of the wine in the bottle to cause carbonation.

### Grapes of Champagne

Total of Seven grape varieties are permitted for production of Champagne, however there are three major grapes of Champagne contributes its own attributes to a wine. The ‘big three’ are Chardonnay, Pinot Noir, and Pinot Meunier. The “big three” by far dominate the plantings of Champagne vineyards, but there are four other grapes approved for Champagne production: Petit Meslier, Arbane, Pinot Gris and Pinot Blanc. (Schiessl, 2016)

#### *Chardonnay*

It the only major white grape in Champagne. Chardonnay contributes to elegance, and bright citrus flavours to Champagne blends.

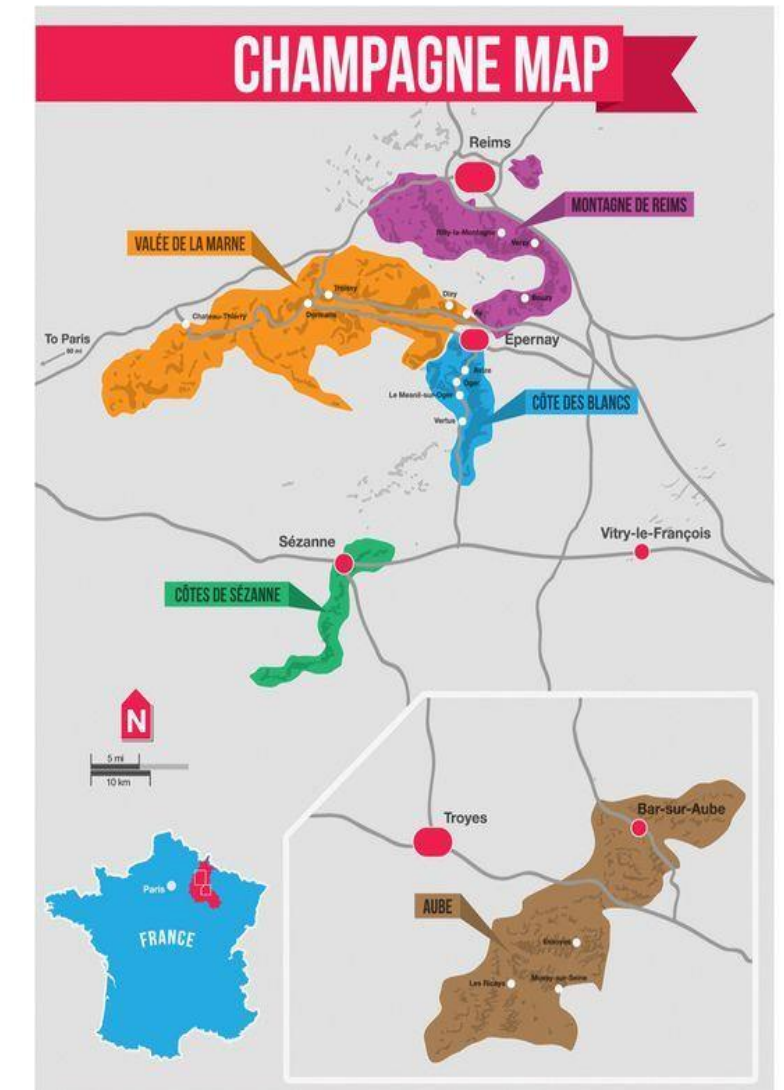
#### *Pinot Noir*

Pinot Noir is the red grape variety which gives structure, richness and body to Champagne.

## *Pinot Meunier*

Pinot Meunier (also simply known as Meunier) is second red grape variety used in production of Champagne. Pinot Meunier is known for its aromatics and approachable fruit. (Schiessl, 2016)

## Regions of Champagne



(Schiessl, C., 2016)

In Champagne region, there are five main sub – regions which are responsible for bringing both diversity and consistency to champagne. Each sub – region or district is popular for producing a specific variety of grape and often a unique character to that grape variety influenced by the specific location, soil, sub-climate, or vineyard aspect.

## **Montagne de Reims**

Montagne is French for Mountains. It predominantly produces pinot noir (38%) but also some pinot meunier. It is home to more grands crus than any other district in Champagne with a total of nine grand cru villages. While Pinot dominates in the district there are some areas who produce Chardonnay, accounting for 28%.

## **The Vallée de la Marne**

The Vallée de la Marne is found to the south of Epernay and is renowned for its abundance of meunier grapes. Pinot Meunier grapes are more robust and resistant to cold weather than pinot noir and chardonnay making them well suited to the valley which is very prone to frost.

## **The Côte des Blancs**

The Côte des Blancs, is popular for chardonnay. Chardonnay grapes bring freshness to champagnes, and each village in the Cote des Blancs produces grapes and wines.

Other regions of Champagne –

Côte de Sézanne - Côte de Sézanne produces chardonnay grapes and is an extension of the Côte des Blancs.

The Aube / Côte des Bar - The Aube / Côte des Bar is a Pinot Noir region mostly used to blend in non-vintage champagnes. (Nichols, n.d.)

## **Methodo Champenoise**

This is the most complicated process of making sparkling wines and is followed in the Champagne region of France. It is the traditional method of making champagne and is made according to Comite Interprofessionel du Vin de Champagne (CIVC) regulations.

### Step 1 – Harvesting of Grapes

Grapes are harvested once they have reached certain sugar and acidity levels. The three classic grape varieties used in the making of champagne are pinot noir, pinot meunier, and chardonnay. Although mostly made of black grapes, the final product is a crystal clear and sparkling white wine. Once plucked, grapes can be destalked.

### Step 2 – Pressing

The grapes are pressed and freshly pressed juice is separated from the skin immediately, so on to avoid the must from taking the colour from the skin. First pressing is called Vin de cuvee (50%). Cuvee means blend. Most premier champagne are produced from first pressing. It is of the highest quality. Second pressing is called Premiere Taille and Third pressing is called Deuxieme Taille.

### Step 3 – Primary Fermentation

The first fermentation occurs in a wooden vat. Primary fermentation lasts for 15-21 days. Up to racking and fining, the method followed is similar to that involved in the making of white wine. After fining, the clear wine is blended with wines from different vineyards of the champagne region. Blending is done to achieve the desired balance of flavors and acidity. Blending is the most critical phase in winemaking. It is also called as Assemblage.

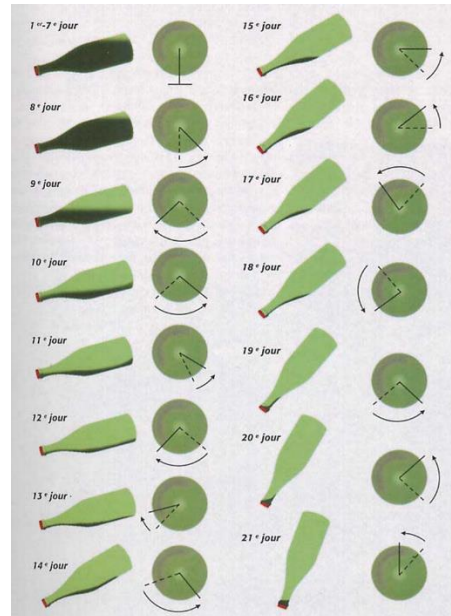
### Step 4 – Secondary Fermentation

Secondary Fermentation is induced in the bottle. Sugar is completely exhausted by this time. LDT (Liqueur de tirage) is a small amount of cane sugar and yeast which is added to induce secondary fermentation. The wine is then bottled and sealed with good quality corks and secured with Agrafe. They are stacked one on top of another (mis sur lattes) in a cellar. Secondary fermentation starts in the bottle about six weeks after bottling. This is best carried out at 10-12 degree celsius and will take about three to six months. The yeast turns the sugar into alcohol and gives off CO<sub>2</sub> which dissolves into the wine. It produces stream of bubbles known as mousse. Champagne spend at least 1-3 years' time in bottle. Non – vintage should spend at least 12 months on lees ageing and Vintage champagne should spend 3 years.



### Step 5 – Remuage

The bottles are placed in racks with oval holes with their necks, tilted slightly downwards. These racks are termed as pupitre. The specialist worker, called remueur, gives a slight shake to the bottle by grasping its bottom. After every shake, the bottles are placed at a slightly higher angle in the pupitre. This happens to each bottle every three days, for about six weeks, till the bottles stand vertically with the neck downwards, called sur le pointe. The sur le pointe position is left for one or several years for slow ageing. The purpose of the remuage process is to collect the sediments in the cork.



### Step 6 – Disgorgement / Degorgement

It is the process of removing the sediments from the bottle which have collected on the cork. The bottle neck is dipped in a freezing brine solution, which freezes a small amount of wine in the cork containing the sediments. The pressure inside the bottle expels the ice with the sediments when the cap is removed.

### Step 7 – Dosage

The champagne which was lost during degorgement is replaced with more similar wine and cane sugar solution called liqueur d'expedition. The amount of sugar added determines the degree of sweetness in the final product. After dosage cork is fitted, with wire gauge known as Agrafe. The bottles are given the final shake-up, either manually or mechanically to ensure even distribution of dosage. The wine is rested for four to six months to allow it to settle. Finally, the wine bottles are cleaned, labelled, and dispatched.

Note – The average champagne has a pressure of between four and six atmospheres which is typically about 60 – 90 pounds per square inch. The pressure of this magnitude is found in a double decker bus tyre. Hence, the bottle should be handled very carefully, especially during the time of opening it.

To withstand the pressure, the bottle is made up of thick glass with the deep curve at the bottom. The deep curve is termed as punt.

### Terms denoting sweetness of champagne

- Brut – Very dry. 0 – 15gms of sugar content.
- Extra sec – Dry Champagne (1-2% sugar)
- Sec – Medium dry (2-4% sugar)
- Demi-sec - Medium sweet (4-6% sugar)
- Demi doux – Sweet (6-8% sugar)

- Doux – intensely sweet 10% and above sugar

## Types of Champagne

- **Non-vintage Champagne**

Champagne that is blended from a variety of up to 40 different wines from many different years. Champagne producers will keep back 20% of their harvest each year to use in future blends.

- **Vintage Champagne**

Vintage champagne is created from grapes belonging to a particular year. Not all years are deemed 'Vintage' and the decision is made by individual Houses.

- **Rose Champagne**

Rose or 'Pink' champagne can be created by one of two methods.

1. By adding a small amount of Pinot Noir red wine to the champagne
  2. By pressing the grapes slower than normal to allow the skin time to colour the wine
- Rose champagne is often revered as a 'romantic' champagne based on its colouration.



- **Blanc de Blancs Champagne**

Champagne is usually made using 3 grapes – Chardonnay, Pinot Noir and Pinot Meunier. Blanc de Blancs champagne use only white Chardonnay grapes.

- **Blanc de Noirs Champagne**

Blanc de Noirs wines are made only from the Pinot Noir and/or Pinot Meunier red grapes and consequently have a slight salmon or pink tint.

- **Recently Disgorged**

Recently disgorged champagne is champagne that is disgorged just before being sold. For many this means that the champagne maintains its freshness and benefits from the additional maturation in the bottle.



## Brands of Champagne

- Moet et Chandon
- Bollinger
- Krug
- G.H. Mumm
- Lanson
- Pommery
- Joseph Perrier

## Terms denoting size of champagne bottles

Bottle	Size	Equivalent	No. of glasses
Magnum	150cl (1500ml)	2 Standard Bottles	Serves Approx. 12
Jeroboam	300cl (3000ml)	4 Standard Bottles	Serves Approx. 24
Methuselah	600cl (6000ml)	8 Standard Bottles	Serves Approx. 48
Salmanazar	900cl (9000ml)	12 Standard Bottles	Serves Approx. 72
Balthazar	1200cl (12000ml)	16 Standard Bottles	Serves Approx. 96
Nebuchadnezzar	1500cl (15000ml)	20 Standard Bottles	Serves Approx. 120

## Other methods of Sparkling Wines

### *Cuvee / Close / Charmat / Tank*

This method was introduced in France by M. Charmat and involves secondary fermentation in a large sealed tank and takes only 10 days to complete. The wine is drawn off through filters under pressure, and is then bottled. The resulting wine is cheaper than champagne.

### *Transfer method*

This method is almost similar to methode champenoise except the process is shortened by using filtration and fining instead of the lengthy remuage process.

### ***Direct Impregnation***

This is the cheapest method of making sparkling wine. The carbon di oxide gas is directly impregnated into the wine from a cylinder in the same way as in the making of aerated waters.

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