



## Champagne Club! Spring 2016

Welcome to the latest edition of the Caveau Champagne Club – a twice-yearly tutored tasting and exploration of some of the most fascinating sparkling wines on earth – **Grower Champagnes**.

This club functions just like our **Burgundy Club** (*and if you're not already a member, call us at 503-679-6233*). The wines in each 6-bottle shipment have been specifically selected to help educate and illustrate – each shipment is essentially a Champagne seminar-in-a-box. You can use all of this to stage your own tasting seminar at home, or of course you can just drink the wines and enjoy them. Whichever path you choose – there's lots of good bubbly in your future!



*A few bottles of Blanc de Blancs sur lattes*

## Blanc de Blancs

This shipment is a detailed study of **Blanc de Blancs** Champagnes, which are made from 100% Chardonnay (with a few rare exceptions.) Chardonnay accounts for about 30% of the vineyard acreage in Champagne, and is grown pretty much throughout the region. (The other 70% is Pinot Noir and Pinot Meunier - which are both red grapes - and most Champagnes are blends of both red and white grapes.)

If you're new to the Club, or would like to brush up on all the winemaking procedures and rules and regulations of the region, you'll find my **Champagne 101** tutorial on page 16, following our discussion of the wines in this shipment.

## Grower Champagne

We import exclusively, and this club features exclusively, **Grower Champagne**. Grower Champagnes are simply wines produced *100% from vineyards that are owned by the producer*. It may surprise you to learn that over 88% of Champagne is **Negociant Champagne** – meaning that the wines are made with grapes purchased from dozens to hundreds of different growers from throughout the region.

The big names that you are likely familiar with – Moët et Chandon, Veuve Clicquot, Mumm, Roederer, etc. – those are negociants. They produce millions of cases of wine, in an industrial fashion, from fruit grown mostly not by themselves, but by thousands of smaller growers across the 319 villages that make up the Champagne viticultural region.

Grower Champagnes, on the other hand, are made by small, family producers, growing grapes and making wines exclusively from their own vineyards. This is analogous to the small, family estates of Burgundy. The typical Grower Champagne producer makes fewer than 5,000 cases per year (in fact less than a dozen make more than 6,000 cases). There are nearly 5,000 of these small grower-producers in Champagne, *but fewer than 250 of them are available here in the U.S.!*

Most negociant Champagne is mass-produced, often over-priced, and can be quite lacking in character. (A very small portion of it however, is outstanding, and in fact can be among the best in all of Champagne.) Negociant Champagne is hugely successful, and is certainly the world's most celebrated wine. Unfortunately, most of it just isn't very good. They produce 88% of the wine, but own only 12% of the vineyards. Their production methods are designed to bring the wines down to a lowest common denominator. Hence our motto – ***“Friends don't let friends drink negociant Champagne!”***

## Blanc de Blancs

Literally “**White from Whites**”. All Champagne (except for the less than 5% of Rosé Champagne) is “white wine”, though most of it has a high percentage of red grapes in the blend. Some Champagnes are made from 100% red grapes, and those are designated “Blanc de Noirs” – “white from blacks”. (Pinot Noir, Pinot Meunier and other red-wine grapes are often referred to as “black”, as at full maturity their skins turn from dark purple to black.)

In Champagne the Blanc de Blancs are generally 100% Chardonnay (Chardonnay accounts for over 99% of the white grape plantings in the region.) There exist a handful of Blanc de Blancs made from grapes other than Chardonnay, but you’re not likely to run across them (these would be rarities made *from Petit Meslier, Arbanne, Pinot Blanc or Fromenteau*, or any combination thereof, heritage grape varieties that are still allowed in Champagne). In all, Blanc de Blancs make up about 10-15% of total Champagne production.

In general, Blanc de Blancs Champagnes are more focused on citrus and apple flavors, more elegant, have more minerality, and tend to show more of the yeasty-bread dough aromas than Champagnes that are made with combinations of the red grapes.

Chardonnay is grown pretty much everywhere in the vast Champagne region, but it performs very differently depending on where it is grown. Most agree that Chardonnay performs at its peak in the Grand Cru villages of the **Côte des Blancs**, but it can also do very exciting things in parts of the **Montagne de Reims** and the **Vallée de la Marne**. There is very little Chardonnay planted in the **Aube**, the southern sector of Champagne that is pretty much a region unto itself. The Aube (also known as the Côte des Bar) is predominantly Pinot Noir country. The little-known region called the **Sézanne** (to the south of the Côte des Blancs) has Chardonnay as its primary grape, but significant percentages of Pinot Noir and Meunier are planted there as well.



## Côte des Blancs

The “Slope of the Whites” is where Chardonnay performs at its highest level in Champagne – the equivalent of the Meursault-Puligny-Chassagne sector in Burgundy. The soils are almost entirely hard chalk here, with hardly any topsoil to be found in most spots. There are chalk-based soils everywhere in Champagne of course, but in most other areas the chalk is mixed with varying amounts of clay or silt. Here it is pretty much solid chalk, dry and friable.

There are six Grand Cru villages in the Côte des Blancs, which are the source of the great wines and the lofty reputations of the best Blanc de Blancs. Only four are actually on the continuous east-facing slope (they’re in **bold**) – the others are considered part of the region but are not directly connected. Moving from North to South:

- Chouilly – 1,289 acres of Chardonnay, which tends to produce a very rich, buttery, tropical fruit profile. Deeper and richer soils here, and considered a “lesser” Grand Cru than its neighbors.
- Oiry – The smallest Grand Cru village on the Côte at 217 acres, and perhaps the least distinctive. The vineyards are all on flat land, atypical for the region. Most of the fruit is sold to the large negociants.
- **Cramant** – 865 acres of beautiful, world-class Chardonnay. Tends to produce wines that are more creamy, and elegant. (Not to be confused with *Crémant*, which is the appellation for sparkling wines made in France outside of the Champagne region.)
- **Avize** – 659 acres of Chardonnay that produces intensely minerally wines, with higher acidity and more concentration than the adjacent villages.
- **Oger** – 995 acres of Chard that combines minerality and richness in the wines.
- **Le Mesnil-sur-Oger** – The most intensely mineral Champagnes are born here in the 1,069 acres of vines. Two of the world’s most iconic wines are from here – **Krug**’s Clos du Mesnil and **Salon**’s le Mesnil. These wines have an amazing capacity to age, and like some great Grand Cru white Burgundies may need 15-20 years or more to show their best.



*Fall colors over the village of Cramant*

## **Montagne de Reims**

The Montagne is Pinot Noir country (60%), but there's a good amount of Chardonnay and a bit of Pinot Meunier scattered all over this vast sub-region.

In general, the soils have higher concentrations of chalk here, along with more silt and sand. The wines tend to be more powerful, richer, and rounder, especially so when talking about the Chardonnay. There are some excellent Blanc de Blancs made with Montagne fruit, but to be clear it is Pinot Noir that makes the reputation for the region.



## Vallée de la Marne

Spread along the north and south sides of the Marne river, which runs through the middle of Champagne on the east-west axis. This is where Pinot Meunier performs its best, though all three principle grapes are found here. As for Blanc de Blancs, there are not a ton of them from here, but versions from the right spots (notable the Coteaux sud d'Epernay, which is just around the corner from the start of the Côte des Blancs) can be exceptional.



*Plowing on the hillside of Cumières in the Marne Valley*

## Montgueux

Drive south from Epernay on the Autoroute for about 90 minutes, and you'll see an exit for the medieval city of Troyes. There you'll be at the start of the Champagne sub-region known as the **Aube** or the **Bar**. As mentioned above, this is almost exclusively Pinot Noir country. However, one of the most exciting terroirs for Chardonnay is down this way – a small village just outside of Troyes called **Montgueux**.

Interestingly, Montgueux does not have a long viticultural history – grapevines were not planted here prior to the 1960s. What is now covered by vines was, like the rest of the surrounding areas, planted to wheat or other grain crops historically. There are only about 200 acres planted here, it's a very tiny sub-appellation, but it turns out to have soils that are nearly identical to those of Mesnil-sur-Oger in the Côte des Blancs. The Champagnes from here tend to be rich, broad, and tropical-fruit in nature, with an intense minerality that really makes them stand out. Due to the small size of the area these wines are exceedingly rare, but well worth seeking out.

## The Wines

You have six different examples of Blanc de Blancs Champagnes in this Club package, representing a good cross-section of the different growing regions and terroirs, as well as winemaking styles. We'll take a close look at each one individually. If you'd like, it's fun and very illuminating to taste these side-by-side. The differences between them all stand out quite clearly when you can compare them one to the other directly.

### 1. **Blanc de Blancs Brut Ultradition** – Laherte Frères **CLUB PRICE \$40**

Aurélien Laherte is one of the leaders of the grower revolution in Champagne, constantly thinking outside of the box in search of quality and authenticity. This is all from biodynamically farmed estate parcels in their home village of Chavot and neighboring Vaudancourt and Épernay, all in the Vallée de la Marne.

- 50% from the 2013 harvest
- 50% reserve wines from 2012 & 2011, which were aged in barrel
- Primary fermentation in tank and barrel
- Malolactic fermentation partially blocked
- Average vine age 35+
- Clay and limestone soils over solid chalk sub-soils
- Dosage 5g/l - Disgorged July 2015
- 585 cases produced

With a scant 5 grams of dosage, this technically qualifies as an Extra-Brut. The terroir of Chavot and Épernay brings nice richness and roundness and a fruit sweetness to the mix, with a nice underlying mineral streak that is more subtle than that from the Côte des Blancs.



*The 11th-Century church in Chavot, surrounded by Laherte's vines*



## 2. 2010 l'Instant Blanc de Blancs – Champagne F. Cossy CLUB PRICE \$60

This is the first Blanc de Blancs ever from young Sophie Cossy. She's become one of Champagne's top rising stars since taking over her family estate at the age of 25. The estate dates back to 1764, and sold its grapes to the negociants prior to starting estate bottling in the 1960s. The vineyards are in a region known as the Petite Montagne, a sub-section of the Montagne de Reims just west of the city of Reims.

- All from estate parcels in Jouy-lès-Reims and Pargny-lès-Reims
- From the superb 2010 vintage
- Primary fermentation in 2500l oak casks
- Brut Nature – no dosage
- Disgorged October 2015
- Only 125 cases produced

From Sophie's vines that surround the winery, this is the first time she's kept her Chardonnay separate. The terroir here is generally thought to be especially good for Pinot Meunier, but all three grapes tend to perform well. This one shows an expressive nose of bread dough and biscuits, with ripe and rich fruit flavors that clearly needed no sugar addition to shine.





*Sophie Cossy & fiancé Cédric Moussé, enjoying the Caveau Extra-Brut!*



### 3. Chardonnay de Montgueux – Vincent Couche

**CLUB PRICE \$47**

The miniscule region of Montgueux has achieved a lot of notoriety over the last five years, primarily due to the Champagnes from **J. Lassaigue** (those wines are wonderful – try one if you see them.) There are very few grower-producers in Montgueux, and a lot of the fruit there is still sold to negociants. **Vincent Couche** is based further south in the Aube, about 45 minutes away down in Buxeuil, but he has a nice 7.5-acre parcel of Chardonnay in Montgueux that he farms biodynamically. Most of the fruit goes into his various Pinot Noir-Chardonnay blends, but he keeps a small portion aside for this excellent Blanc de Blancs.

- Based on the classic 2004 vintage, with 20% reserve wines
- Fermented in tank and barrels (45%)
- Malolactic partially blocked
- Dosage – 6 g/l
- Over 9 years on the lees – disgorged fall 2014
- 625 cases produced

Vincent Couche is one of the leaders of the biodynamic farming movement in Champagne, and his entire estate is now certified. This is a mind-blowingly delicious example of what Chardonnay from Montgueux is all about. Delicate white flowers on the nose, powerful notes of hazelnut, almond and dried fruits on the palate, and a finish of lemon-lime and a distinct minerality that stains the palate. Wow.



*Vincent Couche, in his cellar in Gyé-sur-Seine*

#### 4. **Blanc de Blancs Extra-Brut 1er Cru** – Marion-Bosser **CLUB PRICE \$45**

Based in Hautvillers, the home of Dom Perignon and the birthplace of Champagne as we know it, the Marion-Bosser estate goes back 6 generations. They started bottling under their own label only in 1994, and young Elodie Marion has now taken over from her mom at the helm. They have just under 10 acres in Hautvillers, and their Chardonnay comes from multiple parcels across the Côte des Blancs. (And they also have a wonderful two-bedroom apartment vacation rental in Hautvillers – check it out for your next visit!)

- Based on 2009 vintage, with 20% reserve wines from '08, '07 & '06
- All tank fermented, all malolactic completed
- Fruit from Oger, Mesnil-sur-Oger, Cramant, Vertus, Cuis and Chouilly
- Dosage 5 g/l – Disgorged November 2014
- 500 cases produced

This is a great introduction to the Blanc de Blancs of the Côte des Blancs, as it brings together fruit from several villages up and down the Côte and gives you a good idea of what this famous region is all about. Minerality leads the way, with nice lemon and apple notes on the nose and deep, powerful limestone-y flavors that persist through the elegant and refined finish.



*Elodie Marion at her estate in Hautvillers*

## 5. Reserve Grand Cru – Champagne Jean Pernet CLUB PRICE \$40

Christophe Pernet is the 5th generation at the head of this 40-acre estate, most of which is in the Grand Cru villages of the Côte des Blancs. I was introduced to Christophe and his wines by Thierry and Aurélien Laherte – his neighbors up the hill in Chavot. (Christophe's new modern winery is in Chavot, the vineyards are 15 minutes away to the south.)

The Pernet wines are very classic in style, beautifully balanced and lovely expressions of their exalted terroirs.

- Based on the 2012 vintage, with 40% reserve wines from 2011
- 80% from Mesnil-sur-Oger
- 20% a blend from Oger and Chouilly
- Tank fermented, malolactic complete
- Dosage 7.5 g/l – Disgorged November 2015

With fruit from Mesnil-sur-Oger dominating, the distinct and intense minerality is the most distinguishing feature – the limestone and chalk just leap out of the glass and vibrate with life. Many of Champagne's most famous and most expensive wines come from Mesnil-sur-Oger fruit, and here's a glimpse into that world. There's a depth and power that you don't get from Chardonnay grown elsewhere in the region. It's pure, fresh, clean, alive, and powerful. Cheers!



## 6. **Blanc de Blancs Grand Cru** - Laherte Frères

**CLUB PRICE \$47**

As if farming 70+ different small parcels in 10 villages wasn't enough, the Lahertes added a few small plots of vines in the legendary Grand Cru villages of Cramant, Avize and Mesnil-sur-Oger to their arsenal in 2012. So now we get to see what their touch produces with fruit of the highest possible pedigree. Transparency of terroir is their number one goal.

- 100% Grand Cru, about 60% from Cramant, and the balance from Avize and Mesnil-sur-Oger
- Based on the 2013 harvest, with 20% reserve wines from 2012
- All barrel fermented, malolactic blocked
- Brut Nature – zero dosage added. Disgorged December 2014
- 265 cases produced

With fruit from Cramant leading the way, there is a marked creamy richness to the texture. A sublimely elegant mouthfeel is supported by very expressive aromas and generous citrus fruit flavors, and a finish that just doesn't quit. A complete, complex and flat-out stunning wine. I'm excited to be the first to import this delicious offering from the Lahertes !



***Aurélien Laherte in his vines in Chavot***

## **Next shipment in the Fall...**

Thanks for joining us on our exploration of the great wines of Champagne! Watch your email for information on our next Caveau Champagne Club shipment coming in the fall, and for pre-arrival offerings on all the yummy Bubbliies headed your way throughout the year. All the latest information is always available on our website: [www.caveauselections.com](http://www.caveauselections.com)

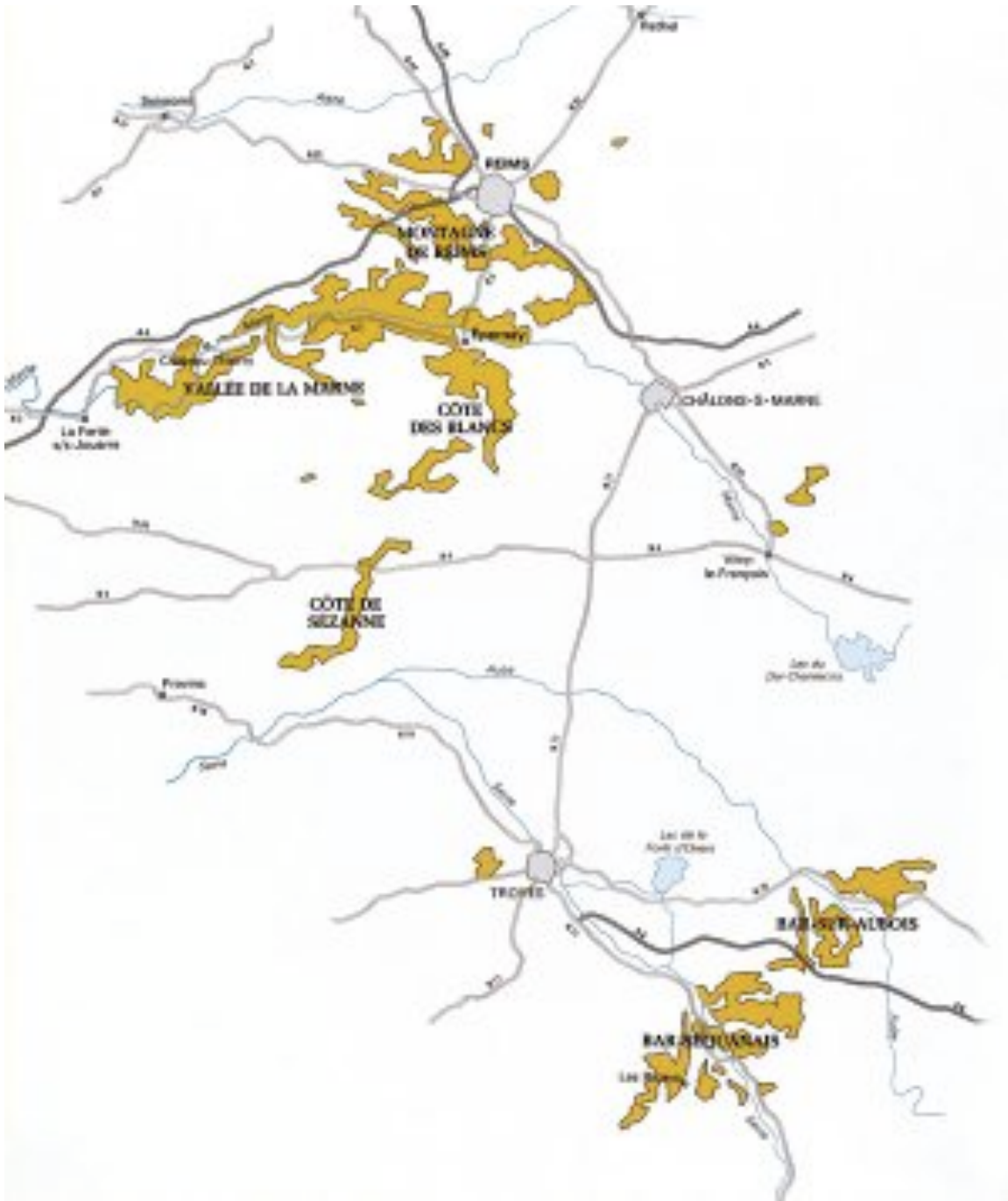
**Read on for our complete Champagne 101 tutorial on the following pages...**

# Champagne 101

- Champagne is the largest AOC (**A**ppellation d'**O**rigine **C**ontrôlée) in France. It covers a whopping 76,000 acres of vineyards, across 319 small villages and towns. Only wine made from this delimited area can be called Champagne. Sparkling wine made from other regions in France carries the appellation *Crémant*.
- There are nearly 20,000 vineyard owners in Champagne. Only about 5,000 of them produce wine from the grapes they grow. The other 15,000 sell all of their grapes to the large negociant houses.
- There are five distinct sub-regions of Champagne:
- **Montagne de Reims** – Encompasses several villages surrounding the city of Reims (pronounced “Rance”). Pinot Noir is the predominant grape grown here, but there is significant Chardonnay and Pinot Meunier as well.
- **Vallée de la Marne** – Many villages strung along the Marne river, which cuts across Champagne from East to West. The largest percentage of acreage is planted to Pinot Meunier.
- **Côte des Blancs** – As the name suggests, this is white grape territory. Virtually everything in this sub-region is Chardonnay.
- **Côte de Sezanne** – A region on the rise. All three grapes are grown here.
- **The Aube (or the Côte des Bar)** – An area on the rise, with a new generation of quality-focused growers emerging. This is where much of the most exciting, cutting-edge Champagne is coming from. The first three regions listed above account for the vast majority of Champagne production, though the Côte de Sezanne and the Aube are growing rapidly.

Below is a map with a good overview of the entirety of the Champagne appellation.





- **Vineyard classification** is radically different in Champagne than in Burgundy. In Burgundy, it is each individual piece of vineyard land that is classified. In Champagne, the *entire village* is classified – every vineyard within the boundaries of a village is given the same classification (though in fact certain sites within the village are clearly better than others, so this is a seriously imperfect system).

- Each village is given a numerical rating, on a scale of 100 percentage points. Champagne village ratings are as follows:
- **Grand Cru** – Villages rated 100%
- **Premier Cru** – Villages rated 90-99%
- **Deuxième Cru** - Villages rated 80-89%

There are only 17 Grand Cru villages. The most familiar names among them would be *Bouzy*, *Ambonnay*, *Oger*, and *le Mesnil-sur-Oger*.

The percentage points refer to the price paid for grapes from each village by the negociants. Say the top-line price for a ton of Pinot Noir is set at \$4,000 for this vintage. If you were selling grapes from a vineyard in a Grand Cru village, you would receive 100% of that price, the full \$4,000. If you were selling grapes from a Premier Cru village rated at 95%, you would receive 95% of the top price, or \$3,800 in this case.

There are three main grape varieties grown in Champagne:

**Pinot Noir** – which accounts for 37.5% of all plantings

**Chardonnay** – which accounts for 27.5%

**Pinot Meunier** – which accounts for 35%

- Additionally, there are four “other” grapes allowed in Champagne, but they are rarely seen today. They are – *Fromenteau*, *Petit Meslier*, *Arbanne*, and *Pinot Blanc*
- Pinot Meunier is a grape little seen outside of Champagne. It is extremely valuable as a blending grape, and adds lovely aromatics and light-bodied fruit to the wines, but is not often used on its own, neither in Champagne nor in still wine.
- Most Champagne is a blend of two or more of the varieties, though some are made from only one of the grape varieties.
- There are four main categories of wine in Champagne –
  - **“Champagne”** – made from a blend of two or three of the grape varieties, using both colors – i.e. Chardonnay and at least one of the two Pinot varieties

- “**Blanc de Blancs**” – made exclusively from white grapes – i.e. 100% Chardonnay
- “**Blanc de Noirs**” – made exclusively from the red (also known as “black”) grapes, either singly or a combination of the two.
- “**Rosé**” – made from any combination of two or three of the varieties. The pink color is obtained either by blending in a portion of red still-wine, or by letting a portion of the juice macerate with the skins of red grapes.
- But it’s all “white”! Yes, it is. It’s import to remember that the juice from all wine grapes is clear – it is only if you let the skins soak together with the juice that one gets any color from the “red” wine grapes. For Champagne, the Pinot Noir and Pinot Meunier grapes are treated just like the Chardonnay, in that the juice is pressed out immediately, and the juice is never in contact with the skins. Hence, “white” wine from red grapes.
- In addition to the four main categories of Champagne listed above, there is another classification based on the amount of residual sugar in the wine. (We’ll explain in detail later the mechanics of this. For now just know that at the end of the winemaking process, varying amounts of sugar are added to most Champagnes.)
- The Seven Levels of Sweetness (or **Dryness**, as the case may be):
- **Brut Nature** (Also known as Brut Zero, Ultra Brut, Brut Sauvage) – less than 3 grams per liter
- **Extra Brut** – Less than 6 grams/liter
- **Brut** – Less than 12 grams/liter
- **Extra-sec** – 12-20 grams/liter
- **Sec** – 17-35 grams/liter
- **Demi-sec** – 33-50 grams/liter
- **Doux** – 50+ grams/liter

In addition to all of the above classifications and categories, Champagnes also fall into one of the two following designations –

**VINTAGE** – A vintage Champagne is primarily, and sometimes entirely, from grapes grown in only one year. The appellation laws require a vintage-dated wine to be a minimum of 85% from the stated vintage – the other 15% can be from one or more other vintages. A producer may produce a vintage wine from whatever vintages he or she wishes – though most will not make vintage wine in the lesser quality years. It is up to the individual producer to decide whether a vintage wine will be produced in a given year. Vintage wines must age a minimum of three years prior to release. Only 10-15% of all Champagne is vintage-dated.

**NON-VINTAGE** – 85-90% of all Champagne is non-vintage, meaning that the wine is a blend from grapes grown in two or more years. It is often said that the essence of non-vintage Champagne is the art of blending – using many different components and building blocks to arrive at a consistent flavor profile and character (or lack thereof).

## History

Before we dive into the winemaking process, let's take a look at a little history.

- Champagne hasn't always been a sparkling wine! Until the late 1600s, Champagne was exclusively a still red wine, made from the Pinot Noir grape. (Thus making Champagne a major competitor to Burgundy. The two regions were in fact bitter enemies throughout the centuries.)
- *Dom Perignon*, the monk widely credited for "inventing" Champagne (and now a brand-name used by Moët et Chandon for their luxury brand), was actually charged with the mission to "stop the bubbles" from happening in the wines! He was the cellar master at the Abbey of Hautvillers in the late 1600s, when the monks grew tired of losing 15-25% of their wines every year to unwanted fermentations that were occurring in the bottle. (The bottles were literally exploding in the cellars.) Instead of "stopping" the bubbles, Dom Perignon figured out how to control the process. His biggest contributions were coming up with the use of corks to close the bottles, which replaced the hemp-rag shoved into the bottle neck with a plug of wood, and he championed the art of blending – different grapes and villages, to make the most harmonious cuvée.

## Méthode Champenois

The *Méthode Champenois* is the intricate, expensive, time-intensive and labor intensive process by which all Champagne is made. There are of course many others ways to make sparkling wine – but none of them produce results with anywhere near the quality of this method. It was arrived at by trial and error, like all winemaking practices over the centuries. The main point of difference from any other method is that wine produced this way *undergoes a second alcoholic*

*fermentation in the bottle* – thus each bottle is its own unique fermentation vessel. Here's a step-by-step look at the process...

All grapes are harvested by hand – picking machines are not allowed. The grapes are pressed as soon as possible after picking. The press is filled with whole bunches of grapes, and the clear juice is pressed out directly into tanks

The juice from the first pressing, the best quality juice, is in Champagne lingo called the *Cuvée*. Most grower Champagnes use only this top quality juice. Lesser quality juice from the 2nd pressing is called the *Taille*, and is often used by the large negociants in their mass-market bottlings. A third pressing produces an even lower quality juice that is called the *2ème Taille* – and is only used in the French equivalent of André's Cold Duck.

**Débourbage.** The juice is chilled to about 38 degrees, and allowed to settle for a day or two, in order to clarify the juice and to separate the juice from any solids

The clear juice is then transferred into temperature controlled tanks for fermentation. Most grower Champagne is allowed to ferment using only the wild, indigenous yeasts, while most negociant Champagne is inoculated with cultured, commercial yeast. A cool fermentation (at 65-68 degrees) ensues, lasting 3-10 days. (A very tiny amount of Champagne is fermented in oak barrels – only a small percentage of producers employ this technique.)

Champagne grapes at harvest rarely exceed 10-11% potential alcohol due to the extremely cool climate in which they're grown. If the grapes were harvested at lower potential alcohol levels, the producer may chaptalize – add sugar to the juice during fermentation – to bring the alcohol level up to 10.5-11% when fermentation completes.

After the primary alcoholic fermentation, malolactic fermentation is allowed to happen in most cases. Malolactic fermentation is a naturally occurring process that converts the sharp, crisp malic acid – the acid that's in apples, into the softer lactic acid – the acid that's in milk. Some producers choose to block the malolactic fermentation, preferring to keep their wines higher in acidity.

When the malolactic fermentation is complete, you then have a very acidic and not so pleasant tasting base wine, called the ***Vin Clair***. At this stage it tastes green, harsh, and fairly astringent. It is hard to believe that it will one day be transformed into the delightful beauty that we know as Champagne!

Next comes the ***assemblage*** – the blending of different *Vins Clairs*, selecting how much Chardonnay, or Pinot Noir, or Pinot Meunier to use in the blend (the different grapes are pressed and fermented separately), how much wine from this vintage, how much from previous vintages, etc.

Then the final blend is put into bottles. A calculation is made as to how much sugar needs to be added to bring the alcohol level to approx. 12% after the next fermentation.

Now the **Liqueur de Tirage** is added to the bottled wine. This is a blend of sugar, yeast, and wine. The bottle is closed with a crown cap – like on a bottle of beer or Coke. The bottles are then laid on their sides – **sur lattes** – in a cool (50-55F) cellar, and the second fermentation occurs in the bottle – a process that is simply the yeasts eating the sugar, which produces CO<sub>2</sub> and alcohol. This second fermentation, called the **Prise de Mousse**, will take about three months. The alcohol level will rise to about 12% after this fermentation.



**Stacking the bottles sur-lattes for fermentation**

When the second fermentation is finished, a sticky sludge of dead yeast cells will have dropped out of the liquid and attached itself to the walls of the bottle.

The process called **Rémouage**, or Riddling is next – slowly and methodically turning the bottles several times per day and tilting them at increasing angles, so eventually the bottles are fully upside down, and all of the yeast sediment has moved and settled onto the inside of the crown cap. Done by hand, this process

takes 8-12 weeks. Mechanical gyro- palletes can now do the riddling in about 7 days – and most negociants do all of their riddling mechanically these days. Many growers still do it by hand, or at the very least for their top of the line bottlings and all of their magnums and large formats.



**Riddling by hand**



Riddling by gyro-palette



Dead yeast in the bottle neck near the end of remouage



Once the yeast sediment has finally all moved onto the cap, the bottles are stored on their heads – **sur pointes** – and aged for a minimum of 12 more months for non-vintage Champagne, or about 30 months minimum for the vintage stuff.

The producers may choose to age their wines much longer than the minimum. The longer the wine ages on its lees – the yeast sediment – the more richness and flavor development will occur. Some top bottlings are aged 10+ years before release. When the decision has been made to release the wine, first the yeasty sludge needs to be removed from the bottle. But how do you do that?

It's an ingenious process called *Dégorgement* – or Disgorging. The bottles are placed neck-down for just a minute or so into a solution of freezing brine. This freezes the yeast sediment along with the first inch or so of liquid in the neck. And turns it into a firm, slushy pellet.



**The frozen pellet, just prior to disgorging**

Then the crown cap is removed. And the slushy pellet (along with a few drops of wine) is forced out of the bottle by the pressure of the CO<sub>2</sub> gas in the wine.

Then, immediately after the ejection of the pellet, the **Liqueur d'Expédition** is added – otherwise known as the **Dosage**. This is the slurry of Brandy or wine and Cane Sugar that determines the level of sweetness in the Champagne – as detailed above in the Seven Levels of Sweetness.

And finally the Champagne is corked, the wire cage is applied to make sure the cork stays in, and the bottle is foiled, labeled, boxed, and readied for shipment.

The disgorging, addition of the Liqueur d'Expédition, and the corking-foiling-labeling process is all done at the same time on an automated line, ensuring consistency from bottle to bottle. (Consistency used to be a huge problem in the past, when all of these processes were carried out by hand, a practice that continued until the 1970s.)

The finished product is a bottle that contains between 40 million and 250 million bubbles – the product of all the CO<sub>2</sub> gas trapped in the wine from the in-bottle fermentation. When the cork is popped, the bubbles are released (and the party has begun)!

Other than that, it's a pretty simple process!