DEFINITELY NOT A LOSER

Chardonnay has always been under attack, especially in Europe, for reasons familiar to many wine lovers. Some call it "winemaking's whore" and its many styles and the grape variety's exceptional adaptability to different – and sometimes even opposite – climatic conditions have led to a fuzzy, ill-defined image.

Upscale consumers in particular have little time for Chardonnay. They see Burgundy as the epitome of high-quality Chardonnay, while "cheaper" overtly oaked styles with tropical fruit character – mostly from the New World – are the preferred tipple of so-called "entry-level" wine drinkers.

But the traditional image no longer holds true, as you will read in this issue. Australian Chardonnay is finding its way back on stage with lean, mineral Chablis-like wines from lesser-known cool climates like Orange and Tumbarumba. These wines are slowly earning a reputation in Europe, mainly due to the new worldwide preference for more refined and clear wine styles.

Sauvignon Blanc and to a lesser extent Riesling have clearly paved the path for modern Chardonnay. Big New World producers like Yellow Tail have changed their packaging from white bottles and luscious golden labels to green bottles and plainer labels in which green predominates.

This issue is short of one article – the role played by Chardonnay in Champagne. We looked for in-depth information on the subject, and were disappointed by the lack of knowledge among winegrowers and winemakers, especially the big producers. Maybe they want to keep it secret.

In Champagne's vineyards Chardonnay tends to be easier to grow than Pinot Noir. It is less susceptible to Botrytis, ripens more easily and has a higher yield. Chardonnay contains more alcohol than Pinot Noir and is less susceptible to oxidation, but the grape variety tends to be treated like Pinot Noir and Pinot Meunier.

The reason the Côte des Blancs is known to produce more mineralic and refined Chardonnay than elsewhere in Champagne is due to more south-facing slopes and the soil's higher lime content that buffers the acidity in the wines. We would love to see some scientific research in this area.

To conclude, we wanted to make this issue on Chardonnay because we firmly believe the grape variety is making a rapid comeback. But it is no longer in Burgundy that the most interesting Chardonnays are produced these days. Australia rules, and we have tasted some very good trials in Chile too.

Filip Verheyden
Editor & publisher

White Burgundy's **Identity** Crisis

By Clive Coates MW, France

When Filip Verheyden asked me to write about white Burgundy's identity crisis, my first reaction was to ask myself if the thesis was right. Yes, there are problems, but not so different from many wine regions.

Clive Coates MW is a world expert on Burgundy. He lives in the region and knows practically all the growers there. In 2008, he revised his seminal "Côte d'Or: A Celebration of the Great Wines of Burgundy" under the new title "The Wines of Burgundy". It is still considered the "Bible of Burgundy". Coates published his fine wine magazine "The Vine" from 1984 to 2005. His website www.clive-coates.com features news from Burgundy, vintage reports and the results of comprehensive tastings. Access is free.

Demand in the West has dropped and in the East the market is still largely confined to top Bordeaux. Prices have risen, especially for those paying in US Dollars and Pounds Sterling. Many collectors already have full cellars because they bought more than they consumed. There is the residual effect of prematurely oxidised bottles, which Arne Ronold MW covers elsewhere in these pages. And it is clear that standards in the Côte d'Or and Chablis – I exempt the Mâconnais – could be improved. But "crisis" is putting it too strongly. The growers and brokers I spoke to did not seem unduly alarmed. The top domains still have no difficulty selling their products.

I asked around. Becky Wasserman, a leading wine broker whose market is largely in the US, describes business for white Burgundy as "steady", and for Mâconnais wines in particular as "encouraging". On the other hand, Richard Elia, publisher of the Quarterly Review of Wines in Boston to which I contribute, pronounces interest in both red and white Burgundy in his market as "flat" if not "negligible".
Bob Feinn of Mount Carmel Wines near New Haven, Connecticut, confirms that sales of Grand and Premier Cru white Burgundies have taken a hit, but more as a result of current prices ($75-100) than because of fears of premature oxidation. And no more than other white wines such as Condrieu and top Californian Chardonnays in the same price bracket. "I wouldn't call it a crisis," he says. "It's just that customers have less confidence that they can put these bottles away and forget about them than they have with red wines."

Jasper Morris MW puts it more bluntly. A senior buyer for Berry Brothers and Rudd, and author of the excellent "Inside Burgundy", he says: "If white Burgundy is not in crisis then it certainly deserves to be. Those who used to buy white Burgundy for laying down have stopped, not only because there are less of these sort of white wines but because of fears of premature oxidation." And because we still don't seem to know why this problem arose, it is difficult to be sure that it won't recur. Yet more recent buyers on the market are to some extent taking up the slack by drinking the bottles earlier. Prices in real terms ex cellars, Jasper points out, have remained stable over the last 10 years. It is when you consider the progress with red wines over the last decade or so that the lack of improvement and consistency among whites is disappointing and even alarming.

So there may be no storm at the barricades demanding every last drop of Meursault as soon as it is in bottle, but the bottom cannot be said to have dropped out of the market. The old rule remains. Make good wine and you will have no difficulty selling it. And make wine that is only average, or worse, and your cellar will remain full.

In many ways, white Burgundy is a unique wine. With the exception of a few dry Rieslings from Alsace and the Wachau in Austria it is the only dry – and therefore food-friendly – wine that at its top levels is better from five to 10 years after the vintage than before. I stress "top levels". Consumers sometimes commit the error of assuming that all Burgundian Chardonnay can, indeed should, be cellared this long. The fact is that all Chablis with the exception of first division Grands Crus (Raveneau, Dauvissat and their peers) and from a fine vintage needs consuming sooner. The same goes for Côte Chalonnaise and the Mâconnais. I am enjoying Jacqueson's Rully, La Pucelle, and Saumaize's Pouilly-Fuissé from Vergisson, both 2008 (the 2009s are richer but softer) right this minute. The same would apply to all but the best Côte d'Or whites.

Dominique Lafon told me of a recent experience. He was in a bistro in Beaune and noticed two men sending back a bottle of his Meursault. The words "prematurely oxidised" rang around the restaurant. He called the waiter over. The bottle was his basic Meursault 2004. Not a brilliant vintage, and now showing a little age, but perfectly acceptable if you're looking for a full-matured white Burgundy. But prematurely oxidised? Absolutely not. "Messieurs," said Dominique, "This 2004 is exactly as I would have expected it to be after all this time. This is what a fully mature Meursault tastes like. It is not "prematurely oxidised". However, it is obviously not to your taste, so please accept a bottle of my Clos de la Barre 2008 with my compliments."

However, should more white Burgundies be able to hold up beyond their fifth birthday? Those that do are certainly much the more interesting and rewarding. And there is an ocean full of Chardonnay from around the world, much of which is more than decent (if tending to be over-oaked) for those producers and consumers who can't wait that long.

It is difficult to be absolutely certain, but I suspect that more bottles of first-growth Puligny-Montrachet and others made better 10-year-old bottles in the old days than now. If this is true, and I have notes from the days when I was newly hatched in the business about 1959s and earlier vintages enjoyed 10-to-15 years after bottling, then this is a subject that needs to be addressed. However, it is easier to explain why this has happened than to be confident that the demand is there for the trend to be reversed.

Over the last generation or so, if "revolution" is putting it a bit strongly, there have been some major changes, many for the good, some for the bad, in the way white Burgundy is produced. The changes in the vineyard have been largely highly positive: the rise of biodynamism, the reintroduction of the plough, the fall in the use of herbicides and pesticides, the move towards the use of predators and techniques such as sexual confusion to reduce insect damage, the change from spraying by rote to the reactive lutte raisonnée, the limitation of the crop, the exclusion at the top levels of the picking machine, and so on. In the cellar itself much that is in vogue at present is for the better: sorting machines, bottling after 18 months rather than 12, and the overall reduction of racking and other manipulations. Not to mention the general improvement in overall cleanliness.

Throughout Burgundy, as elsewhere, winemakers are interfering less than before. It has become a cliché, but it sounded new the first time I heard it from René Lafon's lips 30 years ago. "Il faut avoir le courage de faire rien" ("One must have the courage to do nothing").

It is when you consider the progress with red wines over the last decade or so that the lack of improvement and consistency among whites is disappointing and even alarming.

THE PROBLEM OF PREMOX

By Arne Ronold MW, Norway

Over the past 10 years or so, wine lovers have had to add a new word to their vocabulary: "premox", or "premature oxidation". The premox problem has affected white wines in Burgundy to such an extent that many consumers now look to other regions for high-quality age-worthy white wines.

Arne Ronold is founding editor of the Norwegian wine magazine Vinforum (since 1986) and was the first Master of Wine (1993) from the Nordic countries. He is responsible for running the Wine & Spirit Education Trust courses in Norway and lectures regularly on wine in many other European countries. Arne is also the author of numerous books about wine and is considered an expert on wines from Austria, Burgundy, Germany and Italy.

Cork quality and vinification techniques have been blamed, but more thorough investigation has shown only one reasonable explanation: a lack of sulphur dioxide (SO^2).

It all started with the 1996 vintage. In retrospect, some wines from the 1995 vintage were already affected, but it was in 1996 that the extent of the problem became apparent. That year was characterised by a long and slow ripening period with sunny weather and a cool north- to north-easterly wind, and cold nights, producing perfectly ripe grapes with very high acidity.

Acidity levels of around 8 grams per litre and pH values of 3 were common, and because of this many producers had trouble with malolactic fermentation, meaning that many wines were bottled later than usual. But the quality of most of the wines was considered outstanding, and because of the acidity levels, they were thought suitable for very long ageing. Tasting the wines just after bottling, and also a year later or even two to three years later, confirmed this assessment.

But then, after three to four years in bottle, the situation changed. Many of the wines showed huge bottle variation and there were an alarmingly high number of prematurely oxidised bottles, which appeared to be distributed randomly among wines and producers. With time, the number of these oxidised bottles increased. A similar pattern was detected in other vintages originally considered age-worthy, such as 1999, 2002 and 2004.

The problem can be described as follows: white Burgundies from what are considered good to great vintages appear as they should in cask, promising and apparently age-worthy. They show similar properties just after bottling as well as a couple of years later. But then, after several years in bottle, a high proportion of the wines appear to oxidise prematurely, a problem that seems to accelerate with time. What is causing this and why did the problem appear only from the mid-1990s onwards? Older vintages, such as 1993, do not appear to be affected.

Premox has been the object of much attention over the past 10 years, in wine publications as well as on internet discussion forums, such as *oxidised-burgs.wikispaces* and *dat.erobertparker.com*. In Burgundy, the Bureau Interprofessionel des Vins de Bourgogne (BIVB) has made significant investments into research in this area. There are a number of theories; many point to the corks as the most likely cause for premox, as this would explain the random nature of the problem. Many claim that cork quality has decreased significantly since the mid-1990s, mainly due to increasing demands from the wine industry. Others suggest that new bleaching material used for the corks – from chlorine-based products to hydrogen peroxide, a strong oxidant – may leave traces of peroxide residues that could cause premature oxidation. Yet others suggest that it is the new cork-coating material – paraffin coating rather than silicon-based material – which facilitates the intrusion of oxygen into the bottles and thus triggers the premox process. However, according to the Enology Department at Forschungsanstalt Geisenheim, Germany, corks are not to be blamed. "At Geisenheim, we have run trials and comparative studies over the last 20 years that eliminate the cork as the problematic factor in this problem." If premox was caused by poor-quality corks or any particular treatment then oxidation would appear almost immediately after bottling and not several years later.

Many observers claim that the problem is due to vinification issues such as the improper use of SO^2 during vinification or the extensive use of bâtonnage. In 1996 in particular many of the wines were aged extensively on the lees due to delayed malolactic fermentation, and many producers did extensive bâtonnage due to the clean fruit and high acidity of the wines. But again, if this were the cause, you would expect the oxidation to occur much more rapidly.

Others believe that the new wine presses contribute to the oxidation process. The older basket presses would allow some exposure of the must to oxygen. When pressing the grapes, phenolic compounds would oxidise and settle and the remaining must – and the resulting wine – would be less prone to oxidation. Today most producers use pneumatic presses, which operate in a more reductive atmosphere and yield a very clean juice and a wine that could be more prone to oxidation. But I don't believe the type of press makes any significant difference, as long as the wines are protected by high-enough levels of free SO^2. The wines are likely to oxidise if there is not enough SO^2.

We are left with only one logical cause for the premox in white Burgundies: too-low levels of SO^2. Or more precisely: too-low levels of free SO^2 at the time of bottling.

SO^2 has several useful and protective qualities in winemaking, among them its antioxidative properties. It exists in different forms in wine and it is common to speak about "bound" SO^2 and "free" SO^2, which together constitute the "total" level of SO^2. It is the free SO^2 that has the antioxidative properties. SO^2 can be used at several stages during vinification, but it is particularly important to ensure that free SO^2 at the time of bottling is at a satisfactory level if the wine is destined for a long maturation period in bottle. Just after bottling, the level of free SO^2 will decline, initially quite significantly, later more gradually. If there is not enough free SO^2 at the start, then the level will become insignificant at some stage during bottle maturation and the wine will grow prone to oxidation. Wines contain enough free SO^2 to protect them for some years, but not enough for the entire desired maturation period. That is most probably the cause for premox in white Burgundy wines.

But what about the seemingly random appearance of oxidised bottles? How can this be explained? The answer is that the level of free SO^2 will vary from bottle to bottle, even if all the bottles are filled in one batch. The reason for this are small variations in fill levels, as well as the small but uneven amounts of oxygen released into the wine through the corks after bottling. So the SO^2 levels will vary, and it is those bottles with the lowest levels of free SO^2 at the outset that will oxidise first. This model also explains why magnums seem to hold better than standard 75-cl bottles.

If we accept that premox is caused by too-low levels of free SO^2 at the time of bottling, the next question is: Why? There are two reasons for this. One is easy to understand: many winemakers in Burgundy have deliberately reduced

Free SO^2 levels vary from bottle to bottle. The reason are small variations in fill levels, as well as small but uneven amounts of oxygen released into the wine through the corks.

FROM DIJON to MENDOZA

CHARDONNAY'S CLONES

By Louisa Rose, Australia

With wine, a straightforward question can elicit contradictory answers. Clones are one of these minefields; winemakers are unlikely to agree, and the observer ends up more confused after the discussion than before!

Louisa Rose is the chief winemaker at Yalumba, Australia's oldest family-owned winery. She has completed 20 vintages at Yalumba, based in the Eden Valley (Barossa) and has worked with the development of a number of varieties and wine styles including Chardonnay.

That said, the following text is an attempt to put the clonal resources of Australia into perspective. Most of the views about flavours and ratings are the author's own, based on nearly 20 years of observations and in-house trials. I have tried to describe most of Australia's clones, but this is not an exhaustive list.

The early days of Chardonnay in Australia are somewhat fuzzy – depending on who you consult. It probably hit these shores in 1832 with James Busby's famous importation and was planted on his family's Kirkton vineyard in New South Wales, where via the Kaluna Vineyard in Sydney it eventually made its way by the 1930s to Mudgee and the Craigmore vineyard. It was not until the late 1960s that the variety was identified as Chardonnay, and the first non-fortified wines were made. In 1970-1, Pieter Van Gent released a Craigmore wine that was labelled Chardonnay.

In 1960, the Penfolds planted their Wybong Park vineyard in the Upper Hunter – later renamed Dalwood Estate. Among the varieties they planted was a White Pinot, which probably came from the Kirkton property via the original Dalwood vineyard in the Lower Hunter nearby (established by George Wyndham in 1830).

But it is the Tyrrells who claim to be behind the first Australian Chardonnay wines. According to David Farmer, "Murray Tyrrell acknowledges that the vines that made the Tyrrell's Chardonnay were developed from cuttings from the Penfolds Wybong Park property, presumably in the mid or late 1960s, so knowledge that they were indeed Chardonnay was known by some. Indeed, he planted Chardonnay at Rothbury in 1969. By calling his Chardonnay "Pinot Chardonnay" he rightly combined the name of the variety as it was then known "Pinot Blanc" with its true name." [I]

In 1957, Houghton Winery in Western Australia imported the clone known as "Mendoza" or "Gin Gin" – although it's not clear where it came from. It is also believed that in the 1860s Sir Samuel Davenport introduced Burgundy "chardenet" cuttings to South Australia. Some of these cuttings were planted at Marble Hill in the Adelaide Hills. The vines were rediscovered by viticulturist Wally Boehm when he was working for David Wynn; after cultivation at Wynn's Modbury nursery, they were planted out at Mount Adam in 1972. [II]

Until a method of DNA testing is developed for grapevine clones, it looks unlikely that we will ever know how and if these early clones are related to each other. But it is clear that although the variety has been in the country since some of the earliest importations, it was not used to make varietal table wines until the late 1960s or early 70s. And it wasn't before the 1980s that the production of Chardonnay was significant enough to make the national statistics. But when it finally did take off, it did so with a bang! As the Australian industry boomed and started selling wines around the world, Chardonnay was a leading variety; in 2011, 404,610 tonnes were harvested in Australia, representing 25% of the total crush – the largest single variety.

WHAT CLONES ARE PLANTED IN AUSTRALIA NOW?

The most widely planted Chardonnay clone is probably **I10V1**, a Californian clone from the UC Davis collection imported into Australia in 1969. This commercial clone was widely used as it was available through commercial nurseries from the 1970s. As other clones gained popularity, it has gone out of favour for new vineyard plantings. In the regions I have worked with Chardonnay, I10V1 produces tighter bunches compared to the Burgundy and Mendoza clones, and the wines show simple fruit flavours: tropical, pineapple and citrus, but they lack back palate and do not age as well as those made from other clones or a mix of clones. Nonetheless, I10V1 has thrived in most Australian regions, and is responsible for many renowned wines.

Compared to I10V1, the **Mendoza** or Gin Gin clone tends to show more, although its yields are lower. It suffers greatly from poor fruit set and "hen and chicken" (millerandage) in bunches. This trait appeals to some winemakers, and you will hear contradictory messages about whether or not it is a superior clone. Mendoza's performance can also be related to regions. I've seen some exceptional wines from the Eden Valley made from Mendoza. Vanya Cullen (Cullen Wines) also writes enthusiastically of the clone:

"[In Margaret River] most or all of which had been grown on vines representing the Gin Gin or Mendoza clone, which produces the best Chardonnay fruit in the region. Other clones which have been trialled are the Dijon or Bernard clones 95, 96, 76, 277, which are higher yielding and appreciated for adding freshness and softness to the wine. Clones, called 1, 3 and 5, are planted in small quantities, but are not considered to be of high quality, and Penfolds 58 is also planted but not widely used. The Gin Gin clone or Mendoza exhibits nearly 100% millerandage, providing a high skin to juice ratio and thus a good depth and concentration of flavour. The fact that it generally yields less than 5 tonnes per hectare helps account for the great depth and concentration of fruit that characterises the Chardonnays produced in Margaret River. All vines are planted on their own roots. The fruit flavours of Chardonnay in the north of Margaret River have citrus, nectarine, white peach and grapefruit characteristics. In contrast, the Chardonnays from the southern part of the Margaret River region, of which that of Leeuwin Estate is a particularly good example, have highly distinctive and dried pear, grapefruit and stone fruit characters."

The **Penfolds 58 clone** – likely to have been sourced from the Penfolds Wybong Park vineyard – has a following, although it doesn't seem to have been planted much since the introduction of the Bernard clones. It also can show significant hen and chicken in bunches, leading to concentrated flavours and textures. Wines made solely from this clone are finely structured but with concentrated flavours and long palate.

In the 1980s and after, winemakers started importing the clones known collectively as the **Burgundian, Dijon or Bernard clones**.

The most widely planted Chardonnay clone is probably I10V1, a Californian clone from the UC Davis collection imported into Australia in 1969

CHARDONNAY AROUND THE WORLD

A SNAPSHOT OF REGIONAL PROFILES

By Michelle Cherutti-Kowal, UK

of the winemaker. New oak, use of lees ageing and malolactic notes are more pronounced. Although most communes in the Côtes de Nuits produce both red and white wines, iconic Chardonnay styles are produced in the Côtes de Beaune where the soil contains more limestone. Along the border of Côtes de Nuits and Côtes de Beaune are three Grand Cru climats on the hills of Corton, as well as noted villages like Pernand-Vergelesses, Aloxe-Corton and Ladoix. Given the area's size, wines vary greatly in quality and style. In general, they display minerality without the same flesh or broadness in the mouth found in more southern communes. Their profiles are sinewy, so winemaking techniques can dominate rather than complement the wines, especially in cooler years. Still, in the right hands the best wines are elegant, precise and lingering.

A trio of southern villages – Meursault, Puligny-Montrachet and Chassagne-Montrachet – encapsulate the region's reputation and it is no surprise that most Grand Cru climats are located here. Although different in character, Meursault has a voluptuous palate usually enhanced by more of toasty oak. Chassagne-Montrachet has more breadth and weight mixed with soft fruit surrounded by tension, while Puligny-Montrachet is highly strung and nervy yet elegant, because of colder soils due to the higher water table in the vineyards.

You could include Saint-Aubin in this mix for finesse and a palate of white flowers, although its lacks the intensity of the previous examples. Most of the five prestigious Grand Cru climats are shared by Chassagne-Montrachet and Puligny-Montrachet. Le Montrachet wines are like an iron fist in a velvet glove, dense and tight, while Chevalier-Montrachet also has taut structure but with more perfume. These wines get the full treatment by the winemaker – barrel fermentation and maturation in new oak, lees stirring (bâtonnage) and malolactic fermentation. They require time to develop in the bottle so as to smooth out the edges given both by terroir and oak. The three other vineyards – Bâtard-Montrachet, Bienvenue-Bâtard-Montrachet and Criots-Bâtard-Montrachet – are not as expansive as Le Montrachet. Bâtard is the most mouth filling of the three but somewhat angular; Bienvenue-Bâtard and Criots-Bâtard are slightly lighter but display elegance with a hint of delicacy, especially in moderate vintages that require a lighter touch from the winemaker.

Despite differences between north and south, the common thread throughout the Côte d'Or is taut minerality balanced by vibrant acidity, giving this region's Chardonnays their uniqueness and longevity.

CÔTE CHALONNAISE AND THE MÂCONNAIS

Further south, daylight hours are slightly longer with the defining slope of the Côte d'Or fading into a more pastoral landscape. The outcrops of limestone planted with vines form the link between the Côte Chalonnaise, the Mâconnais and their northern cousins. At regional level, the wines are light and simple, often vinified in stainless steel tanks to preserve the fruity character of ripe apples and crisp acidity. In cooler years these wines can resemble Petit Chablis or even Chablis. At village level, Rully and Montagny (Côte Chalonnaise) and Pouilly-Fuissé (Mâconnais) are noted communes. Rully, closest to the Côte d'Or, has a stony periphery with crisp acidity. The best producers can coax a depth of flavour in the mouth with judicious use of oak, making these wines easy to confuse with some of their more prestigious neighbours.

Further south, Montagny lacks Rully's intensity and minerality, but has riper fruit and softer acidity making wines that can be drunk earlier. Arguably the most powerful and full-bodied Chardonnay comes from Pouilly-Fuissé. The region's final outcrop of limestone arises at the southern end of the Mâconnais, forming a natural amphitheatre that captures the sun's heat and light. In typical vintages the palate is flushed with stone fruit, while restrained use of oak allows for a tentative note of flinty minerality. In warm years, the wine recalls New World styles.

THE REST OF EUROPE

The grape finds its way to most of Europe's wine-producing countries and is used for sparkling wine, commercial blending with indigenous varietals or, in the finest examples, on its own.

Italians enjoy sparkling wines, which explains why Chardonnay has been so massively planted since the late 19th century in regions such as Trentino and Franciacorta

Italy

Historically, Italy's plantings of Chardonnay were confined to the north because of the cooler climate, and the closeness to France. Italians enjoy sparkling wines, which explains why Chardonnay has been so massively planted since the late 19th century in regions such as Trentino and Franciacorta. Piedmont, Friuli-Venezia Giulia and Alto Adige have long made vibrant, elegant wines, similar to the lean, nervy wines of the Côte de Beaune in Burgundy; these are terroir-driven due to soil structures of marl and limestone resembling the French region's. Chardonnay from the warmer regions of Tuscany and Orvieto is riper and more voluptuous than those from the north, reflecting their chalky soils and resembling wines from Burgundy's southern zones. In all cases, the Italian tendency is to go light on oak treatment to let the wine's natural attributes dominate the palate. This places them firmly in the Old World.

Spain

Like Italy, for over a century Chardonnay has been used in Spain's sparkling wine industry, with older plantings of French clones in Penedès and the surrounding area. Depending on altitude and proximity to the sea, these wines are robust and round, the best examples exhibiting taut structure. Regions like Somontano, Costers del Segre, Cariñena and Navarra are hotter, resulting in ripe, fruity wines that can lack finesse due to higher levels of alcohol. Unlike Italy, Spanish wines are appreciated for their oaked styles. Higher classifications are bestowed on longer ageing, resulting in a distinct Spanish stamp of nuts, dried fruit and, in older vintages, mushroom notes.

Austria

The grape has been planted in Austria for over a century but because it has been confused in the vineyard with Pinot Blanc, Chardonnay is known as "Morillon" in the region of Steiermark, and as "Feinburgunder" in the Wachau region. There are two styles depending on growing conditions: un-oaked from the cooler regions, to preserve green fruit characters and lively acidity; and broader wines in warmer climates, where winemaking techniques such as barrel fermentation and lees ageing add complexity and texture. The best examples are found in the chalk soils of northern Burgenland (Leithaberg), Steiermark, and in selected vineyards in Niederösterreich.

THE NEW WORLD

US

The United States "borrowed" the grape from its spiritual French home and claimed it as its own by turning the varietal into a soft brand. Although other grapes are snapping at its heels, Chardonnay is still the white wine of choice among American wine drinkers, and is the most widely planted grape in the country. Winemakers in California began working with the varietal as far back as the 1950s using Burgundy as their template; they took top honours at the 1976 Paris Tasting.

The past 50 years have been about finding the right clones, vineyards and matching winemaking techniques to produce wine with a distinct style. Producers in regions like Oregon, Washington and New York State, inspired by the West Coast pioneers, adapted methods to their local conditions and carved their own path. Due to Chardonnay's long history in California, clones have been developed and propagated over time with the assistance of the University of California at Davis. Today, most vineyards in California and Washington State are planted with a combination of UC Davis, Mendoza and Dijon clones, while the cooler climates of Oregon and New York State have relied predominantly on French cuttings.

The California Chardonnay winemaking technique was developed in the 1960s and is well documented: stainless steel fermentation to preserve fruit, no or only partial malolactic fermentation for acidity and French oak barrels for ageing. The past 20 years have seen a variation on the theme with techniques more closely aligned on Burgundy's example of barrel fermentation in new French oak. More recently, a combination of the two – some barrel fermentation and some stainless steel – has been developed. Whatever the winemaking method, when it comes to Chardonnay and California, one thing is clear: for the most part, terroir plays a limited role with winemakers acting as the show's stars and directors.

What American winemakers consider "cool climate" compares to the warmer sites of the Côtes de Beaune in Burgundy. Truly cool-climate Chardonnay in the style of Chablis does not really exist in the US, with perhaps the exception of Chardonnay from Long Island, New York, where the Atlantic Ocean cools down the summer and shortens the growing season. In the state of California, Anderson Valley, Carneros, Russian River Valley, Sonoma Coast and Santa Barbara have cooling influences