

5. Alsace

Alsace is located in north-eastern France. Despite its northerly location it has a warm, sunny and unusually dry climate due to the protection of the Vosges mountains to the west. The region produces mainly white wine (90 per cent),¹ overwhelmingly from single grape varieties and unoaked.

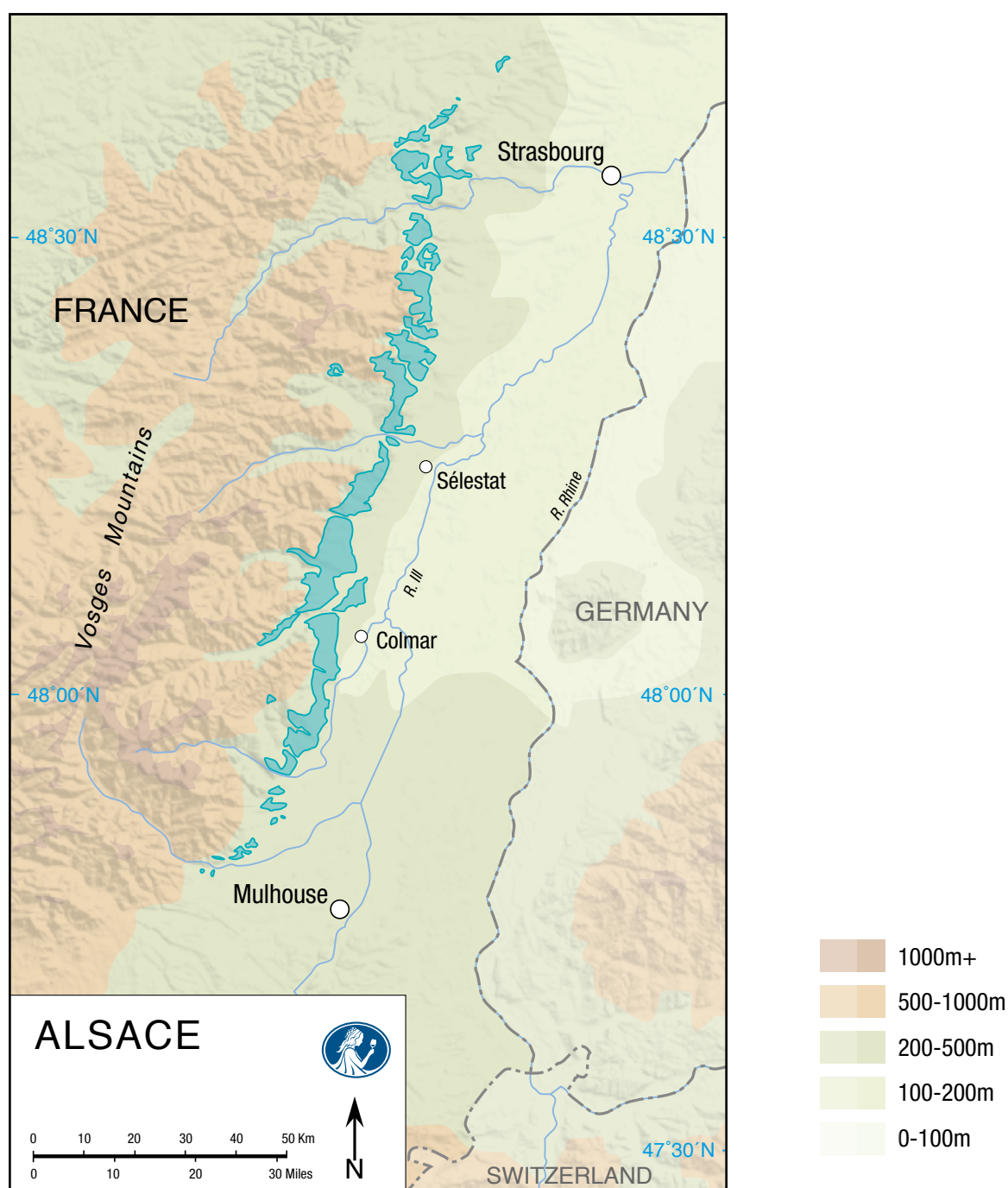
The wines of the region reflect the frequent changes in recent centuries in which control of Alsace has passed between Germany and France. The German influence can be seen in the importance of single variety wines made from aromatic varieties (Riesling, Gewurztraminer, Muscat), alongside less aromatic varieties such as Pinot Gris. In the 20th century, up to the Second World War, the region acted as a source of inexpensive wine made from grapes grown on the flatter land. Alsace finally returned to France in 1945 and at that point adopted the AOC system. The hillside slopes that had a reputation for high quality in the past, but were neglected when the demand was for inexpensive wines, have been partially replanted since the 1960s. In the last decade, the area planted for still wines has reduced slightly while the amount planted for Crémant d'Alsace has grown.



Vineyards in the valley and on slopes

5.1. The Growing Environment and Grape Growing CLIMATE

The northerly latitude results in a long, growing season and Alsace's location inland gives a continental climate with cold winters and warm, sunny summers. Westerly winds carry rain clouds but much of the rain falls on the western side of the Vosges Mountains. As a result, Alsace on the eastern side has only around 600 mm of rain per year, less than half the rainfall in comparison to the other side of the mountains. Moderate rainfall means that summer drought can be an issue and currently irrigation is not permitted for AOC wines. However, the rain is spread throughout the year, with wettest months in summer (August) and the driest normally during harvest (September and October). Therefore, there can be issues at key times



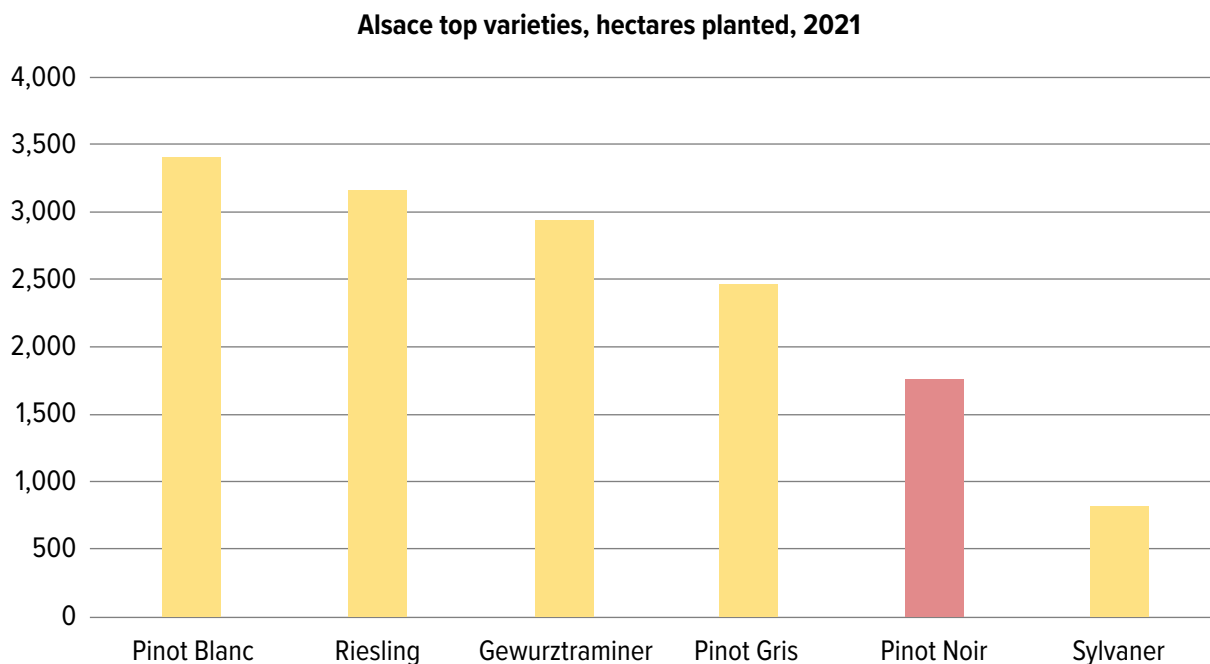
such as flowering and fruit set and, more rarely, harvest. Alsace has high sunshine hours, important to ripen grapes at this northerly latitude. Another drying influence is the Föhn wind, a warm wind that both raises the temperature and reduces the incidence of fungal diseases. There is a marked diurnal temperature difference, especially on higher sites, helping to retain acidity in the grapes.

TOPOGRAPHY

The foothills of the Vosges mountains provide many and diverse vineyard sites at a range of altitudes suited to growing different grape varieties. The best vineyards are often at 200–250 m of altitude and some at higher altitudes, up to 450 m. They tend to be the ones that face south, south-east or south-west, for maximum sunlight interception. Lesser quality vineyards are typically on the plain between the foothills and the Rhine river. Similarly, soils vary widely, leading growers to speak about a ‘mosaic of *terroirs*’. Broadly speaking, the vineyards on the plain are on deeper, more fertile soils, promoting more vegetative growth (and are therefore more suited to higher yielding grape growing for high-volume wine), while vineyards on the hillsides have lower fertility and better draining soils, promoting slower growth and ultimately better fruit quality.

GRAPE VARIETIES

By vineyard planting, the main varieties grown are Riesling, Pinot Blanc/Auxerrois (either variety can be labelled as Pinot Blanc) Gewurztraminer and Pinot Gris. Riesling, Gewurztraminer, Pinot Gris and Muscat are considered ‘noble’ grape varieties and are permitted varieties for grand cru wines and regulated wine styles such as *Vendange tardive* and *Sélection de grains nobles* (for further details see [Appellations, Wine Law and Regulations](#)), see chart below.



Source: CIVA² Note: 60 per cent of the Pinot Blanc is used for Crémant d’Alsace

Riesling

Riesling is a cold-hardy variety (making it suitable to grow in regions with cold winters) that buds late, providing some protection against spring frosts. It needs a good site (full exposure to the sun and good drainage) and a long growing season to ripen fully, but if these are provided it can produce very good quality grapes at relatively high yields (for example, 70 hL/ha). It has good disease resistance (resistant to downy mildew, fairly resistant to powdery mildew and botrytis bunch rot). The wines are typically medium to pronounced in aroma and flavour intensity, unoaked and high in acidity. The wines range in quality from good to outstanding and in price from mid-priced to premium, with a few super-premium examples.

For an introduction to Riesling, see Germany: [Riesling](#). The style in Alsace is typically dry (either with no residual sugar or a low amount that is not easily evident in tasting due to high acidity), medium to full body, medium alcohol, high acidity, with citrus (lemon, grapefruit) and stone fruit (peach) flavour and a pronounced stony/steely character.

Gewurztraminer

Gewurztraminer, sometimes spelled Gewürztraminer, is an early budding variety (making it prone to spring frosts) and early ripening (thus avoiding autumn rains). However, while it rapidly accumulates sugars, in Alsace it is picked late to achieve fully ripe skins to maximise the aromas and avoid unripe tannins. It is a vigorous variety (and therefore needs careful pruning and canopy management) but only moderately productive, due to coulure. It can suffer from chlorosis and from desiccation of the stems. In Alsace it is vulnerable to powdery mildew, grape vine moth and grey rot. Wines produced from this variety are typically medium lemon in colour (the ripe grapes themselves are a light pink), with pronounced aromas of



Gewurztraminer setting fruit

lychee, peach/apricot, rose and spice (the German word *Gewürz* means 'spice'). They have medium to high alcohol, a medium to full body and low to medium acidity. In Alsace the wines are made in a range of styles from dry through to sweet. They range in quality from good to outstanding and in price from mid-priced to premium.

Pinot Blanc and Auxerrois

See the chapter on Crémant d'Alsace in D4: Sparkling Wines for the characteristics of Pinot Blanc. The still wines in Alsace typically have low intensity aromas of apple and peach, and medium acidity and alcohol. They are mainly acceptable to good quality, with a few very good examples, and are inexpensive to mid-priced. Auxerrois, which can be labelled Pinot Blanc, is an early ripening, low aromatic variety producing wines with low acidity. The wines are most frequently used in blends or in Crémant d'Alsace.

Pinot Gris

Pinot Gris is an early budding variety (making it prone to spring frosts) and early ripening (thus avoiding autumn rains). It produces moderate yields and is susceptible to botrytis bunch rot and downy mildew. It can accumulate high sugar levels, leading to medium to high alcohol levels. In Alsace, the wines have medium intensity aromas of peach and apple and are full bodied with medium acidity. The best examples have a rich oily texture and have the capacity to age and develop honeyed and smoky notes.

In Alsace the wines are made in a full range of styles from dry to sweet. Pinot Gris can see a very rapid increase in sugar levels and a drop in acidity. For this reason, the picking dates for Pinot Gris have become a very important topic in Alsace in recent years, with earlier picking being enabled by the change to the climate (earlier start to the season, warmer seasons) and by better canopy management. There has been a shift towards producing drier styles of Pinot Gris. This has been led by market demand for dry Pinot Gris resulting in more wines that are dry with 12.5–13.5% abv, rather than off-dry 13.5% abv wines. The wines range from good to outstanding and are mid-priced to premium.

Pinot Noir

For further details on the characteristics of Pinot Noir, see Burgundy: [Pinot Noir](#). This is the only black grape allowed for AOC wines. Historically, it produced rather thin and lean wines, but a warming climate, knowledge from other regions (Burgundy, neighbouring Germany) and local demand have resulted in rising quality with both unoaked and oaked wines. Significant producers include Domaine Muré and Domaine Albert Mann.

Sylvaner

For further details on the characteristics of Sylvaner/Silvaner, see Germany: [Silvaner](#). This variety is in decline in Alsace, partly because Pinot Gris and Pinot Blanc are easier to grow. Consequently, the majority of Sylvaner wines come from older vines (40 years or more) and very little Sylvaner is located on the valley floor. As a result, it is a grape variety that is gaining a reputation as a source of good value wines of very good quality.

Muscat

Both Muscat Blanc à Petit Grains (for further details on its characteristics, see the chapter on Vins Doux Naturels in D5: Fortified Wines) and Muscat Ottonel are grown in Alsace, although in tiny amounts. The latter ripens earliest of the two, making it attractive to avoid autumn rains.

VINEYARD MANAGEMENT

The most common form of training is single or double Guyot, as required by AOC regulations. The fruit zone is typically trained higher than in other regions at 1–1.2 m above the ground to reduce the risk from frost, especially on the valley plain, and humidity (due to the regular if low absolute level of rain). Canopies are also higher, up to 1.9 m above the ground, to maximise exposure to the sun. In turn, this means that the spacing between rows of vines has to be wider to avoid shading. Typical planting density is 4,400–4,800 vines per hectare, with less dense planting on the valley floor and denser planting on slopes. On the steepest slopes, terracing can be necessary, as in some grand cru sites.

The main pests and diseases are powdery and downy mildew, the grape vine moth and, latterly, Esca. The warm, sunny climate with low rainfall reduces the incidence of the fungal diseases. Small scale production, often found in Alsace, helps with greater attention to detail in monitoring the health of vines in the vineyard. Alsace has nearly 35 per cent of its vineyards certified or in conversion as organic,³ in comparison to the national average of 14 per cent.

Alsace has a long harvest period, typically early September to late October, due to the range of styles being made and the diversity of sites (altitude, exposition). Styles range from sparkling through to late-picked and botrytis-affected wines. Vineyards on steep slopes have to be picked by hand, adding to cost. AOC regulations require that grand cru vineyards are picked by hand. Vineyards on gentle slopes or on the plain can be picked by machine, reducing the cost of production for inexpensive and mid-priced wines.



Vine treated for Esca

5.2. Winemaking

Most wines are made from single varieties and the aim of winemaking is to preserve primary fruit character. Pre-fermentation skin contact or simply keeping the pressed grapes for longer in the press is practiced by some producers to extract flavour molecules and add to the texture of the wine. Cool fermentation temperatures are used for Muscat, Riesling and Sylvaner, while mid-range temperatures are more likely to be used for Gewurztraminer.



Traditional oak casks



Stainless steel casks

(Gewurztraminer has pronounced aromas, not affected by slightly higher fermentation temperatures, and has high sugar levels. A slightly higher fermentation temperature is desirable to ensure that the yeast can ferment effectively to high alcohol levels.) Low fermentation temperatures are avoided as its characteristic banana aroma is not desired in Gewurztraminer.

Many cellars are naturally cool enough to achieve these temperatures; however, temperature control is now typically installed. Inert fermentation vessels are used as no additional flavours are desired. These can be either traditional large, old oak vessels or stainless-steel tanks. Smaller, high-quality producers will often prefer ambient yeasts, believing that they contribute to *terroir*-expressive wines. As a generalisation, malolactic conversion is typically avoided on the white grape varieties grown in Alsace, as the aim is to retain primary fruit. Very little new oak is used, reducing production costs. Wines are typically aged in the same large, neutral containers on fine lees (for freshness) but without lees stirring, to retain primary flavours.

Historically, there has been little consistency about fermenting to full dryness versus leaving small or larger amounts of residual sugar; buyers of the wines have had to know the style of individual producers. The region has now agreed a standard approach to labelling the sweetness of wines, using the EU categories, which was implemented from the 2021 vintage.

On the rules for *Vendange tardive* or *Sélection de grains noble*, see next section.

5.3. Appellations, Wine Law and Regulations

Chaptalisation for Alsace AOC is allowed within EU rules. As a northerly region it is used, especially, in cool years. The maximum yield for Alsace AOC white wines is ranges from 80 hL/ha for Pinot Gris and Gewurztraminer, 90 hL/ha for Riesling and 100 hL/ha for Pinot Blanc, which can lead to some wines with low flavour concentration. Within Alsace AOC it is possible to add the name of one of 13 communes, e.g. Bergheim, or a *lieu-dit*. In these last two categories, maximum yields for white wines are reduced to 72 and 68 hL/ha respectively. The maximum yield for Alsace Pinot Noir AOC is 60 hL/ha.

For grand cru wines, yields are limited to 55 hL/ha or in some cases to 50 hL/ha (e.g. Rangen).

The category of grand cru was introduced in 1975 and is normally restricted to single variety wines from one of the so-called 'noble' varieties: Riesling, Muscat, Pinot Gris and Gewurztraminer. Well known grand crus include Rangen, Geisberg and Schoenenbourg. Additionally, three vineyards are allowed to produce either blends (e.g. Altenberg de Bergheim) or Sylvaner as grand cru wines. From the 2022 vintage, Hengst and Kirchberg de Barr have become grand crus for Pinot Noir.

There has been considerable debate about whether the delimitation of some grand cru vineyards was overly generous and whether permitted yields are too high, with some producers choosing not to use the category. However, more recently key producers such as Trimbach or Hugel, who initially rejected labelling as grand cru, have started to use the category. Since 2011 each of the 51 grand cru vineyards has become an individual grand cru. This will allow individual grand crus to vary their own rules (e.g. lower the maximum yield or introduce a new variety), for example, Pinot Noir. The region is currently discussing introducing a premier cru classification for single vineyards.



Vineyard on hillside slope

VENDANGE TARDIVE AND SÉLECTION DE GRAINS NOBLES

Both Alsace AOC and the grand crus can append *Vendange tardive* or *Sélection de grains nobles* on the label. These wines can only be made solely from the four ‘noble’ varieties. High minimum sugar levels at harvest are required – see the table below. There is no requirement for *Vendange tardive* to have botrytis-affected fruit or to be sweet. Minimum sugar levels at harvest give about 14–15% abv if fermented dry. By contrast, *Sélection de grains nobles* must be made from botrytis-affected grapes and be sweet.

Minimum sugar levels required	<i>Vendange tardive</i>	<i>Sélection de grains nobles</i>
Muscat or Riesling	235 g/L	276 g/L
Pinot Gris or Gewurztraminer	257 g/L	306 g/L

5.4. Wine Business

The average vineyard holding is low at under 4.7 ha, with the result that many growers sell grapes to co-operatives or larger wineries. Over 40 per cent of sales is by co-operatives that have a reputation for high-quality wines. Alsace has a strong reputation in France for wines suitable for gastronomy. 71 per cent of the wine is sold in France, with nearly half of that being sold in supermarkets. The top export markets are Belgium, USA and Germany.⁴

All AOC Alsace wine has to be sold in the typical tall, thin ‘flute’ bottle and no bag-in-box is allowed. This can be said to give Alsace a clear brand identity, but at the same time the shape of the bottle can lead to confusion with German wines.

Alsace is notable for the number of *domaines* that produce many or even all available still styles – dry, off-dry, *Vendange tardive* and *Sélection de grains nobles* – from four or more varieties and with up to four quality levels. This means that 20–35 bottlings for medium to larger size *domaines* is normal. Significant producers of this sort include Hugel, Trimbach and Zind-Humbrecht. Equally, the top co-operatives offer a large range of wines: Cave de Turckheim offers 50 bottlings from seven varieties. This number of bottlings means that the wines are sold on a general image about Alsace wine and the individual producer, rather than individual labels.

References

- 1 Conseil Interprofessionnel des Vins d’Alsace (CIVA), private communication, email 13 October 2022
- 2 As above
- 3 Jefford, A. 2017, *For Common Cause*, Decanter (retrieved 11 October 2022)
- 4 CIVA, email 13 October 2022