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Argentina Cut off from the influences of the Pacific Ocean by the Andes, Argentina's wine regions are defined by their altitude, with many of the best vineyard areas lying over

1000 metres above sea level. Within these regions two grape varieties have come to be recognised as producing Argentina's signature wines: the black variety Malbec and the white variety Torrontés.

CLIMATE AND GRAPE GROWING

Most of Argentina's vineyards lie close to the Andes, in a series of irrigated oases in what is otherwise desert. They are spread over more than 1500 kilometres from the province of Salta in the north to Río Negro and Neuquén in Patagonia.

With the exception of those in Río Negro and Neuquén, most of the vineyards lie 600 metres or more above sea level, and in Salta, close to the town of Cafayate, they regularly extend to 2000 metres or more, allowing suitably cool sites to be found close to the Equator. Historically, because of the heat, most vineyards were planted in the pergola system, known locally as *parral*. This lifted the grapes away from the searing heat close to the ground, and, with grapes hanging down below the leaf canopy, also provided some shade from the intense sunshine. Although *parral* is still commonly used for the

Torrontés grape, many vineyards growing black grape varieties are now planted with vertical trellises. The canopies still need to be arranged so that grapes are shaded from the intense sunshine.

In the rain shadow of the Andes, rainfall is extremely low, but water can be drawn from rivers flowing down from the mountains or from subterranean aquifers. Flood irrigation was widespread but drip irrigation (which uses scarce water more efficiently) is more common in newer vineyards.

Spring frosts are an occasional problem, but summer hail is a regular hazard, particularly in Mendoza. Despite the expense, many producers use netting to protect their vines. The traditional method of risk management – to own vineyards in several different areas – will always be widespread as this also brings considerable advantages at the blending stage. The dry climate means that there are few problems with rot or mildew, and Argentina is an important producer of wines made from organically grown grapes.

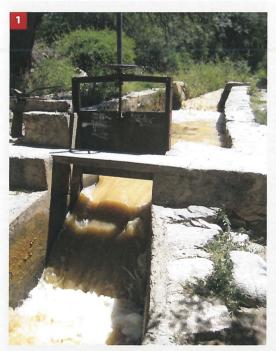
GRAPE VARIETIES AND WINEMAKING Black Varieties

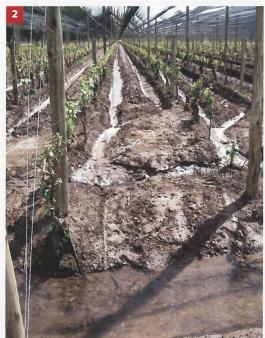
Malbec is Argentina's flagship variety, and the country has the largest plantings of this grape worldwide. It tends to produce deeply coloured, full-bodied wines with notes of black fruit and often high levels of smooth tannins. However, a number of winemakers are now extracting more gently in the winery to create more elegant styles. Most high-quality Malbecs are matured in new oak, lending subtle spicy flavours. Argentine producers have grown Malbec extensively in every wine region of the country, and regional differences can be noticed in the wines produced. Generally, the wines made from fruit ripened at lower altitudes are fuller-bodied, with richer black fruit. Those from higher altitude vineyards tend to be more elegant, displaying fresher, more floral aromas. Malbec is mostly produced as a varietal, although it also plays a leading role in some premium blends, generally with Cabernet Sauvignon, Merlot, Cabernet Franc and/or Petit Verdot.

Bonarda is the second most planted variety in Argentina. It is a late ripening variety that produces deeply coloured grapes with high acidity and tannin levels. When grown at high yields Bonarda produces easy-drinking wines with medium to deep colour and fruity raspberry and blackberry aromas. When yields are controlled and the fruit is allowed to ripen fully, it can



6000 m+
4000-6000 m
2000-4000 m
1000-2000 m
500-1000 m
200-500 m







IRRIGATION

- A complex series of channels and sluice gates are used to manage the water used for flood irrigation.
- 2. Deep furrows are ploughed between the rows of vines to channel the flood waters.
- Drip irrigation uses water more efficiently than flood irrigation. Water is dripped onto the soil directly above the vines' roots.

produce wines of greater concentration and structure. It is mainly grown in Mendoza and San Juan.

International varieties **Cabernet Sauvignon**, Syrah and Merlot are also widely planted, as well as smaller volumes of Tempranillo and Pinot Noir. Premium wines tend to show concentrated ripe fruit flavours, usually with toasty notes from oak.

White Varieties

Torrontés is often seen as Argentina's white signature variety. It is widely planted in Salta, La Rioja, San Juan and Mendoza. Many of the best examples come from high-altitude vineyards in the Cafayate region of Salta Province. They have an intense fruity, floral perfume,

with medium body and acidity and flavours of stone fruits and melon. The aromatic nature of this grape variety means that the wines are usually fermented in inert, temperature-controlled vessels and released from the winery in the year of harvest.

Chardonnay is also widely planted and made in a range of styles. Premium wines tend to be matured in oak barrels, a proportion of which is often new. Chenin Blanc, Sauvignon Blanc, Semillon and Viognier are also grown.

The traditional low-quality variety Pedro Gimenez (not the same variety as Pedro Ximénez found in southern Spain) is used in cheap wines for the domestic market and although in decline, it remains the white variety with the greatest plantings. Flat vineyards in the Uco Valley. Here altitude not aspect is the key to quality.



REGIONS AND WINES

Argentina has a GI system, in common with most New World countries. The vineyard area is split into three broad regions, of which only Patagonia is widely seen on wine labels. Each region is split into a number of provinces, which, in turn, contain a number of more specific departments.

Salta Province

Salta is close to the border of Bolivia and so is the most northerly of the vineyard areas in Argentina. This province is home to some of the highest vineyards in the world, with some located at over 3000 metres above sea level. The extreme climate experienced here produces wines of great purity and concentration. Torrontés is the dominant grape, producing highly aromatic wines, especially in the **Cafayate** region. Many of the large wineries based in Mendoza and some major European wine companies have invested in this region for its superior quality of Torrontés. Malbec and Cabernet Sauvignon are the dominant black varieties planted in Cafayate.

La Rioja Province

La Rioja Province has the third largest area of production in Argentina. The main vineyard area is the Famatina Valley, where large volumes of grapes can be grown on the irrigated valley floors. Torrontés is a speciality of this province, with Cabernet Sauvignon, Syrah and Bonarda being the most planted black varieties. To avoid confusion with the Rioja region in Spain, these exported wines are generally labelled as Famatina.

San Juan Province

San Juan is Argentina's second most important wine area. The vineyards are located at approximately 450 to 1400 metres above sea level, a similar altitude range to those of Mendoza to the south (where the conditions are hotter and more arid). The province is particularly noted for the quality of its Syrah. Other grapes that flourish are Malbec, Cabernet Sauvignon and Bonarda. Chardonnay and Viognier are the most planted white varieties.

Mendoza Province

The province of Mendoza dominates winemaking in Argentina and accounts for the vast majority of wine produced. The vineyards are planted in desert conditions, protected from rain in the west by the huge Andes Mountains and from the east by the vastness of the Argentine Pampas.

Mendoza can be split broadly into five divisions: Northern, Eastern, Central, Uco Valley and Southern. The grapes or wines from these different divisions are often blended to take advantage of fruit from different climates.

Both Northern and Eastern Mendoza are generally areas where the focus is on high-volume, inexpensive wine. The Mendoza river that flows through these areas provides irrigation water, making growing large quantities of grapes possible.

Central Mendoza has the longest history of producing high-quality wines and many of the most famous producers are based here. The **Luján de Cuyo** department in particular has a reputation for producing very fine Malbec. This sub-region lies at around 900 to 1100 metres in altitude, in the foothills of the Andes, south-west of Mendoza city. It is notable for its old Malbec vines, which provide much of the soft, round and sweet spice in Malbec blends.

The **Maipú** department lies to the east of Luján de Cuyo, with vineyards at lower altitudes. Syrah and Cabernet Sauvignon perform particularly well here. The eastern, lower part of Maipú provides much of the high volume, inexpensive wine for both domestic and export markets but is also a valuable source of old vine Bonarda and Tempranillo.

The **Uco Valley** lies to the south-west of Mendoza, and is a source of high-quality fruit. The vineyards lie at 900 to 1500 metres, making them the highest vineyards in Mendoza. Cool nights help to retain acidity and fresh fruit flavours in the grapes, and the wines sometimes display floral notes. Chardonnay, Torrontés, Sauvignon Blanc, Malbec, Cabernet Sauvignon, Merlot and Tempranillo all flourish here. Some sites are cool enough to grow Pinot Noir. This area includes the department of

Tupungato to the west, a high altitude area increasingly recognised for the quality of its wines.

Southern Mendoza is home to the San Rafael department. Compared with much of Mendoza it has a low altitude but its southerly location makes it one of the coolest areas in the province. It has the country's most significant plantings of Chenin Blanc.

Patagonia Region

Patagonia is home to the Río Negro Province, and the relatively new Neuquén Province. With vineyards situated at around 200 to 250 metres, the cooling influence here is not the altitude, but the latitude. Strong desert winds provide a challenge for the grape growers here, but the low rainfall and wide diurnal range means the vines benefit from a low incidence of disease. Long daylight hours and cool nights provide wines with concentrated but fresh fruit flavours, and medium to high acidity. Sauvignon Blanc, Pinot Noir, Malbec and Merlot are all capable of making premium wines in Río Negro; the full potential of Neuquén is still being explored.