

Ribera del Duero

CASTILLA Y LEÓN (usually known as Castile in English) is the largest autonomous region in Spain, occupying one fifth of the total area—but it is relatively sparsely populated. With its rolling terrain and the occasional plateau, mostly used for production of grain crops and sheep grazing, Castile has many similarities with the Australian landscape. There are five Denominación de Origen (DO) wine regions in Castile, namely Ribera del Duero, Rueda, Bierzo, Toro and Cigalas.

Ribera del Duero is located in the upper valley of the River Duero which is perhaps better known by its Portuguese name, the Douro. The name Ribera del Duero literally means the banks of the river Duero. The region was only awarded DO status in 1982 even though the famous estate of Vega Sicilia (located near Valbuena de Duero at the western end of the region) has been known for its high quality wines since the mid 19th century. Significant expansion in both vineyard area and the number of wine estates has occurred since the late 1980s, and today this DO is challenging the dominance of Rioja in the Spanish red wine market.

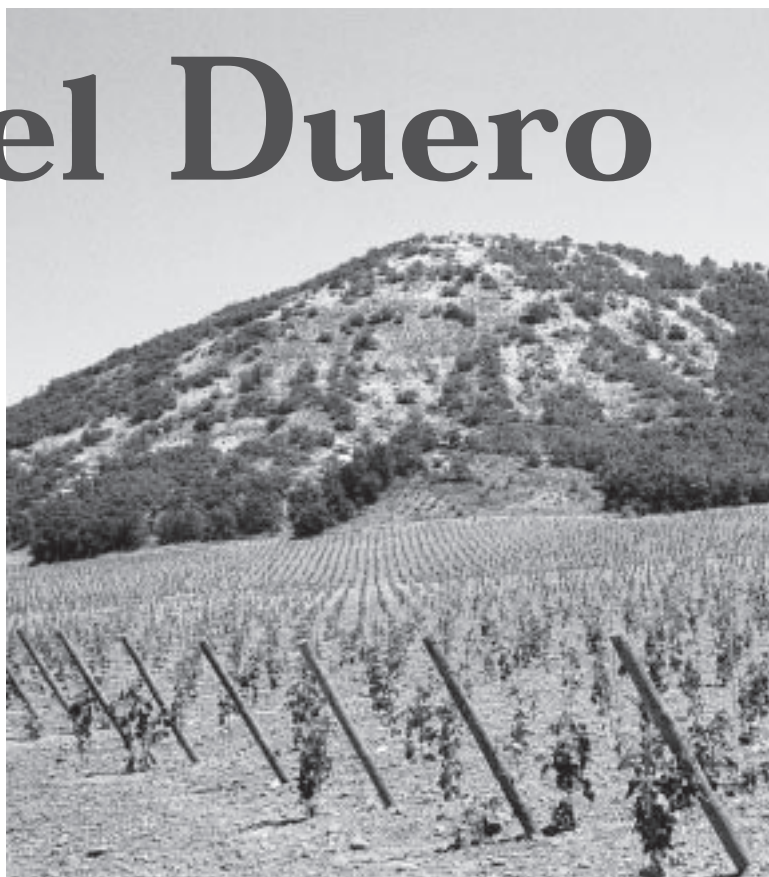
At present there are 15,000 ha of vineyards but the average vineyard size is less than 1 ha. In the past, most of the fruit ended up in cooperatives for the production of cheap rosé. Now there are more than 50 wine estates with an emphasis on quality red wine production. The oldest vineyards are found in the west of the region near Peñafiel but much of the new development is in the east near Aranda de Duero. The 'planting right' for new vineyards is \$8,000/ha within this DO (by comparison, Rioja is more than twice as expensive).

The DO is 110 km from west to east along the broad valley of the Duero, and 40 km at its widest point in a north-south direction. The western boundary is about 25 km east of the city of Valladolid which in turn is 170 km NNW of Madrid.

Vineyards are found at an altitude of 700 to 850 metres.



Mature Tempranillo bush vines (Vega Sicilia vineyard)



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Vineyards of the World

Although the Bay of Biscay is only 200 km to the north, the region has a predominantly continental climate (CTL¹ = 17.8 °C) with hot summers and cold winters². The growing season is relatively short with 125 frost-free days³ and the only period with a low frost risk is from the beginning of June until the end of September. Nevertheless the risk of a severe frost in late spring is relatively high. The growing season is characterised by high diurnal variation. The MJT⁴ of Valladolid is 21.7°C; this is not particularly high but the high day temperatures of summer are counterbalanced by the cold nights. Rainfall is relatively low: 186 mm during the growing season (April to September) with a total of 421 mm for the year. The region has similar temperature conditions to elevated locations in the Great Dividing Range in NSW, e.g. Orange.

The low-lying vineyards near the river are found on clayey alluvial soils. The most favoured soils are those of the higher slopes based on limestone: much of the new investment has taken place on these sites. The most sloping land has

¹ CTL = Continentiality or mean annual range

² Average climatic data for 1974 to 1993 for Valladolid (source: J. Yuste)

³ Radford, T. (1998) *The New Spain* (Mitchell Beazley)

⁴ MJT = Mean July temperature



Above: Mature Tempranillo bush vines near Pedrosa de Duero
Left: A new Tempranillo vineyard

fewer vineyards because it is difficult to cultivate.

Tempranillo (known locally as Tinto Fino or Tinta de Pais) currently takes up more than 85% of the planted area. It is interesting that the potential of Tempranillo for good red wine was not exploited until late in the 19th century: prior to that time it was mainly used for low quality rosé. It seems to have been the introduction of Cabernet Sauvignon that was one of the critical events that caused the change in practice: this was introduced in 1864 in an attempt to make good red wine in the region. However, although this move was successful, the local winemakers soon realised that if Tempranillo was given the same care and attention during winemaking as Cabernet Sauvignon, it too could make good red wine. Furthermore, Tempranillo had the advantage of being more drought-tolerant than Cabernet Sauvignon, an obvious advantage in this climate before the advent of irrigation in the late 20th century.

In Ribera del Duero, Tempranillo is normally used alone—this is unlike the situation in Rioja where Tempranillo is typically blended with Carignan and Grenache. Nevertheless, the DO regulations do permit the use of up to 25% of other varieties such as Garnacha (= Grenache). Cabernet Sauvignon, Merlot and Malbec are also permitted to be used for red wine in this DO. Garnacha is still used, and permitted, for rosé. White wine, predominantly from Albillo, is not entitled to DO status.

Tempranillo is a vigorous variety with erect growth habit, thus making it suitable for the traditional culture as 'bush' vines. It has distinctively large leaves with large bunches and

large, thick-skinned berries. The clones of Tempranillo used in Ribera del Duero are said to have smaller berries than those used in Rioja. The name of the variety originates from its characteristically early maturity (temprano is Spanish for 'early'). For example, it ripens four weeks before Garnacha. The fruit has a tendency to low acid so this variety obviously benefits from being grown in regions with low night temperatures. The wine has good colour and matures rapidly.

Traditionally, vines have been grown without trellises as 'bush' vines at spacings of 3m × 3m. However, most new vineyards have been trellised at a spacing of 3m row × 1.5m vine. Spur pruning is the standard in both cases: this is relatively severe at 16 nodes per vine. Trellised vines are cordon-trained with a single fruiting wire at 50–60 cm plus one or two pairs of moveable or fixed foliage wires. Trellis posts are 1.5 to 1.8m out of the ground. Summer pruning is practised in some trellised vineyards with shoot thinning at the end of May, shoot trimming and some leaf removal in the bunch zone. The use of bunch thinning is increasing. The most common rootstocks are 110R and 41B.

Budburst is typically at the end of April with harvest in the first week of October. Grapes for red wine are picked at 13.0 to 13.5°Be. Harvest is mostly by hand. The yield limit within the DO is 7 t/ha.

As in the other regions of Spain, the amount and timing of irrigation is regulated by a local committee. In practice it is said to be the yield limit which tends to regulate the amount of irrigation applied. Most new vineyards have irrigation installed but the amount applied in mature vineyards is normally less than 100 mm. Clean cultivation is the most common method of soil management due to a combination of low growing season rainfall and high frost risk.

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