

Rioja Revival

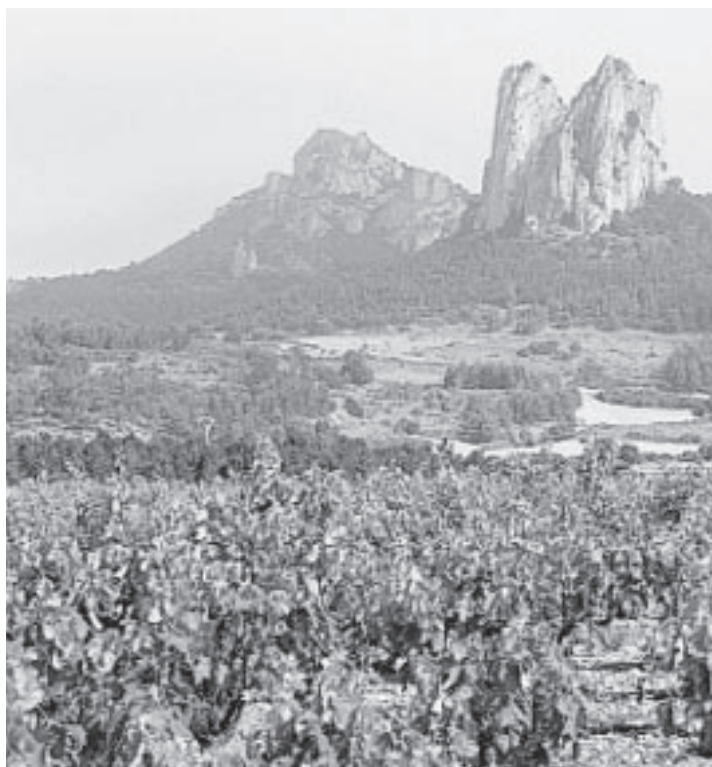
RIOJA IS THE MOST FAMOUS RED WINE REGION of Spain and was the first to obtain Denominación de Origen (DO) status in 1926. Furthermore it was the first region, and the only one to date, to be granted Denominación de Origen Calificada (DOCa) status in 1991 (this literally means qualified denomination of origin, in this instance, having proved itself in terms of performance). Grapegrowing and winemaking date from pre-Roman times. Although the wine industry experienced declining fortunes for much of the 20th century it has enjoyed a major and sustained revival since the late 1960s.

This region is named after the Rio (river) Oja, a tributary of the River Ebro. Curiously most of Rioja is actually located in the valley of the river Ebro. There are three recognised sub-regions: Rioja Alavesa, north of the Ebro entirely in Basque province of Alava; Alta in the west, entirely within the province of La Rioja; and Baja in the east, on both sides of the Ebro. Rioja Alta (22,000 ha) and Baja (19,000 ha) have the largest vineyard areas. The region is approximately 120 km long in a northwest to southeast direction and up to 50 km wide. The mountain ranges to both the north and the south provide shelter from cold winds off the Bay of Biscay to the north, and also the hot southerlies.

The altitude of the valley floor ranges from 480 metres in the west to 300 metres at Alfaro in the east. The city of Logroño is roughly half-way along the long axis and lies on the border between the relatively cool west and the relatively warm east. Although the Alta subregion has the coolest climate, it is not so different from Alavesa. The Baja is certainly the hottest and driest subregion. Vineyards are



The vineyards of Rioja (PHOTOGRAPHS BY TONY CLANCY)



Peter Dry

Vineyards of the World

found on moderate to steep slopes down to relatively flat near the river. The Alavesa subregion has many terraced vineyards on the steep slopes.

The MJT for Logroño (altitude 420 metres) is 21.3°C, growing season rainfall (April to October) is 230 mm and annual rainfall is 392 mm¹. However, annual rainfall averages less than 300 metres in the east to 500 metres in the west. Grapegrowing regions in Australia with a similar temperature regime generally have a higher annual rainfall. Although the region lies just 100 km south of the Atlantic Ocean, there is little maritime influence on climate and the climate is continental. One homoclimate analysis² has suggested that the western part of the region is comparable to Orange (NSW) and Creswick (Victoria), the central part to Beechworth and Heathcote (Victoria) and the east to Bendigo (Victoria) and Bordertown (South Australia). The most-favoured soils are clay over limestone: these are widely found in Alavesa on the south-facing slopes of the Sierra de Cantabria and also in some parts of Alta. Next are the ferruginous clays found south of Ebro on higher land. Least favoured are the very fertile alluvial soils found on low-lying land in Alta and widespread in Baja.

DO rules permit just seven varieties. For red wine, Tempranillo takes up more than 60% of the planted area,



Above: Scenic beauty and a reputation for producing fine wine are the hallmarks of Rioja Alta in Spain. Right: Sturdy stakes help young vines stand up to the wind and take on a better shape for tall goblet training.

followed by Garnacha (Grenache) and Mazuela (= Carignan). There are only 300 ha of Graciano but demand for this variety has increased in recent times. Cabernet Sauvignon is allowed in some situations. White varieties are of minor importance: there are small areas of Viura (Macabeo), Malvasia and Garnacha Blanca. The areas of Tempranillo and Graciano are increasing at the expense of Garnacha and Mazuela. Most red wines of Rioja are blends and a typical *crianza*³ would comprise 70% Tempranillo, 20% Garnacha, 5% Graciano and 5% Mazuela. In the past, the different varieties were planted together in the desired proportion, harvested at the same time and fermented together. These days it is more common to keep each variety separate until the wine is finally blended. Some producers are producing wines of Cabernet Sauvignon, Shiraz, Merlot and Chardonnay outside of the DO system. Garnacha is the main variety of the Baja although Tempranillo is grown on higher land.

For Tempranillo, budburst is typically in early April, veraison in mid August and harvest at the end of September in the south and mid October in the north.

The region has a total vineyard area of 52,000 ha, approximately 85% of which is owned by 14,000 growers, many of whom are part-timers. The average size of each individual

vineyard is less than one ha but a typical owner will work more than this, for example, 5 to 10 ha. This is the most strongly regulated DO in Spain. The planting density must be 3.0 metres × 1.5 metres (row × vine) for trellised vines and 3.0 metres × 1.1 metre for *en vaso* ('bush') vines. 'Bush' vines may be head-trained to short stakes but some new vineyards are trying head-trained vines on tall stakes. Pruning must be within 30,000 to 32,000 nodes per ha as 2 node spurs, i.e. less than 15 nodes per vine. This is strictly controlled. Most vines are spur-pruned. Bush vines make up 90% of the area. The trellis type is not controlled but most vineyards use a reasonably uniform VSP with a single fruiting wire at 60 cm, and one pair of moveable foliage wires to 100 to 120 cm. Shoots are trimmed at 1.2 to 1.4 metres. There is some shoot thinning but little bunch thinning. Weed control is mainly by cultivation with up to 7 passes per season. Some new vine-



yards are using undervine herbicides with mown sward in the midrows.

Irrigation is not permitted past a particular date in July that is determined by a local committee—in practice this date roughly corresponds with the start of veraison. As a result vines may be well-irrigated up to veraison but may suffer stress pre-harvest. Irrigation water is cheap and of good quality but a large proportion

of vineyards is not irrigated at all. There is a small amount of mechanical harvesting. Phylloxera resistant rootstocks have been essential ever since the arrival of the pest in 1901.

The maximum permitted yield is 7 t/ha⁴ but the typical yield is around 5 t/ha. Interestingly, if a grower exceeds the yield limit, he is able to 'purchase' a yield right from another grower. In the recent past, wineries have paid up to A\$4,000 per tonne for Tempranillo, but the typical price in 2001 was A\$2,000 per tonne. At its peak 3 years ago good vineyards were valued at A\$150,000/ha but today they are closer to A\$80,000 to A\$100,000. Bare land suitable for vineyards is around A\$20,000/ha. The 'planting right' for new vineyards within this DO is currently A\$15,000/ha (the most expensive in Spain) but not so long ago it was as high as A\$40,000/ha.

ACKNOWLEDGMENT

I am indebted to Xavier Farré for his kind hospitality and for some of the information contained in this article.

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¹Gladstones, J. (1992) Viticulture and Environment. Winetitles.

²Richard Smart, personal communication.

³A term for wines aged in oak and matured in bottle for at least 2 years.

⁴There is some variation for different parts of the region.