

# Vineyards of the Eastern Shore — Southern Uruguay

**T**HINK OF URUGUAY and the wine industry does not readily spring to mind. For one thing, the climate is not particularly conducive to viticulture. It is no coincidence that the Argentinians do not grow grapes in their eastern regions, preferring instead to use the drier zones in the west of Argentina. Despite the challenges, this small country—80% of the size of the Australian state of Victoria—is the fourth most important wine producer in South America with more than one million hL annually. In comparison to Argentina and Chile, the wine industry of Uruguay is relatively young; commercial

viticulture was not introduced until the 1870s. More than 90% of the total vineyard area of 9,500 ha is found in the south of the country, close to the capital Montevideo (latitude 34°50' S). Nationally, there are more than 3,500 grape-growers, most of whom have less than 5 ha of vineyard.

In the south, vineyards are found on relatively flat land at less than 50 metres elevation. The climate is warm, wet and humid and conducive to high vigour and fungal diseases. For example, the mean January temperature (MJT) for Montevideo is 23.6°C with relatively low diurnal variation. Growing season rainfall (October to March) is 569 mm (52% of annual total); the wettest months are October and March with every month receiving more than 78 mm. The relative humidity is never less than 40% during growing season and frequently is 90% or higher. The Australian region with the most comparable climate in terms of growing season rainfall and temperature is the Hunter Valley (NSW).

Traditionally vines have been planted on deep fertile soils



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## Vineyards of the World

in the quest for high yields. However in more recent times, lower potential soils have been selected to reduce vigour and yield, and thereby improve wine quality. Such soils are less readily available in the south but some new vineyards in the north, adjacent to the Brazilian border near the city of Rivera (latitude 30°54' S), have been developed on sandy, well-drained soils at an altitude of 260 metres.

Despite recent interest in *vinifera* varieties, 36% of wine production is still from non-*vinifera* grapes. The typical wine of Uruguay is a low-priced rosé or light red made from a blend of Muscat Hamburg and Labrusca

grapes. In the mid 1990s, varieties for red wine production made up 80% of the planted area, followed by white wine varieties with 17% and tablegrape varieties with 3%. For the reds, Labrusca types such as Isabella (known locally as Frutilla) made up 20% of the area, followed by various French hybrids (19%), Tannat (16%), Muscat Hamburg (15%) and Merlot (3%). For the whites, various French hybrids make up 8% of the planted area followed by Trebbiano (3%) and Semillon (2%). There is increasing interest in Tannat, Merlot, Cabernet Sauvignon, Cabernet Franc, Chardonnay and Sauvignon Blanc. Tannat (also known locally as Harriague) appears to be well adapted to local conditions and produces some of the best wines. The variety originated from the south-west of France. It is productive with tough skins and low bunch rot potential, a desirable attribute in the Uruguayan environment. However it is prone to uneven ripening and excessive vigour. Although budburst is late, it ripens in mid-season, just before



Espaldera alta



Traditional vineyard near Montevideo in mid-summer. The short rows to the right are Sistema en Tresbolillo.



Above: A new vineyard in the north (close to the border with Brazil) in mid-summer

Cabernet Sauvignon. Wines have good colour with firm tannins (as the name suggests), with a characteristic aroma of cooked quince, black cherry and plum.

Vineyards are typically non-irrigated, a result of the high growing season rainfall; however a small number on sandy soils have drip irrigation. Typical soil management is a mown sward of volunteer grasses and broad-leafed species. Ten to 20 fungicide sprays are normally applied each season, mainly for control of downy mildew and botrytis. The presence of phylloxera requires the use of rootstocks—*Rupestris du Lot* was mainly used in the past but young vineyards are more likely to have SO4.

Both spur and cane pruning are used. Shoot thinning and bunch thinning are commonly practised, with the latter most often at veraison. There is no mechanisation of either pruning or harvesting at present.

The most common trellis is a high VSP (*espaldera alta*) with posts 2.9 metres out of the ground, a single fruiting wire at 0.9 metres, and three fixed foliage wires, with row  $\times$  vine spacing of 2.5 metres  $\times$  1.1 metre. Shoot positioning is done by manual tucking. An interesting variant of this trellis is known as the Sistema en Tresbolillo. Every alternate trellis post is angled slightly into the midrow; there are pairs of fixed foliage wires and each member of a pair is attached to every second post. This creates a 'v' type arrangement



with 0.6 metres between the top pair of wires. The purpose of the system is to prevent shoot crowding and to improve aeration. It is more expensive to establish than the standard VSP because posts must be placed 5 metres apart instead of the normal 8 metres. The Lyre trellis (known as lira locally) has been used with success. It is 1.4 metres wide and used

with 3 metre rows. For Tannat, budburst typically takes place in mid September with harvest in mid to late March. Yields of 20 t/ha or more are possible with Tannat, but 10–12 t/ha is considered to be desirable for quality wine. Non-*vinifera* varieties and Muscat Hamburg are usually cropped at 20 to 30 t/ha. Quality wines represent only 5% of total production at the present time. Most wine is consumed locally but there is a push to develop an export industry based on Tannat.

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