

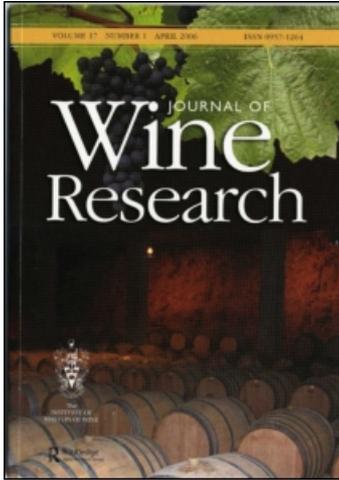
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### The emergence of a new Uruguayan wine industry

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**SHORT COMMUNICATION**

**The Emergence of a New Uruguayan Wine Industry**

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FRANCISCO M. CARRAU

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**ABSTRACT** *Although the traditional wine industry of Uruguay is virtually unknown in the international wine market, wine sales are now increasing in some of the most important markets of Europe and North America. Because of strong domestic consumption and a quiescent R&D situation in recent decades, the pioneer vision of high quality that was born in the 1880s was not realised. The strategy of promoting the typical grape Tannat (Harriague), best known for making high-quality Madiran reds in southwest France, is starting to result in successful competitive reds which are only found in Uruguay. This paper presents a summary of the history of the Uruguayan wine industry, beginning with the first Tannat vines planted in the 1870s by the Frenchman Harriague, who with a British family developed the most technically advanced winery of those days, including a bacteriological laboratory. With the programme of training for winemakers and the recently started R&D projects in the University of the Republic, it is hoped that the Uruguayan wine industry, based on quality wines at a good price, will continue opening markets and reach its target of 300 000 cases by the year 2000. The country could occupy an interesting position within the quality wines of the New World in the near future.*

**Historical Context**

*Origins*

With the arrival of the Spaniards in Uruguay at the end of the 16th century, the first vines were introduced for religious purposes. Spaniards continued to be important in the development of vineyards, and they were instrumental in the arrival of commercial viticulture in Uruguay in 1870. Many other founding families came from Italy, and a few from Germany, Switzerland, France and Algeria. Most of them established their vineyards in the south near the capital city, Montevideo.

The two main grape varieties first established were *Vitis vinifera* originating from France—Tannat and Folle Noir (Galanti, 1919). The first one was introduced by Pascual Harriague, a Frenchman from the Basque region, who planted a vineyard of Tannat in 1870, 400 km north of Montevideo, on the outskirts of the city of Salto. Later in the 1880s, this vineyard together with a small winery were bought by the British brothers G. and C. Dickinson & Co., who transformed the winery into one of the best of that time, including a laboratory for microbiology (Galanti, 1919). This was an interesting

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contribution to the South American wine technology of those days, taking into account that the first studies concerning wine microbiology were published by Louis Pasteur in 1866. At the beginning of this century the Dickinsons worked hard to develop a butchering business, which left little time to devote to the winery and the 200-ha vineyard, which unfortunately was therefore abandoned. Francisco Vidiella, a Spaniard from Catalunya, who established a plantation of Folle Noir and Gamay Blanc as well as a winery in Colon in 1874, is considered to be the founder of the Uruguayan wine industry. In the 1880s, Portal, another leading grape-grower, introduced Gamay Noir near Montevideo in Carrasco. After his death, Pablo Varzi, a wine producer of Italian origin, set up in Colon in 1887, and obtained vines from Portal. By 1895, his vineyard also had 20 ha of Tannat and a few hectares of Cabernet Sauvignon, Merlot and Malbec (Galanti, 1919). In 1914, Varzi founded the first grape-growers cooperative in Uruguay (the Sociedad Cooperativa Regional de Viticultores) and started to improve the quality of the wines for the local market. He pioneered some of the necessary changes in the law and authenticity controls of wine, and observed that “The absolute lack of winemakers in our country, with the latest advances of oenology, is the cause why the wineproducers do not mind about making profitable the excellent grapes we have, resulting in wines even not palatable for the ordinary consumer” (Varzi, 1917, p. 32). At that time, the total wine production of the country was 15 million l, rising to approximately 30 million l by 1930.

#### *From the 1930s to the 1970s*

The second important phase in the development of Uruguayan viticulture was heralded by the arrival of the Catalan oenologist Juan Carrau Sust in Montevideo in 1930. He had studied at the school of Villa Franca del Penedés and was the seventh generation of his family to produce grapes and fine wines in Catalunya. Together with two partners, Passadore and Mutio, Carrau founded the Santa Rosa winery which, in just 10 years (1930–40), increased the production of wine 25-fold. Using European technology, this company also pioneered the production of Méthode Champenoise, sherry, port, Madeira and fine wines, which before 1930 had all been imported from Europe. Although Carrau’s own wines were of almost the same quality, they were available at much lower prices than the imports. Carrau was knowledgeable and experienced, and in 1933 he wrote a practical winemaking book where he observed that “It is necessary to make more democratic the enological science for the Uruguayan wine-growers so as to improve the quality” (Carrau, 1933, p.3). He founded the first wine and grape-grower’s magazine (*Revista de la Union de Viticultores y Bodegueros*), promoting winemakers’ education (Barreto, 1936, 1942). Although the technology improved between 1940 and 1970, the wine producers thought not in terms of increasing quality but rather of increasing quantity. This could be explained by a closed market for imported wines, very little demand for quality by the consumer and an increase in the local consumption of wine from about 15 l to 28 l per capita.

#### *The Search for Quality*

The third important phase commenced with the search for quality and with one clear objective: export. In 1974, a project began to develop the regional fine wines market, especially for Brazil where wine quality was very low and the potential growth of local consumption per capita was very high (it was less than 2 l per capita). This project began with a joint venture between Almaden Vineyards of California and Juan Carrau Pujol

(Hiaring, 1974). The latter, the son of Carrau Sust, after having worked for 34 years in the Santa Rosa Winery in Uruguay and in the south of Brazil, thought at that time that his initiative of searching for new soils and conditions was the way to develop a quality wine industry in the two countries. The technical consultants of this project were Professor Olmo and his group of plant geneticists at the University of California, Davis. Their objective was to select the best soil and varieties to be planted in a new region. As Uruguay has 1000 mm of rain a year, it is important for its vineyards to be situated on poor, deep sandy soil in order to produce fine wines. When there is an excess of rain, it drains away quickly but, when the season is dry, the plants will not suffer and it is not necessary to water them. Finally, in 1977, the region of Rivera-Livramento on the border of Brazil and 500 km north of Montevideo was selected to plant the first vines of virus-free selected clones imported from California and France, including Chardonnay, Sauvignon Blanc, Cabernet Sauvignon, Merlot, Pinot Noir and Tannat.

In 1978, the CREA groups of grape-growers (Centros Regionales de Experimentación Agrícola, private Regional Centres for Agricultural Experiments) started a programme to rejuvenate the viticultural situation in Uruguay. The first technical missions organised by these groups, with Professor Denis Boubals of Montpellier, started to change the vision of the grape-growers: "if you don't change your plants and the management systems of your vines, this viticulture will die in a few years", he said at that time. Other technical visits by Professor Durquety, C. Roussel and other French consultants helped to develop the vision of a new viticulture. Today, a fluid relationship with such experts continues to develop the quality of the vineyards, with courses organised by the Ministry of Agriculture with Professor Boubals, Dr R. Smart (Australia) and others.

In 1988, the National Wine Institute (INAVI) was created by law, with its main objective being to control authenticity and grape production (De Frutos, 1992). Today, the INAVI is developing a few support programmes for other areas of viticulture and winemaking, such as promotion, wine tasting and fairs, and, in the near future, probably also R&D. In 1991, INAVI began to determine the different geographical regions of Uruguay (Figure 1). This work was entrusted to Professor Luis Hidalgo (1992) of Spain and, following it, five different viticultural regions were established: south (Montevideo, Canelones, San José and Florida) 88% of the total area of vineyards; south-west (Colonia) 6.5%; north-west (Paysandú, Salto and Artigas) 3%; north-east (Rivera-Tacuaembo) 0.8%; and central (Durazno) 1.5%. A resumé of the present statistics of the Uruguayan wine industry is shown in Tables 1 and 2. Uruguay is a land of small vineyards in private enterprises (only 1.02% organised in cooperatives and 1.76% in CREA groups) (Scarone, 1997). Most of these grape-growers have been running their businesses for three generations in this country. The Uruguayan wine industry is, for example, comparable in size with the New Zealand wine industry.

### **Oenology: R&D in the Industry**

In 1988, the first oenology course of international level was organised, also, by the CREA groups under the guidance of Professor Robert Cordonnier (Montpellier). In the 1990s, although the quality of viticultural material has improved (today 3000 ha less than in 1989, but of better quality plants), considerable R&D on winemaking and oenology under Uruguayan conditions is still necessary. During this time, only a few missions organised by the Centro de Bodegueros (Consultant winemaker Paul Hobbs of California) and wine tastings organised by INAVI (Consultant Dr M. Isabel Mijares, Professor D. Cabezudo and Dr Jose Saez of Spain) continue to maintain minimal critical evaluation necessary for the evolution of wine quality.

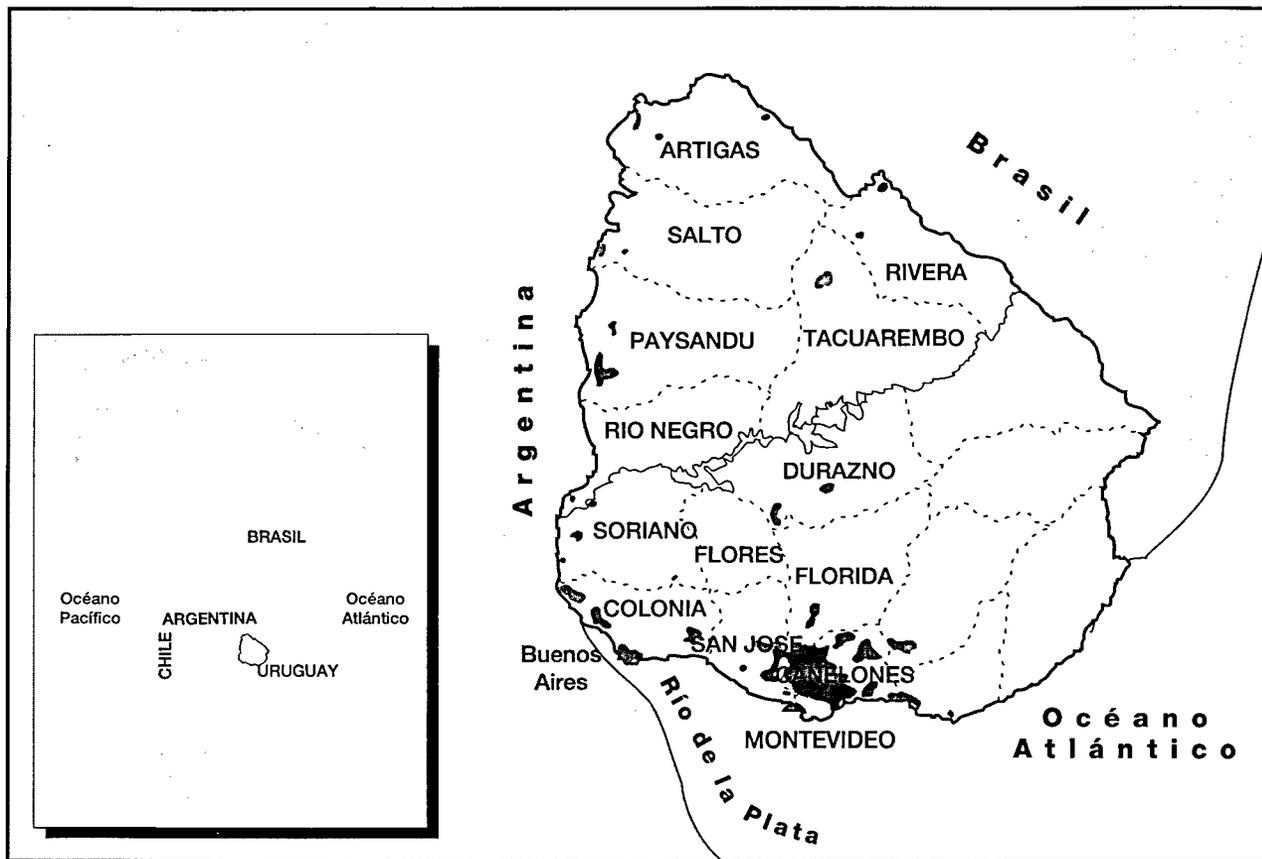


Figure 1. Map of Uruguay showing the location of the vineyards. This country is located in the same parallel of the wine regions of Chile and Argentina, in South America.

**Table 1. Summary of current statistics of the Uruguayan wine and vine sectors**

Factor	Value
Hectares planted with vineyards	9431
Hectares of <i>Vitis vinifera</i> wine varieties	4661
Number of grape producers	3500 (88.7% less than 5 ha)
Wine production, 1996	950 000 hl
Local consumption	99.4% (32 l per capita, 1996)
Exports	0.6% (62 000 cases in 1996)
Total wineries	350 (52% producing under 100 000 l per year)

Source: INAVI, 1996.

**Table 2. Principal exporters of wine during 1996 in US dollars; total exports 1 252 000 (in 1995, total exports were US\$405 000)**

Exporter	Amount exported (US\$)	Market	Average price per bottle (US\$)
Castel Pujol Winery	437 000	North America, UK, Scandinavia, the Netherlands, etc.	2.5
Establecimiento Joanico	363 000	UK	1.36
Castillo Viejo Winery	127 000	UK	1.57
Bella Union Winery	126 000	Brazil	1.7
Others	199 000		

Source: *Economía & Mercado*, El País, 7 July 1997, Montevideo.

With the aim of filling this gap in the opportunities for the Uruguayan winemakers to acquire the essential knowledge for the next millennium, the Faculty of Chemistry of the University of the Republic commenced with Advanced Courses of Oenology in 1996 with invited researchers. The first part of these courses included: aroma compounds (Dr G. Versini, Italy), wine microbiology and biotechnology (Dr P. Henschke, Australia) and practical winemaking (invited winemaker Charles Hopkins, South Africa). Since 1993 the oenology section of the Faculty of Chemistry (previously directed by Professor Cano Marotta) has undertaken research projects on:

- (1) Native yeasts and mixed strain fermentations. Effects in quality winemaking (Carrau *et al.*, 1993, 1994, 1995; Medina *et al.*, 1997).
- (2) Aroma and phenol characterisation of Tannat and other native grapes of Uruguay. Microbial modification of aroma compounds during wine fermentation (Versini *et al.*, 1995).

### **Tannat: The Typical Fine Grape of Uruguay**

An overview of the amount of *Vitis vinifera* planted in Uruguay is shown in Table 3. Today, non-vinifera grapes represent 47.19% of the vineyard (Scarone, 1997); Isabella, some hybrids and table grapes are still used for 10 l packaged wines for the domestic market. It is hoped that these varieties will be used simply for grape juice or disappear in the near future when the free market of wine within the Mercosur (Common Market of the South with Argentina, Chile, Paraguay and Brazil) will reach zero taxes for wine

**Table 3. Major vinifera wine varieties in Uruguay; total grape area for 1994 was 9431 ha**

Variety	Trends	Hectares	Wine grapes (%)
Tannat (Harriague)	↑	1524	32.7
Moscatel de Hamburgo	↑	1374	29.5
Ugni Blanc	↑	306	6.5
Merlot	↑	247	5.3
Folle Noire (Vidiella)	↓	229	4.9
Semillon	↓	209	4.4
Cabernet Sauvignon	↑	166	3.5
Syrah	↓	69	1.4
Cabernet Franc	↑	52	1.1
Chardonnay	↑	47	1.0
Sauvignon	↑	46	1.0
Nebbiolo	↓	39	0.8
Trebbiano	↓	38	0.8
Others		315	
Total viníferas		4661	

Source: INAVI, 1996.

in the year 2000. This would make it impossible to compete in volume with, for example, Argentina.

Since the 1970s, Uruguay has been producing fine wines with the Tannat grape which, although it originated in the south of France, is today almost unknown in Europe. As mentioned previously, it was introduced by Pascual Harriague and accounts for 1500 ha of the area under vinifera grapes (Table 3). Uruguay is the only country in the Americas where this grape is found. For this reason, the strategy has been to produce wines with this grape using state-of-the-art viticultural technology.

Between 1985 and 1992, well-known varieties from exotic countries were attractive for a very limited type of consumer. During the last 5 years, an 'experimental consumer' has appeared in the market particularly interested in New World wines. These experimental consumers were described by Clarke (1995) from Tesco Stores (UK) as people that "like to try anything new, have more general knowledge and they are hungry for new wines, new ideas, lesser known varieties and lesser known appellations". In this last period, the Tannat variety started to grow and open some important markets. Tannat is the Uruguayan answer to Argentinian Malbec or Australian Shiraz. So although, in the beginning, it was somewhat difficult to export wines from a small country unknown to the rest of the world, after some years of travelling and participating in fairs in Europe and North America, markets have started to open where Uruguayan wine had not been available before. These include Finland, Germany, the Netherlands, Denmark and three Provinces of Canada (British Columbia, Ontario and Quebec). In 1994 the doors of two other important markets were opened: the UK and Switzerland. Sweden, the US and Norway are the most recent markets to be opened in 1995/96. The quantities are still too small to be known in the international market, but they are expected to increase five-fold by the year 2000, although there is also high local consumption. Some wine producers are starting to prove that, with good plants, soil and advanced technology, Uruguay can produce excellent wines which are able to compete with those of the world's most famous wine-growing regions. This country could occupy an interesting position within the quality wines of the New World in the near future.

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