

# Appendices



# Appendix A

## Fieldwork sites

### 9.1 Wineries visited.

Company name	Region	Visit duration (total)	Organic/conventional
<b>Perlage</b>	<b>Veneto</b>	<b>27 days</b>	<b>Organic</b>
<b>La Biancara</b>	<b>Veneto</b>	<b>14 days</b>	<b>Organic/biodynamic</b>
<b>Valli Unite</b>	<b>Piemonte</b>	<b>64 days</b>	<b>Organic</b>
<b>Erbaluna</b>	<b>Piemonte</b>	<b>13 days</b>	<b>Organic</b>
Terra D'Arcoiris	Toscana	3 days	Organic/biodynamic
Viticultura di Anna Lisa	Veneto	2 days	Organic (grape growing only)
Galileo Zaninotti	Veneto	2 days	Organic
La Jara	Veneto	1 day	Organic
Fasoli Gino	Veneto	1 day	Organic
Le Carline	Veneto	1 day	Organic
Cantine Maschio	Veneto	1 day	Conventional
Viticoltori Ponte	Friuli Venezia Giulia	1 day	Conventional
Cascina degli Ulivi	Piemonte	1 day	Organic
La Raia	Piemonte	1 day	Organic/biodynamic
Chiusa Grande	Abruzzo	1 day	Organic
Emidio Pepe	Abruzzo	1 day	Organic
Cantine Sangro	Abruzzo	1 day	Conventional
Cerulli Irelli	Abruzzo	1 day	Organic
AgriVerde	Abruzzo	1 day	Organic
Rovero	Piemonte	1 day	Organic

The main sites are highlighted in **bold**.

## 9.2 Field sites: geographical distribution

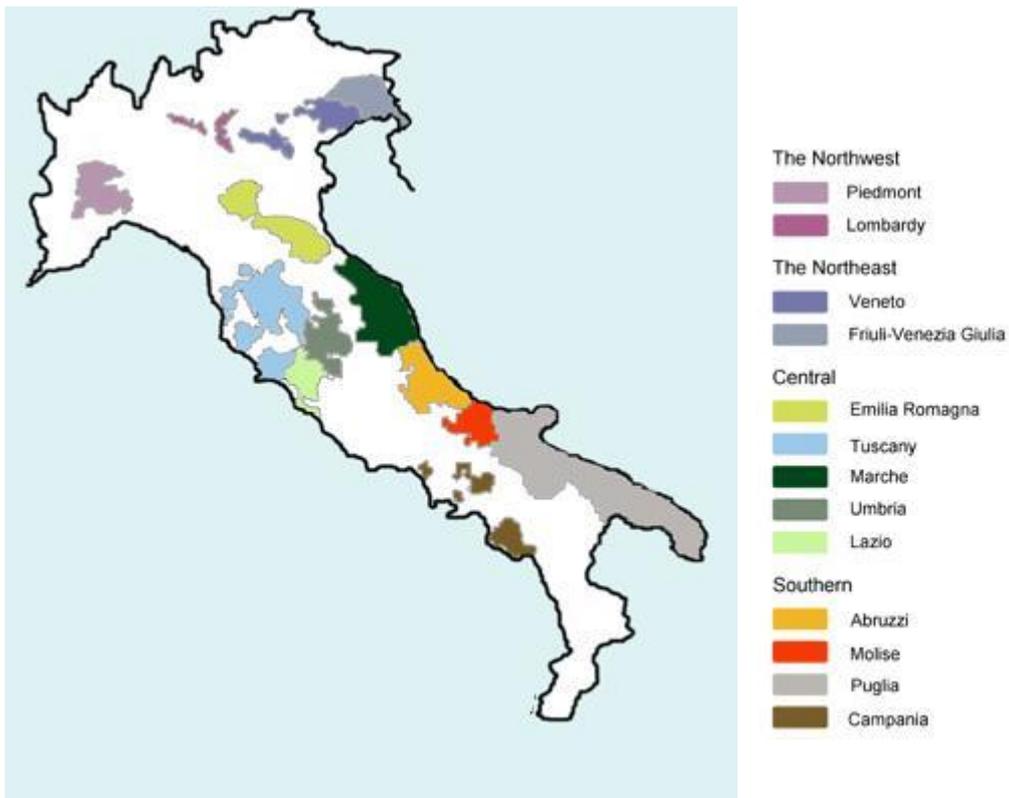


Fig. 9.1 Wine regions in mainland Italy. Source: cellatours.com.

### 9.3 Producer profiles: key sites

Below are brief descriptions of the key research sites, their history, production type at the time of research, and my position within them during the fieldwork. Additional information about the companies is provided in the text of the thesis when appropriate.

#### Perlage



Fig. 9.2 Part of the winery floor at Perlage.

Perlage was the biggest winery in my research, producing just under a million bottles a year. The company specialised in the production of sparkling white Prosecco (ten different labels, including a biodynamic no-sulphites-added wine described in detail in [SO2 chapter]), but it also put out red, white and rose wines (twelve labels). Additionally, the workers at Perlage were involved in the production of demijohn Prosecco wine, which is described in detail in [market chapter]. The company was originally set up by the *paterfamilias* as an agricultural enterprise making milk and wine side-by-side. He first started selling bottled wine in 1979, and the company took a slow turn towards organic production under the management of Tiziano's son and the company director during my fieldwork, Ivo Nardi. An agronomist by education, Ivo

became involved with the organic food movement at university. His first organic vintage, in 1981, was 'a disaster', and it took Ivo and his brothers five years to expand organic growing methods to the entire company, which was certified organic in 1985. As Ivo noted, 'once we obtained organic wine, we then had the task of selling it. So the first thing we did was to take a suitcase and go to Germany' (02/08/2008), where the market was much more developed than in Italy. Perlage saw its biggest growth once it became involved with a UK-based organic wine wholesaler in 1992. The company provided them with important intellectual support in the shape of 'flying winemakers', that is independent oenological experts, who worked with the winemakers at Perlage to create wines better suited to the palate of UK consumers. The wholesalers then played a key role in securing contracts for the production of own-label wines for three UK supermarkets which was Perlage's main source of revenue during my fieldwork. The company used grapes grown in its own vineyards, as well as buying organic and biodynamic certified grapes from a stable network of grape growers in the area.

During my time at Perlage the company employed eight full-time staff (three office workers, three winery floor workers, one packing line worker, oenologist, and one of the brothers whose role was not well defined), and two part-time staff (winery floor/vineyards). Pruning and harvest work was out-sourced. I held numerous semi-structured interviews with the company director, the oenologist, and the winemaker. During my four stays at the winery, I also spent a lot of the time 'hanging about' on the winery floor or in the office, helping out with the more straight-forward tasks (like packing), and asking incessant questions. Over the year I spent a month working at this site.

### **La Bianca**

Making wine was a long-standing ambition of Angiolino Maule, the owner and winemaker at this small organic and biodynamic winery. He and his wife Roza ran a pizzeria for many years, saving money to start their own winemaking business, and Angiolino's dream was finally realised when he was in his mid-thirties. Angiolino described himself as a 'naturalist', and told me he had always been interested in making food and drink with as little human intervention as possible. Angiolino had no education in winemaking and was largely self-taught. For a number of years he was fascinated with biodynamic winemaking methods, and many of his current winemaking methods developed through a collaboration with a French biodynamic production consultant. With time he became disenchanted with the 'astrology obsession' of the biodynamic movement, opted out of the Demeter certification, and set up his own group of biodynamic wine producers Vin Natur. Under his leadership the group has been developing 'natural' winemaking methods with a stress on natural yeast fermentation and intense vineyard management with the use of herbal infusions and vegetal compost.

La Bianca produced both white (three labels) and red wines (four labels), as well as two sweet wines made from grapes harvested just before the onset of winter and further matured in the winery to concentrate the sugars. Angiolino used exclusively grapes from his own vineyards (9 hectares). The wines were not filtered, had minimal quantities of sulphur dioxide added, and underwent natural yeast maturation in open vats. This resulted in wines which are very unusual and had problems of secondary fermentation, sediment, and bacterial infection.

The full story of Angiolino's market challenges, and his dependence on the Japanese market, can be found in Chapter Seven.



Fig. 9.3 Fermenting wine at La Biancara.

During my stays at La Biancara, I lived with Angiolino and his family in the house/winery building, and participated in all the work activities they were involved in be it grape harvesting, vine pruning and tying, fertiliser spreading, or cleaning the cantina. Over the year I spent two weeks working at this site.

### **Valli Unite**

This cooperative company in the hills of Piemonte was where I spent most time during my fieldwork, living on-site at the cooperative and participating in both work and social activities. Valli Unite was set up in the eighties by four 'founding members' who brought their land together to create a cooperative working farm producing organic wine, grains, meat and meat products, and cheeses in the 1970s. The cooperative operated a diversified economy, butchering their own animals, growing their own wheat, keeping a herd of milking cows, and running a small vegetable garden. Their food produce was sold both in their on-site store, and on a local and national scale. They also ran two agro-tourism establishments, and a weekend restaurant. The winery, however, was both the most significant income stream, and involved the most workers throughout the year.



Fig. 9.4 Working with wine at Valli Unite.

As Valli Unite deployed an hourly-pay system they had a very flexible, mobile workforce which fluctuated throughout the year. At the same time, there were core groups of workers dedicated to the winery and vineyards. Historically the winery operations were ran by Ottavio, one of the cooperative founding members, who, however, was in the process of ‘retiring’ from day-to-day running of the winery, passing the mantle to Alessandro during my stay at the site. Alessandro had studied fermentation as part of his university work, but had no specialist oenological training. When I arrived at Valli Unite Alessandro was working on his third vintage. He had been learning the practicalities of winemaking from Ottavio, as well as Umberto, an oenologist the cooperative employed. He was also assisted by Lucille, who had been Ottavio’s winery assistant before Alessandro’s arrival, and who had studied winemaking and viticulture. I conducted multiple semi-structured interviews with these key workers, and I spent a day following the oenologist around his various clients. Most of my time at Valli Unite was spent participating in the work at the winery as an assistant, working in a similar capacity in the vineyards, or travelling with the winery team selling the cooperative’s wines.

Valli Unite were an important location in my fieldwork due to the facility of access both to the winery floor and to the vineyards. As was the case with the winery, the vineyard ‘team’ was composed of a core of full-time workers, but the number of people doing the work fluctuated throughout the year depending on the numbers needed as much as on the availability of workforce at the time . The core vineyard workers were Dirk, with a formal education in gardening, Lucille, and Paulus. The team was also advised by Ottavio at crucial times of the year (see chapter four for more details). All Valli Unite wines were certified organic. Over the year I spent two months working at this site.

## Erbaluna



Fig. 9.5 Carlo and Severino working on the wine at Erbaluna.

My first meeting with Severino, the co-owner at Erbaluna, took place during the first bout of my fieldwork, and the site gained in importance during the second and third period of my research. All in all I spent two weeks participating in the work at the winery and at the vineyards, and interviewing Severino and Carlo, the two brothers who owned and ran the winery. Both brothers learned winemaking alongside their father, the company founder, as well as having graduated from winemaking and oenology at high school level. Erbaluna was a small sized winery, producing exclusively heavy reds typical of the region from the grapes harvested from the ten hectares of their vineyards. All their wines were certified organic. Apart from Carlo and Severino the winery employed two part-time workers who contributed to the work in the vineyards, and one part-time office worker. Otherwise the winery was ran exclusively by the two brothers, and my contribution was a welcome help. During my stay at the winery I lived on-site in the agro-tourism accommodation which was also part of the winery business, and worked and I took the meals with one or the other of the brothers and their families.

## 9.4 Brief profiles of subsidiary sites

### Terra D'Arcoiris

I visited this small biodynamic company three times during my fieldwork as I found conversations with both Walter, the winemaker, and his wife Paola stimulated and deepened my understanding of the relationship between particular winemaking practices and wine markets. Paola and Walter had a long-standing interest in non-chemical ways of making foods. Their long and 'stubborn' struggle against the main stream of wine marketisation highlighted both the dominance of the pacification mode of ordering in certain wine market contexts, and the cost of creating non-mainstream wine markets. Please see chapter five section 5.3.2.2 for a further description of this site.

### Viticultura di Anna Lisa

Anna Lisa made no wine herself, but produced grapes which she supplied to one of my key fieldwork sites, Perlage. I visited Anna Lisa's vineyard during the harvest season and participated in grape picking, and returned to conduct an interview about vineyard management issues in organic viticulture.

### Galileo Zaninotti

Galileo was an owner of 35 ha of organic vineyards, and primarily produced organic grapes which he supplied to one of my key field sites, Perlage. During my first visit he had begun making his own wine, and was in the process of market development. I visited his vineyards and winery with him and conducted a semi-structured interview of the topics of organic winemaking and vineyard practice and his motivations for 'going organic'. During my second visit I was accompanying a vine management consultant, and I interviewed Galileo on issues of vineyard management, and on his recent market developments.

### La Jara

I visited La Jara to conduct interviews with the two brothers who co-own the company, and who are both engaged in both vineyard management and the making of wine. I interviewed them about the motivations behind 'going organic', their wine making practices, the particular challenges of producing organic Prosecco, which was their main product, and of managing vineyards using organic methods. During the course of one interview we were joined by the company's marketing director.

### Fasoli Gino

I first met and interviewed the owner of Fasoli Gino at the initial scoping event which was an organic wine tasting in London. I visited the company early in my research with the hopes of establishing it as one of my key research sites. However, the relationship did not 'click'. During my visit I interviewed the winemaker about their winemaking practices, and visited the vineyards to talk about their issues connected with organic grape growing methods.

### Le Carline

I first met and interviewed the owner of Le Carline, Daniele Piccin, at the initial scoping event which was an organic wine tasting in London. I then visited him in the winery for a day visit,

during which I interviewed him about his motivations behind 'going organic', the winemaking methods used, the particular challenges encountered. As Daniele's company was one of the trial field sites for the research project ORWINE, our interview centred on the issues associated with an European wine legislation, and the challenges of lowering levels of sulphur dioxide use. We also visited the vineyards to talk about their issues connected with organic grape growing methods.

#### Cantine Maschio

Cantine Maschio were a very large conventional wine producer specialising in sparkling Prosecco wine. I visited the company and interviewed the director to learn about the differences between small-scale and large-scale and organic and conventional winemaking practices. A visit to the winery floor and conversations with one of the winemakers highlighted the importance of 'wild' yeast as a dangerous presence in conventional wineries.

#### Viticoltori Ponte

I first met and interviewed the director of the winemaking cooperative Viticoltori Ponte at the VinItaly wine fair in 2008. I then visited the winery, where I took a tour of the winery floor with one of the winemakers, and conducted a walking interview with him. The visit allowed me to learn about the differences between small-scale and large-scale and organic and conventional winemaking practices.

#### Cascina Degli Ulivi

I visited Cascina Degli Ulivi early during my research as the winemaker at this small, artisan winery was a known propagator of biodynamic winemaking and something of a controversial figure in the organic winemaking community. I interviewed both him and his winery assistant about the winemaking and vine growing methods used, the motivations behind their biodynamic methods, and I visited both the *cantina* and the vineyards.

#### La Raia

La Raia was an interesting site in my fieldwork due to a strong split between the biodynamic methods used in managing 32 ha of vineyards, and the classic oenological methods employed by the winemaker in the *cantina*. I interviewed both the head of the vineyard team and the winemaker about their methods, practices and motivations in their work environments.

#### Chiusa Grande

The owner of Chiusa Grande had first-hand experience of managing its 40 ha of vineyards as a graduate in agricultural management. I interviewed him about his motivations behind 'going organic', and the winemaking and vineyard management practices. I also interviewed the company winemaker in the environment of the *cantina*, and the company secretary with whom I spoke about the bureaucratic aspects of managing an organic winery.

#### Emidio Pepe

I visited this company led by its notoriety, as it was a site well known for expensive organically produced wines. During my visit I interviewed the female winemaker about the company's

winemaking and vine growing practices, and the owner, her father, about his motivations behind 'going organic'.

#### Cantine Sangro

Cantine Sangro were a large cooperative winery, and during my visit there I interviewed the company director, the principal winemaker, and the head of the oenological laboratory. I took a tour of the winery with the winemaker, and the visit allowed me to further learn about the differences between small-scale and large-scale and organic and conventional winemaking practices.

#### Cerulli Irelli

During my visit at this medium-sized winery in Abruzzo I interviewed the winery owner, the co-owner, and the winemaker about the winemaking and vinegrowing practices, the history of the company, and the company's reasons behind 'going organic'. I also took a tour of the winery with the winemaker and spoke at length about the importance of oenological machinery to the particular wines they produced.

#### AgriVerde

AgriVerde were a medium-large organic winemaking company, managing 45 ha of organic vineyards. During my visit I took a tour of the winery with the company director and ex-winemaker during which we spoke at length about the particular winemaking practices at this site. We also visited the company vineyards and spoke about the challenges of organic vine growing. I also conducted a brief interview with the company oenologist on the topic of yeast and sulphur dioxide in organic winemaking, and with the director of sales.

#### Rovero

This small organic winery was connected with one of my key research sites, Erbaluna, as both producers worked together at marketing their wines abroad. During my visit I took a tour of the vineyards and the winery with the company owner and principal winemaker, and interviewed him at length about winemaking practices and the challenges of organic winemaking.

## 9.5 Institutions visited

Institution name	Institution type	Dates visited	Methodology
Congeliano School of Oenology	Educational and research institution	18/09/08	Semi-structured interviews with head of research, and a senior researcher in the school laboratory
Zonin Oenological Laboratory	The on-site oenological laboratory of a large conventional winemaking company	11/03/09	Semi-structured interviews with the head of the laboratory
Giuseppe Pinat Vivai	Vine nursery	30/06/09	Semi-structured interviews with the owner and manager of the nursery
Progetto Natura	Vineyard management specialists	01/07-04/07/2009	Semi-structured interview with the head consultant, observation and unstructured interviews with a senior consultant as we visited his clients' vineyards

# Appendix B

## Maps of Valli Unite vineyards.

Source: Google Earth™



Fig. 9.6 : Map of vineyards at Valli Unite, section Montesorro.

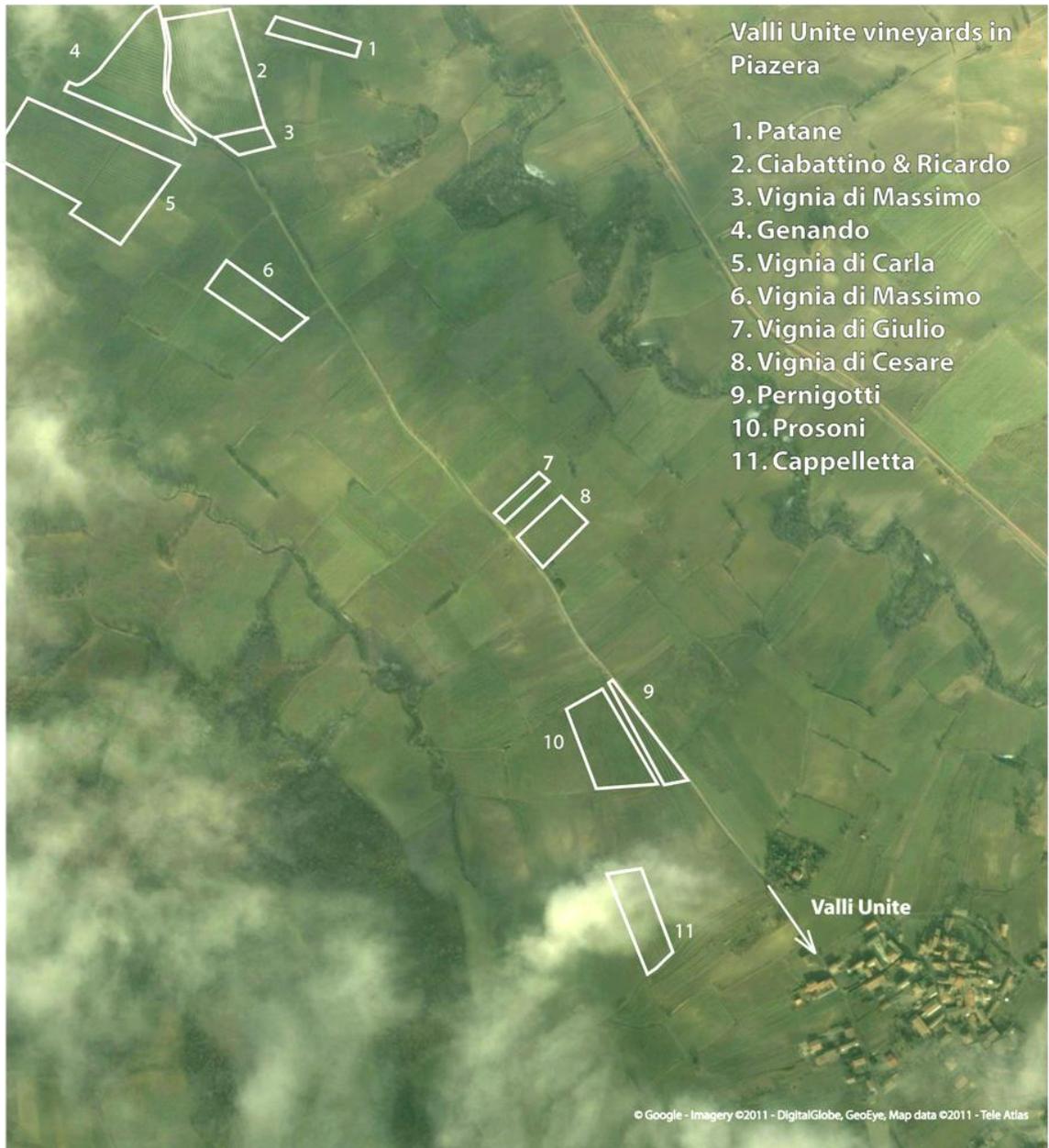


Fig. 9.7: Map of vineyards at Valli Unite, section Piazero.

# Appendix C

## Valli Unite wine list

### Valli Unite wines and prices

<b>Bottled wines</b>			
<b>Wine name</b>	<b>Terroir certification</b>	<b>Grape type</b>	<b>Price (Euro)*</b>
Bardigà	DOC	Red	9
Vighet	DOC	Red	9
San Vito	DOC	White	8
Croatina		Red	7
Brisca	DOC	Red	5.5
Ciapè	DOC	White	4.8
Diogene	DOC	Red	4.8
Diogene no sulfites added	DOC	Red	4.8
Gaitù	DOC	Red	4.8
Rosatea	none	Rosè sparkilng	4.44
Allegretto	none	White sparkiling	4.2

\*Prices for bottles as per 21/09/2011 [sorgentedelvino.it/37/valli-unite.html](http://sorgentedelvino.it/37/valli-unite.html)

<b>Other wines</b>		
<b>Packaging type</b>	<b>Amount</b>	<b>Price (euro)**</b>
Bag-in-box	20 litres	43
Bag-in-box	5 litres	12.5
Bag-in-box	3 litres	8.5
Demijohn	1-10 litres	2,1 per litre
Demijohn	11-34 litres	2 per litre
Demijohn	35-54 litres	1,9 per litre
Demijohn	55 litres and above	1,8 per litre

\*\*Prices for other wines as per 22/10/2011 [valliunite.it](http://valliunite.it)

# Appendix D

## Organic wine legislation and certification in the EU

(Source: Monnier et al. 2008)

Organic grapes come from vineyards conducted under organic farming methods, as defined also at European level, by the EC Regulation 2092/91.

Because wine is excluded of the scope of this regulation (annex 6, concerning processing organic food), there is till now no legal statute for organic wines at European level, but only for wines coming from organic grapes.

It results that the sole overall rules to be applied to wines processed from organic grapes are those contained in the EC Regulations 1493/1999 (annexes 4 and 5) and 1622/2000, which define the oenological practises and treatments allowed for wines in Europe.

Nevertheless, organic vine-growers have developed specific approaches for processing their wines in a way they consider in compliance with organic farming principles. These private initiatives in the producing countries have taken the format of standards or charters and appear more restrictive than the legal requirements for wine, with limitations concerning the use of additives and technical processes at all steps of wine processing, from grapes picking to wine bottling and storage. They belong to producers groups (Germany, France, Austria), organic farming associations connected with certifiers (Germany, Greece, Italy, Switzerland), certifiers (Spain) or representative national platforms for organic wine sector (Spain). In this last case, the implication of officials (regional authorities and national Ministry of Agriculture) gives quite a public statute to the standards. A particular place in the organic agriculture movement has to be recognized to the bio-dynamic organisations, which have also in some countries wine processing standards.

In the consuming European countries, some limitations have also been introduced by organic certification bodies, for example concerning the SO<sub>2</sub> rate in wine at consumption level (UK, ND). As a result producers exporting to these countries have to comply with these regulations.

An analysis of the legislative and regulatory framework for organic wine processing across European countries shows that the following additives and practices are generally forbidden:

- Genetically modified micro-organisms (yeasts, bacteria) or inputs derived from or by GMO inputs (like enzymes, citric acid, ascorbic acid, if allowed): totally excluded as in the general organic regulation;
- PVPP (E1202): to reduce tannin content in the wine and correct some colour defaults;
- Lysozyme E1105 (to control lactic bacteria activity and reduce SO<sub>2</sub> needs);
- Dimethyl dicarbonate DMDC (recently allowed by the European wine regulation in order to help microbial stabilization)
- Ionization and use of ion exchange materials, as in the general organic food regulation
- Sorbic acid and potassium sorbate except for few specific Spanish wines

With relation to SO<sub>2</sub> use, the European Wine Regulation on wines (conventional or organic) fixes total SO<sub>2</sub> maximum doses in the end product; they vary according to wine types, and notably in relation to the presence of residual sugars, going from 160mg/l for red wines to

400mg/l for sweet wines from Botrytised grapes, such as Sauternes. Additional quantities, up to 40 mg/l of SO<sub>2</sub>, are allowed *“when approved for all wines except those with final rates upper than 300 mg/l of SO<sub>2</sub> end”*.

The allowed doses of total SO<sub>2</sub> used during the wine processing are, in the case of all private standards for organic wines, lower than their respective European wine regulation. These reductions vary subsequently between 25% (National Spanish standards) to more than 60% (AIAB standards) for red, white and rosé wines. The differences are essentially explained by the 2 parameters of the type of wine and the climatic conditions in its production area. This last aspect concerns both:

1) The well-known relationships between SO<sub>2</sub> addition needs and wine parameters as,

- acidity of the white wines (higher in the North, protects the wine, less need of SO<sub>2</sub>);
- tannins content of the red wines (higher in the South, protects the wine);
- sugar content (create unstable conditions, wine to be protected by SO<sub>2</sub>);

2) Climatic constraints which have an influence on the sanitary quality of the grapes