

## [GRAPEVINE]

## The Swiss Wine Industry

ACADÉMIE SUISSE DU VIN

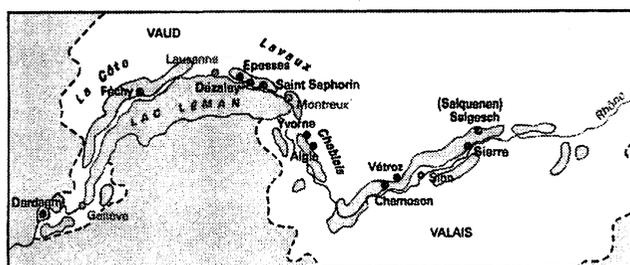
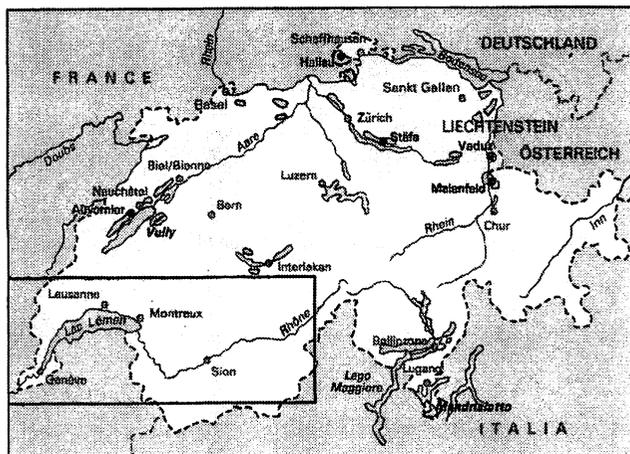
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**History**

Switzerland illustrates the permanence of certain geographical and historical rules. Situated in the center of Europe with the Alps as an obligatory passage, Switzerland has always been a place of refuge during times of war. Our country has historically played an indirect role in the affairs of the other European Countries.

The first recorded inhabitants of Switzerland were the Helvetii, a Celtic tribe which was described by the Greek geographer Strabon (64 BC - 24 AD) as "men rich in gold but peaceful." Despite its peaceful reputation, the tribe met Caesar's army in 58 BC in a battle which led to the expansion of Rome's empire from the Mediterranean Sea to the Rhine River. This began the history of both Western Europe and Roman Imperialism. The Romans imposed their language, Latin, which gave birth in Switzerland to French, Italian and Romansch. When the Roman Empire was disassembled after 400 AD, the Alemans occupied most of Switzerland, a Germanic people which then Germanized seventy-five percent of the population.

Wine was the symbol of the Roman way of life, as it was used to subdue the population to accept the Empire's rule. Romans had to adapt their Mediterranean cultivars to the harsher conditions of the northern reaches of their Empire. This first took place in the area between Valence, France and Geneva. So was created the *Allobrogica* cultivar, perhaps an ancestor of the Pinot Noir family. Another innovation from the same area was the wooden barrel, which replaced the more fragile Roman ceramic amphorae. The famous Roman Naturalist, Pliny the Elder (23 - 79 AD), known as the best writer of his time on viticulture and enology, had his estate at



Como, Italy, which bordered Switzerland.

After 400 AD, when the Germanic tribes dominated Western Europe politically and militarily, wine remained the symbol of Roman culture, and eventually became the representation of Christianity. The Christian monks created vineyards in Switzerland on sacramental purpose, but also to introduce their Germanic rulers to the delights of Roman civilization, in the same way that the Chinese adapted all their conquering peoples.

After 1600 AD, the French developed two classes of wine: one for the aristocracy, and the other for the common people. The Swiss "Samurai," hired as mercenaries by various rulers throughout Europe, brought home this differentiation, and still now, the wine labels are often related to the clergy or to the aristocracy, but never to the bankers.

The size of the Swiss vineyard is only 15,000

hectares, but its significance is much greater, because Swiss emigrants played a noteworthy role in the establishment of new vineyards in several countries. For instance, Jean-Jacques Dufour wrote in 1825 the first American book on viticulture and enology, and Charles Tardent did the same in 1874 in the Russian Empire, where he introduced French words into the Russian technical language. In 1882, Müller-Thurgau created the first successful modern crossbreeding of vinifera grape types, although the

identity of the father cultivator is now under discussion.

## 2) Geography

The Swiss vineyards are located between 300 M and 600 M altitude, simply because there are almost no territories under 300 M and those above 600 M are too cold. The notable exception is Visperten, east of Sierre, where the protected southern slopes allow the vine to climb up to 1300 M.

Table 1. Climatic conditions.

Location	Average altitude (m)	Average temperature		Precipitations (mm)	Hours annual sunshines
		January °C	July °C		
Auvernier	450	0.0	18.6	981	1699
Satigny / Dardagny	470	0.5	19.0	930	1979
Epesses	460	1.0	19.2	1151	1672
Leytron / Vetroz	520	-0.2	20.0	592	2094
Mendrisiotto	350	1.9	21.3	1726	2101
Maienfeld	550	-0.9	17.5	1036	1675
Hallau	490	-0.9	18.1	830	1578

From "Connaissance des vins suisses", Payot 1992.

Table one reflects only partially the climatic differences observed in Switzerland. The Alps cross the country from east to west. The southern side of the Alps receives more sudden and heavy precipitations, and they are much more diffused in fine drizzles in Hallau. In Geneva, the strong north wind, called "la biss," dries up and cleans the atmosphere, but also slows down the maturation. In Vetroz (Valais), the foehn, a warm and dry wind from the south of the Alps helps the maturation. This action is still more pronounced in Maienfeld, whose vineyard may be considered as a creation foehn. The big problems are hail and frost.

As a rule, Switzerland is the point where continental, Atlantic, and Mediterranean climates overlap in variable proportion, which explains the diversity of the vintage each year. For this reason, it is convenient to describe the different parts of the country differently.

### 2.1) French Speaking Area

Its typical cultivator, the Chasselas, gives more than two thirds of the Chasselas wines produced in the world. About 75 percent of Swiss wines are grown in this area (the remaining 18 percent in the German area, and seven percent in the Italian area).

#### 2.1.1) Neuchatel

This part of the country is the closest to Burgundy. Its chalky soil is due to the Jura Mountains, which separate our country from France. The climate is mild, cool, and allows for the best Pinot Noir of Switzerland - at least in the opinion of the locals. The Rose of Pinot Noir is called Oeil-de-Perdrix (partridge eye). Chasselas is by far the main cultivator, but Gewürztraminer, Riesling and Müller-Thurgau, which is called Riesling Sylvaner in Switzerland, can also be found. The Chasselas is often not separated, or just before bottling, from its yeasty sediment. Neuchâtel is, along with Geneva,

the main watch making location in Switzerland, and the homesick watchmakers used to take their wines with them when they emigrated. For this reason, Neuchâtel was the first to be exported.

### 2.1.2) Geneva

Geneva is only two hours from Beaujolais by car, and the climate is similar. For this reason, Gamay is the main red grape, in spite of the fact that the soil is not "schistoso" (this word is illegible after the fax), but formed by glacial alluvions. Since the deadline is not as strict as in the case of Beaujolais, we are not obligated to fly to Japan to drink the first "Gamay primeur" of the year. Pinot Noir comes second as a red grape, and the main white grape is Chasselas. Thanks to international institutions, half of Geneva's residents are foreigners, and to be a winegrower there may be fascinating.

### 2.1.3) Vaud

Chasselas largely dominates Vaud, especially Lavaux, from where it most likely originates. The soil is formed by glacial alluvions in La Côte: sandstone in Lavaux and limestone in Chablais. The protected slopes of Lavaux reverberate in the Lemman Lake, giving a microclimate in which Charlie Chaplin enjoyed his last days. The village of Leysin, noteworthy for its Japanese school "Kumon Leysin Academy", dominates Chablais. Vaud is the most advanced part of Switzerland in terms of Appellations, probably because the subtle Chasselas reflects the microclimate and soils well, to the point of being qualified for photography of its place of production. The author appreciates the Chasselas with some dainty Japanese dishes.

### 2.1.4) Valais

Valais may remind Japanese people of Kurosawa's film "the hidden fortress," because this upper part of the Rhone Valley is isolated from the rest of the world. Its vineyards lie at an altitude of 5-600 M, between two chains of 4000 M high mountains.

When the apricot trees bloom, and later when the vine has its bud burst, the highest mountains are still covered with snow, and the scenery is simply unforgettable. The soil is generally chalky, with some alluvial cones like in Chamoson; the summer is hot and dry. Most of the white grapes are Chasselas, called Fendant; Sylvander, called Johannisberg; Pinot Gris, called Malvoisie. The blend of Gamay and Pinot Noir is called Dole, under certain conditions of quality. Valais is well known for its wines from shriveled grapes, with or without noble rot. However, it is most famous for its genuine cultivars, which are only found in the region, like the white Petite Arvine, Amigne, Rèze, Humagne Blanc, and the red Cornalin, Diolinoir, and Durize.

## 2.2) Italian-Speaking Area

The Merlot cultivar found in the southern side of the Alps presents a very appropriate environment and represents 75 percent of the vineyard. The loose and mixed but chiefly chalky Mendrisiotto has certain similarities to Saint Emilion (Bordeaux), the most famous production area for Merlot. However, this cultivar succeeds as well in the crystalline slopes around Bellinzona, with a pretty different character. The more maritime Cabernet Sauvignon is not as well represented. The wine making there is one of the most sophisticated of Switzerland, with heavy investments and expensive wines. Nevertheless, the rich industrialists of Milano are less than one hour by car, and they enjoy the fresh air of Switzerland.

## 2.3) German-Speaking Area

### 2.3.1) Malenfeld

As I previously mentioned, this vineyard is a creation of the foehn, which often allows the postponement of the harvest until November, and gives surprisingly strong, well-balanced wines. The Pinot Noir, introduced by the French armies in the "century", covers more than 80 percent of this chalky or quaternary area. The Müller-Thurgau, with 10

percent, comes next.

### 2.3.2) Hallau

This extreme northern part of Switzerland has a rather low level of rain, and a favorable mild autumn season, which allows the wine, mainly Pinot Noir and Pinot Gris, to grow on its sandy soil. The wines are light, rather pale, and quite fruity.

### 2.3.3) Other Places

There is a significant amount of small vineyards everywhere, because each Swiss community desires its own wines. For instance, there is a half a hectare in downtown Basel, and a few hundred vinestocks in Altdorf, Wilhelm Tell's village.

## 3) Viticulture

The Swiss growers are well aware of the all the viticultural practices throughout the world, even if they are unable to use all of them because their estates are not often larger than 10 ha, and with steep slopes. The high standard of life obligated them to adopt and to miniaturize some devices. The helicopter is often very welcome to spray pesticides. The latter were used very intensively thirty years ago, because the clean Swiss people were very concerned with efficiency. Now, with the harder economic situation and the progress of ecology, they understand that higher yields do not mean higher profits, and that killing everything aside from the vine does not equate cleanliness. The use of fertilizers and pesticides was highly reduced and applied only at necessary and appropriate times. Paradoxically enough, the more frequent absence of insecticides allowed the reintroduction of the Typhlodromus, a predator of the red spider (*Panonychus ulmi*), and so this crucial problem was finally solved. Our country owes a lot to Mario Baggiolini, who enhanced the concept of integrated production, which attempts to give a consistent answer to the qualitative, economic, and ecological requirements. The more shooting diseases are now the Botrytis and

downy mildew, and in warmer years, the powdery mildew.

## 4) Enology

The basic methods used in Switzerland to now vary significantly from those employed elsewhere; the main point is the importance given to technical precision. The latter concerns the quality of the grape more and more, which may avoid, in the best cases, the addition of sugar and, for the red wines, the legal blending with stronger southern wines. The \*\*\*malolactic\*\*\* fermentation is systematically performed for red and white wines, because it enriches the rather neutral white Chasselas with new aromas. However, a small group of producers is proclaiming the merits of eliminating this second fermentation. Since they have the Chasselas, the Swiss growers for the other white cultivars, prefer selections which are more aromatic than in other countries. The small producers may propose several wines; therefore, the winemaking of amounts smaller than 1000 liters is not exceptional. Swiss wines are generally young, but wine more than 20 years old may be a fantastic experience, if you are on friendly terms with the grower.

## 5) Trade

In southern Europe, wine is a symbol of joy, life and love. The small Swiss producer is popular not only for his drink, but also his personal contact with the customers. Actually, the number of small sellers, producers and retailers up to 500 billion per year, increased from 619 to 1646 in the past twenty years, while the number of larger firms decreased by 63. However, the reality is not so idyllic as could be expected: though the small producer represents a dream, his part of the market is no more than 2 to 3 percent. About three quarters of the wine is consumed at home, and of these about one third comes from merchants and cooperatives, and two-thirds from supermarkets.

such as the "Académie Suisse du Vin," whose Japanese correspondent is Professor Koki Yokotsuka.

Table 2. Wine consumption, in hL.

	White	Red
Swiss	623,994	590,602
Imports	270,061	1,467,788
Total	897,055	2,058,390

The total consumption of wine is a little more than 40 liters per capita. The imports from France and Italy are one third of this, and Spain is the leader of the last third. However, the role of US and Australian wines is increasing. The exports represent only 3000 hl, i.e. .25 percent of production. As a customer for our red wines, Japan comes second only to Germany.

## 6) Regulations

The Federal Food Regulation defines the legal requirements (Ordonnance des denrées alimentaires). Domestic and imported wines are \*\*\*reparted\*\*\* in three categories: common wines, "geographical" wines (provenance), and origin wines (origine). The lowest category, the common wines, must contain at least 7% alcohol content coming from the sugar of the grape. For Swiss grapes, the yield is limited but blending is not. The kind and the amount of additives are given by a positive list - the label cannot say any more than "red wine" or "white wine." The "geographical" wines may mention the wine's origin, but there are restrictions on it. The best category is the origin wines, which are eligible to the A.O.C. on the French model. A good Swiss producer will demand more than the legal requirements of his product.

## 7) Conclusion

Swiss wine production is handicapped by the Switzerland's harsh natural conditions and the high expenses associated with labor in the country. However, it has the advantages of skill and well-trained professionals. Wine is a large part of Swiss culture and inspires several organizations,