



## Switzerland, a vineyard between lakes and mountains

Switzerland's vineyards cover approximately 15 000 hectares (ha). Relatively small in size by European standards, they range from 400 m to 1000 m in altitude, and have many diverse microclimates and soil types. The proximity of mountains, lakes and rivers creates an extraordinarily varied vineyard panorama.

### Six wine regions

Switzerland boasts six wine regions, corresponding either to cantonal boundaries or to wider geographical areas: the cantons of Valais, Vaud, Geneva and Ticino, as well as the Three Lakes Region and German-speaking Switzerland. Pinot noir, Chasselas, Gamay and Merlot alone account for about 70% of the country's vinestock. The most common grape varieties in French-speaking Switzerland are Chasselas, Pinot noir and Gamay, compared to Merlot in Ticino, and Pinot noir and Müller-Thurgau in German-speaking Switzerland. Over the last 30 years, efforts to rediscover local varieties have resulted in an increase in their planted area, especially in the canton of Valais. International grape varieties such as Chardonnay, Sauvignon, Syrah and the Cabernets, not to mention those developed through agricultural research, contribute to the diversity of wines produced in Switzerland.

In terms of climate, French-speaking Switzerland is one distinct area, with vineyards around Lake Geneva (Geneva, Vaud) and the Three Lakes (Neuchâtel and its surrounding area). Because of the lakes, it has a relatively mild temperate climate, with annual precipitation ranging between 800 mm and 1000 mm. The main varieties cultivated are Chasselas for white wines, and Pinot noir and Gamay for red wines. New grape varieties selected through viticultural research, such as Gamaret and Garanoir, are well suited to the terroirs of this area.

German-speaking Switzerland is a second distinct part; its vineyard area is sparser, covering mainly the cantons of Basel, Aargau, Zurich, Schaffhausen, Thurgau, St. Gallen and Grisons. With between 1000 mm and 1200 mm of precipitation each year, the climate is a little cooler than around Lake Geneva, with the exception of the Grisons region, which is regularly subject to a warm wind known as the Foehn. This particular climate is suited to the production of Pinot noir wines. Two special varieties of white grape, Räuschling and Completer, produce original wines.



Ticino, the country's only Italian-speaking canton, is the warmest region of Switzerland, but also the wettest due to high precipitation (1800 mm per year in Lugano, roughly double the rainfall of Geneva or Lausanne). Its vineyard area is mostly planted with Merlot, some of which is used to produce a blanc de Merlot.

The fourth climate area, the canton of Valais, is the driest region of Switzerland, with 500 mm to 600 mm of annual rainfall. Sunshine hours are long and temperatures are high in summer, but they can be very low in winter. Steeply sloping soils generally have fairly low water reserves. In these situations, the vines need additional water by irrigation. The canton of Valais also grows indigenous or local varieties such as Petite Arvine and Cornalin.

### The historical context of winegrowing in Switzerland

No one knows exactly when vine cultivation was introduced in Switzerland. The oldest written source on viticulture is the will and testament of the Bishop of Chur, Tello, who in 765 bequeathed Disentis Abbey, a seigneurial domain with vineyards. By the year 1000, viticulture was most likely being practised in most parts of Switzerland where vine growing was possible. From that time, abbeys and landowning lords encouraged the practice. For example, in the 12<sup>th</sup> century, Cistercian monks cleared the shores of Lake Geneva to create the famous terraced vineyard of Le Dézaley in the Lavaux area.

Switzerland did not escape phylloxera; the combat against this destructive pest, which spread from France to Switzerland via Geneva in 1875, led to a complete overhaul of the country's vineyards. As was the case with other vineyards around the world, the most effective measure was to graft European vines onto resistant American rootstock. This became practice from the end of the 19<sup>th</sup> century, but it required significant investment. The federal government provided financial support through its agricultural policy and encouraged, with the assistance of the cantons, the creation of testing laboratories (federal agricultural research stations) and of cantonal schools of viticulture (agricultural schools).



The vineyard surface area reached its peak in the 1880s, with approximately 34 000 ha. By the 1930s, it had fallen to a mere 12 000 ha or so, and was concentrated in areas that were most favourable for quality and least likely to be exposed to the risk of frost. Hence the vineyard area decreased significantly in the Plateau area and in Central Switzerland. Even under the Ticino sun, the surface area went from an estimated 8000 ha in 1877 to 915 ha in 1980. From the 1950s, Switzerland's vineyard area levelled off at around 15 000 ha with the introduction of the vineyard register, which made sure vines were maintained in the most appropriate areas. The exception is the canton of Valais; thanks to a favourable climate, its vineyard area has experienced steady growth to reach just under 5000 ha today. Next come Vaud (3800 ha) and Geneva (1400 ha). As for the other cantons, viticulture endures only in those areas that are sunny, dry and relatively low altitude (up to 650 m approx.), such as Hallau in Schaffhausen, the Zurich Weinland, the right bank of Lake Zurich, the Grisons Rheintal, Val Mesocco, the Three Lakes Region and Ticino.

### A well-kept secret

Swiss wines are most definitely one of the best kept secrets of the European wine industry. For both historical and economic reasons, Swiss wine exports are negligible (about 1% of production). Total Swiss production only covers just over a third of the country's consumption. Production costs are high, owing to the structure of holdings and the topography of the vineyards.

Outside of the country, Swiss wines are therefore mostly known only to wine connoisseurs and specialists, despite their quality having been praised by critics for many years. This is attested by their awards in major international competitions, such as the Vinalies Internationales of Paris, the Mondial des Pinots, the Mondial du Chasselas, the Mondial du Merlot and the Mondial de Bruxelles.

### Chasselas, the Swiss grape variety par excellence

If only one variety could be chosen, it would be Chasselas. It is the embodiment of Swiss cultural wine identity par excellence. As demonstrated in the ampelographic research carried out by Swiss grape geneticist and expert José Vouillamoz, Chasselas is a very old vine variety, probably originating in the Lake Geneva area. The canton of Vaud, the largest producer of Chasselas, uses village or cru designations to name wines from this grape variety, following the model of the Burgundy *Climats*. Since 1966, Valais has used the designation Fendant, whose name originates from a type of Chasselas whose berries crack under finger pressure.

Chasselas, more than any other vine variety, reflects the terroir from which it comes. Chiefly grown in French-speaking Switzerland, in the cantons of Vaud, Valais, Geneva and Neuchâtel where it flourishes, it is also found outside of Switzerland, in the south of Germany and to a limited extent in France. Early and delicate both on the vine and in the cellar, the Chasselas grape produces subtle and elegant wines, with a wide aromatic palette and remarkable ageing potential.



## Influence of global warming

By 2030, most climate models predict an increase in the earth's surface temperature (of up to 1.5 °C) with a rainfall pattern roughly similar to what it is today. In this context, with Switzerland's northern-hemisphere vineyards enjoying a relatively cool climate (with the exception of certain regions), these changes in climate should provide favourable conditions for the cultivation of grapes ripening later than Chasselas and Pinot, such as Cabernet Sauvignon.

## Host of the 42<sup>nd</sup> OIV World Congress

Switzerland's wine country holds many treasures. The 42<sup>nd</sup> World Congress of Vine and Wine will be an opportunity to discover its wines; its original vine varieties; its stunning landscapes shaped by centuries of winegrowing activity; its rich traditions, defending an expert craft that is still carried on by winegrowers today; and the cultural diversity of the different linguistic regions of Switzerland.