ADAPTATION OF VITICULTURE TO CLIMATE CHANGE



High resolution observations of viticultural adaptation & mitigation scenarios

In a climate change context, and facing the statement of the necessary inclusion of the climate at a fine scale and its consequences on the viticulture, the LIFE-AD-VICLIM project aims to study adaptation and mitigation scenarii, at the terroir wine growing scale, for different vineyards representatives of the climatic diversity of the European wine-growing regions.

In order to demonstrate the interest of a local management of the adaptation and mitigation strategies, the LIFE-ADVICLIM

project develops technologies adaptable to the Europeans wine growing terroirs: a measurement network and a web platform which will allow the winegrowers to assess the impacts of the climate change on their plot, to simulate adaptations scenarii and to measure the greenhouse gas emissions linked to their practices. Those technologies are experimented on demonstration sites, in five European vineyards, thanks to the Life funding: Cotnari, Rheingau, Bordeaux, Sussex and Val-de-Loire.

The partners



















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THE DEMONSTRATION SITES IN EUROPE





Bordeaux

90 temperature sensors installed in the famous areas of Saint-Emilion & Pomerol to model temperature at fine scale. Vine phenology and grape ripening are monitored to better understand the influence of spatial temperature distribution on vine behaviour and wine quality.

Val de Loire

The wine producing areas of the Coteaux du Layon and Saumur Champigny are equipped with a network of agro-environmental measurements at local vineyard levels. These two areas, producing respectively dry or sweet white wines and red or rosé wines, are representative of the contrasting landscape and geo-pedological features of the Loire Valley.



Sussex

Rock Lodge Vineyard, located in West Sussex (UK) was established in 1964 and, at 8 hectares, is Plumpton College's largest vineyard. The vineyard is very representative of cool climate viticulture, hosting a range of grape varieties for the production of sparkling, white, rosé and red wines.

Rheingau

The Rheingau wine-growing region is located at the 50th degree latitude north and is famous for their well-known Riesling wines. Due to the gradient within such steep slope vineyards as well as management practices meso-climate varies and impacts on wine quality. Hence a network of agro-meteorological sensors is installed in a steep slope area of ca. 175 ha near Rüdesheim.



Cotnari

Within the Life ADVICLIM Project, the Cotnari vineyard represents the viticulture of the temperate continental climate zone. This vineyard is located in the north-eastern part of Romania and produces white wines. Spatio-temporal variation of the local thermal regime will be monitored through 20 sensors installed within the vineyard area.