

Abstract

Climate change in the Beaujolais:

a welcome problem, a need for adaptation or for the development of new roads towards the future?

Beaujolais has gone through dire straits the last half century. Only quite recently it has resurfaced. For a long time dominant merchants and métayage-owners have refused to take up their ethical responsibility for this wine region, both socially and economically. Beaujolais was judged on the quality of its smallest wines: the Beaujolais Nouveau, instead of on its best Cru-wines. This marketing ploy backfired enormously and has tainted the image of the region's wines. A huge crises resulted, which has lasted for nearly 15 years, causing strong tensions between its different groups of producers.

However Beaujolais is also the cradle of the Vins Naturels. After the period of merchant induced industrialisation, its yields have been lowered drastically. A younger generation of growers has taken over with a hard-working attitude and a keen eye on innovation. Beaujolais wines start to get very positive press coverage the last years. The producer groups have unified again, behind a solid plan for a sustainable future, under the slogan: "Beaujolais is back".

Sustainable, but what about climate change in the region? The vine is known to be a witness plant for it: an ideal marker for climate change and its repercussions. The discussion on this is complicated, as often people mix up of 'climate' with 'weather'. Remarks on climate and its changes should include at least a period of 30 years.

For regions as the Beaujolais, local climate studies on a very detailed scale are needed to predict its consequences and to create plans to address them. In the creation of these studies the region's vigneron's extended knowledge and experience should play a vital role, also to increase their acceptance.

The data show a steady increase of the average daily temperature in the region's growing season since 1987. Between 1971 and 2010 the starting data of flowering and véraison and the end of the harvest ban advanced 13-14 days on average. In the Beaujolais the advancement of the average start of debudding is not noticeable: its dates are widely variable. All this means that the period between the start of debudding and the end of the harvest ban has also shortened by nearly two weeks on average,

Not only climate change plays its role in this advancement. Also the sharp reduction of yields, to around 40hl/ha on average nowadays, should be taken into account: less grapes to ripen, means less time needed for it. What does all this mean for the vines, the grapes and the resulting wines.

Time to let the Beaujolais vigneron's speak as interviewed during an local annual seminar, during ProWein and in their cellars.

To a large extent they consider climate change in their region, which they recognise, to be a welcome problem, as is the case with most of them in the Northern French wine regions. It provides them with the combination of richness, concentration and alcohol, provided yields are controlled. Chaptalisation, once practiced widely in the region, has become an exception. Many vigneron regard the 2015-vintage as the road ahead in the light of climate change. However others consider its wines, popular among the public, atypical for Beaujolais as they have a solar, kind of Rhône-like, aspect to them. Our expert-panel blind tasting shows a clear preference for the more typical style in recent Beaujolais vintages.

Some have fears about the total acidity in their wines, as, due to the faster phenological development of the grapes, their composition is influenced. Also many worry about milder winters, leading to earlier debudding, followed by April- or May frosts, as happened in the 2016/2017 winter. This, together with the increasing occurrence of severe hail storms, are the most damaging special weather events, which are likely to increase, due to climate change and global warming.

The most pressing present question in the region among the producers remains the valorisation of the wines. The professional bodies of the region expect prices to remain stable at best and thus prescribe a lowering of production costs. However more revenue has to be generated to invest in the future, also in the consequences of climate change.

Different ways of adaptation are considered.

Planting other varieties is an obvious one, especially when they do not debut and ripen as early as its dominant Gamay Noir variety. Syrah, Viognier, Pinot Noir and more of the region's own Chardonnay grape have been planted. On the world market however they will have to compete with all the other region's producing these wines at present. Gamaret has been planted as an experimental variety with promising results.

Still the Gamay Noir variety is what Beaujolais is world famous for, and it is highly adaptable. For the next decades, this is the variety of choice, including its adaptation to the effects of climate change. It would be wise to stick to the Gobelet plantings, with their great drought resistance, instead of totally switching over to Cordon de Royat. On the long run, when the predicted 'Danubian climate', with its higher temperatures, without a dry season, will hit in, genetic modification of this variety and the rootstocks can be considered.

Conclusion: climate change is a welcome problem for the Beaujolais, still adaptation continues to be necessary. New roads have to be developed to better valorise these wines. An excellent opportunity to do this would be by focussing on the most valuable asset of the region: its vignerons, their hospitality, dedication and will to innovate in an eco-friendly and sustainable way. This makes Beaujolais unique and the relation with them, in virtual communities and otherwise, can give modern consumers the experiences they want. This should be done in an open and honest way. Open also about the natural environment in which these wines are produced and the necessary social and economic sustainability of the region as well.