



LES DOMAINES
PAUL MAS

VIGNERONS DE PÈRE EN FILS DEPUIS 1892

2008 VINTAGE REPORT



Much has been written already about the 2008 vintage, for different reasons including the lower yields (15 to 25% less), oïdium pressure in Spring, ... It is true that weather conditions in France were not classical, but we must bear in mind that France is made of many different winegrowing regions and that in Languedoc, 2008 vintage is of excellent quality and many of our wines appear to have good ageing potential.

In spite of a mild and dry winter followed by a rather fresh and humid spring, the maturity month was perfect for our grape varieties, with a pronounced day-night temperature difference (thermal amplitude), which translates into a great concentration of aromas and colour.

Like in 2007, our efforts in terms of forecasting, anticipation, prevention and above all, the search for the optimum maturity, have paid off.

My team was made of my permanent winemakers Michel Laye, Arnaud Bergeron, Guillaume Borrot, Sébastien Perez and David Costa, and also the flying winemaker David Ciry.

2008 weather conditions

Our vineyards are found in two main geographical areas: PEZENAS/MONTAGNAC and LIMOUX. Here are the highlights of the vintage.

PEZENAS / MONTAGNAC

WINTER:

Rain deficit and mild temperatures

SPRING: our spring was variable in terms of temperatures, with days or even weeks with warm temperatures, followed by fresh days or weeks.

- APRIL: rain deficit; ups and downs in temperatures: first 10 days superior to average, second decade lower, then last 10 days superior again.
- MAY: very humid (2 to 3 times more rain than normal) with a very warm beginning of the month.
- JUNE: the first half was very fresh, then very warm. Rains were superior to normal standards.

SUMMER:

- JULY: normal conditions
- AUGUST: dry months with irregular temperatures
- SEPTEMBER: warm and rainy at the beginning of the month (with a big storm on September 4, and hail around Pézenas; our vines were not affected). The rest of the month was fresh.

The thermal amplitude (the difference between the average minimum and maximum temperatures) was very important during the maturity month and beneficial to the development of the aromas on the white wines and on the aromas and the colour on the reds.

- August : 10°C
- September : 15°C

The overall rainfall of the 2008 vintage was the lowest since 2000. The average or overall temperature was similar to 2004.

Summary Pézenas/Montagnac

Rain deficit in winter

Rainy spring

Moderate temperatures in summer, but cool temperatures at night favouring the aromatic and phenolic maturity of our grapes.

LIMOUX

WINTER:

High rain deficit.

SPRING:

Rather cool, with ups and downs in temperatures.

- MAY: very humid
- JUNE: very fresh temperatures in the first half of the month, then very warm. Rainfall higher than normal.

SUMMER:

- JULY: temperature deficit
- AUGUST: temperature deficit ; little rainfall.
- SEPTEMBER: warm weather at the beginning of the month, and then cooler. No rain at all.

Thermal amplitude was very important during the months of August and September, respectively 13 and 18°C.

Summary Limoux:

Rain deficit in winter

Wet spring

Cool and dry summer

Outlook of the 2008 vintage, variety by variety

As said before, we had unusual weather conditions, with a dry winter, a wet spring, temperatures going up and down, etc...

Harvest started on August 25 (with Sauvignon Blanc) and ended on October 29 (with Cabernet Sauvignon): 2 full months. On average, we had a 2-week delay compared to our normal harvest schedule. In the vineyard, the highlights are:

- A strong decrease of the yields, on average - 22%, for all grape varieties. This drop is explained by a disrupted flowering and a very wet spring.
- A strong oïdium pressure at the end of the winter and during spring required us to more alert than ever.

A vintage during which our expertise and innovative approaches were essential.

Sauvignon Blanc:

An intense work on plot selection, as this variety is highly exposed to oïdium. The result is a very qualitative Sauvignon Blanc, with a high finesse.

Alcohol: 12 to 13%

Acidity: 3,8 to 5 g/l

pH: 3,1 to 3,4

Chardonnay:

Like Sauvignon blanc, the chardonnay variety is very sensitive to oidium. It was a difficult year in the vineyard, as the maturity was longer to reach (due to lower temperatures) and it required an important work in the cellar, in particular with ageing on lees; doing so, it gives the wines more and aromas and gives an increased ageing potential.

Alcohol: 13 to 14%

Acidity: 3,6 to 4,5 g/l

pH: 3,3 to 3,6

Viognier: This variety is more resistant to oidium and mildew; it is more « rustic » which means it has a higher capability to be constant in spite of the weather variability, as we had in 2008. This is a great vintage for Viognier.

Alcohol: 13 to 14%

Acidity: 3,5 to 4 g/l

pH: 3,5 à 3,6

Vermentino: A highly resistant variety against oidium ; it also adapts very well to the changes of weather and temperatures. The quality of the wine is the same as in 2007, with a very good tipicity of the varietal (rose and litchi aromas).

Alcohol: 13 to 13,5%

Acidity: 3,6 to 3,9

pH: 3,4 to 3,5

Marsanne: this is a difficult and late variety. Under the cooler conditions we had to face, we had to wait before harvesting and then pay extra attention in the cellar in order to get a typical Marsanne.

Alcohol: 13%

Acidity: 3,6 g/l

pH: 3,5

Picpoul: This is the first time we did a single varietal wine out of Picpoul. We stressed the vinification part in the cellar in order to get a delicate wine, with subtle aromas. A very elegant wine, with citrus fruit notes.

Alcohol: 12,2%

Acidity: 4 g/l

pH: 3 ,25

Grenache blanc: a very sensitive variety to oidium. We farm our grenache blanc organically, in our Les Tannes vineyards, where the self-defence capacity of the plants is superior and produces higher quality berries.

Alcohol: 13,8%

Acidity: 3,6 g/l

pH: 3,6

Rosé

Due to the high thermal amplitude, we have outstanding rosés this year. The Syrah, Cinsault and Grenache grapes we grow specifically with the aim to make Rosé show very well in terms of fruit, aromas, body and balance.

Let's hope summer will be nice and warm!

Pinot noir: Outstanding! We knew how to manage the plants to face the threat of oïdium, as Pinot noir is a very sensitive variety. We had to wait one month more than in any normal year to reach a good maturity. This slow maturity allowed us to make wines which in our opinion are the best we have ever had.

Alcohol : 13,5%

Acidity : 3,4 g/l

pH: 3,6

Merlot: a very good year. The maturity of our merlot was longer and softer. A very nice phenolic maturity.

Alcohol: 13,5 to 14,5%

Acidity: 3,1 to 3,3 g/l

pH: 3,65 to 3,8

Syrah: A more difficult year. The syrah is very often planted on slopes or on dry soils, and the maturity was delayed quite a lot. Our Syrah has very elegant aromas and a deep concentrated colour.

Alcohol: 13,5 to 14%

Acidity: 3,1 to 3,4 g/l

pH: 3,65 to 3,85

Cabernet Sauvignon: The latest variety, along with Malbec. Excellent harvesting conditions, outstanding fruit, we can predict some excellent 2008 Cabernets.

Alcohol : 13,5 to 14,5%

Acidity : 3,2 to 3,5 g/l

pH : 3,6 à 3,7

A little bit of science.

The vine is under the permanent influence of hormones, called phytohormones (plant hormones). They are synthesized by the plant itself and strongly impact the plant development, flowering, maturity, starch storage (in order to increase the ability to debud the following spring) and leaf falling; in a word, phytohormones control and determine the vine stages. There are five main hormone families: auxins, gibberellins, cytokinins, abscisic acid and ethylene.

In spring, growth hormones (auxins, gibberellins, cytokinins) are produced. During maturity, their production decreases while abscisic acid and ethylene levels increase.

1) **auxins:**

They are synthesized in the apex (the bud at the end of the branch). Their role lies in promoting the circulation of water in the plant, through cell elongation. They also contribute to root development.

2) **gibberellins:**

They are synthesized in the apex of the branches, in young leaves, and in the root apex. Gibberellins promote cell multiplication by inducing nutrient mobilization and transport in the plant. They play a paramount role in flowering and berry development. Unlike auxins, gibberellins reduce root development.

3) **cytokinins:**

They are produced in all the vine tissues. They promote protein synthesis, hence flower growth and tissue thickening. They influence cell division and shoot formation. They can limit the effects of flowering loss. They also take part in the regulation of water circulation in the plant, through their influence on stomata opening (stomata being the pores of the leaves).

4) **abscisic acid:**

It is produced in adult leaves and in roots. In periods of drought, it acts on stomata closing. It stops the growth of the branches and promotes the biosynthesis of phenolic compounds (aromas). Thus it favors plant maturity and bud dormancy (beginning of plant winter rest). This hormone also determines leaf falling, and in periods of stress (drought, excess of water, excess of heat, cold), it is responsible for foliage loss.

5) **ethylene:**

It is produced by the berries at maturity. It promotes the accumulation of phenolic compounds and increases colour concentration in the berries.

It is important to know that these hormones act at all stages of the vine development. Their synthesis is regulated by equilibria which are themselves under the influence of external phenomena:

Example 1: hydric stress: the abscisic acid is produced in higher quantities; stomata close down, with the effect of reducing water loss and plant drying out. At the end of summer, the vine plant often needs a slight hydric stress in order to induce growth stop, and start of the maturity phase, indeed triggered by abscisic acid synthesis. As the lack of water is more and more obvious in the plant, the synthesis of growth hormones such as gibberellins and cytokinins is decreasing drastically.

Example 2: humid summer: roots are constantly wet; therefore the growth hormones auxins and gibberellins are produced in large quantities in these parts. The vine plant shows a vigorous growth, with large leaves. This induces an important production of cytokinins, with the effect of keeping the stomata opened, which contributes to the evapotranspiration (ET), thus the discharge of water. A hormonal misbalance can occur before the beginning of the maturity stage: growth hormones can still be produced in such quantities that they will counter-balance the influence of maturity hormones, and as a consequence, we will observe a delay in maturity and in the synthesis of phenolic compounds.

Example 3: excess of water: the roots are completely drawn in water; they get asphyxiated, and are not able to function properly. Growth hormones such as auxins and gibberellins are not produced any more, therefore the plant cannot grow. This is a situation of very high stress for the vine plant. The abscisic acid is then produced and induces leaf falling in very extreme situations.

Conclusion: The vine plant cycle is regulated by phytohormones and their varying relative ratios throughout the plant life. In spring, growth hormones (auxins, gibberellins and cytokinins) are synthesized.

At the time of maturation, growth hormones synthesis decreases, whereas abscisic acid and ethylene production strongly increase.

Focus on one of our partner wine growers in an exceptional terroir: l'étang de Marseillette

At the end of the quaternary, the African plate got closer to the European and the whole Aude valley got higher; the sea went away, leaving behind a 2000-hectare lagoon, with a depth of only 2 meters, full of salted water. At the beginning of the 19th century, the lagoon was dried in order to transform it into a farmable land; it turned out to be a failure, as the soil has a too high content in salt. A tunnel is then dug in the 1840s to connect the Aude River to the lagoon. This was an impressive work, of a total length of 2.2 km, going under the Canal du Midi. The work finished in 1849, the result looked like a big spider's web, bringing the still water to each plot. Flood irrigation was practiced to reduce the salt content of the soil. Cereals (rice), vineyards and fruit trees started to be cultivated. Thanks to the water present in the canals, a very specific microclimate developed. This has been responsible for high thermal amplitude, which gives to the grapes and the fruits an exceptional aromatic concentration. This amplitude is about 30% higher than anywhere else in Languedoc.

Domaine St Gabriel was built in 1880; it belongs to the Malis family since 1925 and spreads over 250 ha: 100 ha of vineyards, 100 of rice fields and 50 hectares of other cereals. The sharing of our technical knowledge with Laurent Malis's (4th generation) knowledge about this outstanding terroir is a major advantage to produce top quality grapes. This microclimate suits particularly well the production of aromatic white grapes such as viognier, chardonnay and sauvignon blanc, which represent 40% of the vineyard surface.

In 2008 we started some trials with varieties such as pinot gris, pinot blanc and gewürztraminer; we may then (in a minimum of 3 years) include those varieties in our portfolio. But the opportunity to undertake such trials on-site is for us a big advantage in our constant search for innovation.

