

The 2023 vintage in Bordeaux

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The current situation in the Bordeaux vineyards is paradoxical: while the weather conditions and technical expertise in vineyard practices have helped winegrowers produce high-quality wines over the last decade, at least, commercial difficulties are growing and the market is witnessing a major crisis. And it is a well-known fact that the reputation of a vintage depends just as much on the taste of the wines as the expectations of distributors and consumers. In light of an unstable market plagued by serious concerns about the global economy, and following on from a 2022 vintage which stood out thanks to the quality of its wines but had mixed commercial success, the 2023 vintage had to contend with a fairly hostile context, even before the harvest. This vintage report leaves discussions on the reasons behind these difficulties and the means to remedy them to the market specialists, instead providing a factual look at how the 2023 Bordeaux vintage unfolded and the quality of its wines. Taking a step back from the economic context and the commercial future of the vintage, it focuses on summarising climate data and describing its consequences on vine growth, as well as the main characteristics of fine Bordeaux wines that are now at the start of ageing.

Thanks to relatively cool conditions and little sunshine at the end of winter 2022-2023, bud break was not too early, which prevented damage from frost in April, a much-feared scenario in recent years. Alternating milder and cooler periods in spring led to irregular vine growth, with humidity levels conducive to the development of mildew. Throughout the growing season, the fight against mildew presented a major challenge for Bordeaux winegrowers, causing significant damage, particularly for the Merlots. However, in contrast to what the oversimplified media coverage led us to believe, not all vineyards were affected in the same way, with low to negligible losses at some estates, both on the left and right banks. This is the main factor which explains the disparity in yields observed from one estate to the next. May was sunny, warm and rather dry, propitious to vine growth and flowering, the latter unfolding rapidly and evenly without any major incidence of *coulure* (shot berries) or *millerandage* (abnormal fruit set). For the estates spared by mildew, the potential yields were promising. They increased once again in June, when the absence of water stress during fruit set stimulated berry development. Up until 15 August, the summer was full of contrasts: slightly warmer than average although fairly dull and dry overall yet with regular storms. These

conditions led to the early onset of colour change (*véraison*), which lasted nearly one month while the vines continued to grow in most terroirs, leading to fears that the grapes would struggle to ripen. Fortunately, the situation changed drastically from 16 August onwards, with a heatwave, unprecedented at this stage of the vine cycle, halting growth. The grapes ripened in good conditions and, with the exception of young vines on well-drained soils or grapes over-exposed to sunshine, shrivelling remained rare. The Merlot harvest began during the first week of September, becoming widespread the following week. A heavy spell of rainfall around 20 September brought forward the Cabernet harvest in certain estates while others chose to postpone picking until after the rain, which ended up being less abundant than forecast. The end of the harvest unfolded in optimal conditions, with winegrowers making the most of the wonderful Indian summer to pick the last red grapes without fears of dilution or grey rot.

Preserving acidity and the aromatic potential of the grapes is a major prerequisite for producing fine dry white wines. The weather conditions in summer 2023 helped satisfy this requirement, particularly thanks to the lack of sunshine combined with moderate temperatures in July and early August. While the first Sauvignon Blanc grapes were harvested in the Sauternes region as of 12 August, the white wine harvest only properly began during the last ten days of the month, finishing in early September. Thanks to the warm, dry conditions in late summer, the grapes reached optimum ripeness without compromising on their balance.

The weather in the Sauternes vineyards during September alternated between wet and dry spells, ideal conditions much cherished by sweet white winegrowers. *Botrytis cinerea* developed on perfectly ripe and healthy grapes from mid-September onwards, i.e. earlier than in previous vintages. The return of dry and exceptionally warm weather triggered the very rapid concentration of the grapes. From late September to early October depending on the estate, they were harvested in several passes, with the majority picked within a two-week window.

Slightly later than usual bud break, linked to weather conditions close to the seasonal average, helped to prevent damage from spring frosts.

The winter of 2023 was characterised by weather conditions close to the seasonal average (Table I, Figure 1). However, a few cool and relatively dry weeks (Figure 2) followed one another from mid-January onwards, conducive to even bud break.

The average date of bud break was later than in 2022 due to a particularly gloomy March (Table I). Most plots were thus spared from frost damage in early April (Figure 3).

Table I

Weather data for 2023: rainfall and temperatures (compared to the 1981-2010 average) and hours of sunshine (compared to the 1991-2010 average)

Data from Méridoc (Météo France)

	Sunshine (hours)		Rainfall (mm)		Average minimum temp. (°C)		Average maximum temp. (°C)	
	2023	1991-2010 average	2023	1981-2010 average	2023	1981-2010 average	2023	1981-2010 average
January	119	96	59	87	4.3	3.1	10.4	10.0
February	168	115	53	71	2.3	3.3	12.7	11.7
March	87	170	87	65	7.4	5.4	16.4	15.1
April	204	182	58	78	8.7	7.4	18.8	17.3
May	264	217	54	80	12.3	11.0	23	21.2
June	247	239	102	62	17.1	14.1	27.9	24.5
July	230	249	22	50	16.7	15.8	27.6	26.9
August	245	241	34	56	17.3	15.7	28.6	27.1
September	240	203	93	84	16.7	12.9	28.6	24.0
October	176	147	188	93	12.7	10.4	23.6	19.4

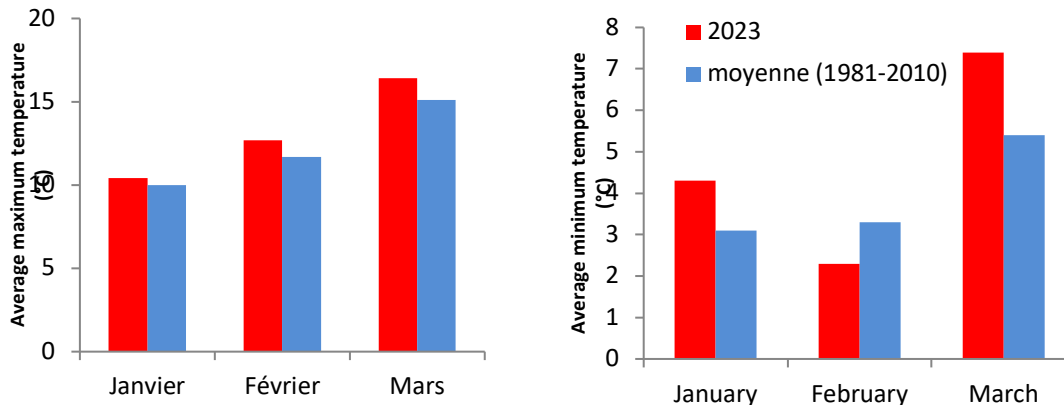


Figure 1
Average maximum and minimum temperatures in the winter of 2023,
compared to 1981-2010
Data from Mérignac (Météo France)

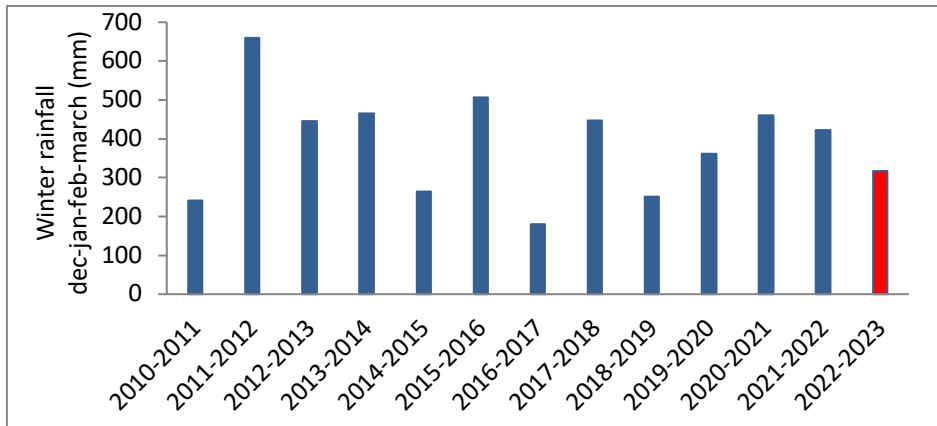


Figure 2
 Cumulative winter rainfall (mm) from December 2022 to March 2023,
 compared to the past 12 years
Data from Mérignac (Météo France)

An irregular return to vine growth due to contrasted temperatures in spring

While the recorded values were above-average (Table I), temperatures in spring 2023 varied significantly (Figure 4). Alternating periods of very mild and cooler weather (in early March and the first half of April) caused vegetative growth to occur in a series of fits and starts, with alternating phases of very quick and much slower growth (Figure 3).

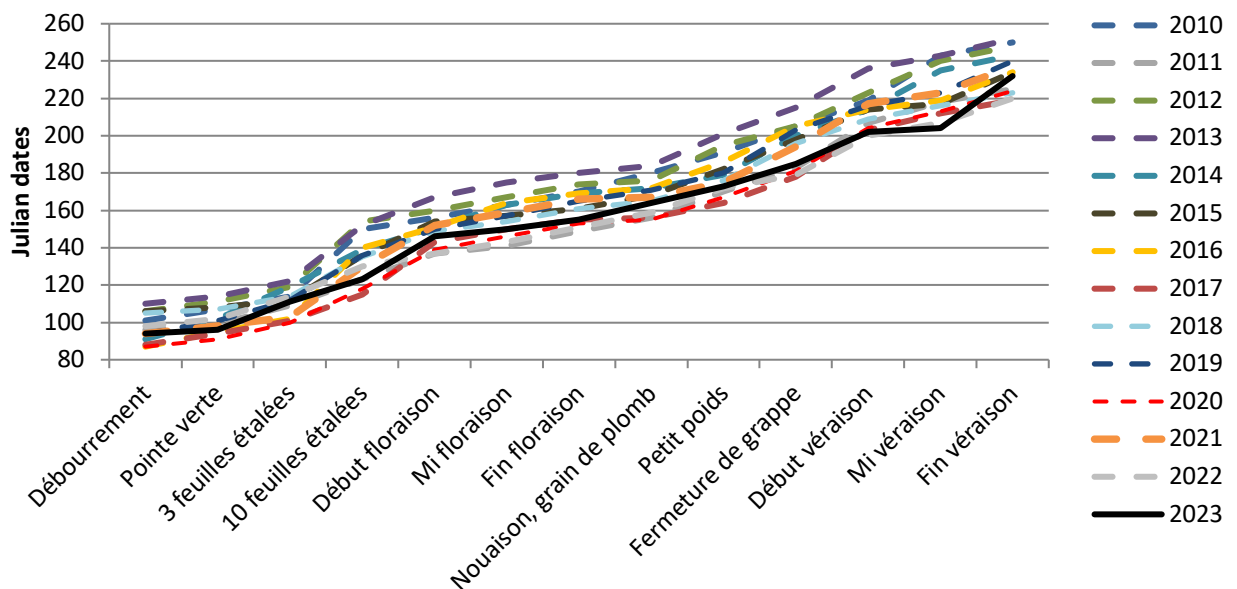


Figure 3
 Development of phenological ripeness in 2023 compared to the past 13 years (*Data from SRAL and ISVV*)

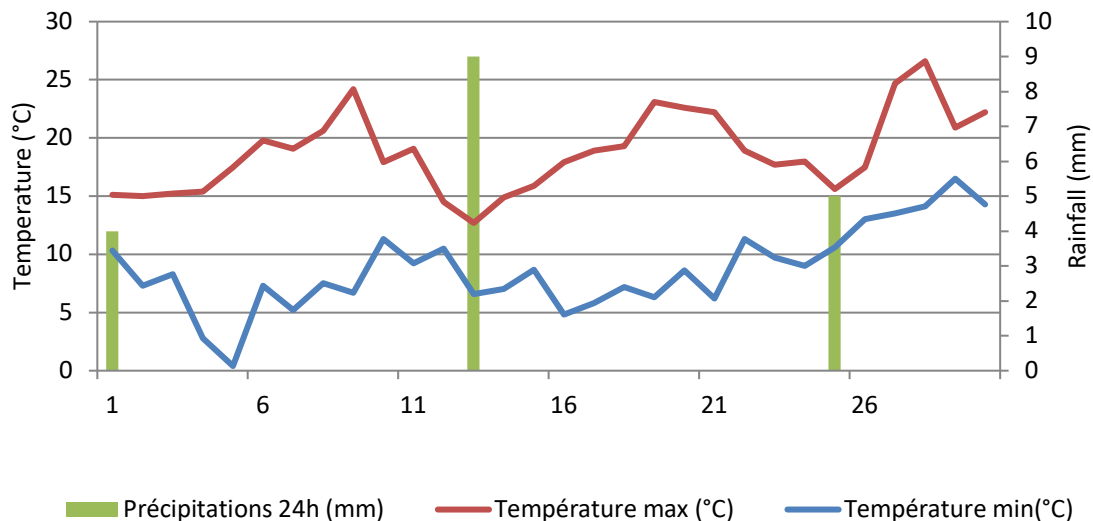


Figure 4
 Daily variations in temperature and precipitation in April 2023
Data from Mérignac (Météo France)

Flowering unfolded incredibly quickly in good conditions, with no shot berries or abnormal fruit set, yet in a context marked by a high threat of mildew

Alternating spells of warm and wet weather during spring led to an unprecedented mildew threat in the vineyards throughout the growing season, particularly on grape bunches. In wetter areas, winegrowers struggled to fight efficiently against this disease. While the damage was not systematic, it was sometimes significant, particularly in the Merlot plots.

In May, temperatures were above-average (Table I), marking a return to regular, yet not too quick vine growth, conducive to a good balance between the vine’s vegetative and reproductive parts, i.e. the even growth of the flower clusters. Flowering unfolded in relatively warm and dry conditions (in the last week of May and the first week of June) over a few days with no signs of shot berries. Mid-flowering was observed on 3 June 2023 on average in our reference plots, with no significant differences between the Merlot and Cabernet Sauvignon.

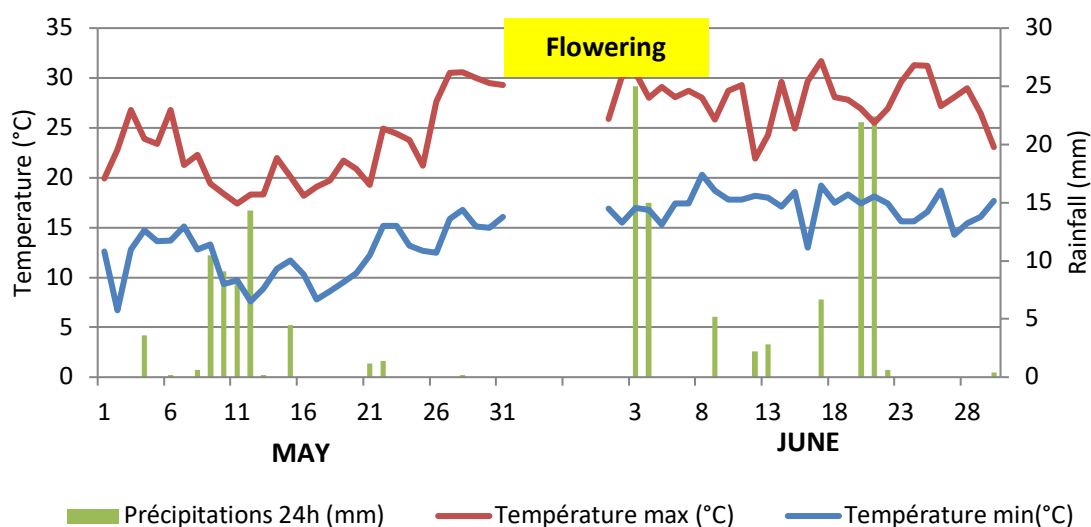


Figure 5

Daily variations in temperature and precipitation in May and June 2023
Data from Mérignac (Météo France)

Table II

Mid-flowering and mid-*véraison* dates in 2023 compared to the past 10 years and the 20-year average

Period	Mid-flowering	Mid- <i>véraison</i>
2000-2020	4 June	6 August
2013	18 June	22 August
2014	7 June	13 August
2015	5 June	6 August
2016	11 June	7 August
2017	30 May	30 July
2018	3 June	4 August
2019	4 June	9 August
2020	26 May	1 August
2021	10 June	11 August
2022	23 May	28 July
2023	3 June	23 July

A summer characterised by irregular and uneven rainfall leading to very long colour change (*véraison*)

The weather conditions in early summer were propitious to the vegetative growth of the berries. June 2023 recorded 26 days where the maximum daily temperature exceeded 25°C and 8 days of significant rainfall in the form of near-weekly storms, with up to 45 mm of

rainfall per episode (Figure 5, Table I). July 2023, on the other hand, was not particularly summerlike due to a lack of sunshine, despite temperatures being comparable to June and very low rainfall (Table I).

In the plots least impacted by mildew, colour change began just after 20 July (Figure 3). Just like flowering, colour change was extremely quick until mid-*véraison* (Table II), then spread out over nearly one month (Figures 3 and 6) due to still very active vegetative growth and the quantity of the harvest (high number of bunches and berries per bunch, and high weight of the bunches).

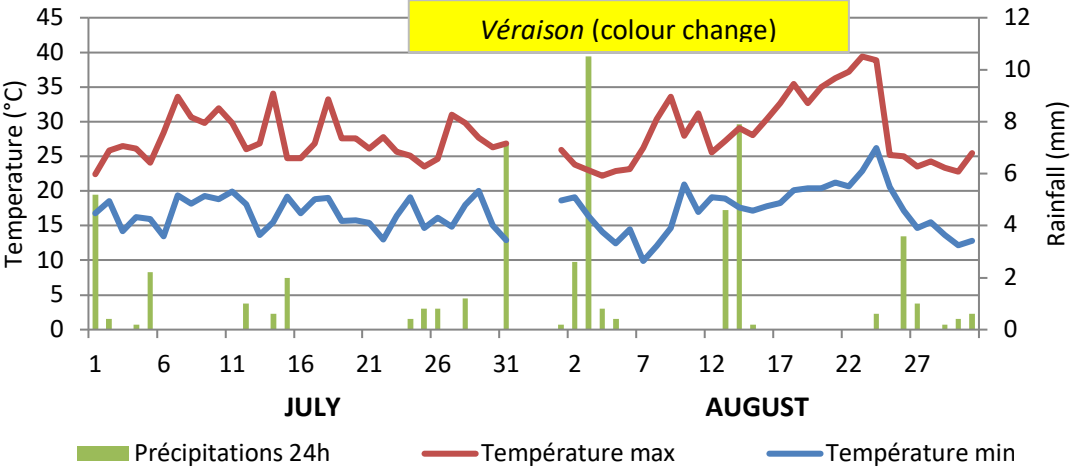


Figure 6
Daily variations in temperature and precipitation in July and August 2023
Data from Mérignac (Météo France)

Heavy rainstorms in early summer led to the significant swelling of the berries and prevented the early onset of water stress (Figure 7). In these conditions, vegetative growth continued until the start of colour change.

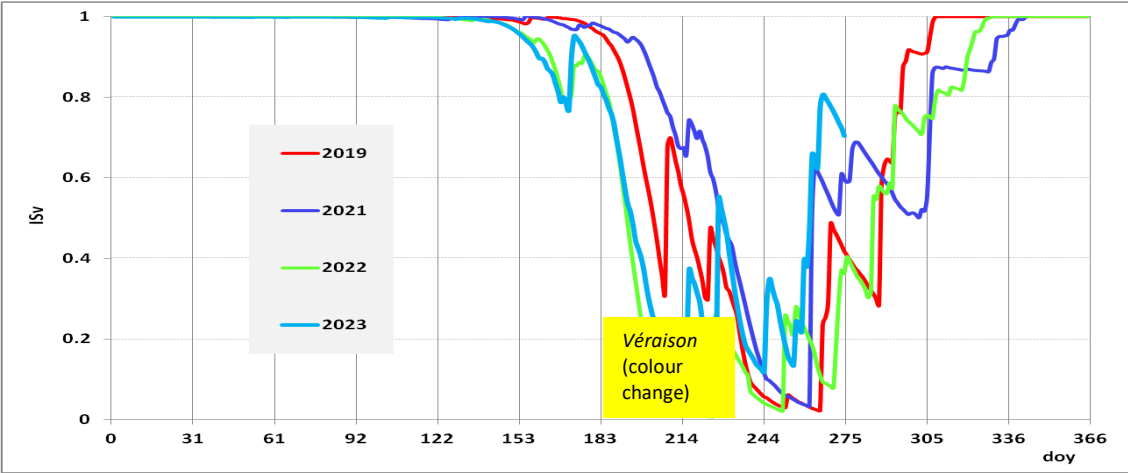


Figure 7
Variation in the water stress index in 2023 compared to 2019, 2021 and 2022 (Data from INRA, Philippe PIERI)

Ripening ended in dry and extremely hot conditions

With colour change ending after 15 August in a fairly summerlike atmosphere, the vintage was not early, leading to fears of a difficult end to ripening. Fortunately, summer conditions set in from the second half of August until mid-September. The lack of significant rainfall and particularly high temperatures meant that vine growth stopped once colour change was complete. Ripening thus got off to an efficient start.

However, the vines responded differently to the heatwave, which was unprecedented in Bordeaux for the time of year (the second half of August). Water reserves in the soil, which varied significantly due to scattered summer rainfall, played a determining role in ripening under such temperatures. Some Merlot plots, grown on permeable soils, thus showed shrivelling while others planted on clay or clay-limestone soils were much more resistant. Cabernet Sauvignon, which is less sensitive to water stress, generally suffered less in these very unusual weather conditions.

The first yield estimations during this period suggested a plentiful harvest due to the high number of bunches, the high number of berries per bunch and the weight of the berries which was significantly higher than that measured at the same phenological stage in 2022 (Table III).

September was once again particularly conducive to producing ripe, healthy and abundant grapes

The Sauvignon Blanc harvest began in Sauternes on 12 August, i.e. only three days later than in 2022, which was historically early. The first Sémillon grapes were harvested on the 14th.

In the other regions, the first grapes were picked about ten days later due to a rainy spell between 13 and 15 August. The long-lasting return to warm, dry weather (from 17 August onwards), was in fact necessary to allow the grapes diluted by rainfall to become perfectly concentrated and achieve optimum ripeness.

The conditions during the summer, with the late arrival of water stress linked to significant rainfall in June and a lack of sunshine in July, were particularly conducive to producing high-quality white wine grapes. The heatwave in late August had no impact on the balance of the grapes although it did help to keep them in excellent condition. The acidity and aromatic potential of the berries were perfectly preserved for both grape varieties.

With slightly lower sugar levels and higher acidity compared to 2022, the grapes are reminiscent of the finest dry white vintages.

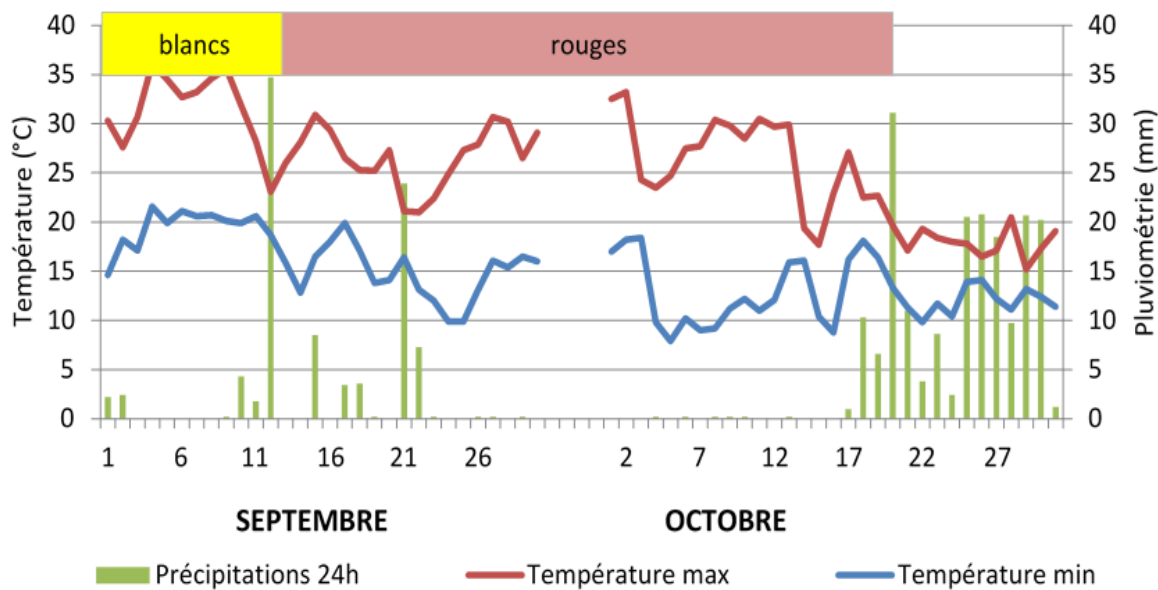


Figure 8

Harvest periods and daily variations in temperature and precipitation in September and October 2023.

Data from Mérignac (Météo France)

Table III

Harvest dates for dry white wine grapes in the Bordeaux region from 2014 to 2023

	Sauvignon Blanc	Sémillon
2013	10 - 22 September	21 - 25 September
2014	6 - 12 September	12 - 20 September
2015	28 August - 6 September	5 - 11 September
2016	2 - 15 September	8 - 18 September
2017	16 August - 7 September	1 - 15 September
2018	23 August – 10 September	5 - 15 September
2019	26 August - 19 September	6 - 23 September
2020	14 August - 5 September	27 August – 10 September
2021	28 August - 18 September	5 - 24 September
2022	9 August - 2 September	13 August - 9 September
2023	12 August - 6 September	14 August - 10 September

Table IV

Composition of Sauvignon Blanc grapes from a plot with limestone soil in the Graves region from 2014 to 2023

	Potential alcohol (%)	Total acidity (g/L)	pH
2014	12.3	6.9	3.04
2015	13.7	4	3.33
2016	13.4	3.6	3.32
2017	13.2	4.6	3.2
2018	13.7	4.6	3.22
2019	13	4.3	3.27
2020	13.9	4.3	3.28
2021	12.9	5	3.23
2022	13.8	3.5	3.30
2023	13.2	4.4	3.2

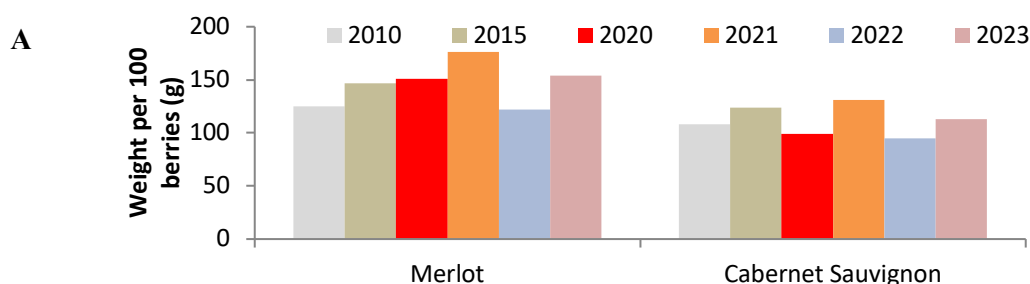
The summerlike conditions continued over the first few days of September (Figure 8) and the first Merlot grapes were picked. The harvest became widespread from 11 September onwards. The Cabernet Sauvignon harvest began around one week later, but most grapes were harvested after 20 September due to forecasted rainfall (Figure 8). In the later-ripening areas, the Cabernet Sauvignon grapes benefited from very fine weather in September and early October to finish ripening. The dry end to the season also prevented the development of *Botrytis cinerea*. Despite these dry and very warm weather conditions, however, the weight of the berries remained high until the harvest, significantly higher than in 2022 and among the highest in recent years (Table V, Figure 9A).

The sugar levels gradually increased due to the high volume of the berries, without reaching the excessive values of recent years. The acidity levels, which were high at the start of the growing season, rapidly decreased due to the high temperatures but were nevertheless preserved (Table V, Figure 9A).

Table V

Variations in sugar and acidity levels of red wine grapes during ripening in reference plots

	Weight per 100 berries (g)	Sugar (g/L)	TA (g/L H ₂ SO ₄)	Total anthocyanins (mg/L)
2023				
28/8 Merlot	159	211	3.9	1,734
Cabernet Sauvignon	113	191	5.5	2,103
04/9 Merlot	154	222.3	3.3	1,770
11/9 Cabernet Sauvignon	113	222	3.1	2,343
2022				
22/8 Merlot	123	208	2.9	1,751
Cabernet Sauvignon	92	184	4.2	1,745
05/9 Merlot	122	240	2.4	1,980
12/9 Cabernet Sauvignon	95	232	3.0	2,421
2021				
31/8 Merlot	175	183	5.9	1,359
Cabernet Sauvignon	130	175	8.4	1,783
27/9 Merlot	176	205	3.3	1,780
Cabernet Sauvignon	138	205	4.0	2,138
2020				
31/8 Merlot	154	216	2.6	1,803
Cabernet Sauvignon	106	201	3.4	2,038
07/9 Merlot	151	229	2.6	1,835
14/9 Cabernet Sauvignon	99	235	3.4	2,416
2019				
26/8 Merlot	119	199	4.7	1,160
Cabernet Sauvignon	99	177	7	
16/9 Merlot	127	244	2.7	1,780
30/9 Cabernet Sauvignon	105	233	3.3	1,901



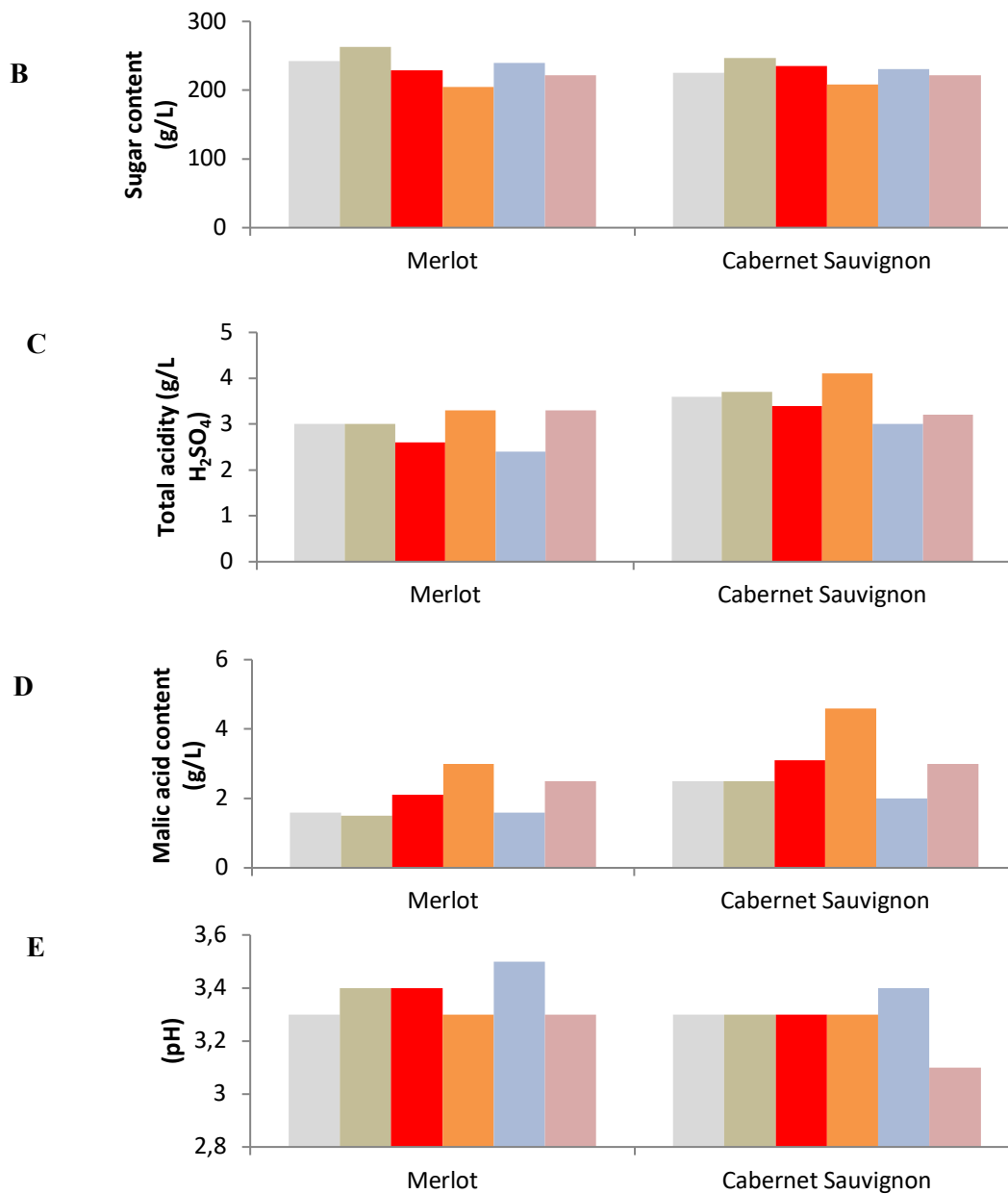


Figure 9

Analytical characteristics of Merlot and Cabernet Sauvignon grapes at the time of the harvest in reference plots in the 2023 vintage, compared with five vintages from the previous decade

A: Weight per 100 berries (g) – B: Sugar content (g/L) – C: Total acidity (g/L H₂SO₄)
 – D: Malic acid content (g/L) – E: PH values

Despite a heatwave in the second half of August, which occasionally blocked synthesis, the anthocyanin content of the berries was remarkably high at the time of the harvest, comparable to 2020 values (Table V, Figure 10).

The harvest date was chosen in complete serenity, according to analytical and taste criteria, without fears of a deterioration in the quality of the grapes or any herbaceous character. In fact, the methoxypyrazine content of the grapes, responsible for the green bell pepper character, were already below the detection threshold on 21 August and negligible at harvest.

The earliest plots showed candied fruit aromas in certain shrivelled berries. Most of them were nevertheless eliminated during sorting in the cellar, just like the grapes affected by mildew. The later-ripening plots benefited from cooler weather conditions in early October, ideal for perfecting their fruity and complex aromatic expression.

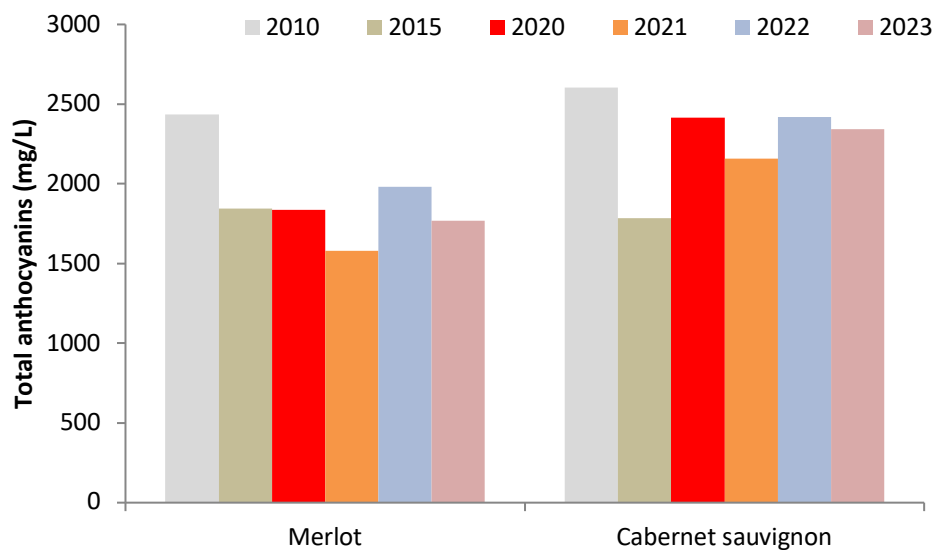


Figure 10

Total anthocyanin content (mg/L) of Merlot and Cabernet Sauvignon grapes in reference plots in 2023, compared with five vintages from the previous decade

Initial microbiological data provides a better overview of the vintage

For the first time, with the 2023 vintage, microbiological analyses were performed at peak ripeness on samples of red grape varieties taken from 8 reference plots, as well as from the *Observatoire de la biodiversité des microorganismes œnologiques* (18 plots). The total yeast population, anaerobic bacteria population (including lactic acid bacteria) and aerobic bacteria population (including acetic bacteria) in the pressed grape juice were counted. Total yeast populations were relatively high on average, reaching $1.4 \cdot 10^5$ cells/mL (internal reference at the laboratory for 2009-2013 between 10^3 cells/ml and 10^5 cells/mL). Anaerobic and aerobic bacteria populations were also in the medium-high range, reaching $2.4 \cdot 10^3$ cells/ml and $5.1 \cdot 10^3$ cells/mL, respectively. These values are equivalent for the Merlots and Cabernets.

On the other hand, while the total yeast populations were similar in the Médoc and Libourne regions, the bacteria populations, in particular the anaerobic bacteria populations, were lower in the Médoc (Figure 11). Climatic factors (temperature, humidity, etc.), the condition of the berries and differences in the level of ripeness may explain the differences in

these population levels. In particular, higher water activity (Wa) in cooler and wetter areas and/or more advanced ripeness can result in higher populations on the surface of the fruit. The condition of the grapes probably does not explain these differences given the near-total lack of *Botrytis cinerea* in 2023.

These analyses, renewed each year, should help winemakers to understand the effect of the vintage on microbial population levels in the grape berries at optimum ripeness, and thus better adapt winemaking practices, in particular the processing of the grapes and must.

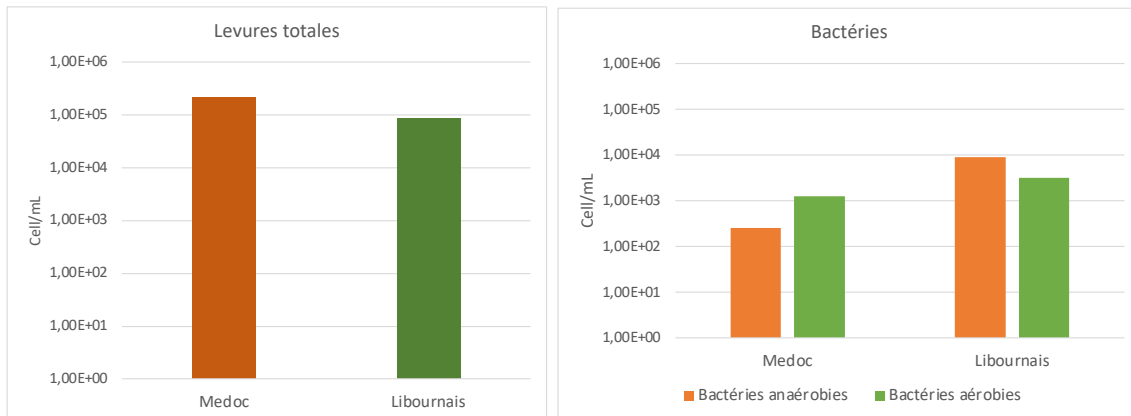


Figure 11

Average total yeast population (figure on left) and bacterial populations (figure on right) in the Médoc and Libourne regions

The Sauternes region saw the widespread development of *Botrytis cinerea* as of mid-September, followed by the rapid concentration of the grapes affected by noble rot

In Sauternes, more than elsewhere, every vintage is different. While in 2022, winegrowers' patience was put to the test by a long period of drought which delayed the development of *Botrytis cinerea*, followed by dull weather which hindered the concentration of the grapes, the weather conditions in 2023 allowed the harvest to unfold more serenely.

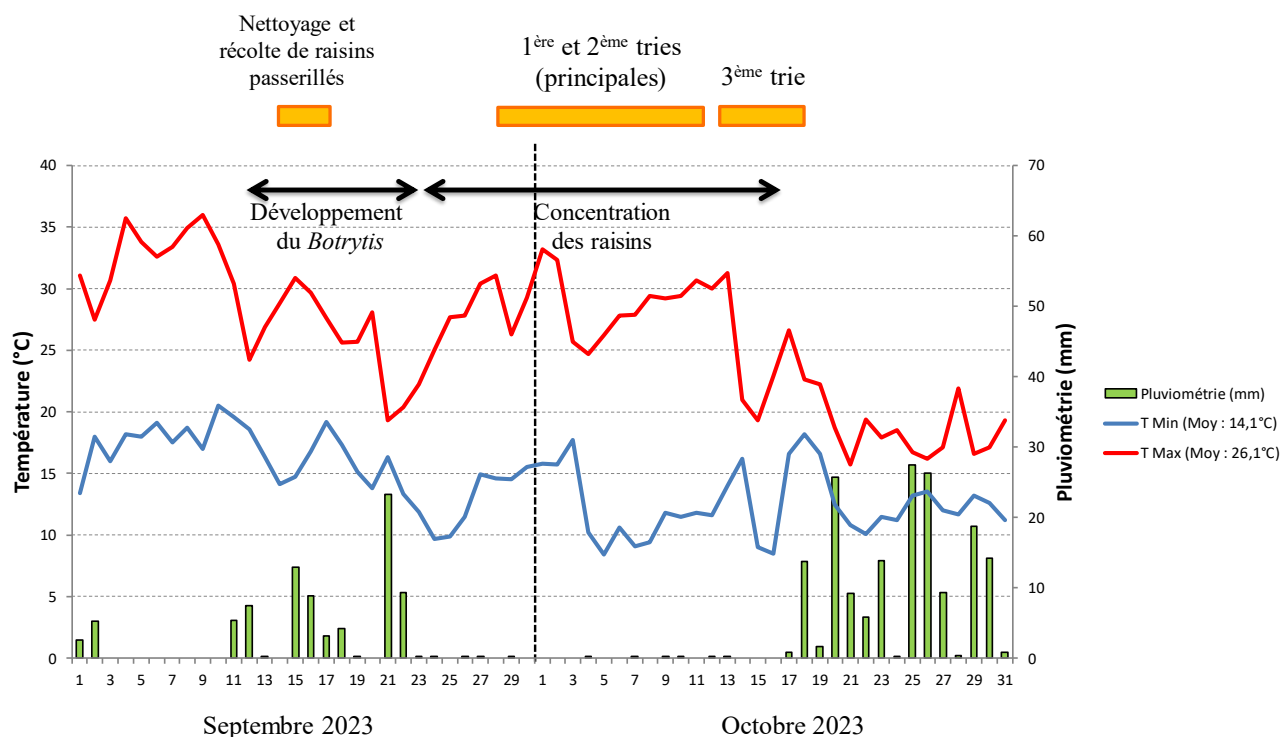


Figure 12

Daytime temperatures and precipitation in September and October 2023 in Sauternes
Chronology of the development of noble rot and dates of passes (example)

In early September, the white wine grapes were ripe and healthy, displaying perfectly satisfactory acidity levels, i.e. ideal conditions for the development of noble rot. A first pass was completed mid-September in certain areas, to pick some raisined grapes and, above all, to prepare the plots for the upcoming harvest. From 11 September, nearly 75 mm of rain fell in ten days, conducive to the widespread development of *Botrytis cinerea* in the vineyards. As is often the case, alternating wet and dry periods were the key to success for Bordeaux sweet white wines. From 23 September onwards, the return of fine weather proved providential. The grapes quickly became evenly concentrated thanks to exceptionally warm and dry conditions (nearly 20 days without rainfall). In most estates, two to three passes followed one another, and sometimes even overlapped from late September to mid-October (Figure 12). They constituted the lion's share of the vintage, both in terms of quality and quantity.

From 18 October onwards, the return of heavy rainfall signalled the end of the harvest, which was mainly carried out in fifteen days. In this context, one of the challenges was to have a sufficiently large enough team of pickers to harvest the grapes at the desired level of ripeness. The average yield in the appellation (12.5 hL/ha) was lower compared to 2022 (14.5 hL/ha), although the opposite trend was observed at certain estates.

In general, the musts were pure and sometimes with a high concentration of sugar in grapes picked towards the end of the harvest, yet balanced out by higher acidity compared to 2022, which was preserved thanks to the early harvest.

Red wines with varied profiles and some great successes, brilliant dry white wines, and admirable sweet white wines, combining freshness and power

Summarising a winegrowing year and winemaking practices in an entire region in a few pages is a perilous and fatally simplistic exercise. This has become even more true in the context of climate change, which has led to increasingly chaotic weather conditions. The 2023 vintage was the perfect illustration of this, with rainfall throughout the growing season, particularly in the form of storms, the intensity of which varied significantly depending on the area. Scattered rainfall, combined with the diversity of soils, rootstocks and age of the vines caused local variations. Consequently, it was not surprising to observe the reflection of this variability in the taste of the wines, enhanced by human choices regarding vineyard operations, the harvest date and winemaking practices. From frost to hail, heatwaves, droughts and mildew, every year, winegrowers have to contend with new challenges requiring not only hard work and a little bit of luck, but also the ability to adapt, guided by a combination of knowledge and sensibility.

Each situation and each estate therefore needs an individual approach to the vintage, in light of the weather and decisions that shaped it. To give an example, there were huge differences in the yields obtained, which were close to the authorised limit in certain estates while others struggled to produce 20 hL/ha. Low yields generally resulted from the high threat of mildew during spring and early summer, particularly for the Merlot which was most affected. However, the damage varied much more than what was depicted in the media, with some estates almost entirely spared. In the latter, yields were often generous, due to the large size of the berries resulting from the lack of water stress during fruit set, as well as the high number of berries per bunch. This phenomenon, following on from good conditions during floral initiation in 2022 and flowering in 2023, limited the risk of dilution which is often feared in abundant vintages.

The heatwave at the end of August was unprecedented due to its late character, and it was therefore impossible to predict the consequences on the grapes and resulting wines. Surprisingly, they now seem very limited. On average, the red wines of the 2023 vintage displayed slightly lower alcohol levels compared to 2022 and good acidity levels, despite high temperatures in late August. Fermentation unfolded in good conditions, sometimes with bleeding off when the large size of the berries or high level of the yields justified it. At the start of ageing, the Merlots are generally deeply-coloured and fruity without overripe aromas and their flavours faithfully reflect the terroir. They are well-structured and sometimes austere on gravelly soils, more generous and full-bodied on clay soils, and brilliant and salty on clay-limestone soils. The overall quality level is good, with a certain heterogeneity, the causes of which are described above. In estates significantly affected by mildew, rigorous sorting had to be carried out to avoid impacting aromas.

The style of the Cabernets also varied significantly depending on winegrowers' choices, particularly the harvest date. When they were able to reach optimum ripeness, the Cabernets Francs display their distinctive aromatic signature, with floral notes, as well as delicate tannins, yet without the softness they show in certain vintages. The success of the Cabernet Sauvignon grapes was also highly dependent on the soils. In the finest terroirs, they are remarkable: elegant, well-structured and delicious, with a great depth, black fruit aromas, and no herbaceous notes. Their quality is more uneven in secondary sectors, sometimes with leafy notes and relatively harsh tannins. A careful, rigorous selection was required during blending.

At this stage, 2023 looks set to be a fine vintage for dry white wines. Preserved until mid-August due to a lack of sunshine, regular rainfall and no excessive temperatures, the white wine grapes did not suffer too much from the heatwave in late August. The Sauvignon Blanc wines display remarkable aromatic brilliance, incredible freshness and plenty of body.

Even when yields were higher than usual, they did not suffer from dilution and are sure to win over tasters with their delicious flavours. The Sémillons were also highly successful in the finest terroirs, providing an additional sweetness and very elegant aromas of white flowers.

Harvesting botrytised grapes with a good level of concentration was not a problem in 2023. In contrast, warm and dry conditions in late September and early October meant that winegrowers needed to act quickly to avoid harvesting overly sweet grapes, likely to hinder fermentation. Fortunately, the levels of acidity, preserved thanks to the early harvest, were high and perfectly compensated for this richness. The resulting wines are outstanding: very aromatic, with candied fruit notes reminiscent of the finest vintages, they display great power and depth with incredible freshness. Thanks to their pure expression, balance and concentration, 2023 is on par with the finest sweet white vintages.

To sum up, while the dry and sweet white wines were an undeniable success in 2023, the red wine vintage appears to be more mixed, nevertheless producing some wonderfully successful wines. While they do not display as much body or concentration as some recent vintages, the red wines stand out for their typical character, neat aromas and balanced structure, which delicate fermentation helped to preserve. In light of these factors, the quality of the 2023 vintage deserves to be carefully considered, at the level of each individual estate. It would be a shame to relegate it to the list of Bordeaux vintages whose virtues, initially underestimated, are only realised a few years later, much to our regret!