

## **Crop level maintained despite climatic challenges**

### **I GENERAL**

The 2011 season was characterised by considerable climatic fluctuations, especially unrelenting drought and heat throughout summer. What appeared to be a large crop early in the season, systematically shrunk, also due to cold conditions during flowering and a windy December. Large-scale flood damage along the Orange River also impacted on the wine crop.

Despite all the challenges and setbacks, the industry is nevertheless pleased with the quality of the wines and the fact that the size of the crop will be about equal in size to that of 2010. The South African wine industry is able to buffer large fluctuations in overall crop size and quality thanks to the diversity of the respective cultivation areas.

**Crop size\*\*** – The 2011 wine grape crop is estimated at 1 279 017 tons according to the latest estimate (end of April) of the SA Wine Industry Information and Systems (Sawis). This is 1.4% more than the 2010 crop. With the exception of Orange River, Breedekloof and Worcester, all nine cultivation districts are expected to have bigger crops.

The 2011 crop – including juice and concentrate for non-alcoholic purposes, wine for brandy and distilling wine – is expected to amount to 992.5 million litres, calculated at an average recovery of 776 litres per ton of grapes. This is 1% larger than the 2010 wine crop.

**2010/11 Growing season** – The 2010 winter arrived late, but sufficient cold units were accumulated at the end of May and beginning of June to ensure even bud burst. Winter rainfall was considerably below the long term average. Due to a warm August, bud burst in grapevines occurred 7 - 14 days earlier.

The start of the growing season was cool, with a quite a few overcast days and regular showers which required preventative spraying programmes due to fungal prevalence. Fortunately none of the customary gale force winds prevailed early in the season and the grapevines were able to flourish. The southeaster was out in force throughout December, but little physical damage was reported.

Cold, inclement weather conditions during flowering caused uneven and weak set in cultivars and grapevines that are prone to later bud burst, which impacted considerably on the crop size and quality.

Hardly any rain was recorded from mid-November, and with unrelenting heat from January onwards, producers were challenged by particularly tricky irrigation management. During the ripening period dryland vines suffered due to the lack of supplementary rain. Rot control proved to be problematic in certain regions as a result of persistent thunderstorm conditions and high humidity.

During the warm, dry ripening period several cultivars ripened simultaneously, thereby placing severe pressure on cellar capacity at times – with the result that cellar managers and winemakers in particular were thoroughly challenged. In the Orange River district floods and incessant showers complicated the crush, with large crop losses recorded.

Grape analyses varied substantially and at times acids decreased rapidly while sugar content increased just as rapidly. The colour of the red cultivars is good, however, and 'green' flavours were already absent from an early stage.

**Wine potential** – Despite a difficult year the producers, viticulturists and winemakers are positive that the wines would comply with the consumers' requirements and standards. Although in some instances the flavours in white cultivars do not live up to expectations, the white wines in general are described as being attractive and balanced. The smaller berry sizes in red grapes resulted in intense colour, soft tannins and good structure.

**Breedekloof** – The vines were generally very healthy and the quality of a few wines will be truly surprising. Some cultivars were delivered over exceptionally long periods, while others ripened simultaneously and put pressure on cellar capacity.

**Klein Karoo** – Almost all red cultivars display exceptional quality and a larger crop is expected, despite severe challenges throughout the season.

**Malmesbury** – Ripening took a long time due to low soil water levels, but a bigger crop and average to good quality – red wines especially with intense, good colours – can be expected.

**Olifants River** – The crop is smaller than initial estimates, but on average the quality is better than in the past. The region had fewer problems than the rest of the winelands and is proving to be one of the most stable wine regions in the country.

**Orange River** – A challenging year and considerably smaller crop due to flood damage and losses caused by rot. Thanks to effective management a maximum amount of good wine could be prepared early in the season, the quality of which is comparable with, and in the case of Chenin Blanc even better, than in 2010. Grapes that were harvested later in the season were mainly used for the production of grape juice.

**Paarl** – A slightly larger crop. Despite an abnormally hot and dry season, wine quality is expected to be good. Yields generally exceeded expectations in Chardonnay, Pinotage and Merlot.

**Robertson** – A season with exceptional challenges. The crop is bigger than the small 2010 crop, the quality of the red wines is very promising and as usual the quality of the Chardonnay is very good.

**Stellenbosch** – A good year for yield and quality, especially in respect of the early to midseason cultivars. In some cultivars such as Cabernet Sauvignon physiological ripeness was achieved at a higher sugar and lower acid content.

**Worcester** – The fluctuating climate impacted on the sequence of the crush and caused a bottleneck of cultivars mid-February. Very good Pinotage wines are expected and Chenin Blanc shows lovely flavours throughout.

\* An agricultural/viticultural report

\*\* Crop sizes are based on the Sawis estimate of 29 April 2011.

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## **II OVERVIEW PER DISTRICT**

### **BREEDEKLOOF**

#### **Crop size**

201 839 tons, 3% decrease

#### **Production trends**

The crop appears to be slightly smaller than initial estimates, mainly due to low bunch weight and sunburn damage.

White cultivars are largely responsible for the decrease in the crop, with Chenin Blanc, Chardonnay and Hanepoot yields in particular much lower than in 2009. Red cultivars generally fared better.

The past season was characterised by extremely lengthy periods over which cultivars were harvested. Some Merlot vineyards were, for example, harvested at the beginning of February, while other Merlot grapes were still on the vine at the end of March.

#### **Climate and viticultural trends**

The post-harvest period of the 2010 vintage was relatively disease-free and in general the condition of the vines appeared to be good. Vineyards affected by early season downy mildew infections experienced early leaf fall. Although there was little precipitation in April, irrigation water was generally sufficient for post-harvest irrigation. Conditions were therefore generally favourable for the accumulation of reserves.

Rainfall in May was slightly higher than the long-term average, whereas in June and July precipitation was 75 mm below the long-term figure. The winter period was sufficiently cold to ensure good bud burst. Night temperatures especially were cold, possibly as a result of numerous cloudless days.

With relatively warm weather in August and September, as well as hardly any rain, bud burst was about 10 days earlier than usual. The period from August to October was characterised by drier and slightly warmer weather conditions than usual. The average minimum temperature for this period was about 2.2°C higher and the average maximum temperature 2.3°C higher than the long-term average. These warmer conditions – in August

especially – resulted in more even bud burst. Bud burst in Chardonnay in particular was far more even than in the 2010 season.

With a decrease in rainfall, most soils were not fully saturated at the time of bud burst. At the onset of the growing season ideal growing conditions in terms of temperature induced great vigour. Cold and windy conditions in October slightly delayed initial growth, and the effect of these cold winds on the berry set of earlier cultivars may also have contributed to the reduction in the yield.

An outstanding characteristic of the 2011 season was moderate temperature from bud burst until the beginning of January. Grapevines were not exposed to excessive temperatures until 4 January. An exceptional heatwave on the heels of the initial cool weather lasted four days until 8 January and undoubtedly impacted on the crop size.

The canopies of some grapevines also suffered from the heat and it was once again clear that the damage affected rows with north-south orientation more than rows with an east-west orientation.

Canopies furthermore displayed very late active growth due to ideal conditions during the first half of the growing season and 10 mm rainfall in December. The grapevines were slightly late in waking up from their slumber and subsequently went into overdrive.

The last week of January and the first week of February were very hot and caused many cultivars to ripen simultaneously. The rest of February and the entire month of March were extremely dry and very hot throughout. At the end of March and beginning of April temperatures started to drop.

### **General remarks**

No diseases were observed early in the season and snails appeared to be less problematic as a result of the drier conditions in winter. Snout beetles were very active.

A combination of vigour, regular showers (in October especially) and slightly warmer temperatures resulted in periods of downy mildew infection. In most cases these were rapidly brought under control, but good preventative spraying programmes were still mandatory during the rest of the season.

The lack of significant precipitation from November to January resulted in very healthy vines and new downy mildew and oidium infection was only observed in exceptional instances. Botrytis affected some later ripening Sauvignon and Chenin Blanc, but proved less of a problem during the latter part of the harvest.

The water levels of some irrigation dams were critically low at the end of the harvest. Sufficient post-harvest irrigations were not possible throughout the region.

### **Grape and wine quality**

The quality of a few wines might well turn out to be surprisingly good. The effect of wind before the onset of the season and heat during ripening will undoubtedly prove that properly managed vineyards – especially in respect of canopy and water management – will show up more favourably than poorly managed vineyards.

The acid content of the first grapes appears to be below average, but pH in general was quite acceptable.

The Sauvignon Blanc grapes that were crushed early are fairly aromatic, although the flavour spectrum of Sauvignon Blanc generally tends to the tropical this year. The Chenin Blancs and Chardonnays are full-bodied with good flavour.

Opinions on the red cultivars vary. Colour is generally good, while quality in certain red blocks was poor compared to previous years.

There was considerable pressure on cellar facilities to handle the intake from mid-February to mid-March.

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## **KLEIN KAROO**

### **Crop size**

36 803 tons, 5% increase

### **Production trends**

The 2011 harvest will be remembered for its challenges throughout the season which thoroughly tested the experience and adaptability of producers, viticulturists and winemakers. The crop should exceed that of last year.

The Klein Karoo as a region crushed more grapes than in 2010. Within the region yields differed greatly. The crop in Ladismith and Oudtshoorn was smaller due to drought conditions; Calitzdorp was bigger, mainly due to new high-yield plantings, and Montagu was bigger thanks to improved set and less damage from downy mildew than the previous season. In areas where plantings of wine grapes have increased, yields from all cultivars improved. Colombar makes a bigger contribution this year than in 2010, the reason being the small Colombar crop last year and considerable young plantings.

### **Climate and viticultural trends**

Winter bode well with sufficient cold units for complete dormancy-breaking in the critical period from mid-May to mid-June.

July to mid-October was considerably warmer than usual, whereafter temperatures until the end of December were below average. December especially was exceptional, with maximum temperatures 2°C below average. The nights were 2°C warmer, however, due to overcast weather, and the average temperature was therefore very close to the long-term average.

The year started with heatwave conditions from 4 to 8 January. Overcast and humid conditions characterised the weather throughout the harvest period.

The past season was the driest in recent years – the current drought started in December 2009 – with the result that surface and underground water resources throughout the Klein Karoo were under immense pressure. Oudtshoorn, Prins Albert and Ladismith were worst

affected. Wine grape production in these areas decreased even further from a low base in 2010.

Large parts of Montagu and Calitzdorp still had access to “scheme water”, however, and were not quite as severely affected by the drought. Rain showers and thunderstorms from December to February brought further relief.

Following complete dormancy-breaking, bud burst was exceptionally even. Above-average temperatures towards the end of winter triggered bud burst almost 14 days earlier, but protected the grapevines from frost and spurred vigorous initial growth.

Initially flower clusters looked very promising, but the overcast, cool weather impaired set. Although flower set varied considerably from block to block, it was nevertheless an improvement on the 2010 season. Cool, overcast weather resulted in an extended flowering period, and caused unevenness within blocks and even within bunches.

The heatwave early in January caught the grapevines unawares. Until that stage the grapevines were used to cool, overcast weather and damage was particularly severe in blocks with low soil water content. Lean vineyards suffered more, with sunburn damage even on the morning sun aspect of rows. The heatwave also changed the composition of the wine grapes, in particular by reducing undesirable green flavours in red cultivars, but also by destroying sensitive flavour components of white wine grapes.

The crush went hand in hand with exceptional challenges. Sampling proved tricky as a result of variation among berries ever since the flowering period, and was further exacerbated by heat exposure in January. Grape samples deviated from the norm in that the sugar content was largely lower than the eventual pickings, with the result that tasting of the grapes gave a better indication of ripeness than chemical analyses of samples.

Physiological ripening occurred at a considerably lower sugar content this year. The absence of undesirable green flavours in red grapes enabled vinification of wines with a lower alcohol content.

### **General remarks**

Damage by fruit fly and oidium, as well as overcast, humid and wet conditions during the harvest, caused mid-harvest problems with sour rot and botrytis. Losses were limited, however, by acting in good time and through collaboration between producers and wineries. Drier conditions at the end of February prevented any further rot.

Moderate and warm weather conditions from July onwards caused an increase in fruit fly, oidium and scales. Fruit fly numbers especially were hard to control due to restrictions on control programmes in orchards.

Oidium infection was most severe from January to mid-February, and although producers with effective spray programmes did not suffer any damage from oidium, leaf infection did occur at the end of the harvest. Fanleaf symptoms were exceptionally severe, with serious crop losses in infected blocks.

Veld fires during the second week of March did not impact greatly on the crop, since most vineyards had already been harvested. A few hectares were damaged or destroyed.

## **Grape and wine quality**

Whereas white wine grapes will generally produce well-balanced wines, exceptionally good quality red wines are expected from this vintage.

On the whole red cultivars handled the season better than white cultivars. Dry conditions and less irrigation water resulted in smaller, better aerated canopies and in most instances smaller berries. The heatwave in January caused less direct damage to red cultivars, which were not greatly affected by rot. In the vineyard berries did not appear particularly dark, although they released ample colour when the skins were chewed.

The absence of undesirable green flavours allowed the red grapes to be crushed at a much lower sugar content – the pH correspondingly lower – which will further benefit the colour and stability of these wines. The colour is excellent, with lovely flavours and body. Even Red Muscadel, which is known to have little red colour, displays exceptional colour this year.

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## **MALMESBURY**

### **Crop size**

116 784 tons, 5% increase

### **Production trends**

After initially estimating that the crop would be even bigger, the 2011 crop is now expected to be 7% larger than in 2010. The widespread damage from downy mildew which caused 2010 crops to be smaller, was not repeated this year, hence the bigger crop. Although not exceptional, 2011 – apart from a few cultivars – may be considered a good quality vintage.

Among the white cultivars the Chenin Blanc crop is expected to decrease by 35%, while Sauvignon Blanc should increase by 32%. On the red side 15% more Pinotage is expected, while the Cabernet Sauvignon crop is estimated to be slightly less than in 2010.

### **Climate and viticultural trends**

The post-harvest period – April specifically – was relatively dry, but where producers were able to irrigate, leaf fall did not occur until late May. There were very few incidences of post-harvest oidium. In general therefore the region experienced a good post-harvest period and good accumulation of reserves could take place.

The first proper winter showers occurred mid-May and were definitely above average. End May, beginning June was fairly cold, which is important for sufficient accumulation of cold units. Frost was twice reported in the Malmesbury area.

Warm periods at the end of July and beginning of August caused bud burst at the tips of the shoots in a few vineyards – young Chardonnay in particular. Chenin Blanc and Colombar also showed serious signs of bud burst.

From September to October bud burst was very even and vines appeared healthy. Preventative spraying with fungicides was very thorough. It was already apparent that an average crop could be expected – especially in older blocks where fewer flower clusters occurred. Fruit set was very good in most cultivars and initially the crop on the grapevines was average to large. Weak set was observed in Cabernet Sauvignon due to unfavourable conditions during flowering.

Soil moisture was less than usual as a result of below average winter rainfall, as well as 14% less rain in the period from September to December. Consequently it was necessary to start irrigating earlier.

The abnormally hot, dry conditions lasted from January until the end of March. Dryland vines suffered immensely under these conditions. Moisture stress at the time of berry formation was clearly reflected in the berry sizes. Very small berries for Chenin Blanc resulted in a large decrease in crop size. Once again Shiraz fared well under the warm, dry conditions.

Due to the exceptionally low soil water content, grapevines struggled to ripen the grapes. Initially sugars accumulated very slowly and extended the crush. The quality of grapes that were crushed from mid to late season was much better than that of grapes that had been crushed early.

### **General remarks**

This was an exceptionally dry year with a very long, hot summer. The temperature during the crush was constantly above 35°C, and regular wind – more than the previous season – further impacted on the vineyards. The West Coast also experienced higher sea temperatures, resulting in very warm winds, especially along the coastal region.

Diseases and pests posed hardly any problems.

As a result of extremely low water supplies, the grapes' sugar content increased slowly, causing dryland vines in particular to suffer.

### **Grape and wine quality**

Red wines with very intense, good colour are expected from this vintage. The dryland vines' chemical analyses were not optimal, mainly because of the drought. Pinotage crops are very good and the quality looks promising, followed by Merlot and Shiraz. In the Riebeek area some of the first Chenin Blanc tanks are displaying lovely guava and tropical fruit flavours.

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## **OLIFANTS RIVER**

### **Crop size**

212 549 tons, 4% increase

## **Production trends**

Now that the crop has practically been harvested, the initial estimate of a 5% increase on 2010 seems to have been optimistic, but an increase of 2% is nevertheless expected.

In general the red cultivars – in particular Cabernet and Ruby Cabernet – performed much better than last year, while Colombar, Steen and Hanepoot on the white side fared better. The Chardonnay and Sauvignon Blanc yields were disappointing.

The year will probably be remembered for everything running particularly smoothly during the pressing season, mainly thanks to the practical absence of heatwaves and consequently even ripening. The pros and cons of the abnormally high precipitation over a period of 48 hours in December – more than the annual average rainfall in some areas in the region – will remain a topic of conversation for a long time hence.

## **Climate and viticultural trends**

Leaf fall in the Olifants River – an irrigation area – is traditionally much later in autumn than in most other wine regions and the 2011 season was no exception. The leaves were mostly healthy and grapevines had sufficient opportunity to accumulate reserves.

While temperatures in April and May were generally slightly below average, the average June temperature was marginally above the past eight years' average. During the second week of June temperatures complied with the theoretical requirements for dormancy breaking.

Winter rainfall early in the season was normal, although there were no supplementary showers later in winter. Even so, it sufficed for adequate growth of cover crops that had been sown in good time. The rain in the catchment area of the Olifants River was sufficient for the Clanwilliam Dam to overflow early in winter, thereby ensuring adequate water for the entire season.

Temperatures at the time of bud break were generally higher than the August and September averages, with a few very hot days in September and maximum temperatures of 39°C. Whether this caused the high incidence of millerandage is not quite clear.

The rest of the growing season until the beginning of the harvest in January was mild, with exceptionally hot days on 7 December, 4 January and 14 February. In general a certain amount of sunburn damage, on Hanepoot especially, was caused by the December heat. The harvest season proceeded without any hitches and the absence of lengthy heatwaves contributed to more even ripening.

## **General remarks**

The season was characterised by an exceptionally healthy climate and minimal fungal disease, apart from a very late outbreak of oidium which mostly occurred on the leaves only. Oidium infection – late-season especially – is increasing in extent and may possibly be linked to insect control for aster yellows. The control strategy for leafhoppers appears to be reaping positive results, but it may simply be ascribed to seasonal circumstances.

Exceptional rain on 15 and 16 December, as much as 165 mm in Koekenaap, caused flooding and structural damage, but impacted ever so slightly on the crop itself. To a certain extent the vigorous growth that ensued resulted in more rot – especially in compact

cultivars such as Chenin Blanc – but the benefits of the rain probably outweighed the disadvantages.

The Clanwilliam Dam still had sufficient water for all post-harvest requirements.

### **Grape and wine quality**

Grape analyses indicated that pH's would be high and acids low, but in the settling tanks the acids generally looked better and must analyses were better balanced. In the red cultivars colour was already exceptional at a lower sugar content than previous years.

February being cooler than average, the quality of the Sauvignon Blancs is generally good and the early intakes of Chenin Blanc are also looking very promising. With regard to the red cultivars, considerably less grapes were delivered with very high sugars and we can expect fruity, early-drinking wines.

The more even ripening of cultivars enabled cellars to handle the intake with ease and it was only in a few instances at the end of the season that intake had to be interrupted for a day or two.

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## **ORANGE RIVER**

### **Crop size**

128 671 tons, 23% decrease

### **Production trends**

Estimates show a considerable decrease in the total 2011 crop for the Orange River district – including Douglas and Hartswater cellars – due to extensive flood and rot damage.

Initial estimates indicated that the 2011 crop would be smaller because all wine grape cultivars, as well as Sultana and Merbein, had a smaller crop than in 2010. The further decrease in intake is largely ascribed to flood damage and unremitting rain during the harvest, which caused losses as a result of rot.

A survey by Orange River Wine Cellars (OWK) subsequent to the flood indicated that 366 ha wine grapes were totally flooded and destroyed and a further 640 ha wine grapes suffered indirect flood damage. Were it not for this damage, the initial January estimate would probably have been realised. All cultivars' yields were down, except for Merlot, Hanepoot and Villard Blanc.

### **Climate and viticultural trends**

Leaf fall occurred very late, the first actual cold and frost being experienced during the first week of June. During May only 10 cold units accumulated in the central region. The first two weeks of June were exceptionally cold with night temperatures dropping to below -5°C, followed by two weeks that were warmer than usual. In the Upington area altogether 162 cold units were accumulated in June. July temperatures were normal, but warm weather in August induced bud burst up to two weeks earlier than usual. Considerably fewer cold units

were accumulated during the 2010 winter, compared to 2009. There was hardly any precipitation during the winter months.

Bud burst in early cultivars such as Chenin Blanc started in the last week of August. Noticeable trends were early bud burst in Colombar, while Pinotage was much later than usual. Bud burst was surprisingly even, taking into account the relatively warm winter. In some instances bud burst in Chenin Blanc was uneven, accompanied by weak budding percentage. Shiraz varied immensely, with extremely uneven growth.

Regular cold periods prevailed in September to the detriment of shoot growth. Growth arrest symptoms on deep, fertile clay soils were experienced where soil temperatures remained low. Even growth was hampered by huge fluctuations between day and night temperatures, and the wind in September was strong throughout. Flowering started during the second week of October and hardly any rain occurred from September to December. Grapevines were mostly healthy until then, with no visible signs of disease.

The season was further characterised by persistent rain and flooding of vineyards at the start of the harvest season. With copious amounts of rain in the catchment areas of the Orange and Vaal River systems from the end of December onwards, water was released from dams upstream, which caused a steep rise in the water level of the Orange River in the course of January. Large-scale flooding of low-lying vineyards and at weirs ensued.

The water level dropped by mid-January, but persistent rain caused the river to rise again at the end of January, causing a second set of floodings and the concomitant damage to vineyards increased exponentially. Numerous vineyard blocks were completely flooded causing total crop losses. Other blocks escaped flooding, but access routes were submerged. These blocks could neither be harvested nor sprayed, with the result that indirect crop losses occurred due to rot and downgrading.

The showers continued unabated in February and the beginning of March. In and around Upington the total rainfall from January to mid-March amounted to 350 mm. Certain areas received three times more rain than the long-term average during the harvest period.

### **General remarks**

The extent of the damage to both wine and raisin divisions of the industry amounted to astronomical figures. Without government aid many producers will struggle to survive in a wine industry that is already under pressure, and it is sincerely hoped that disaster aid as promised by the government will indeed be forthcoming.

As the crush proceeded, grapes started to rot and downy mildew caused enormous damage. Many vineyards displayed a complete loss of leaves, with incidences of regrowth. Accumulation of reserves is therefore largely compromised. The level of the river remained high in April and certain vineyard blocks were still inaccessible to producers.

### **Grape and wine quality**

The intake of grapes early in the harvest until mid-February showed very good analyses, especially with regard to pH. A steep decrease in grape quality ensued due to the unremitting rain and blocks that had been submerged during the flood. Rot and downy mildew developed because producers were unable to spray their vineyards and the later

cultivars struggled to accumulate sugar as a result of the weather conditions and overabundance of water.

Early in the season the objective was to make maximum volumes of good wine in anticipation of the decrease in wine grape quantity and quality, due to the effect of the rain and floods. The later intake grapes were mostly used for juice and concentrate. Given the trying circumstances, the Orange River district is grateful for each berry delivered and trusts that next year will treat each producer more kindly.

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## **PAARL**

### **Crop size**

137 789 tons, 13% increase

### **Production trends**

The 2011 crop is estimated to be bigger than that of 2010, but will nevertheless be considerably smaller than the record crop of 2008. It was a severely trying season for the vineyards, workers and producers, but despite abnormal heat and drought the quality of the wine is good.

The crop would have been much bigger were it not for the dry, warm season. At the time of flowering large numbers of flower clusters were observed, although Chenin Blanc, Pinotage and Cabernet Sauvignon notably had smaller bunches. Vineyards where pruning adjustments had been made for higher yields – for example Chenin Blanc and Cabernet Sauvignon – suffered immensely given the severe conditions. In the latter instances extensive sunburn and berry shrinking were visible and grapes struggled to achieve good colour and the desired sugar levels/degrees of ripeness. Late cultivars on dryland (Cinsaut too) suffered the biggest losses due to shrinking.

In general better than expected yields were obtained from Chardonnay, Pinotage and Merlot.

### **Climate and viticultural trends**

The post-harvest period was quite normal with average rainfall and temperatures in April. Very good precipitation occurred in May, but low night temperatures only prevailed from June onwards. Leaf fall was normal and proper cold in June created expectations for even bud burst – especially in view of the fact that from May to June the highest cold units were accumulated since 2006. Effective rainfall for the rest of winter was below average. Regular snowfall occurred on mountain peaks during July and August.

Warm day temperatures in August and September caused early bud burst especially in Chardonnay, Colombar, Sauvignon Blanc and Chenin Blanc, whereafter bud burst and growth were again delayed by cooler, rainy conditions in October. Regular light showers in October and November had a detrimental effect on flowering and set, but fortunately less wind than usual prevailed during this period.

The climate from December to March was much warmer and drier than usual, with higher minimum temperatures than the long-term average. After about 10 mm rainfall towards the end of December, there was no summer rain until the end of March. Vigour increased from December onwards and combined with windy conditions and the drought, water consumption shot up to abnormal heights.

Harvesting ranged from 14 days earlier in some Sauvignon Blanc blocks, until slightly later at the end of the season in the late cultivars.

### **General remarks**

Generally it was a very healthy year in the vineyard. Despite the regular showers at the onset of the season, downy mildew and snails did not pose any problems. With widespread distribution of long horn grasshoppers, some producers were compelled to act accordingly. The warmer conditions from December onwards caused an early outbreak of mealybug.

Vigour being profuse from the beginning of December, late tipping and topping actions were required in some instances. A relentless heatwave during the first week of January occasioned maximum temperatures of between 40°C and 44°C for four consecutive days. Severe sunburn then affected bunches and leaves, resulting in a decrease in volume. Damage was greatest in dryland blocks, as well as the morning sun side of north-south oriented vineyard rows. Producers had to irrigate more regularly and for longer periods than usual and catchment dams in the region were rapidly reduced to very low levels.

### **Grape and wine quality**

Early cultivars such as Sauvignon Blanc and Chardonnay showed good analyses and flavour profiles during the crush. The quality of Sauvignon Blanc in the region appears to be excellent, with good quality in the average Chenin Blanc. Grape analyses of mid-season red cultivars such as Pinotage, Merlot and Shiraz were good, with low pH and good acids, but later in the season analyses fluctuated and generally the pH was high with low acids.

Good phenolic ripeness occurred at sugar levels below 25°B and the 2011 vintage looks set to deliver soft, fruity red wines with medium to full body.

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## **ROBERTSON**

### **Crop size**

196 711 tons, 13% increase

### **Production trends**

Despite the 2011 season going down in the annals for exceptional challenges to producers, viticulturists and winemakers, the crop is expected to be bigger than that of 2010.

Red cultivars' yields were higher than in 2010 – set was very good in Ruby Cabernet especially. Colombar also yielded far more than the small crop of 2010. Early cultivars' yields were impaired by a heatwave in early January, resulting in sunburn damage. Rot also occurred due to a few light thunderstorms during this time.

### **Climate and viticultural trends**

Excellent cold prevailed during the critical period for dormancy breaking from mid-May to mid-June. The accumulated cold units for this period considerably exceeded the past six years' average. July to September was noticeably warmer than the long-term average.

Rainfall over the period June to September was much lower (approximately 45-40%) than the long-term average for the corresponding period. Rainfall of only 9 mm and 4 mm respectively was recorded in August and September. Following the dry period good showers occurred in October. Farms at the foot of the Langeberg mountains received as much as 114 mm rain in October and the Robertson experiment farm weather station recorded 33 mm. The Robertson district enjoyed a cool November and December, but rainfall remained low. January to March was considerably warmer than the long-term average (2°C) with very low rainfall. The heatwave from 4 to 7 January reached maximum temperatures of approximately 40°C.

Bud burst was very good and even, with a few exceptions where clean pruning occurred very early and final pruning late. Weather conditions for bud burst and initial growth in spring were very good, and mild days with little wind encouraged good growth. The first blocks saw very early bud burst, even two weeks earlier as a result of the warmer weather in July and August.

Good weather prevailed in spring and few fungal diseases were recorded during the growing season. Growth was vigorous due to the cooler weather conditions from September to December and water consumption figures were much lower during this period. Far fewer snails were encountered, courtesy of the dry weather conditions.

The January heatwave inflicted sunburn damage on some vines – notably young grapevines, leaner vines and those with a north-south orientation. In some blocks with a morning sun aspect the grapes were exposed to sunburn. Millerandage also occurred far more than usual.

### **General remarks**

The grapes were generally very healthy. In February repeated light thunderstorms caused botrytis and sour rot in early cultivars – Sauvignon Blanc, Chenin Blanc and White Muscadel especially – which impaired quality. The incidence of fruit fly was also very high. The ensuing dry conditions caused the rot to dry out, however, and there were no problems during the remainder of the season.

In February and March some blocks struggled to achieve the desired sugar level due to very high temperatures. Water consumption figures were also considerably higher than in the past.

Late downy mildew and oidium were prevalent in places. Mealybug was also problematic and affected several blocks.

### **Grape and wine quality**

The 2011 crop proved challenging to winemakers, the acids being generally lower. In some instances there were strange analyses, where both acid and pH were high in healthy grapes.

The quality of the red wines looks very promising with better colour than anticipated. There are few green flavours thanks to the warmer ripening period. As usual the quality of the Chardonnay is very good.

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## **STELLENBOSCH**

### **Crop size**

114 050 tons, 10% increase

### **Production trends**

The crop is expected to be bigger than in 2010, mainly because more and bigger bunches with good shoulders developed in the cultivars that make the biggest contribution to the total crop in the region. Berry sizes were smaller than previously, however, which in turn had a positive effect on quality.

Early season the flower clusters were looking good, in terms of both size and quantity. Cool climatic conditions during berry set resulted in loose bunches with a large variation in berry size, particularly in Cabernet Sauvignon and Sauvignon Blanc. Consequently Cabernet Sauvignon generally yielded smaller crops than the previous season.

Average to above-average crops were obtained from Pinotage, Chenin Blanc, Merlot and Shiraz. Yields of Chardonnay vines in the Banhoek Valley were below average in size. Some dryland and bush vine blocks in the Bottelary area delivered smaller yields due to sunburn – Chenin Blanc especially.

### **Climate and viticultural trends**

The post-harvest period was dry, the first noteworthy showers occurring in May only. Both minimum and average temperatures at the end of May and beginning of June sufficed to ensure good bud burst. June rainfall was higher than the long-term average, whereas it was lower from July to September. Maximum and minimum temperatures were above average during this period, with the exception of July and August when minimum temperatures were lower. In October and November rainfall was above average and maximum temperatures were below average.

December was characterised by a warm and dry climate with the most wind in 42 years. Early January was very hot with heatwave conditions and one of the driest seasons experienced in Stellenbosch in many years, which persisted in February and March.

Bud burst was generally about one week earlier than in 2010 – depending on vineyard location – and proved to be even, with the exception of some Chardonnay blocks. Initial shoot growth after bud burst was slow because of colder conditions, followed by warm conditions which in turn encouraged good shoot growth.

Cooler and wetter climatic conditions during the latter half of October and beginning of November impacted negatively on set. The wet weather also resulted in substantial weed problems.

With warmer and drier conditions during the latter half of the growing season, as well as during the ripening period, irrigation became a high priority with blocks requiring earlier, more regular and greater volumes of irrigation.

Early and midseason cultivars ripened more or less at the usual time, while warm and dry climatic conditions caused later cultivars in general to be crushed earlier than usual.

### **General remarks**

Large numbers of snails on the new shoot growth especially could be discerned at the start of the growing season. Incidences of snout beetles occurred earlier than usual, with damage mostly limited to the Banhoek Valley. Long horn grasshoppers caused damage to leaves and young bunches especially in the Simonsberg area.

Considerable erinose was prevalent in large numbers especially on Chenin Blanc, Chardonnay and Sauvignon Blanc. Oidium occurred later in the season, as well as in the post-harvest period in certain areas.

In the Hemel-en-Aarde Valley and Stanford wet conditions and high humidity during the ripening period caused problems with rot – especially on Sauvignon Blanc, Pinot Noir and even Shiraz – at the end of the season.

### **Grape and wine quality**

Grapes harvested at the beginning of the season have good analyses, especially in respect of pH. Good wine quality may be expected from these early cultivars, in particular Pinotage.

During the latter half of the harvest season high temperatures caused sugars to shoot up while the pH remained low. In some cultivars such as Cabernet Sauvignon physiological ripeness was therefore achieved at a higher sugar content. The high temperatures mentioned above also caused the analyses to reveal low acids.

During the latter half of the ripening period these high temperatures also put pressure on cellar space.

It was a good year in terms of yield and quality, especially with regard to early and midseason cultivars.

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## **WORCESTER**

### **Crop size**

133 822 tons, 2% decrease

### **Production trends**

The eventual crop was smaller than initial estimates. The early cultivars especially did not meet expectations. The cultivar which impacts most on the total crop, Chenin Blanc, suffered most.

The white wine grape crop is up to 10% smaller, while the red wine grape crop is expected to be the same size and even slightly bigger.

Exceptional characteristics of the season were the scorching heatwaves in January which resulted in a glut of cultivars ripening mid-February. Furthermore many of the Merlot blocks struggled to achieve the desired sugar content. The sequence of the crush also went haywire – Shiraz for example was crushed long before Merlot.

### **Climate and viticultural trends**

It was a relatively good post-harvest period with fairly late leaf fall. Good accumulation of reserves could take place and the shoots were properly ripened throughout.

Winter rain was up to 50% less in certain areas. At the Nuy weather station only 88 mm were measured, compared to 115 mm in 2009. From August to October a further 30 mm were recorded. It was therefore a particularly dry season with no showers during the ripening and harvest periods.

Cold units were only recorded later in winter – more than during the previous winter – which had a positive effect on the dormancy-breaking of grapevine buds.

Bud burst, which was 7 to 14 days earlier due to the drier and warmer conditions in August and September, was generally even.

The flowering period was characterised by strong and cold winds. These conditions eventually impacted negatively on the set of the flower clusters and millerandage was the order of the day. The early cultivars especially were affected, which represents one of the biggest reasons for the lower yields.

The year started off with a heatwave and long periods in excess of 40 °C. Considerable sunburn damage affected rows with north-south orientation especially. Hanepoot vines probably suffered most with totally scorched bunches. The dry soils probably contributed to sunburn damage, as there was no way the canopies could cool down.

January to March was exceptionally hot, resulting in an accumulation of ripening across cultivars with concomitant pressure on cellar capacity. In the second half of the crush grapevines struggled to obtain sugar and the acids dropped drastically.

### **General remarks**

It was an extremely dry harvest season with no rain. This resulted in a particularly healthy wine grape crop with little to no diseases. In places mealybug infestation and light botrytis infection occurred sporadically later in the season.

It was noteworthy that new growth kept occurring in the canopies throughout the growing season and even until late in the harvest period. This may be ascribed to prevailing thunderstorm conditions.

### **Grape and wine quality**

Coloration in red wine grapes was very good throughout and colour was stable all the way, even in the wines. Cabernet Sauvignon was the exception with very green berries.

Grape analyses were initially very good – especially in the early Sauvignon Blancs – but later on the acids dropped out.

Chenin Blanc showed signs of guava fermentation flavours, but the flavours of the later Sauvignon Blancs are more tropical and even neutral.

Very good Pinotage wines may be expected and Chenin Blanc displays good, cultivar-typical flavours.

While cellar space was not necessarily the headache; cellar capacity was compromised by mid-February. Cellars could not keep up with the grape intakes and the physical processing of the wines and were forced to switch to a quota system.

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