

SA Winegrape Crush Survey State Summary Report – 2016

Explanations and Definitions

INTAKE (CURRENT VINTAGE) DATA

Definition of regions

Regions have been defined in accordance with Geographical Indication (GI) boundaries. If a GI region has not been declared, or produces less than 5,000 tonnes, then the data is aggregated into the relevant GI zone. Disaggregation of data into smaller regions such as Southern Fleurieu and Mount Benson is available on request from Wine Australia.

Total crush

The total crushed is the total tonnes of grapes crushed from a particular source region, whether processed in that region, another region in SA or interstate. All wineries in Australia are included in the survey collection process. However, not all wineries respond to the survey - therefore the total tonnage reported may underestimate the true crush. It is estimated that the overall response rate for the survey is 90%; however, individual regions may vary. Reported fruit is separated into fruit produced from the winery's own or associated vineyards ("own grown") and from independent vineyards ("purchased").

Calculated average purchase value

The survey requests wineries to provide the total amount paid for each parcel of fruit purchased (or the price per tonne). This is the price paid for fruit of a particular variety at the point of receival – NOT including freight. It includes any penalties or bonuses (eg Baumé) applied at the weighbridge, but DOES NOT INCLUDE other bonuses or adjustments such as end use quality bonuses, which are not available at the time the survey is conducted (May 2016).

The calculated average purchase value per tonne is the average amount paid per tonne of fruit across all wineries. Winery grown grapes are not included in the calculation of average purchase value; nor are grapes grown by companies connected with the winery or under lease arrangements.

Important note on average purchase value

There is considerable variation in the pricing arrangements made by different wineries. For example, some wineries make adjustment payments based on the average value per tonne reported in this survey and some pay quality bonuses based on the end use of the product. These additional payments are not included in the reported figures. The average price also does not give any indication of the distribution of prices, or variables that go into individual contracts. Therefore the average price should not be compared directly with an individual grower's arrangement. It should also be noted that in minor varieties there may sometimes be very few purchases contributing towards a calculated average purchase value.

Price dispersion data (shaded columns in Intake Summary tables)

All purchases for each variety are grouped into categories according to the price paid for that fruit. The tonnes in each category are converted into a percentage of the total tonnes purchased, giving an indication of what share of fruit was purchased in each price range category. The categories are given nominal titles of A to E for convenience but these do not correspond with grades used by any particular winery.

Estimated total value of all grapes

The estimated total value of all grapes is calculated by multiplying the average purchase value per tonne by all tonnes crushed. If there is a variety where there are no purchases, then the average purchase value across all other varieties of the same colour in the same region is used to determine an estimated value for the own grown grapes.

Explanations and Definitions cont.

PLANTING DATA

Source of planting data tables

Planting data is not collected by the 2016 Australian Wine Sector Survey. The information is obtained from the vineyard register maintained by Vinehealth Australia (formerly the Phylloxera and Grape Industry Board of South Australia).

Vinehealth Australia is required under the Phylloxera and Grape Industry Act 1995 to maintain a complete and accurate register of grapegrowers in the state. All vineyard owners with more than 0.5 hectares are required by law to register with Vinehealth Australia, and to report details of their plantings on an annual basis. This information is kept strictly confidential.

Vineyard plantings are recorded by Geographical Indication. Planting details for smaller regions not included in the survey report are available on request from Vinehealth Australia.

For more information on registration of vineyards, please contact the Vinehealth Australia office on (08) 8273 0550.

Explanatory notes for planting data tables

- 1. Planting data tables are current as at April 2016 and include all plantings from the 2015 planting season.
- 2. Vines planted in a particular year may include topworked or replaced vines, as well as new plantings in virgin ground. Where vines have been replaced or topworked, the old variety record is removed. This explains why the area planted for earlier years may be different in the 2016 report compared with previous reports.
- 3. Where a zero (0) appears in a table, this may indicate the presence of a planting of less than 0.5 hectares, or it may indicate zero plantings. Rounding may produce a slight error in totals or percentages.

Overview of Vintage Statistics 2016

State and Regional overview

The total reported crush of South Australian winegrapes in 2016 was 817,981 tonnes. This was an increase of 14% above the 2015 harvest of 716,592 tonnes. Nationally, there was an estimated non-response rate of 10.0%; however a specific non-response rate for South Australia is not known.

Over the previous five years (from 2011 - 2015), the average State production is 723,983 tonnes, with a low of 681,319 tonnes in 2013 and a high of 716,592 tonnes in 2015. The 2016 crush is up by 17% against the last five year average. It is the highest crush for the state since 2006.

The top three regions by volume in 2016 were the Riverland with 56% of the crush (456,988 tonnes), Langhorne Creek with 7.3% (60,119 tonnes) and the Barossa Valley with 6.6% (54,137 tonnes). Many regions had significant increases in tonnage, including Langhorne Creek (up by 54%), Padthaway (up by 77%), McLaren Vale (up by 44%) and Wrattonbully (up by 43%). The Adelaide Hills had an increase of 21% in tonnes, and the Barossa Valley 23%, while the Clare Valley was up by 30%. The Riverland increased its production by 1% on the 2015 vintage

The total estimated value of the crush was \$581 million, up by \$134 million (32%) compared with 2015. The average purchase value per tonne across the state increased from \$557 in 2015 to \$631 per tonne.

Varietal overview

The red crush produced 496,463 tonnes, which was 17% higher than the 2015 crush (422,776 tonnes) and 14% above the five year average (435,732 tonnes); whilst the white crush production increased by 9% to 321,518 tonnes, which is 10% above the five year average (292,092 tonnes).

Shiraz was up by 30,000 tonnes (12.5%) and accounted for 48% (239,594 tonnes) of the red crush, with Cabernet Sauvignon second at 30% (149,976 tonnes – up by 36,000 tonnes) and Merlot third at 9% (45,384 tonnes).

Among the white varieties, Chardonnay was up by 20,000 tonnes and accounted for 52% (166,136 tonnes) of the white production, with Sauvignon Blanc (11%) next and Colombard dropping by 5,000 tonnes and slipping from 11% to 8% of the white crush. Pinot Gris/Pinot Grigio increased by nearly 4,000 tonnes – a 40% increase.

Note: changes to the methodology for the survey collection in 2015 mean that direct comparisons of tonnages and prices with previous years should be interpreted with caution.

Vineyard plantings

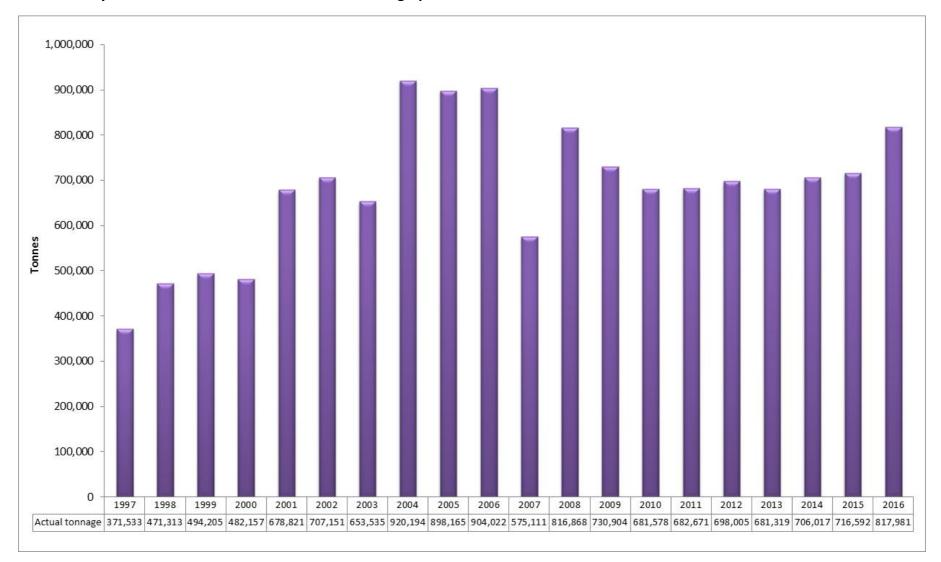
Planting data derived from the Vinehealth Australia vineyard register shows that there were 75,858 hectares planted to vines in South Australia as at 30 April 2016. This represents a decrease of 260 hectares since 2015. Although there have been net decreases in the previous four years in total planted area, the current area planted is 6,000 hectares higher than it was in 2004.

There was a total of 462 hectares (<1% of the total area) planted in spring 2015 (including top-working and replacements) compared with 864 hectares planted in the 2014-15 season. Of the new plantings, red varieties accounted for 86% compared with white varieties at 10% and tablegrapes at 4%. 50% of new plantings were Shiraz (231 ha) and 27% were Cabernet Sauvignon (231 ha).

There was a total of 3,394 growers registered with the Board as at 30 April 2016. This was slightly fewer than at the same time last year. 2,013 growers (59%) have properties smaller than 10 hectares and account for 11% of the total vineyard area, while 128 growers (4%) have properties larger than 100 hectares (in the same region) and account for 40% of the vineyard area.

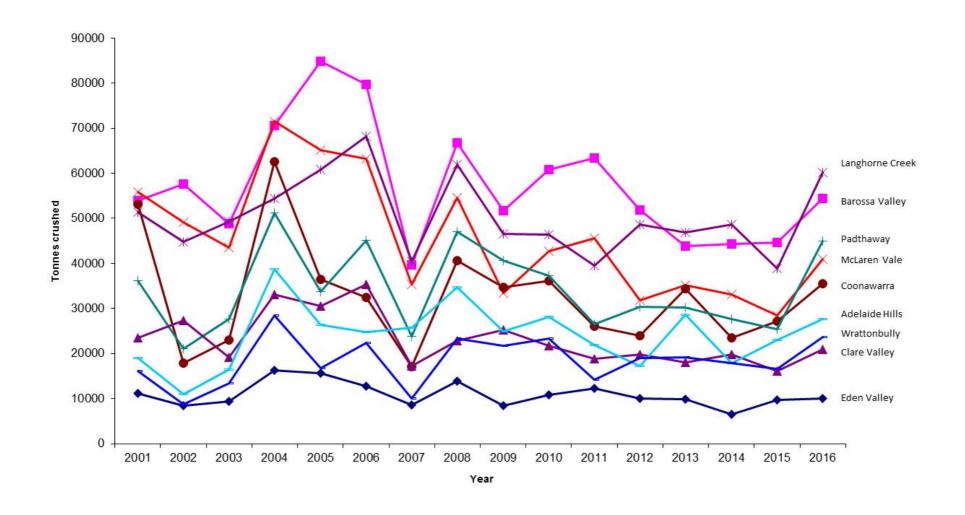
¹ formerly Phylloxera and Grape Industry Board of SA

Historical winegrape crush South Australia 1997 - 2016



Vintage by region 2001 - 2016

Not including the Riverland due to scale differences



Total crush by GI region 2016 vs 2015

	Winery		Tonnes	1	Tonnes	
	grown	Purchased	crushed	Region % of	crushed	% difference
GI region	(tonnes)	(tonnes)	2016	state crush	2015	2016 vs 2015
Adelaide Hills	6,694	20,976	27,670	3.4%	22,943	21%
Adelaide Plains	165	4,231	4,396	0.5%	3,091	42%
Barossa Valley	21,151	32,737	53,888	6.6%	43,889	23%
Barossa - Other	369	114	483	0.1%	817	-41%
Clare Valley	10,735	10,059	20,795	2.5%	16,039	30%
Coonawarra	23,564	11,933	35,497	4.3%	27,137	31%
Currency Creek	6,581	3,588	10,169	1.2%	7,595	34%
Eden Valley	5,323	4,669	9,991	1.2%	9,658	3%
Far North - Other	32	-	32	0.0%	-	
Fleurieu - Other	369	2,181	2,549	0.3%	2,238	14%
Kangaroo Island	114	49	162	0.0%	146	11%
Langhorne Creek	26,579	33,540	60,119	7.3%	38,921	54%
Limestone Coast - Other	9,877	4,911	14,788	1.8%	10,248	44%
Lower Murray - Other	385	2,834	3,219	0.4%	1,807	78%
McLaren Vale	15,381	25,616	40,997	5.0%	28,434	44%
Mount Benson	128	2,198	2,326	0.3%	1,674	39%
Mount Gambier	-	945	945	0.1%	594	59%
Mount Lofty Ranges - Other	87	111	198	0.0%	1,250	-84%
Padthaway	16,225	28,698	44,922	5.5%	25,351	77%
Riverland	88,241	368,747	456,988	55.9%	454,202	1%
Robe	1,981	628	2,609	0.3%	1,811	44%
Southern Fleurieu	9	362	371	0.0%	1,219	-70%
Southern Flinders Ranges	361	563	924	0.1%	842	10%
The Peninsulas	42	295	337	0.0%	130	159%
Wrattonbully	12,695	10,911	23,606	2.9%	16,557	43%
Total all regions	247,087	570,894	817,981	100%	716,592	14%

Vintage summary by region 2016

		Total Winery	Total		Estimated Value of	Estimated Value of
Region	Colour	Grown	Purchased	Total Crushed	Purchased Grapes	Total Crush
Adelaide Hills	Red	1,565	6,470	8,036	9,764,083	\$12,365,748
	White	5,129	14,506	19,634	\$18,522,923	\$25,144,260
	All	6,694	20,976	27,670	\$28,287,006	\$37,510,008
Adelaide Plains	Red	72	3,225	3,296	\$3,072,166	\$3,141,189
	White	93	1,006	1,099	\$813,339	\$888,759
	All	165	4,231	4,396	\$3,885,505	\$4,029,948
Barossa Valley	Red	19,766	27,541	47,307	\$55,535,331	\$96,859,100
	White	1,755	5,310	7,064	\$3,993,400	\$5,342,442
	All	21,521	32,851	54,371	\$59,528,730	\$102,201,542
Clare Valley	Red	6,971	5,806	12,778	\$7,421,016	\$16,193,866
	White	3,764	4,253	8,017	\$4,155,900	\$7,849,702
	All	10,735	10,059	20,795	\$11,576,916	\$24,043,568
Coonawarra	Red	19,653	11,393	31,046	\$16,916,411	\$44,601,578
	White	3,912	540	4,452	\$320,427	\$2,766,769
	All	23,564	11,933	35,497	\$17,236,838	\$47,368,347
Currency Creek	Red	4,196	2,958	7,154	\$2,619,628	\$6,324,904
	White	2,385	630	3,015	\$454,143	\$2,190,413
	All	6,581	3,588	10,169	\$3,073,771	\$8,515,317
Eden Valley	Red	1,774	2,233	4,007	\$4,826,543	\$8,677,981
	White	3,549	2,436	5,985	\$3,185,558	\$8,236,438
	All	5,323	4,669	9,991	\$8,012,101	\$16,914,419
Fleurieu - other	Red	124	993	1,117	\$1,114,115	\$1,253,751
	White	367	1,599	1,966	\$1,092,895	\$1,356,761
	All	491	2,592	3,083	\$2,207,011	\$2,610,517

Vintage summary by region 2016

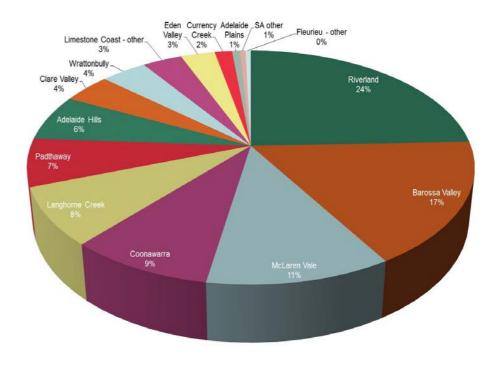
		Total Winery	Total		Estimated Value of	Estimated Value of
Region	Colour	Grown	Purchased	Total Crushed	Purchased Grapes	Total Crush
Langhorne Creek	Red	21,856	27,417	49,272	\$22,106,776	\$39,458,882
	White	4,724	6,123	10,847	\$3,583,708	\$6,414,979
	All	26,579	33,540	60,119	\$25,690,484	\$45,873,861
Limestone Coast - other	Red	9,857	6,579	16,436	\$6,739,574	\$16,528,774
	White	2,128	2,103	4,231	\$1,586,022	\$2,931,931
	All	11,985	8,682	20,667	\$8,325,596	\$19,460,705
McLaren Vale	Red	14,088	22,742	36,830	\$38,561,513	\$62,264,470
	White	1,293	2,874	4,167	\$2,334,900	\$3,447,194
	All	15,381	25,616	40,997	\$40,896,413	\$65,711,664
Padthaway	Red	8,430	15,585	24,015	\$15,831,625	\$24,286,777
	White	7,794	13,113	20,907	\$8,680,330	\$14,064,992
	All	16,225	28,698	44,922	\$24,511,955	\$38,351,769
Riverland	Red	53,828	180,102	233,930	\$61,537,779	\$79,953,719
	White	34,414	188,645	223,058	\$52,893,985	\$62,689,274
	All	88,241	368,747	456,988	\$114,431,764	\$142,642,992
SA other	Red	833	2,516	3,349	\$1,822,247	\$2,432,229
	White	73	1,287	1,360	\$392,287	\$414,798
	All	906	3,803	4,709	\$2,214,535	\$2,847,027
Wrattonbully	Red	9,430	8,461	17,891	\$8,941,039	\$18,548,999
	White	3,266	2,450	5,716	\$1,643,293	\$4,150,459
	All	12,695	10,911	23,606	\$10,584,331	\$22,699,457
All winegrapes	All	247,087	570,894	817,981	\$360,462,955	\$580,781,138

Note: The 'estimated value of total crush' is the value estimate from the tonnage and total price paid for all varieties in each region

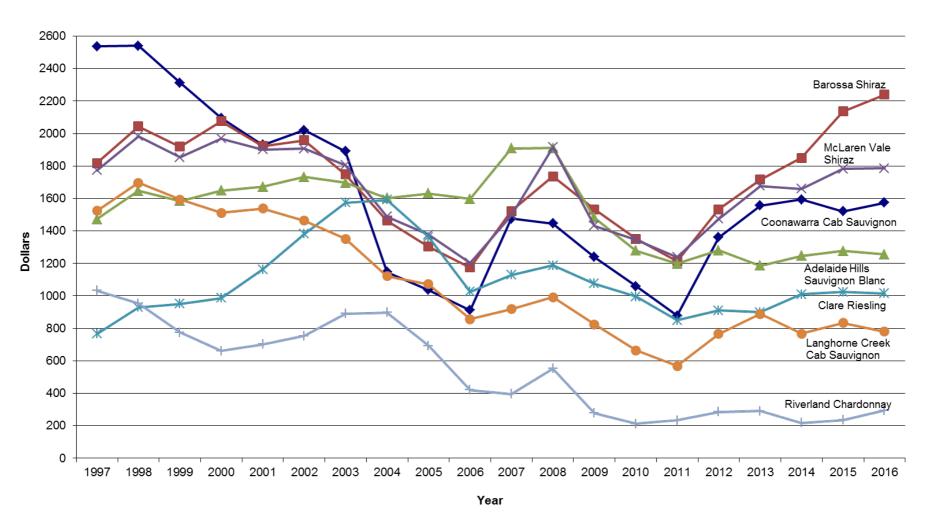
Volume share

Limestone Coast - other Cyrrency Eden SA other Creek Valley 1% 1% Fleurieu - other O% Adelaide Hills 3% Coonawarra 4% McLaren Vale 5% Padthaway 5% Riverland 56% Barossa Valey 7%

Value share



Major variety-region combinations

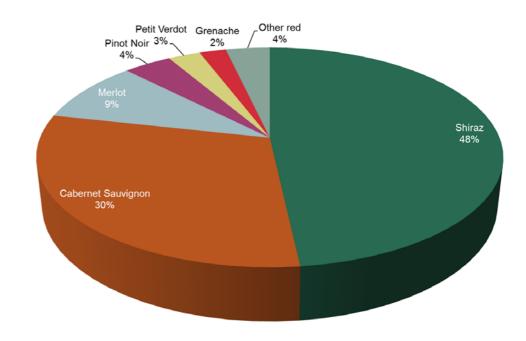


Vintage summary by variety 2016

Red winegrapes

	Total			Purchased
	Winery	Total	Total	fruit as %
Variety	Grown	Purchased	Crushed	of total
Barbera	22	98	120	82%
Cabernet Franc	535	282	818	35%
Cabernet Sauvignon	54,998	94,978	149,976	63%
Dolcetto	7	108	115	94%
Durif	189	313	502	62%
Grenache	3,912	6,952	10,864	64%
Lagrein	-	90	90	100%
Malbec	1,449	1,524	2,973	51%
Mataro	1,063	3,147	4,209	75%
Merlot	17,082	28,302	45,384	62%
Muscat a Petit Grains Rouge/Rose	2	189	191	99%
Nero D'Avola	74	58	131	44%
Petit Verdot	5,406	7,723	13,129	59%
Pinot Noir	5,058	14,493	19,551	74%
Ruby Cabernet	1,652	1,539	3,191	48%
Sangiovese	818	735	1,552	47%
Shiraz	78,615	160,979	239,594	67%
Tempranillo	614	1,416	2,030	70%
Other red	946	1,097	2,043	54%
Total Red winegrapes	172,443	324,020	496,463	65%

Share of tonnes crushed by variety - red



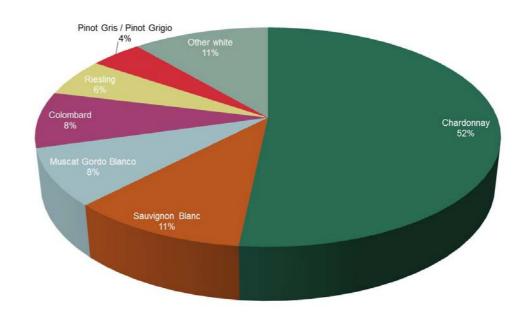
There is an estimated non-response rate of 10% across the state.

Vintage summary by variety 2016

White winegrapes

	T			Purchased
	Total			fruit as %
	Winery	Total	Total	of total
Variety	Grown	Purchased	Crushed	crush
Chardonnay	31,057	135,078	166,136	81%
Chenin blanc	39	2,003	2,042	98%
Colombard	2,653	23,991	26,644	90%
Doradillo	949	79	1,028	8%
Marsanne	65	64	129	49%
Muscadelle	36	23	59	39%
Muscat a Petit Grains Blanc	1,007	4,354	5,362	81%
Muscat Gordo Blanco	3,706	23,202	26,908	86%
Palomino and Pedro Ximenes	170	22	192	11%
Pinot Gris and Pinot Grigio	4,993	8,674	13,667	63%
Riesling	10,010	8,130	18,140	45%
Sauvignon Blanc	9,597	24,299	33,895	72%
Semillon	6,391	7,093	13,484	53%
Sultana	-	244	244	100%
Traminer	1,353	3,050	4,403	69%
Verdelho	425	2,516	2,941	86%
Viognier	1,312	2,144	3,456	62%
Other white	879	1,909	2,788	68%
Total white winegrapes	74,644	246,874	321,518	77%

Share of tonnes crushed by variety - white



There is an estimated non-response rate of 10% across the state.

Current plantings by variety and year planted 2016

Source: Vinehealth Australia

Current area in hectares

Total white varieties	19,951	64	55	46	20,116	0%
Other White	110	8	4	6	127	4%
Trebbiano	17	0	0	0	17	0%
Pedro Ximenez	20	0	0	0	20	0%
Roussanne	23	0	0	0	23	1%
Muscadelle (Tokay)	28	0	0	0	28	0%
Marsanne	29	1	0	0	30	0%
Palomino	30	0	0	0	30	0%
Savagnin	40	0	0	0	40	0%
Fiano	40	2	0	0	43	0%
Vermentino	47	2	2	0	51	0%
Doradillo	72	0	0	0	72	0%
Chenin Blanc	133	0	0	0	133	0%
Sultana	150	0	0	0	150	0%
Verdelho	203	0	0	0	203	0%
Muscat A Petit Grains Blanc (White Frontignac)	215	8	1	0	224	0%
Traminer (Gewurztraminer)	252	2	1	0	255	0%
Viognier	406	1	0	0	406	0%
Colombard	819	0	0	0	819	0%
Pinot Gris	930	4	21	12	967	1%
Muscat Gordo Blanco	1,021	10	4	3	1,038	0%
Semillon	1,095	0	0	0	1,095	0%
Sauvignon Blanc	2,496	4	2	0	2,502	0%
Riesling	2,539	3	10	12	2,564	0%
Chardonnay	9,238	19	9	13	9,279	0%
White winegrapes						
Variety	Pre-2013	2013	2014	2015	Total area	in 2015
						% planted

Current area in hectares

	Current area in nectares									
						% planted				
Variety	Pre-2013	2013	2014	2015	Total area	in 2015				
Red winegrapes										
Shiraz	25,682	337	434	231	26,683	1%				
Cabernet Sauvignon	16,571	290	294	124	17,280	1%				
Merlot	4,029	23	4	12	4,068	0%				
Grenache	1,678	9	5	1	1,692	0%				
Pinot Noir	1,651	6	12	4	1,673	0%				
Petit Verdot	702	0	2	0	704	0%				
Mataro (Mourvedre)	662	24	11	5	700	1%				
Malbec	321	9	23	3	357	1%				
Tempranillo	306	12	7	5	330	1%				
Sangiovese	198	0	0	0	198	0%				
Cabernet Franc	174	1	1	0	176	0%				
Ruby Cabernet	148	0	0	0	148	0%				
Durif (Petite Sirah)	36	3	0	6	45	14%				
Montepulciano	32	4	7	0	44	1%				
Meunier (Pinot Meunier)	35	0	0	5	40	12%				
Touriga	35	2	1	0	37	0%				
Nebbiolo	37	0	0	0	37	0%				
Barbera	28	2	2	0	32	0%				
Zinfandel	30	0	0	1	30	2%				
Sagrantino	11	0	0	1	12	8%				
Other Red	235	40	6	1	282	0%				
Total red varieties	52,601	761	808	399	54,568	1%				
Unknown variety	971	0	0	0	971	0%				
Rootstock	37	0	0	0	37	0%				
Germplasm	4	0	0	0	4	0%				
Multi-purpose	94	0	0	0	94	0%				
Table grapes	47	0	1	17	66	2%				
Total all varieties	73,706	825	864	462	75,858	1%				

Current plantings by region and year planted 2016

Current area in hectares

% planted Pre-2013 in 2015 Zone Region 2013 2014 2015 Total area Barossa Valley 10,559 211 242 1% Barossa 124 11,136 Barossa zone - other 236 0 0 236 0% 0 Eden Valley 2,219 27 17 16 2,280 1% **Total for Barossa** 13,014 238 259 140 13,651 1% Far North Southern Flinders Ranges 210 0 0 0 210 0% **Total for Far North** 210 0 0 0 210 0% Currency Creek 944 0 17 0 0% Fleurieu 961 0 0% Fleurieu zone - other 311 4 315 1 Kangaroo Island 135 0 0 0 135 0% 57 Langhorne Creek 5,691 30 21 5,798 0% McLaren Vale 7,088 99 123 43 1% 7,353 Southern Fleurieu 490 6 0 0 496 0% **Total for Fleurieu** 14,659 138 197 63 15,058 0% **Limestone Coast** Bordertown 1,254 0 0 0 1,254 0% Coonawarra 5,446 118 182 77 5,823 1% Limestone Coast zone - other 597 0 0 0 597 0% Mount Benson 504 0 0 0 504 0% Mount Gambier 292 0 0 0 292 0% Padthaway 3.922 48 41 8 4,019 0% 0 Robe 756 3 9 768 0% 6 6 Wrattonbully 2,649 12 2,673 0% **Total for Limestone Coast** 15,420 175 245 91 1% 15,930 **Lower Murray** Lower Murray zone - other 427 1 0 3 431 1% Riverland 20,214 161 105 128 20,608 1% **Total for Lower Murray** 20,641 161 106 131 21,039 1% 37 22 0% **Mount Lofty Ranges** Adelaide Hills 3,747 13 3,818 Adelaide Plains 513 2 0 0 515 0% Clare Valley 5,100 62 31 23 5,216 0% Mount Lofty Ranges zone - other 332 12 5 0 350 0% 57 36 0% **Total for Mount Lofty Ranges** 9,692 113 9,899 The Peninsulas The Peninsulas 70 0 0 0 71 0% 70 0 **Total for The Peninsulas** 0 0 71 0% Total for all GIs 73,706 825 865 462 75,858 1%

Source: Vinehealth Australia

Number of growers by region and property size 2016

Source: Vinehealth Australia

		Property size in hectares											
		<10	ha	10-24	l ha	25-49	9 ha	50-99) ha	+100	ha	Tota	al
			# of		# of		# of		# of		# of		# of
Zone	Region	Area (ha)	growers	Area (ha)	growers	Area (ha)	growers	Area (ha)	growers	Area (ha)	growers	Area (ha)	growers
Barossa	Barossa Valley	1,329	337	2,337	150	2,355	69	1,277	20	3,847	16	11,145	592
	Barossa zone - other	15	3	12	1	0	0	84	1	126	1	236	6
	Eden Valley	368	89	494	34	311	10	446	6	667	3	2,286	142
Far North	Southern Flinders	18	5	139	8	0	0	53	1	0	0	210	14
Fleurieu	Currency Creek	62	12	162	11	193	5	0	0	544	2	961	30
	Fleurieu zone - other	22	7	60	4	0	0	234	3	0	0	315	14
	Kangaroo Island	112	19	23	2	0	0	0	0	0	0	135	21
	Langhorne Creek	119	23	297	18	991	28	1,148	17	3,249	11	5,804	97
	McLaren Vale	1,520	360	1,768	112	1,416	43	1,404	19	1,245	6	7,354	540
	Southern Fleurieu	109	34	92	7	228	6	68	1	0	0	496	48
Limestone Coast	Bordertown	0	0	0	0	39	1	0	0	1,215	4	1,254	5
	Coonawarra	286	53	489	32	672	19	859	13	3,517	12	5,823	129
	Limestone Coast	61	14	30	2	59	2	202	3	244	2	597	23
	Mount Benson	28	5	78	5	155	5	114	2	129	1	504	18
	Mount Gambier	56	14	36	3	106	3	94	1	0	0	292	21
	Padthaway	9	1	76	5	329	9	638	9	2,967	13	4,019	37
	Robe	18	2	83	4	81	2	210	3	377	2	768	13
	Wrattonbully	86	15	333	19	550	15	330	4	1,375	6	2,673	59
Lower Murray	Lower Murray zone -	67	15	177	9	187	6	0	0	0	0	431	30
	Riverland	2,781	562	4,354	275	3,087	90	2,245	31	8,144	36	20,612	994
Mount Lofty Ranges	Adelaide Hills	709	187	971	59	1,051	30	737	11	366	3	3,834	290
	Adelaide Plains	126	44	107	9	81	2	201	3	0	0	515	58
	Clare Valley	651	178	794	47	833	23	939	13	2,001	10	5,218	271
	Mount Lofty Ranges	103	30	47	3	108	3	93	1	0	0	350	37
The Peninsulas	The Peninsulas	17	4	21	2	33	1	0	0	0	0	71	7
Totals by size category		8,670	2,013	12,979	821	12,866	372	11,375	162	30,013	128		
Totals for SA												75,903	3,394

Note - grapegrowers can have vineyards in multiple regions – therefore the total number of growers counted by region may be higher than the actual number of registered growers.