

Appunti del modulo di tecnologia enologica

La produzione enologica

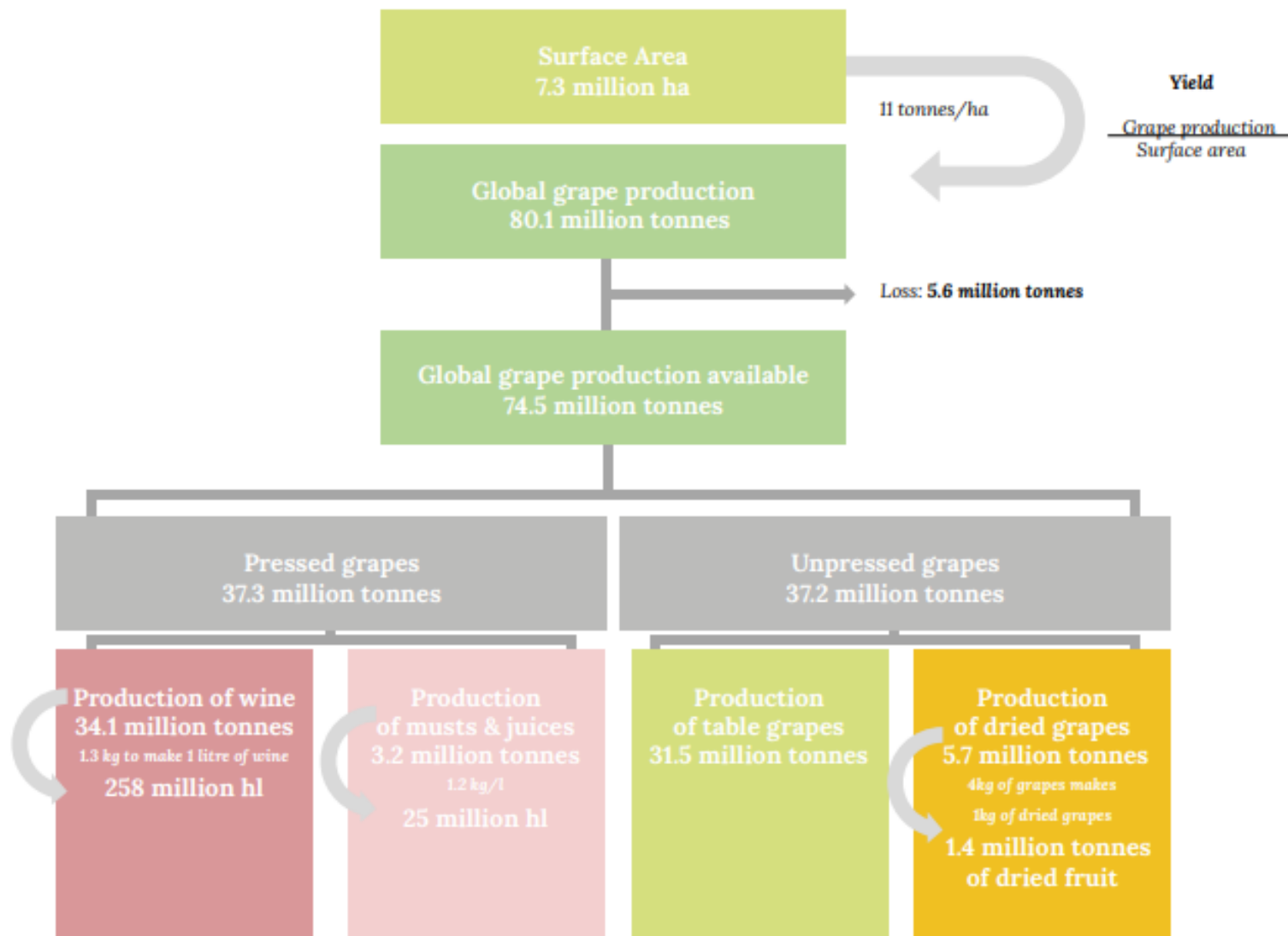
ZEPPA G.

Università degli Studi di Torino



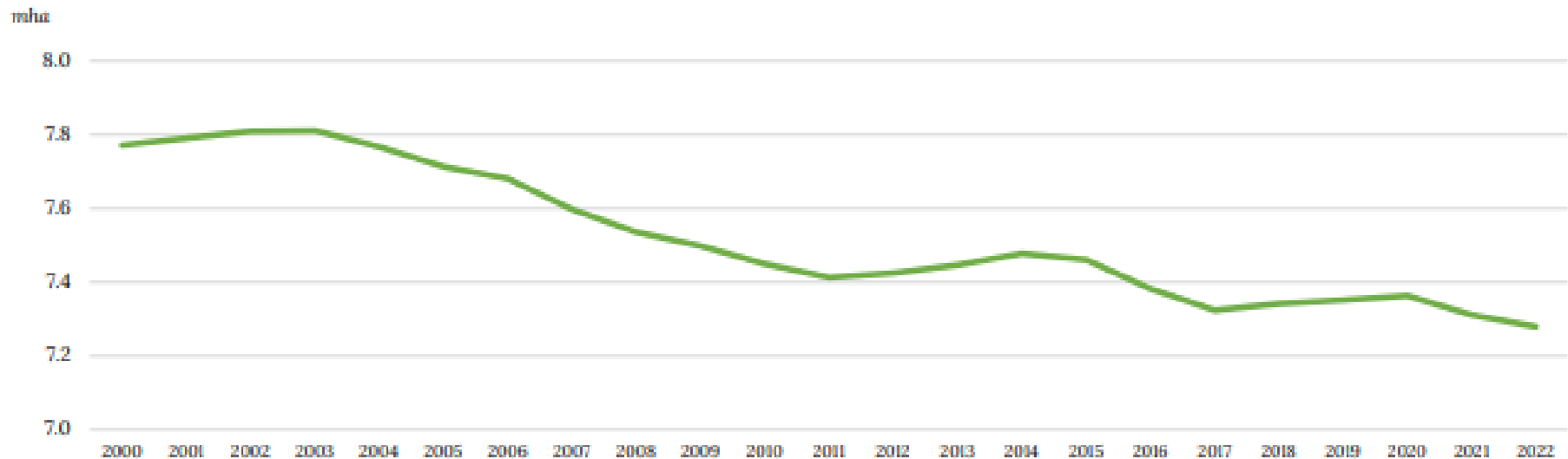
Parte 1° - La produzione

GLOBAL GRAPE BALANCE-SHEET 2022



Surface area of vineyards worldwide

Evolution of world area under vines, 2000-2022



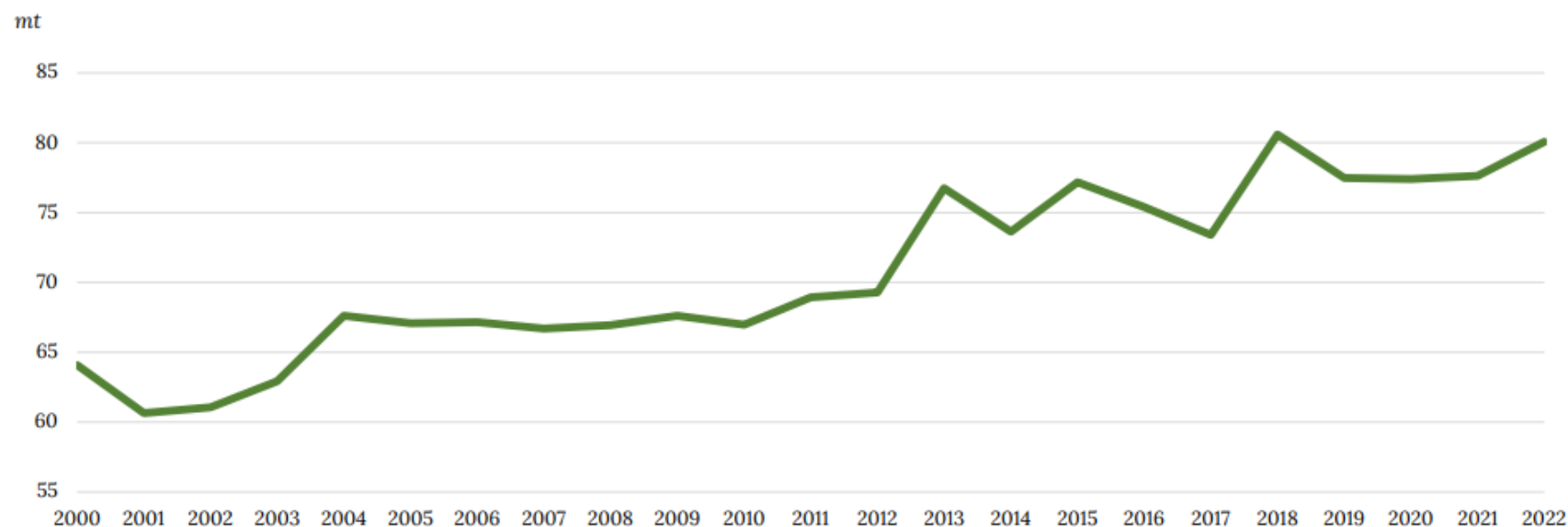
Top 10 vineyards (kha)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Spain	973	975	974	975	968	972	966	961	963	955
France	793	789	785	786	788	792	794	799	805	812
China, mainland	695	741	770	770	760	779	781	783	785	785
Italy	705	690	685	693	699	705	714	719	718	718
Turkey	504	502	497	468	448	448	436	431	419	<i>410</i>
USA	453	450	446	439	434	408	407	402	393	<i>390</i>
Argentina	224	228	225	224	222	218	215	215	211	207
Chile	207	213	214	209	207	208	210	207	196	196
Portugal	229	224	204	195	194	192	195	195	194	193
Romania	192	192	191	191	191	191	191	190	189	191
Other countries	<i>2 472</i>	<i>2 476</i>	<i>2 470</i>	<i>2 431</i>	<i>2 413</i>	<i>2 428</i>	<i>2 442</i>	<i>2 462</i>	<i>2 437</i>	<i>2 423</i>
World	<i>7 447</i>	<i>7 478</i>	<i>7 461</i>	<i>7 382</i>	<i>7 324</i>	<i>7 342</i>	<i>7 351</i>	<i>7 363</i>	<i>7 311</i>	<i>7 279</i>

Figure in Italics: OIV estimate

Sources: OIV, FAO, National Statistical Offices

Evolution of global fresh grape production, 2000-2022



Top 10 producers (mt)

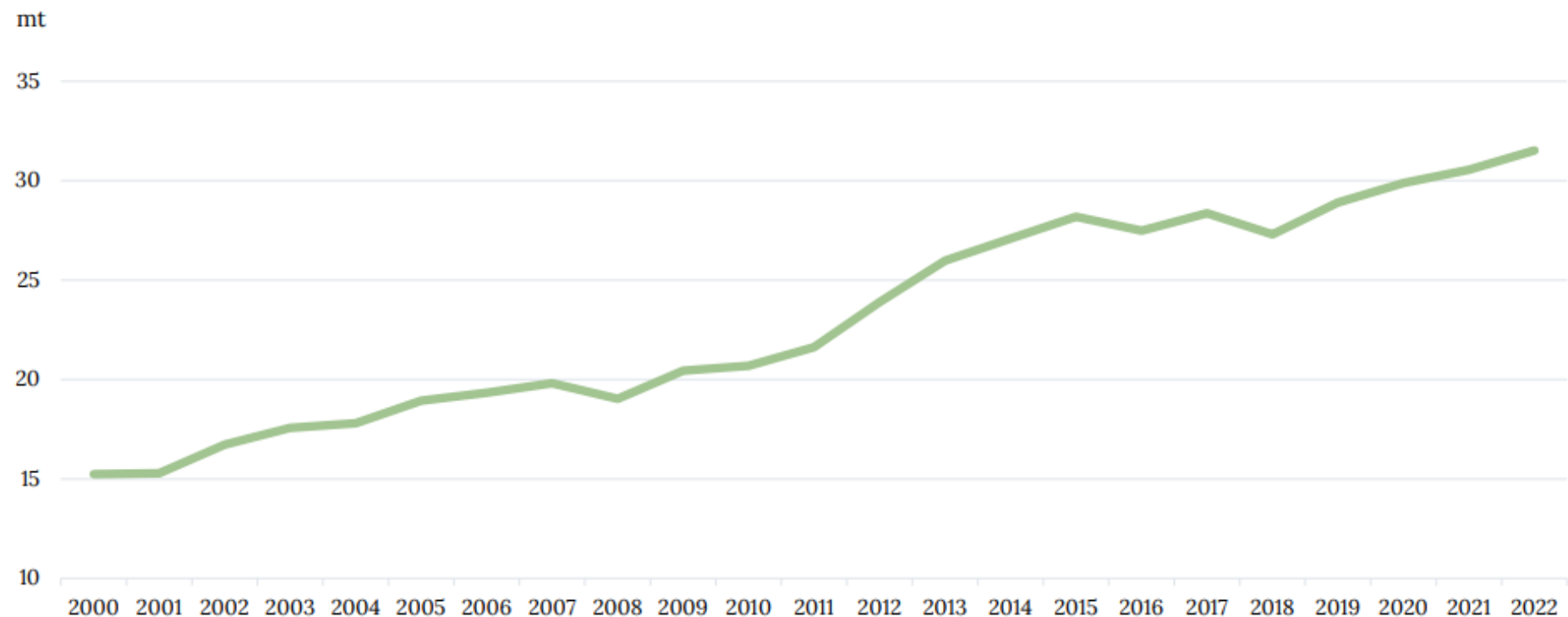
Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
China, mainland	10.9	11.7	13.2	12.6	13.1	13.7	14.2	14.3	<i>14.9</i>	<i>15.6</i>
Italy	8.0	6.9	8.2	8.4	6.9	8.6	7.9	8.2	8.1	<i>8.1</i>
France	5.5	6.2	6.3	6.0	5.0	6.3	5.5	5.9	5.1	6.2
USA	7.8	7.1	6.9	7.0	6.7	6.9	6.2	5.4	6.1	6.0
Spain	7.4	6.1	6.0	6.3	5.0	6.9	5.4	6.5	5.3	6.0
Turkey	4.0	4.2	3.7	4.0	4.2	3.9	4.1	4.2	3.7	4.2
India	2.5	2.6	2.6	2.6	2.9	2.9	3.2	3.4	3.5	<i>3.4</i>
Chile	3.0	2.5	2.8	2.5	2.4	2.8	2.7	2.4	2.9	2.7
Australia	2.0	1.8	1.9	2.0	2.2	1.9	1.9	1.7	2.2	2.1
Argentina	2.9	2.7	2.5	1.9	2.1	2.7	2.6	2.1	2.4	2.1
Othe countries	<i>22.8</i>	<i>21.7</i>	<i>23.2</i>	<i>22.1</i>	<i>22.9</i>	<i>23.9</i>	<i>23.8</i>	<i>23.3</i>	<i>23.6</i>	<i>23.8</i>
World	<i>76.7</i>	<i>73.6</i>	<i>77.2</i>	<i>75.4</i>	<i>73.4</i>	<i>80.6</i>	<i>77.5</i>	<i>77.4</i>	<i>77.6</i>	<i>80.1</i>

Figure in Italics: OIV estimate

Sources: OIV, FAO, National Statistical Offices



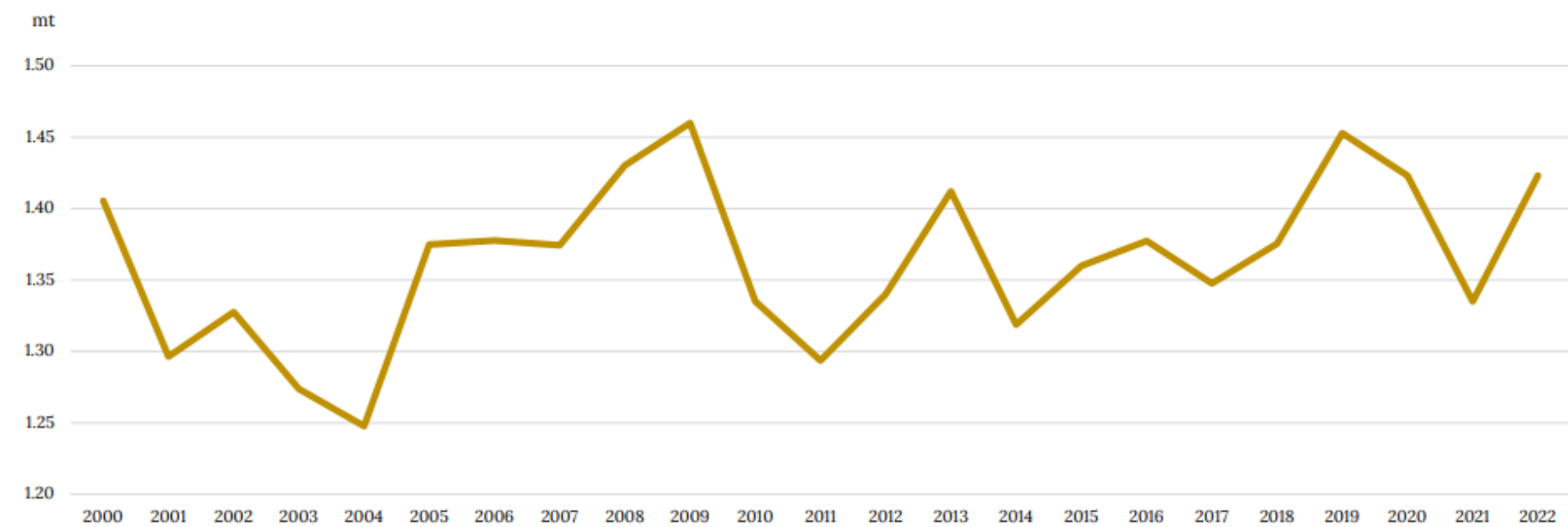
Evolution of global table grape production, 2000-2022



Top 10 producers (mt)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
China, mainland	8.5	9.4	10.0	10.1	10.5	9.5	10.6	11.5	12.0	12.6
India	2.1	2.2	2.3	2.2	2.5	2.5	2.7	2.9	2.9	2.8
Turkey	2.1	2.2	1.9	2.0	2.1	1.9	2.1	2.2	1.9	2.2
Egypt	1.3	1.4	1.6	1.6	1.6	1.5	1.5	1.1	1.3	1.4
Iran	1.8	1.7	1.9	1.2	1.1	1.3	1.3	1.3	1.4	1.3
Uzbekistan	0.8	1.1	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2
Italy	1.1	1.0	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0
USA	1.0	1.0	0.9	0.9	0.9	1.0	0.9	0.9	0.8	0.9
Brazil	0.7	0.8	0.7	0.6	0.9	0.8	0.7	0.8	0.9	0.8
Peru	0.4	0.5	0.6	0.7	0.6	0.6	0.6	0.7	0.7	0.8
Other countries	6.1	5.9	6.0	5.9	5.9	5.9	6.3	6.4	6.4	6.5
World	26.0	27.1	28.2	27.5	28.4	27.3	28.9	29.9	30.6	31.5

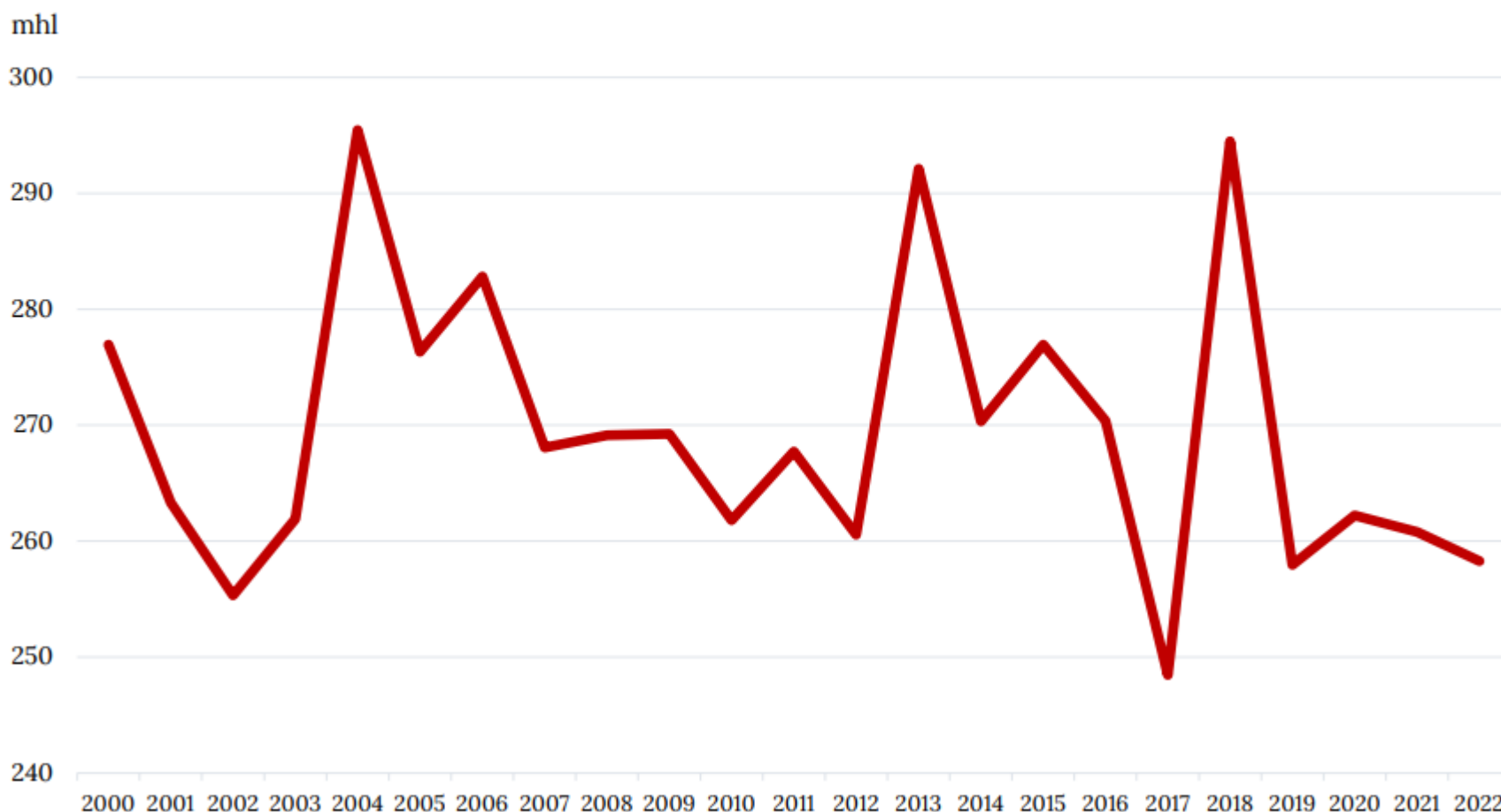
Evolution of global dried grape production, 2000-2022



Top 10 producers (kt)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Turkey	356	391	334	384	401	381	400	384	358	395
USA	368	332	352	305	241	263	285	303	274	313
China, mainland	165	180	190	165	180	190	200	150	180	170
Iran	151	92	101	150	140	130	135	148	103	125
South Africa	56	46	61	55	66	71	75	85	73	71
Uzbekistan	75	50	70	71	65	70	85	85	70	70
Chile	68	67	63	57	53	69	65	62	61	61
Afghanistan	36	45	48	46	48	47	59	54	57	55
Argentina	25	16	28	32	29	39	33	42	45	38
India	26	29	30	28	32	32	33	34	36	37
Other countries	86	71	83	85	93	82	83	76	79	88
World	1 412	1 319	1 360	1 377	1 348	1 376	1 453	1 423	1 335	1 423

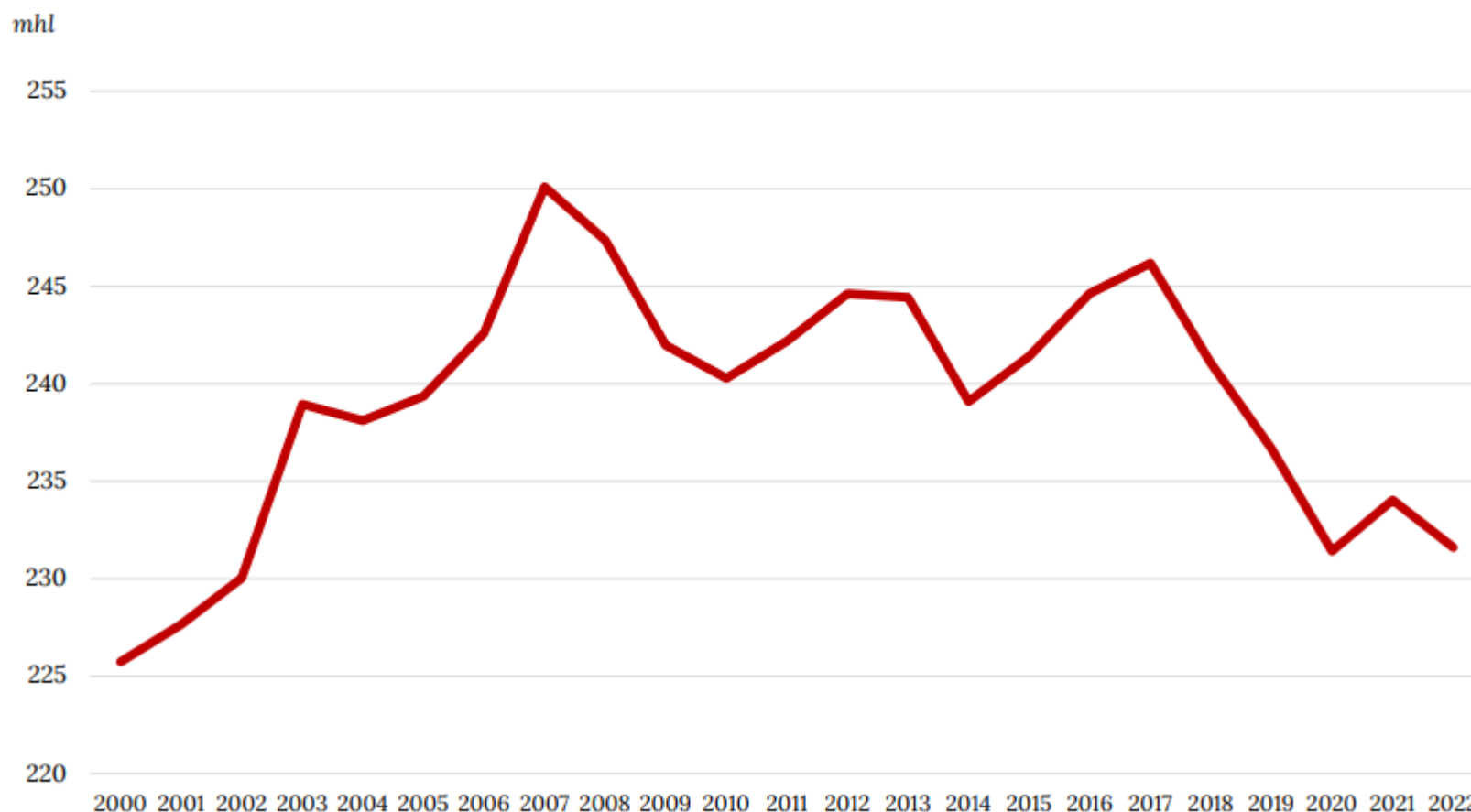
Evolution of world wine production, 2000-2022



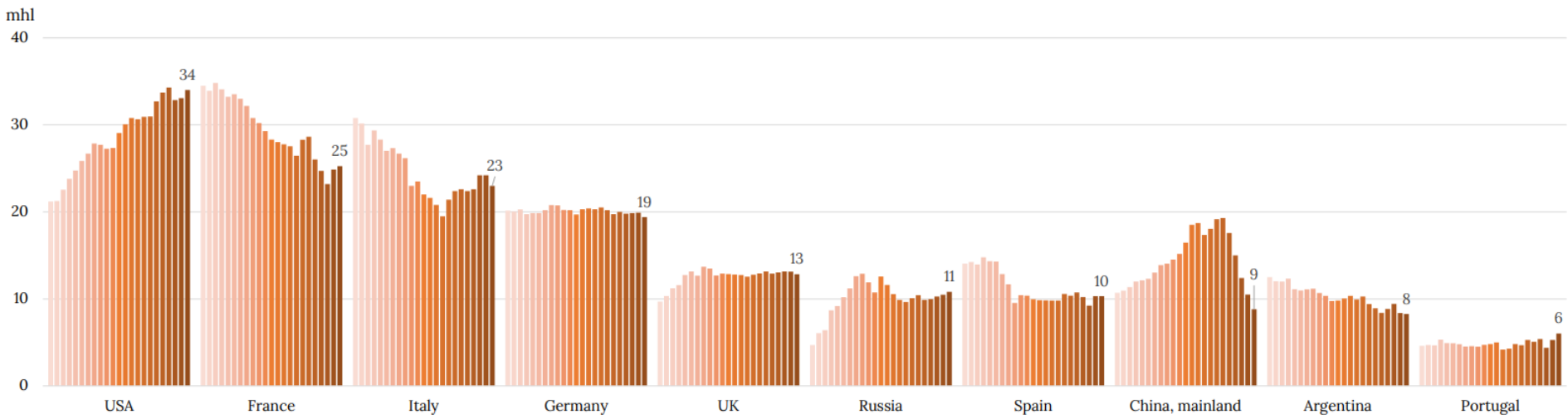
Top 10 producers (mhl)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Italy	54.0	44.2	50.0	50.9	42.5	54.8	47.5	49.1	50.2	49.8
France	42.1	46.5	47.8	45.4	36.6	49.2	42.2	46.7	37.6	45.6
Spain	45.3	39.5	37.7	40.0	32.5	44.9	33.7	40.9	35.5	35.7
USA	25.6	24.3	22.8	24.9	24.5	26.1	25.6	22.8	24.1	22.4
Australia	12.3	11.9	11.9	13.1	13.7	12.7	12.0	10.9	14.8	12.7
Chile	12.8	9.9	12.9	10.1	9.5	12.9	11.9	10.3	13.4	12.4
Argentina	15.0	15.2	13.4	9.4	11.8	14.5	13.0	10.8	12.5	11.5
South Africa	11.0	11.5	11.2	10.5	10.8	9.5	9.7	10.4	10.8	10.2
Germany	8.4	9.2	8.8	9.0	7.5	10.3	8.2	8.4	8.4	8.9
Portugal	6.2	6.2	7.0	6.0	6.7	6.1	6.5	6.4	7.4	6.8
Other countries	59	52	53	51	52	54	48	46	46	42
World	<i>292</i>	<i>270</i>	<i>277</i>	<i>270</i>	<i>248</i>	<i>294</i>	<i>258</i>	<i>262</i>	<i>261</i>	<i>258</i>

Evolution of global wine consumption, 2000-2022



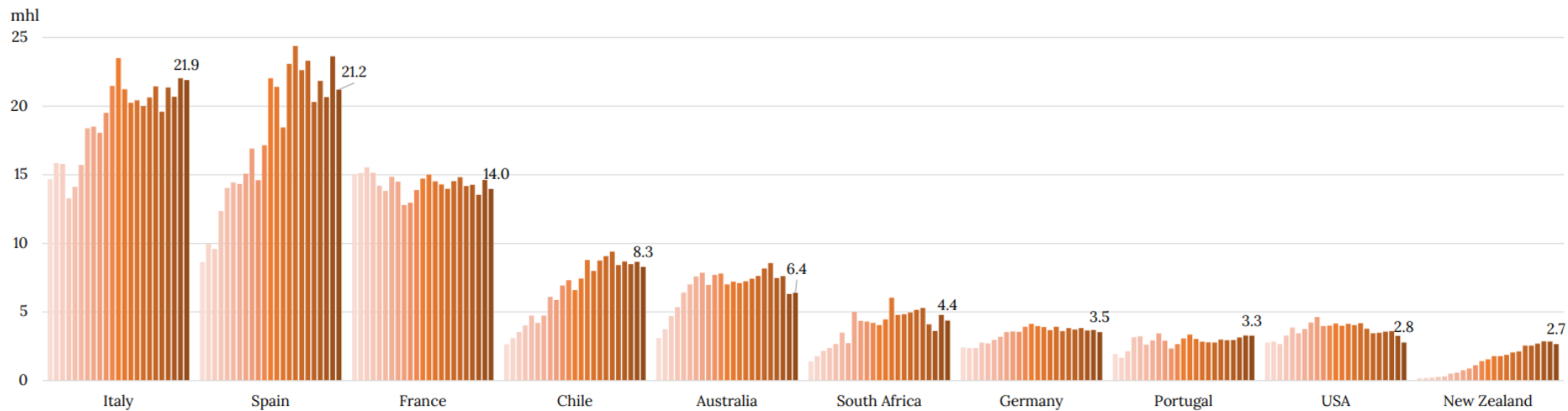
Wine consumption in major countries, 2000-2022



Top 10 consumers (mhl)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
USA	30.8	30.6	30.9	31.0	32.7	33.7	34.3	32.9	33.1	34.0
France	27.8	27.5	26.5	28.3	28.6	26.0	24.7	23.2	24.9	25.3
Italy	20.8	19.5	21.4	22.4	22.6	22.4	22.6	24.2	24.2	23.0
Germany	20.4	20.3	20.5	20.2	19.7	20.0	19.8	19.8	19.9	19.4
UK	12.7	12.6	12.8	12.9	13.1	12.9	13.0	13.2	13.1	12.8
Russia	10.6	9.9	9.7	10.1	10.4	9.9	10.0	10.3	10.5	10.8
Spain	9.8	9.8	9.8	10.6	10.4	10.7	10.2	9.2	10.3	10.3
China, mainland	18.7	17.4	18.1	19.2	19.3	17.6	15.0	12.4	10.5	8.8
Argentina	10.4	9.9	10.3	9.4	8.9	8.4	8.9	9.4	8.4	8.3
Portugal	4.2	4.3	4.8	4.7	5.3	5.1	5.4	4.4	5.3	6.0
Other countries	78.3	77.3	76.8	75.9	75.1	74.4	72.8	72.5	73.9	72.9
World	244.4	239.1	241.4	244.6	246.2	241.1	236.7	231.4	234.0	231.6

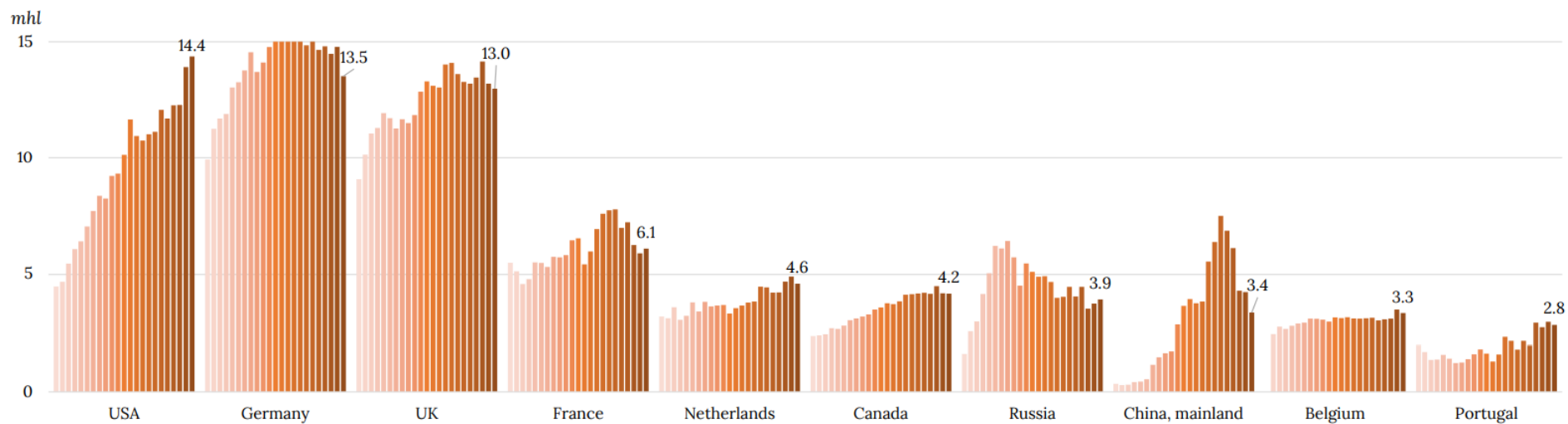
Wine export in major countries, 2000-2022



Top 10 exporters (mhl)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Italy	20.3	20.4	20.0	20.6	21.4	19.6	21.4	20.7	22.0	21.9
Spain	18.5	23.1	24.4	22.6	23.3	20.3	21.8	20.7	23.6	21.2
France	14.5	14.3	14.0	14.5	14.8	14.2	14.3	13.5	14.6	14.0
Chile	8.8	8.0	8.8	9.1	9.4	8.4	8.7	8.5	8.7	8.3
Australia	7.1	7.2	7.4	7.6	8.2	8.6	7.5	7.6	6.3	6.4
South Africa	6.0	4.8	4.8	5.0	5.2	5.3	4.1	3.6	4.8	4.4
Germany	3.9	3.7	3.9	3.6	3.8	3.7	3.8	3.7	3.7	3.5
Portugal	3.0	2.8	2.8	2.8	3.0	3.0	3.0	3.2	3.3	3.3
USA	4.1	4.0	4.2	3.5	3.5	3.5	3.6	3.6	3.3	2.8
New Zealand	1.8	1.9	2.1	2.1	2.6	2.6	2.7	2.9	2.8	2.7

Wine imports in major countries, 2000-2022



Top 10 importers (mhl)

Country	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
USA	11.0	10.8	11.0	11.1	12.1	11.7	12.3	12.3	13.9	14.4
Germany	15.3	15.5	15.4	14.9	15.2	14.7	14.8	14.5	14.8	13.5
UK	13.0	14.0	14.1	13.6	13.3	13.2	13.5	14.2	13.2	13.0
France	6.0	6.9	7.6	7.8	7.8	7.0	7.2	6.3	5.9	6.1
Netherlands	3.7	3.8	3.8	4.5	4.4	4.2	4.2	4.7	4.9	4.6
Canada	3.7	3.8	4.1	4.2	4.2	4.2	4.2	4.5	4.2	4.2
Russia	4.9	4.7	4.0	4.0	4.5	4.1	4.5	3.5	3.7	3.9
China, mainland	3.8	3.8	5.6	6.4	7.5	6.9	6.1	4.3	4.2	3.4
Belgium	3.2	3.1	3.1	3.1	3.1	3.0	3.1	3.1	3.5	3.3
Portugal	1.6	2.3	2.2	1.8	2.2	2.0	2.9	2.7	3.0	2.8

I numeri del vino		Italia			Produzione vino (hl/1000) - ISTAT			
	Vino	Bianco	Rosso	DOC	IGT	Comune	Mosti	Totale
(hl/1000)								
2005	47,834	22,506	25,548	15,020	12,726	20,085	2,515	50,696
2006	47,117	21,876	25,241	14,794	12,598	19,724	2,515	49,631
2007	40,943	18,860	22,083	14,247	12,034	14,662	1,616	42,559
2008	43,946	20,803	23,143	14,441	13,129	16,377	2,299	46,245
2009	43,424	21,474	21,951	15,262	12,271	15,891	2,376	45,800
2010	44,703	22,174	22,529	15,743	13,953	14,997	2,041	46,745
2011	40,632	20,396	20,235	15,061	13,592	11,979	2,073	42,705
2012	38,265	19,629	18,637	16,026	12,546	9,693	2,808	41,074
2013	45,044	24,046	20,999	17,340	15,787	11,917	2,922	47,966
2014	39,741	20,874	18,867	16,373	13,452	9,916	2,346	42,088
2015	48,635	26,118	22,518	18,954	15,423	14,258	2,091	50,726
2016	51,615	27,410	24,205	19,508	15,345	16,762	2,523	54,138
2017	43,829	24,087	19,742	17,447	11,790	14,593	2,271	46,100
2018	54,150	30,652	23,498	22,870	13,460	17,820	2,452	56,601
2019	49,859	27,960	21,899	22,001	11,827	16,030	2,327	52,186
2020	51,916	29,843	22,073	22,459	12,718	16,739	2,418	
2021	50,885	29,677	21,208	23,114	12,293	15,478	2,302	
2022	54,005	31,194	22,811	24,550	13,955	15,500	2,351	
2022/21	6%	5%	8%	6%	14%	0%	2%	
Media 11-20	47,394	26,029	21,365	19,609	13,464	14,321	2,446	
2019/Media	14%	20%	7%	25%	4%	8%	-4%	

Suddivisione e tipologia per regione 2022 (hl/1000) - ISTAT

	DOC Bia	DOC Ros	IGT Bia	IGT Ros	Tav Bia	Tav Ros	Totale
Abruzzo	177	793	231	97	894	937	3,129
Basilicata	0	27	11	15	4	29	86
Calabria	9	23	20	51	34	134	270
Campania	172	109	105	58	444	588	1,476
EmiliaRomagna	403	1,243	1,056	982	1,928	526	6,139
FriuliVeneziaGiulia	1,579	149	208	124	107	42	2,209
Lazio	574	153	253	144	189	116	1,429
Liguria	30	11	6	4	14	7	73
Lombardia	412	318	187	173	40	80	1,210
Marche	362	165	209	229	193	240	1,398
Molise	10	24	19	50	114	295	513
Piemonte	941	1,327	-	-	50	96	2,413
Puglia	267	510	1,290	2,233	3,428	3,119	10,846
Sardegna	140	250	34	83	50	128	684
Sicilia	1,526	695	1,658	974	639	390	5,881
Toscana	105	1,452	166	476	60	180	2,439
TrentinoAltoAdige	809	300	151	50	10	5	1,325
Umbria	150	147	104	156	22	18	597
Valledaosta	6	10	-	-	1	2	19
Veneto	7,974	1,199	1,354	994	263	86	11,870
Italia	15,648	8,903	7,063	6,892	8,483	7,017	54,005



Vino no mosti (hl/1000)

(hl/1000)	2016	2017	2018	2019	2020	2021	2022	22/21
Abruzzo	3,899	3,110	3,112	3,088	3,087	3,087	3,129	1%
Basilicata	86	85	86	86	86	86	86	0%
Calabria	428	337	337	305	294	270	270	0%
Campania	1,286	1,293	1,376	1,391	1,412	1,451	1,476	2%
EmiliaRomagna	7,165	5,457	7,340	5,766	6,611	5,907	6,139	4%
FriuliVeneziaGiulia	1,856	1,639	1,709	1,709	1,839	2,019	2,209	9%
Lazio	1,524	1,135	1,289	1,443	1,481	1,489	1,429	-4%
Liguria	69	76	78	84	89	80	73	-9%
Lombardia	1,473	1,183	1,719	1,327	1,505	1,370	1,210	-12%
Marche	956	860	878	878	878	878	1,398	59%
Molise	250	339	467	451	488	512	513	0%
Piemonte	2,549	2,043	2,658	2,525	2,571	2,507	2,413	-4%
Puglia	8,792	9,070	9,806	9,773	9,667	9,595	10,846	13%
Sardegna	804	466	841	629	630	630	684	9%
Sicilia	5,334	4,725	4,989	5,685	5,796	6,169	5,881	-5%
Toscana	3,025	1,901	2,597	2,627	2,601	2,185	2,439	12%
TrentinoAltoAdige	1,213	1,018	1,355	1,153	1,133	1,126	1,325	18%
Umbria	741	609	630	629	644	582	597	3%
Valledaosta	21	10	20	19	19	16	19	21%
Veneto	10,145	8,473	12,866	10,293	11,038	10,927	11,870	9%
Italia	51,615	43,829	54,150	49,859	51,916	50,885	54,005	6%
Nord	24,491	19,898	27,744	22,875	24,804	23,952	25,257	5%
Centro	6,246	4,506	5,393	5,576	5,651	5,133	5,862	14%
Mezzogiorno	20,878	19,425	21,013	21,407	21,460	21,800	22,886	5%

fonte: inumeridelvino.it su dati ISTAT

PRODUZIONE ENOLOGICA PIEMONTESE

	Superficie vitata totale (Ha)	Superficie in produzione (Ha)	Uva prodotta (q)	Uva vinificata (q)	Vino prodotto (Hl)
1984	73,933	71,005	4,948,706	4,945,441	3,406,356
1985	72,029	69,856	5,540,768	5,528,253	3,929,315
1986	70,442	68,750	5,648,519	5,639,429	3,998,844
1987	69,885	68,152	5,758,792	5,746,792	4,075,564
1988	69,110	67,434	4,648,463	4,642,083	3,297,960
1989	68,547	66,859	4,496,639	4,491,784	3,203,224
1990	68,009	66,133	4,535,285	4,530,228	3,310,121
1991	62,089	59,569	4,752,544	4,748,002	3,496,262
1992	61,814	59,303	4,645,495	4,624,805	3,305,955
1993	61,472	59,103	4,532,278	4,527,830	3,224,883
1994	61,009	58,787	4,520,048	4,518,403	3,219,807
1995	60,545	58,265	3,828,439	3,815,800	2,708,700
1996	59,805	57,647	4,393,730	4,391,049	3,106,918
1997	59,735	57,487	4,840,403	4,838,597	3,405,160
1998	59,368	56,778	4,522,698	4,521,019	3,171,101
1999	59,565	56,574	4,659,025	4,654,525	3,266,852
2000	56,407	53,573	4,201,556	4,200,318	2,937,710
2001	54,325	52,850	4,568,235	4,536,710	3,324,335
2002	53,593	51,735	3,346,053	3,345,208	2,328,675
2003	53,554	51,951	3,280,893	3,280,163	2,281,511
2004	53,273	51,679	4,587,005	4,586,055	3,263,162
2005	53,196	51,856	4,289,433	4,288,283	3,054,426
2006	53,075	51,802	4,520,006	4,518,956	3,228,961
2007	52,720	51,266	3,908,749	3,907,699	2,723,946
2008	51,463	50,155	3,558,248	3,557,318	2,479,633