

# Combining Vintage Charts Ratings into a Consensual Quality Ranking



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# The problem

Need of an **unbiased assessment of vintage quality** in order to study how weather/climate changes influence a region's wine production quality

# How to combine Vintage charts published by independent sources into a single measure of quality?

## Wine Spectator Vintage Chart • 2011 Edition

(Also available on your iPhone! Download Free from the App Store or apps.winespectator.com)

# Wine Spectator

## 2011 VINTAGE CHART

(updated January 2011)

Vintage charts are, by necessity, general in nature, and provide an indication of a region's overall performance in a given year. This chart includes quality ratings and drinkability evaluations for most vintages that are currently available in retail stores and at restaurants and for selected older vintages. A score range indicates preliminary analysis based on barrel samples and/or a limited sampling. "NVR" means not yet released. More comprehensive vintage charts accompany our annual tasting reports and are available to Web site members at [www.winespectator.com/vintagecharts](http://www.winespectator.com/vintagecharts).

100-Point Scale	
95-100	Classic
90-94	Outstanding
85-89	Very Good
80-84	Good
75-79	Mediocre
50-74	Not Recommended

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VINTAGE/SCORE/DRINKABILITY		
<b>ARGENTINA • Mendoza</b>		
2009	87-90	NVR
2008	86	Drink or hold
2007	88	Drink or hold
2006	91	Drink or hold
2005	90	Drink or hold
2004	90	Drink
2003	91	Drink
<b>AUSTRALIA • Barossa &amp; McLaren Vale Shiraz</b>		
2008	90-95	NVR
2007	90	Drink or hold
2006	92	Drink or hold
2005	97	Drink or hold
2004	94	Drink or hold
2003	95	Drink
<b>FRANCE • Bordeaux / Older Reds</b>		
2007	98	Hold
1995	95	Drink or hold
1990	97	Drink or hold
1989	98	Drink or hold
1988	93	Drink or hold
1986	95	Drink
1985	94	Drink or hold
1980	97	Drink or hold
<b>FRANCE • Champagne</b>		
2004	90	Drink or hold
2003	88	Drink or hold
2002	94	Drink or hold
2001	89	Drink
<b>FRANCE • Bordeaux /</b>		
<b>Older Reds</b>		
2007	86	Drink or hold
2006	93	Drink or hold
2005	90	Drink or hold
2004	88	Drink or hold
2003	87	Drink or hold
2002	95	Drink or hold
<b>FRANCE • Champagne</b>		
2004	90	Drink or hold
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2003	87	Drink or hold
<b>FRANCE • Bordeaux /</b>		
<b>Older Reds</b>		
2007	86	Drink or

- not always consensual
- different tasting panels
- different criteria and perception of quality
- different set of wines tasted
- variety of rating scales (5-star , 10-point, or 100-point)
- same scale with different criteria

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GUIDE TO GOOD VINTAGES

# GUIDE TO GOOD VINTAGES

This chart provides a useful fingertip reference to the comparative performance of more than 950 vintages, covering 28 different categories of wine. As with any vintage chart, the ratings should merely be seen as "betting odds." They express the likelihood of what might reasonably be expected from a wine of a given year and should not be used as a guide to buying specific wines. No blanket rating can highlight the many exceptions that exist in every vintage, although the higher the rating, the fewer the exceptions; quality and consistency do to some extent go hand in hand.

## KEY TO VINTAGE RATINGS

90 – 100*	Excellent to superb
80 – 89	Good to very good
70 – 79	Average to good
60 – 69	Disappointing
40 – 59	Very bad
0 – 39	Disastrous

\*No vintage can be accurately described as perfect, but those achieving a maximum score are truly great vintages.

Remember that some wines are not particularly enjoyable, nor even superior, in so-called "great years." Such wines, which are normally light-bodied, aromatic whites that are best drunk while young, fresh, and grapey (e.g. Muscat d'Alsace, German QbA, or Kabinett, etc), favor vintages with ratings of between 70 and 85, or lower.

WINE CATEGORY	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	
BORDEAUX—MÉDOC and GRAVES	95	90	90	98	85	85	83	95	90	85	82	78	78	90	95	88	78	90	92	75	88	98	
BORDEAUX—ST-ÉMILION and POMEROL	99	85	91	98	88	90	80	90	90	85	85	78	75	92	95	88	75	85	92	65	85	98	
BORDEAUX—SAUTERNES and BARSAC	99	95	98	87	87	89	95	90	95	79	60	65	60	92	95	95	60	90	85	60	100	70	
BURGUNDY—CÔTE D'OR—red	75	90	84	85	91	89	88	97	90	70	87	85	82	95	92	98	70	78	100	70	88	80	
BURGUNDY—CÔTE D'OR—white	75	89	85	87	91	90	92	97	92	80	87	95	70	98	95	92	80	92	90	80	88	86	
BURGUNDY—BEAUJOLAIS—red	90	85	80	87	88	83	85	90	85	90	85	92	85	90	90	85	78	85	90	70	90	72	
CHAMPAGNE	50–95	88	35	80	80	85	85	95	90	70	85	85	80	100	89	90	—	80	95	—	90	92	
ALSACE	80	88	90	85	85	85	90	90	90	90	85	80	75	90	95	90	78	75	90	65	100	80	
LOIRE—sweet white	88	90	95	60	60	60	91	90	90	95	90	55	55	50	90	90	90	60	85	87	65	90	85
LOIRE—red	95	90	80	85	80	75	90	92	90	60	60	40	40	90	90	85	40	85	90	75	85	85	
RHÔNE—NORTHERN RHÔNE	96	70	85	90	91	89	85	85	92	75	65	75	85	96	95	95	88	86	95	70	98	92	
RHÔNE—SOUTHERN RHÔNE	95	55	89	92	88	96	70	85	90	80	80	75	70	90	95	92	70	88	90	70	92	88	
GERMANY—MOSEL	100	93	90	80	87	75	90	85	92	92	94	92	88	100	98	95	75	93	95	50	100	70	
GERMANY—RHINE	98	93	92	80	87	85	95	94	90	85	90	90	80	95	95	90	78	93	95	50	98	73	
ITALY—BAROLO	97	75	94	90	95	94	92	94	90	88	85	75	80	98	95	95	88	82	95	55	90	95	
ITALY—CHIANTI	95	75	91	87	89	85	93	80	88	90	85	75	80	90	65	90	83	80	93	60	85	90	
SPAIN—RIOJA	75	70	93	85	84	80	85	75	87	95	87	85	85	78	85	80	80	80	80	75	88	100	
PORTUGAL—VINTAGE PORT	90	70	86	94	75	80	90	—	88	95	—	85	95	—	—	—	—	—	95	—	95	80	
CALIFORNIA—red	90	92	95	89	94	89	87	88	92	94	88	91	93	80	80	85	90	88	98	92	90	88	
CALIFORNIA—white	90	91	90	89	90	89	88	88	92	88	89	92	85	80	82	88	85	90	84	95	86	86	
PACIFIC NORTHWEST—red	88	93	89	90	95	92	85	90	88	88	87	89	85	85	85	85	85	86	96	50	95	84	
PACIFIC NORTHWEST—white	85	90	90	90	90	88	85	90	85	75	69	85	85	88	80	80	85	90	96	70	95	83	
AUSTRALIA—HUNTER VALLEY—red	98	70	70	88	80	90	65	95	85	70	90	65	95	80	85	80	88	95	90	80	90	80	
AUSTRALIA—HUNTER VALLEY—white	98	95	85	88	80	90	65	95	85	85	90	75	90	75	90	90	90	95	90	80	90	80	
AUSTRALIA—BAROSSA VALLEY—red	70	92	90	80	70–95	94	90	95	70	80	80	80	90	95	85	85	80	88	95	95	70	90	
AUSTRALIA—BAROSSA VALLEY—white	70	88	75	85	80	90	90	95	80	80	70	80	90	90	70	80	80	80	95	95	85	90	

# What we Propose

Combine **scores** into a consensual ranking of the vintage

- Convert each vintage chart into a ranking of the years
  - Deal with missing values (correlations, average rank, ...)
  - Formulate the task as a **Rank Aggregation problem** (NP-hard) and make use of a heuristic to obtain a good solution

# What we achieve

- Take advantage of the information available from **independent sources**
  - A method with no assumptions about the criteria of each individual rating provider
  - A combined ranking that represents a **relative measure of the vintages quality**

## An example with White Burgundy

	Original Scores															
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Decanter	4	3	4	3	3	5	5	4	4	4	4	4	5	3	3	4
Wine Spectator	92	85	89	82	87	93	95	88	88	88	90	89	95	87	90	93
Michael Broadbent	4	3	3	3	3	4	5	4	4	4	3	3.5	4	3.5	4	5



# Combined Consensual Ranking

1995	1	1999	8
1996	1	2000	10
2002	1	2001	11
2005	4	1998	12
1990	5	2003	13
2004	6	1994	14
1992	7	1991	15
1997	8	1993	15

## Conclusions

We propose a method to produce a measure of relative quality of the vintages for a wine region

- Represents an **unbiased consensus** from a number of independent sources
  - Can be a useful tool for researchers that need to evaluate vintage quality over the years in order to study the factors influencing it

	Rankings															
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
<b>Decanter</b>	4	12	4	12	12	1	1	4	4	4	4	4	1	12	12	4
<b>Wine Spectator</b>	5	15	8	16	13	3	1	10	10	10	6	8	1	13	6	3
<b>Michael Broadbent</b>	3	12	12	12	12	3	1	3	3	3	12	10	3	10	3	1
<b>Wine Advocate</b>	10	16	5	15	14	1	2	7	12	7	9	11	2	12	4	5