

REPORT

WINETASTER ON 06/08/12 WITH 9 JUDGES AND 10 WINES BASED ON GRADES, IDENT=N
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FLIGHT 1:
 Number of Judges = 9
 Number of Wines = 10

Identification of the Wine:	The judges' overall ranking:
Wine A is Heritage Chardonnay 2010	..... 3rd place
Wine B is Unionville Pheasant Hill Single Vineyard 2010	..... 2nd place
Wine C is Puligny Montrachet Domaine Leflaive 2009	..... 5th place
Wine D is Clos des Mouches Drouhin 2009	..... 1st place
Wine E is Silver Decoy "Black Feather" 201	..... 4th place
Wine F is Bellview Chardonnay 2010	tied for 6th place
Wine G is Ventimiglia Chardonnay 2010	..... 9th place
Wine H is Meursault-Charmes Jean Latour-Labille2008	..... 10th place
Wine I is Amalthea Chardonnay 2008	..... 8th place
Wine J is Bâtard Montrachet Marc-Antonin Blain 2009	tied for 6th place

The Judges' Grades

Judge	Wine ->	A	B	C	D	E	F	G	H	I	J
Jean-M Cardebat		10.0	13.0	14.0	15.0	8.0	13.0	15.0	11.0	9.0	12.0
Tyler Colman		16.0	14.0	14.0	16.0	12.0	11.0	11.0	14.0	11.0	14.0
John Foy		16.0	17.0	16.0	15.0	14.5	14.5	16.0	17.0	15.0	17.5
Olivier Gergaud		14.0	19.0	12.0	10.0	19.0	18.0	17.0	16.0	18.0	14.0
Robert Hodgson		17.0	11.0	13.0	14.0	14.0	10.0	9.0	9.0	10.0	10.0
Linda Murphy		15.5	15.0	17.0	18.0	16.0	17.0	15.0	14.0	16.0	17.0
Daniele Meulder		10.0	15.0	12.0	12.0	15.0	14.0	15.0	12.0	15.0	12.0
Jamal Rayyis		16.0	15.0	14.5	17.5	16.5	14.0	12.0	15.0	13.0	12.0
Francis Schott		17.0	16.0	12.0	18.0	15.0	16.0	15.0	14.0	17.0	15.0

The Judges' Rankings

Judge	Wine ->	A	B	C	D	E	F	G	H	I	J
Jean-M Cardebat		8.0	4.5	3.0	1.5	10.0	4.5	1.5	7.0	9.0	6.0
Tyler Colman		1.5	4.5	4.5	1.5	7.0	9.0	9.0	4.5	9.0	4.5
John Foy		5.0	2.5	5.0	7.5	9.5	9.5	5.0	2.5	7.5	1.0
Olivier Gergaud		7.5	1.5	9.0	10.0	1.5	3.5	5.0	6.0	3.5	7.5
Robert Hodgson		1.0	5.0	4.0	2.5	2.5	7.0	9.5	9.5	7.0	7.0
Linda Murphy		7.0	8.5	3.0	1.0	5.5	3.0	8.5	10.0	5.5	3.0
Daniele Meulder		10.0	2.5	7.5	7.5	2.5	5.0	2.5	7.5	2.5	7.5
Jamal Rayyis		3.0	4.5	6.0	1.0	2.0	7.0	9.5	4.5	8.0	9.5
Francis Schott		2.5	4.5	10.0	1.0	7.0	4.5	7.0	9.0	2.5	7.0

Group Ranking -> 3 2 5 1 4 6 9 10 8 6
 Votes Against -> 45.5 38.0 52.0 33.5 47.5 53.0 57.5 60.5 54.5 53.0

(9 is the best possible, 90 is the worst)

Here is a measure of the correlation in the preferences of the judges which ranges between 1.0 (perfect correlation) and 0.0 (no correlation):

W = 0.1017



The probability that random chance could be responsible for this correlation is rather large, 0.5476. Most analysts would say that unless this probability is less than 0.1, the judges' preferences are not strongly related.

We now analyze how each taster's preferences are correlated with the group preference. A correlation of 1.0 means that the taster's preferences are a perfect predictor of the group's preferences. A 0.0 means no correlation, while a -1.0 means that the taster has the reverse ranking of the group. This is measured by the correlation R.

Correlation Between the Ranks of Each Person With the Average Ranking of Others

Name of Person	Correlation R
Robert Hodgson	0.7299
Jamal Rayyis	0.5321
Tyler Colman	0.2750
Francis Schott	0.2037
Linda Murphy	0.0502
Jean-M Cardebat	-0.1774
Olivier Gergaud	-0.3303
Daniele Meulders	-0.3729
John Foy	-0.4318

We now compute for each wine the mean (average) grade it received from the judges and the standard deviation of those grades. (The mean of, say, 3 grades is the sum of the grades divided by 3. The standard deviation is a measure of the "dispersion" of the grades around the mean. The numbers 5, 6, and 7 and the numbers 3, 6, and 9 both have the same mean of 6, but the second set has a higher dispersion, i.e., standard deviation.)

Summary Grade Statistics for Wines

	A	B	C	D	E	F	G	H	I	J
Mean	14.61	15.00	13.83	15.06	14.44	14.17	13.89	13.56	13.78	13.72
StdDev	2.60	2.16	1.70	2.59	2.90	2.47	2.47	2.36	3.01	2.35

We now compute the mean and the standard deviation for each judge, from which you can see which judge is harsh and which is lenient, which thinks that the wines are very different and which thinks they are pretty much the same.

Summary Grade Statistics for Judges

Name	Mean	Std.Dev.
Jean-M Cardebat	12.00	2.32
Tyler Colman	13.30	1.85
John Foy	15.85	1.03
Olivier Gergaud	15.70	2.93
Robert Hodgson	11.70	2.53
Linda Murphy	16.05	1.15
Daniele Meulders	13.20	1.72
Jamal Rayyis	14.55	1.75
Francis Schott	15.50	1.63

The wines were preferred by the judges in the following order. When the preferences of the judges are strong enough to permit meaningful differentiation among the wines, they are separated by ----- and are judged to be significantly different.

1.	.....	1st place	Wine D is Clos des Mouches 2009
2.	.....	2nd place	Wine B is Unionville Single Vineyard 2010
3.	.....	3rd place	Wine A is Heritage Chard 2010
4.	.....	4th place	Wine E is Silver Decoy "Black Feather" 201
5.	.....	5th place	Wine C is Puligny Montrachet 2009
6.	tied for	6th place	Wine F is Bellview Chard 2010
7.	tied for	6th place	Wine J is Batard Montrachet 2009
8.	.....	8th place	Wine I is Amalthea Chard 2008
9.	.....	9th place	Wine G is Ventimiglia Chard 2010
10.	.....	10th place	Wine H is Meursault-Charmes 2008

We now undertake a more detailed examination of the pair-wise rank correlations that exist between pairs of judges. First, we present a table in which you can find the correlation for any pair of judges, by finding one of the names in the left hand margin and the other name on top of a column. A second table arranges these correlations in descending order and marks which is significantly positive significantly negative, or not significant. This may allow you to find clusters of judges whose rankings were particularly similar or particularly dissimilar.

Pairwise Rank Correlations

Correlations must exceed in absolute value 0.65 for significance at the 0.05 level and must exceed 0.56 for significance at the 0.1 level

	Jean-M Cardebat	Tyler Colman	John Foy
Jean-M Cardebat	1.000	0.115	0.140
Tyler Colman	0.115	1.000	0.393
John Foy	0.140	0.393	1.000
Olivier Gergaud	-0.455	-0.638	-0.250
Robert Hodgson	-0.174	0.602	-0.319
Linda Murphy	0.261	0.146	-0.394
Daniele Meulders	-0.081	-0.763	-0.314
Jamal Rayyis	-0.153	0.617	-0.312
Francis Schott	-0.031	0.194	-0.363

	Olivier Gergaud	Robert Hodgson	Linda Murphy
Jean-M Cardebat	-0.455	-0.174	0.261
Tyler Colman	-0.638	0.602	0.146
John Foy	-0.250	-0.319	-0.394
Olivier Gergaud	1.000	-0.209	-0.464
Robert Hodgson	-0.209	1.000	0.396
Linda Murphy	-0.464	0.396	1.000
Daniele Meulders	0.816	-0.329	-0.263
Jamal Rayyis	-0.098	0.733	0.075
Francis Schott	-0.006	0.409	0.258

	Daniele Meulders	Jamal Rayyis	Francis Schott
Jean-M Cardebat	-0.081	-0.153	-0.031
Tyler Colman	-0.763	0.617	0.194
John Foy	-0.314	-0.312	-0.363
Olivier Gergaud	0.816	-0.098	-0.006
Robert Hodgson	-0.329	0.733	0.409
Linda Murphy	-0.263	0.075	0.258
Daniele Meulders	1.000	-0.260	0.000
Jamal Rayyis	-0.260	1.000	0.314
Francis Schott	0.000	0.314	1.000

Pairwise correlations in descending order

0.816	Olivier Gergaud	and Daniele Meulders	Significantly positive
0.733	Robert Hodgson	and Jamal Rayyis	Significantly positive
0.617	Tyler Colman	and Jamal Rayyis	Significantly positive
0.602	Tyler Colman	and Robert Hodgson	Significantly positive
0.409	Robert Hodgson	and Francis Schott	Not significant
0.396	Robert Hodgson	and Linda Murphy	Not significant
0.393	Tyler Colman	and John Foy	Not significant
0.314	Jamal Rayyis	and Francis Schott	Not significant
0.261	Jean-M Cardebat	and Linda Murphy	Not significant
0.258	Linda Murphy	and Francis Schott	Not significant
0.194	Tyler Colman	and Francis Schott	Not significant
0.146	Tyler Colman	and Linda Murphy	Not significant
0.140	Jean-M Cardebat	and John Foy	Not significant
0.115	Jean-M Cardebat	and Tyler Colman	Not significant
0.075	Linda Murphy	and Jamal Rayyis	Not significant
0.000	Daniele Meulders	and Francis Schott	Not significant
-0.006	Olivier Gergaud	and Francis Schott	Not significant
-0.031	Jean-M Cardebat	and Francis Schott	Not significant
-0.081	Jean-M Cardebat	and Daniele Meulders	Not significant
-0.098	Olivier Gergaud	and Jamal Rayyis	Not significant
-0.153	Jean-M Cardebat	and Jamal Rayyis	Not significant
-0.174	Jean-M Cardebat	and Robert Hodgson	Not significant
-0.209	Olivier Gergaud	and Robert Hodgson	Not significant
-0.250	John Foy	and Olivier Gergaud	Not significant
-0.260	Daniele Meulders	and Jamal Rayyis	Not significant
-0.263	Linda Murphy	and Daniele Meulders	Not significant
-0.312	John Foy	and Jamal Rayyis	Not significant
-0.314	John Foy	and Daniele Meulders	Not significant
-0.319	John Foy	and Robert Hodgson	Not significant
-0.329	Robert Hodgson	and Daniele Meulders	Not significant
-0.363	John Foy	and Francis Schott	Not significant
-0.394	John Foy	and Linda Murphy	Not significant
-0.455	Jean-M Cardebat	and Olivier Gergaud	Not significant
-0.464	Olivier Gergaud	and Linda Murphy	Not significant
-0.638	Tyler Colman	and Olivier Gergaud	Significantly negative
-0.763	Tyler Colman	and Daniele Meulders	Significantly negative

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FLIGHT 2:

Number of Judges = 9
 Number of Wines = 10

Identification of the Wine:

The judges' overall ranking:

Wine A is Ch. Montrose 2004	.....	4th place
Wine B is Ch. Mouton Rothschild 2004	.....	1st place
Wine C is Silver Decoy Cab. Franc 2008	.....	8th place
Wine D is Heritage Estate BDX 2010	.....	3rd place
Wine E is Bellview Lumiere 2010	.....	7th place
Wine F is Tomasello Oak Reserve 2007	.....	5th place
Wine G is Ch. Leoville Las Cases 2004	.....	6th place
Wine H is Amalthea Europa VI 2008	.....	9th place
Wine I is Four JG's Cab Franc 2008	.....	10th place
Wine J is Ch. Haut Brion 2004	.....	2nd place

The Judges' Grades

Judge	Wine ->	A	B	C	D	E	F	G	H	I	J
Jean-M Cardebat		15.0	11.0	12.0	16.0	14.0	11.0	14.5	13.0	10.0	14.5
Tyler Colman		14.0	11.0	16.0	12.0	14.0	13.0	14.0	12.0	13.0	11.0
John Foy		17.5	19.0	18.0	18.0	15.0	16.0	18.0	18.0	17.0	17.5
Olivier Gergaud		10.0	17.0	9.0	14.0	19.0	12.0	15.0	10.0	11.0	18.0
Robert Hodgson		13.0	17.0	13.0	16.0	12.0	15.0	10.0	12.0	8.0	11.0
Linda Murphy		13.0	14.0	17.0	16.0	15.0	17.0	14.0	15.5	13.0	18.0
Daniele Meulder		14.0	16.0	11.0	16.0	14.0	15.0	13.0	11.0	10.0	15.0
Jamal Rayyis		15.0	19.5	14.0	12.0	13.0	16.0	14.5	15.0	16.0	16.0
Francis Schott		19.0	18.0	8.0	15.0	15.0	12.0	15.0	16.0	7.0	17.0

The Judges' Rankings

Judge	Wine ->	A	B	C	D	E	F	G	H	I	J
Jean-M Cardebat		2.0	8.5	7.0	1.0	5.0	8.5	3.5	6.0	10.0	3.5
Tyler Colman		3.0	9.5	1.0	7.5	3.0	5.5	3.0	7.5	5.5	9.5
John Foy		6.5	1.0	3.5	3.5	10.0	9.0	3.5	3.5	8.0	6.5
Olivier Gergaud		8.5	3.0	10.0	5.0	1.0	6.0	4.0	8.5	7.0	2.0
Robert Hodgson		4.5	1.0	4.5	2.0	6.5	3.0	9.0	6.5	10.0	8.0
Linda Murphy		9.5	7.5	2.5	4.0	6.0	2.5	7.5	5.0	9.5	1.0
Daniele Meulder		5.5	1.5	8.5	1.5	5.5	3.5	7.0	8.5	10.0	3.5
Jamal Rayyis		5.5	1.0	8.0	10.0	9.0	3.0	7.0	5.5	3.0	3.0
Francis Schott		1.0	2.0	9.0	6.0	6.0	8.0	6.0	4.0	10.0	3.0

Group Ranking ->	4	1	8	3	7	5	6	9	10	2
Votes Against ->	46.0	35.0	54.0	40.5	52.0	49.0	50.5	55.0	73.0	40.0

(9 is the best possible, 90 is the worst)

Here is a measure of the correlation in the preferences of the judges which ranges between 1.0 (perfect correlation) and 0.0 (no correlation):

$$W = 0.1543$$

The probability that random chance could be responsible for this correlation is rather large, 0.2039. Most analysts would say that unless this probability is less than 0.1, the judges' preferences are not strongly related.

We now analyze how each taster's preferences are correlated with the group preference. A correlation of 1.0 means that the taster's preferences are a perfect predictor of the group's preferences. A 0.0 means no correlation, while a -1.0 means that the taster has the reverse ranking of the group. This is measured by the correlation R.

Correlation Between the Ranks of Each Person With the Average Ranking of Others

Name of Person	Correlation R
Daniele Meulders	0.7963
Francis Schott	0.3877
Robert Hodgson	0.3272
Jean-M Cardebat	0.2778
John Foy	0.1443
Olivier Gergaud	0.0823
Linda Murphy	-0.1074
Jamal Rayyis	-0.1296
Tyler Colman	-0.6927



We now compute for each wine the mean (average) grade it received from the judges and the standard deviation of those grades. (The mean of, say, 3 grades is the sum of the grades divided by 3. The standard deviation is a measure of the "dispersion" of the grades around the mean. The numbers 5, 6, and 7 and the numbers 3, 6, and 9 both have the same mean of 6, but the second set has a higher dispersion, i.e., standard deviation.

Summary Grade Statistics for Wines

	A	B	C	D	E	F	G	H	I	J
Mean	14.50	15.83	13.11	15.00	14.56	14.11	14.22	13.61	11.67	15.33
StdDev	2.47	3.00	3.28	1.89	1.83	2.02	1.97	2.49	3.20	2.59

We now compute the mean and the standard deviation for each judge, from which you can see which judge is harsh and which is lenient, which thinks that the wines are very different and which thinks they are pretty much the same.

Summary Grade Statistics for Judges

Name	Mean	Std.Dev.
Jean-M Cardebat	13.10	1.91
Tyler Colman	13.00	1.48
John Foy	17.40	1.09
Olivier Gergaud	13.50	3.44
Robert Hodgson	12.70	2.61
Linda Murphy	15.25	1.66
Daniele Meulders	13.50	2.06
Jamal Rayyis	15.10	1.93
Francis Schott	14.20	3.82

The wines were preferred by the judges in the following order. When the preferences of the judges are strong enough to permit meaningful differentiation among the wines, they are separated by ----- and are judged to be significantly different.

1. 1st place Wine B is Ch. Mouton Rothschild 2004
 2. 2nd place Wine J is Ch. Haut Brion 2004
 3. 3rd place Wine D is Heritage Estate BDX 2010
 4. 4th place Wine A is Ch. Montrose 2004
 5. 5th place Wine F is Tomasello Oak Reserve 2007
 6. 6th place Wine G is Leoville Las Cases 2004
 7. 7th place Wine E is Bellview Lumiere 2010
 8. 8th place Wine C is Silver Decoy Cab. Franc 2008
 9. 9th place Wine H is Amalthea Europa 2008
-
10. 10th place Wine I is Four JG's Cab Franc 2008

We now undertake a more detailed examination of the pair-wise rank correlations that exist between pairs of judges. First, we present a table in which you can find the correlation for any pair of judges, by finding one of the names in the left hand margin and the other name on top of a column. A second table arranges these correlations in descending order and marks which is significantly positive significantly negative, or not significant. This may allow you to find clusters of judges whose rankings were particularly similar or particularly dissimilar.

Pairwise Rank Correlations

Correlations must exceed in absolute value 0.65 for significance at the 0.05 level and must exceed 0.56 for significance at the 0.1 level

	Jean-M Cardebat	Tyler Colman	John Foy
Jean-M Cardebat	1.000	0.053	0.120
Tyler Colman	0.053	1.000	-0.279
John Foy	0.120	-0.279	1.000
Olivier Gergaud	0.159	-0.394	-0.189
Robert Hodgson	0.061	-0.215	0.363
Linda Murphy	0.095	-0.209	-0.022
Daniele Meulders	0.336	-0.542	0.168
Jamal Rayyis	-0.601	-0.538	0.019
Francis Schott	0.481	-0.414	0.318

	Olivier Gergaud	Robert Hodgson	Linda Murphy
Jean-M Cardebat	0.159	0.061	0.095
Tyler Colman	-0.394	-0.215	-0.209
John Foy	-0.189	0.363	-0.022
Olivier Gergaud	1.000	-0.055	0.095
Robert Hodgson	-0.055	1.000	0.203
Linda Murphy	0.095	0.203	1.000
Daniele Meulders	0.554	0.710	0.291
Jamal Rayyis	0.074	-0.006	-0.121
Francis Schott	0.246	0.290	-0.155

	Daniele Meulders	Jamal Rayyis	Francis Schott
Jean-M Cardebat	0.336	-0.601	0.481
Tyler Colman	-0.542	-0.538	-0.414
John Foy	0.168	0.019	0.318
Olivier Gergaud	0.554	0.074	0.246
Robert Hodgson	0.710	-0.006	0.290
Linda Murphy	0.291	-0.121	-0.155
Daniele Meulders	1.000	0.106	0.484
Jamal Rayyis	0.106	1.000	0.224
Francis Schott	0.484	0.224	1.000

Pairwise correlations in descending order

0.710	Robert Hodgson	and Daniele Meulders	Significantly positive
0.554	Olivier Gergaud	and Daniele Meulders	Not significant
0.484	Daniele Meulders	and Francis Schott	Not significant
0.481	Jean-M Cardebat	and Francis Schott	Not significant
0.363	John Foy	and Robert Hodgson	Not significant
0.336	Jean-M Cardebat	and Daniele Meulders	Not significant
0.318	John Foy	and Francis Schott	Not significant
0.291	Linda Murphy	and Daniele Meulders	Not significant
0.290	Robert Hodgson	and Francis Schott	Not significant
0.246	Olivier Gergaud	and Francis Schott	Not significant
0.224	Jamal Rayyis	and Francis Schott	Not significant
0.203	Robert Hodgson	and Linda Murphy	Not significant
0.168	John Foy	and Daniele Meulders	Not significant
0.159	Jean-M Cardebat	and Olivier Gergaud	Not significant
0.120	Jean-M Cardebat	and John Foy	Not significant
0.106	Daniele Meulders	and Jamal Rayyis	Not significant
0.095	Jean-M Cardebat	and Linda Murphy	Not significant
0.095	Olivier Gergaud	and Linda Murphy	Not significant
0.074	Olivier Gergaud	and Jamal Rayyis	Not significant
0.061	Jean-M Cardebat	and Robert Hodgson	Not significant
0.053	Jean-M Cardebat	and Tyler Colman	Not significant
0.019	John Foy	and Jamal Rayyis	Not significant
-0.006	Robert Hodgson	and Jamal Rayyis	Not significant
-0.022	John Foy	and Linda Murphy	Not significant
-0.055	Olivier Gergaud	and Robert Hodgson	Not significant
-0.121	Linda Murphy	and Jamal Rayyis	Not significant
-0.155	Linda Murphy	and Francis Schott	Not significant
-0.189	John Foy	and Olivier Gergaud	Not significant
-0.209	Tyler Colman	and Linda Murphy	Not significant
-0.215	Tyler Colman	and Robert Hodgson	Not significant
-0.279	Tyler Colman	and John Foy	Not significant
-0.394	Tyler Colman	and Olivier Gergaud	Not significant
-0.414	Tyler Colman	and Francis Schott	Not significant
-0.538	Tyler Colman	and Jamal Rayyis	Not significant
-0.542	Tyler Colman	and Daniele Meulders	Not significant
-0.601	Jean-M Cardebat	and Jamal Rayyis	Significantly negative