

Supplementary Figure S1. Tasting sheet used in the study (scaled down from A4 size).

ISA Event, Lisbon, 14 June 2021	
Name: _____ Age: _____ Gender: F <input type="checkbox"/> M <input type="checkbox"/> E-mail: _____	
Profession: _____	
The years of experience: _____	
Type of training in wines: Informal <input type="checkbox"/> University/Polytechnic <input type="checkbox"/> WSET, CMS or equivalent course <input type="checkbox"/> Other: _____	

Code sample: _____	
1 – Please draw a mark on the scale according to your perception	
How familiar are you with this wine? (does it remind you of wines you have already tasted)?	A b C Familiar
Unfamiliar	Familiar
How many flavours can you identify in this wine?	A lot
A few	A lot
How easy is it for you to identify or describe the different flavours of this wine?	Easy
Difficult	Easy
Are the different sensations and flavours harmonious ; do they go well together?	Harmonious
Not harmonious	Harmonious
Are the different sensations and flavours well balanced , without any being overpowering?	Balanced
Unbalanced	Balanced
How long do the different sensations and flavours linger in your mouth?	Long
Short	Long
Are the sensations and flavours of this wine strong and powerful ?	Strong
Weak	Strong
You have just described this wine; you know its characteristics. Now we would like you to score its overall complexity on the scale below:	
Low complexity	High complexity

In: Puri, W. V., Grosse, C., Hildebrand, D., Meisel, M., Masters, O., Araújo, L. D., & Valentin, D. (2020). Perception of quality and complexity in wine and their links to varietal typicality: An investigation involving Pinot noir wine and professional tasters. *Food Research International*, 137, 109423. <https://doi.org/10.1016/j.foodres.2020.109423>

2 - Which terms would you use to describe better the taste and mouthfeel sensation of the wine? Please, check 5 descriptors that apply.	
<input type="checkbox"/> Body <input type="checkbox"/> Length <input type="checkbox"/> Viscosity <input type="checkbox"/> Smoothness <input type="checkbox"/> Acidity <input type="checkbox"/> Dryness <input type="checkbox"/> Other _____	<input type="checkbox"/> Saltiness <input type="checkbox"/> Bitterness <input type="checkbox"/> Sweetness <input type="checkbox"/> Roughness <input type="checkbox"/> Sourness <input type="checkbox"/> Astringency
3 - Which terms would you use to describe better the aroma of the wine? Please, check 5 descriptors that apply.	
<input type="checkbox"/> Beeswax <input type="checkbox"/> Bruised Apple <input type="checkbox"/> Butter <input type="checkbox"/> Caramel <input type="checkbox"/> Chamomile <input type="checkbox"/> Citrus <input type="checkbox"/> Curry <input type="checkbox"/> Dried Fruit <input type="checkbox"/> Earthy <input type="checkbox"/> Other _____	<input type="checkbox"/> Floral <input type="checkbox"/> Fresh Fruit <input type="checkbox"/> Honey <input type="checkbox"/> Oak <input type="checkbox"/> Petroleum/Kerosene <input type="checkbox"/> Spicy <input type="checkbox"/> Straw <input type="checkbox"/> Wet Stone/Flint Stone
Please draw a mark on the liking scale according to your personal preference.	
DISLIKE ----- LIKE EXTREMELY	
Please draw a mark on the scale according to your perception on the overall quality.	
POOR ----- OUTSTANDING	
4 - Predicted age of the wine: _____	

Table S1. Mean scores of colour (Abs 420 nm) and synthetic/aesthetic attributes given by the 3 tasting cohorts.

Wines	Tasting panels	Colour	Familiarity	Number of Flavours	Ease of Identification	Harmonious	Balance	Linger	Strong/powerful	Complexity	Liking	Quality
WPe00	Critics	0.484	7.59	6.17	6.80	6.69	6.18	5.99	6.02	5.93	6.12	6.12
WDa03	Critics	0.286	5.82	5.22	6.12	5.06	4.82	5.15	4.48	4.36	5.04	4.99
WAl11	Critics	0.266	6.19	5.85	6.42	5.31	5.07	4.84	5.01	5.13	5.53	5.29
WMe12	Critics	0.322	6.32	5.33	6.21	6.33	6.35	5.50	5.37	4.44	5.58	5.49
WDa74	Critics	0.201	6.19	7.02	7.14	4.81	4.76	4.89	3.98	5.17	5.18	5.15
WAl10	Critics	0.221	6.55	6.32	7.03	6.62	6.10	5.07	5.81	5.93	6.37	6.20
WMo16	Critics	0.151	5.98	5.31	6.64	6.29	5.64	3.92	3.66	3.66	4.03	3.63
WDo13	Critics	0.197	6.49	5.32	5.71	5.74	5.26	4.44	3.88	4.10	4.31	4.32
WDo20	Critics	0.091	8.12	5.27	7.01	6.43	5.81	3.15	4.29	2.70	3.46	3.39
WPe08	Critics	0.695	6.95	6.22	6.65	6.88	6.66	6.64	5.99	6.32	6.38	6.24
WBe11	Critics	0.111	6.02	3.74	5.50	3.79	3.22	3.52	3.72	2.10	2.98	2.99
WMo12	Critics	0.181	5.35	4.46	5.64	6.02	5.81	5.45	4.81	4.09	5.36	4.91
WAl15	Critics	0.143	5.13	3.58	4.64	4.25	4.30	3.55	3.38	3.07	4.28	4.26
WBa91	Critics	0.782	4.85	5.09	5.47	5.04	5.11	5.65	5.64	4.42	5.99	6.31
WBe03	Critics	0.284	6.16	5.03	4.78	4.10	5.10	6.55	6.26	4.84	5.35	5.68
WMe11	Critics	0.379	5.53	4.73	5.44	3.92	3.47	4.08	3.61	3.23	3.72	4.18
WDa12	Critics	0.172	6.13	3.96	4.90	4.44	4.99	3.21	3.27	3.27	3.97	3.76
WLi18	Critics	0.092	6.22	4.10	5.61	3.49	4.13	3.21	3.65	2.76	3.27	3.38
Ro06	Critics	4.08	4.55	5.64	5.33	3.85	3.59	3.03	2.87	2.91	3.19	4.08
Re74	Critics	5.79	4.25	5.57	4.02	3.41	3.46	4.75	3.06	3.61	3.58	5.79
WPe00	Oenologists	0.484	6.52	5.07	5.23	5.14	5.63	5.70	6.17	6.46	5.92	5.91
Wda03	Oenologists	0.286	6.62	5.39	5.95	4.98	4.95	5.09	5.28	5.85	4.16	4.75
WAl11	Oenologists	0.266	7.05	5.96	6.27	6.18	5.88	6.56	6.21	6.77	6.58	6.50

WMe12	Oenologists	0.322	6.95	6.21	6.29	7.17	7.19	7.35	7.02	7.17	7.68	7.83
WDa74	Oenologists	0.201	6.72	6.04	6.18	6.14	5.76	7.05	5.85	5.95	5.73	6.23
WAl10	Oenologists	0.221	6.68	6.23	5.94	6.04	5.62	6.65	6.23	5.93	5.53	6.01
WMo16	Oenologists	0.151	7.05	5.67	6.52	6.02	5.91	5.13	5.21	5.29	5.49	5.53
WDo13	Oenologists	0.197	6.51	5.09	3.82	6.43	5.92	5.81	5.65	5.89	5.03	5.72
WDo20	Oenologists	0.091	7.89	5.59	7.42	5.82	4.98	4.80	7.38	2.88	3.62	4.59
WPe08	Oenologists	0.695	7.09	7.04	6.99	6.96	6.86	7.29	7.11	7.12	7.66	7.31
WBe11	Oenologists	0.111	7.24	5.50	6.63	5.52	5.46	5.70	6.12	4.75	4.82	5.50
WMo12	Oenologists	0.181	6.03	6.27	6.62	6.51	6.37	7.21	7.01	6.08	6.44	6.20
WAl15	Oenologists	0.143	7.05	5.46	6.41	6.16	6.19	5.42	5.22	5.50	5.58	5.56
WBa91	Oenologists	0.782	6.17	5.82	5.60	5.31	4.99	4.99	5.42	5.01	5.26	5.69
WBe03	Oenologists	0.284	6.39	6.02	6.16	6.43	7.15	6.21	5.79	6.03	6.32	6.79
WMe11	Oenologists	0.379	7.35	7.39	7.05	7.22	7.07	7.02	6.90	6.81	7.52	7.31
WDa12	Oenologists	0.172	7.44	5.54	6.28	7.23	7.05	7.39	6.99	6.12	6.74	7.01
WLi18	Oenologists	0.092	7.75	4.43	5.74	6.66	5.49	4.69	3.83	3.41	4.27	4.54
Ro06	Oenologists	5.94	4.20	4.52	5.30	4.73	3.38	3.84	4.24	3.77	4.07	5.94
Re74	Oenologists	6.76	4.11	5.69	4.00	4.11	5.77	6.09	5.55	3.11	3.08	6.76
WPe00	Students	0.484	2.99	3.99	3.65	5.07	4.89	5.90	5.38	5.71	5.23	5.41
Wda03	Students	0.286	2.91	3.37	3.62	4.73	4.43	4.67	4.52	4.73	4.77	5.05
WAl11	Students	0.266	4.47	3.79	4.02	5.17	5.15	6.05	5.72	5.53	5.08	5.40
WMe12	Students	0.322	4.45	3.90	3.15	5.29	5.53	5.70	5.73	5.26	5.21	5.20
WDa74	Students	0.201	3.71	3.37	4.18	3.90	3.36	4.06	5.48	4.27	3.99	4.20
WAl10	Students	0.221	4.58	5.30	4.11	4.65	4.52	4.60	5.21	5.18	5.03	4.89
WMo16	Students	0.151	5.38	3.66	5.23	5.53	5.49	4.68	4.99	4.76	5.69	5.22
WDo13	Students	0.197	4.23	4.19	4.20	5.33	5.54	5.84	5.38	4.91	5.28	5.78
WDo20	Students	0.091	6.27	5.02	5.41	5.59	4.68	4.61	4.92	3.28	5.14	4.98
WPe08	Students	0.695	3.14	3.07	2.66	4.76	5.20	4.23	5.14	4.88	5.02	5.43
WBe11	Students	0.111	4.77	3.53	4.55	4.87	4.59	4.89	4.88	4.48	4.15	4.49

WMo12	Students	0.181	4.84	4.77	4.59	5.93	5.95	4.38	4.69	4.65	5.60	5.52
WAl15	Students	0.143	4.42	4.84	4.88	5.14	5.60	3.99	4.52	4.56	5.25	5.40
WBa91	Students	0.782	4.36	4.82	4.61	5.99	5.99	5.78	6.07	6.30	5.76	5.62
WBe03	Students	0.284	3.86	3.69	3.73	4.15	4.38	4.81	4.82	4.57	4.51	4.83
WMe11	Students	0.379	4.64	4.75	3.90	5.63	5.49	4.38	4.38	4.82	5.91	5.95
WDa12	Students	0.172	4.80	4.59	5.18	5.07	5.06	4.64	4.53	4.62	5.20	4.96
WLi18	Students	0.092	5.34	4.49	5.47	5.84	6.02	4.60	4.52	4.78	6.09	5.17
Ro06	Students	2.53	2.78	3.85	3.99	3.90	4.30	4.23	4.26	3.94	4.07	2.53
Re74	Students	3.42	3.39	3.84	3.99	4.47	5.29	5.74	6.02	4.69	5.55	3.42

Descriptor	WBa91	WPe08	WMe1 2	WPe00	WDa03	WMe1 1	WAl11	WAl10	WBe03	WMo1 2	WDa74	WBe11	WDa12	WDo13	WAl15	WLi18	Ro06	WMo1 6	WDo20	Re74	Total
Citrus	4	6	13	6	5	11	12	6	9	17	6	19	21	11	17	20	3	17	16	0	219
Dried fruit	15	19	18	15	12	13	12	17	8	9	14	4	6	9	9	3	7	8	0	14	212
Honey	24	22	13	14	14	14	13	14	5	9	16	2	7	12	11	3	11	4	0	1	209
Floral	6	4	10	6	2	10	9	11	13	12	3	12	15	13	10	21	8	15	23	2	205
Fresh fruit	2	0	4	2	0	8	4	4	11	12	0	13	15	10	14	23	8	17	22	0	169
Beeswax	10	16	11	18	11	9	10	9	9	6	8	6	5	5	5	0	8	3	3	3	155
Oak	14	14	9	8	9	8	12	8	8	2	12	6	6	4	5	2	8	1	0	11	147
Chamomile	4	2	7	6	3	9	5	9	9	6	2	6	9	11	9	13	2	9	13	0	134
Bruised apple	11	8	11	10	9	7	2	3	4	6	9	7	2	8	5	3	6	3	3	4	121
Spicy	9	7	6	4	7	6	5	4	7	4	7	5	1	6	5	1	8	1	1	17	111
Petroleum/ Kerosene	7	9	7	13	5	3	7	7	4	5	9	10	2	5	1	2	4	4	0	5	109
Straw	7	3	4	4	8	6	2	6	8	7	7	5	5	8	6	6	6	2	3	5	108
Butter	3	6	9	10	14	6	5	6	4	5	5	3	3	3	2	4	6	4	1	2	101
Caramel	11	7	3	4	12	5	6	4	4	5	10	1	4	2	3	0	9	0	2	2	94
WetFlintStone	1	3	2	2	4	4	8	6	7	4	2	9	7	3	7	4	0	5	2	8	88
Earthy	3	2	1	1	4	1	6	5	3	4	0	4	4	1	1	0	3	4	2	14	63
Curry	1	3	0	1	5	2	2	1	2	0	3	0	0	1	1	0	4	1	0	3	30
Total	132	131	128	124	124	122	120	120	115	113	113	112	112	112	111	105	101	98	91	91	2275

Table S2. Contingency table of aroma analytical descriptors (those retained for Correspondence analysis are written in bold).

Table S3. Contingency table of analytical taste and synthetic mouthfeel descriptors (those retained for Correspondence analysis are written in bold).

Descriptor	WMe1		WMe1		WMe1		WMe1		WMe1		WMe1		WMe1		WMe1		WMe1		WMe1		Total
	WPe08	WBe91	1	WAl11	WBe03	2	WPe00	WDa12	Re74	6	2	WBe11	WAl10	WDo13	WDa03	WAl15	WLi18	Ro06	WDa74	WDo20	
Acidity	29	26	22	25	26	21	23	24	24	23	23	30	18	23	16	25	26	18	24	27	473
Dryness	18	17	11	11	11	14	12	14	17	14	10	19	15	17	19	13	16	15	18	11	292
Length	18	12	17	13	15	17	14	18	12	14	13	11	12	11	9	9	8	9	10	10	252
Body	17	14	17	17	16	16	18	16	9	8	15	6	13	12	10	8	6	9	7	7	241
Smoothness	10	9	15	12	9	10	9	10	8	13	18	7	11	9	14	11	15	15	4	15	224
Bitterness	12	12	8	15	12	10	13	11	14	8	9	10	9	9	12	12	12	11	12	6	217
Saltiness	10	11	8	13	10	14	11	11	7	8	11	9	14	14	11	15	12	6	11	8	214
Viscosity	17	12	17	11	11	13	13	10	10	13	11	6	14	7	11	8	6	8	8	2	208
Sweetness	0	3	14	4	8	4	2	10	0	10	11	3	5	4	6	7	8	10	2	16	127
Sourness	6	6	2	4	6	5	4	3	8	5	2	10	6	10	6	6	5	3	7	5	109
Astringency	4	8	1	3	5	5	4	1	11	7	2	9	4	2	5	5	4	7	7	3	97
Roughness	0	4	1	4	2	2	6	0	7	4	1	5	3	5	3	2	0	6	6	5	66
Total	141	134	133	132	131	131	129	128	127	127	126	125	124	123	122	121	118	117	116	115	2520

Table S4. Eigenvalues and variance of the PCA elicited by the factors affecting quality evaluation.

Component	Eigenvalue	% of Variance	Cumulative %
1	4.22608	52.6979	52.7
2	1.28404	16.0115	68.7
3	1.06232	13.2468	82.0
4	0.47031	5.8646	87.8
5	0.27685	3.4523	91.3
6	0.19755	2.4633	93.7
7	0.11978	1.4937	95.2
8	0.10584	1.3198	96.5
9	0.06521	0.8132	97.4
10	0.06179	0.7705	98.1
11	0.04532	0.5651	98.7
12	0.03717	0.4634	99.2
13	0.03274	0.4082	99.6
14	0.01483	0.1849	99.8
15	0.01073	0.1338	99.9
16	0.00626	0.0780	100.0
17	0.00262	0.0327	100.0