

Supplemental Material

TABLE S1. Solvent elution systems and their recommended column pressures* for flash column chromatography.

Solvent elution system	Column pressure (kPa)
50 % Methanol	45-50
60 % Methanol	45-50
75 % Methanol	40-45
90 % Methanol	35-40
80:10 % Methanol-Acetone	35-40
65:20 % Methanol-Acetone	35-40
40:30 % Methanol-Acetone	30-35
70 % Acetone	30

* At these column pressures for a given solvent system, a constant flow rate between 3.5 – 4 mL/min can be used.

TABLE S2. Summarized chemical measurements* obtained, excluding phloroglucinolysis.

Code ^a	Activity ^b	RPLCt ^c	MCPt ^d
03F1	-127	5009	2033 ± 0.11
03F2	-71	4954	2016 ± 0.2
03F3	-396	3889	4033 ± 0.06
03F4	-389	4579	4746 ± 0.12
04F1	624	4519	2070 ± 0.3
04F2	-75	4291	1667 ± 0.15
04F3	-351	4143	1910 ± 0.22
04F4	-538	4352	4135 ± 0.32
05F1	-52	4877	3850 ± 0.43
05F2	-432	4338	4086 ± 0.26
05F3	-556	3512	3785 ± 0.32
05F4	-520	4099	4325 ± 0.17
06F1	-23	4494	4417 ± 0.33
06F2	-92	4246	4369 ± 0.13
06F3	-2434	3324	3737 ± 0.23
06F4	-570	3731	4265 ± 0.23
07F1	-165	4478	4040 ± 0.42
07F2	-363	4093	4167 ± 0.08
07F3	-556	2929	2419 ± 0.14
07F4	-874	4180	3012 ± 0.3
08F1	-14	4242	3890 ± 0.11
08F2	-344	4112	3798 ± 0.4
08F3	-456	3371	2983 ± 0.4
08F4	-487	4853	4246 ± 0.04
09F1	215	4810	5228 ± 0.32
09F2	-463	4598	5596 ± 0.14
09F3	-497	3810	4736 ± 0.26

SUPPLEMENTARY DATA

du Preez, B., du Toit, W., de Villiers, A., & Alexandre-Tudo, J.L. (2022). The effect of wine age and tannin composition on tannin activity across consecutive Pinotage red wine vintages. *OENO One*, 56(3).
<https://doi.org/10.20870/oeno-one.2022.56.3.5392>

Code ^a	Activity ^b	RPLCt ^c	MCPt ^d
09F4	-569	4486	5209 ± 0.09
10F1	-153	3972	4488 ± 0.2
10F2	-392	4068	5355 ± 0.29
10F3	-701	2873	1693 ± 0.1
10F4	-404	3755	3685 ± 0.27
11F1	-98	4616	4759 ± 0.29
11F2	-411	4417	5497 ± 0.14
11F3	-1273	3571	3778 ± 0.15
11F4	-843	4670	4792 ± 0.38
12F1	394	2871	986 ± 0.1
12F2	-405	3875	4674 ± 0.33
12F3	-1924	2362	1932 ± 0.04
12F4	-1049	3348	2202 ± 0.17
13F1	-154	4108	4567 ± 0.25
13F2	-494	4597	5232 ± 0.29
13F3	-1097	2543	3291 ± 0.12
13F4	-895	3942	4893 ± 0.32
14F1	-787	4013	4210 ± 0.09
14F2	-481	4341	4899 ± 0.45
14F3	-997	3097	3182 ± 0.23
14F4	-975	4077	3837 ± 0.12
15F1	157	4078	4373 ± 0.07
15F2	-257	4274	5412 ± 0.07
15F3	-1010	4136	6163 ± 0.5
15F4	-767	4373	4880 ± 0.09
16F1	148	4399	4326 ± 0.19
16F2	-268	4644	4977 ± 0.55
16F3	-814	2555	2396 ± 0.27
16F4	-150	3757	4226 ± 0.04

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Code ^a	Activity ^b	RPLC ^c	MCP ^t ^d
17F1	141	3960	3882 ± 0.31
17F2	-364	3923	4653 ± 0.3
17F3	-1052	2755	3362 ± 0.24
17F4	88	3401	4255 ± 0.23
18F1	338	3944	3686 ± 0.2
18F2	-469	4051	5447 ± 0.19
18F3	-933	1435	2259 ± 0.12
18F4	-396	3216	3489 ± 0.22

^a Wine codes used to label each of the 64 samples (16 wine samples within four weight classes or fractions), namely F1, F2, F3 and F4; ^{b-d} HPLC-based measurements obtained for tannin activity: ^b tannin activity values (in ΔH , in J/mol) and ^c tannin concentrations (in mg/L epicatechin equivalents) obtained from PLRP column; ^d tannin concentration by MCP (in mg/L epicatechin equivalents), performed in triplicate.

TABLE S3. Summarized chemical data obtained from phloroglucinolysis, based on subunit composition.

Code ^a	C ^b	EC ^c	ECG ^d	C-P ^e	EC-P ^f	ECG-P ^g	ΣTer ^h	ΣExt ⁱ	ΣTotal ^j
03F1	0.1178 ± 0.00621	0.0683 ± 0.00092	0.0137 ± 0.00202	0.0388 ± 0.00029	0.1989 ± 0.033	-	0.1998 ± 0.0091	0.2377 ± 0.0332	0.4375 ± 0.0424
03F2	0.0878 ± 0.00107	0.0563 ± 0.00149	0.0132 ± 0.00224	0.0428 ± 0.0008	0.3298 ± 0.0169	0.0132 ± 0.0002	0.1573 ± 0.0048	0.3858 ± 0.0163	0.5431 ± 0.0115
03F3	0.082 ± 0.00106	0.0519 ± 0.00093	0.0118 ± 0.00024	0.04 ± 0.00043	0.2993 ± 0.002	0.0147 ± 0.0005	0.1458 ± 0.0017	0.354 ± 0.002	0.4997 ± 0.0038
03F4	0.0997 ± 0.00072	0.0587 ± 0.00044	0.0129 ± 0.0007	0.0413 ± 0.00068	0.2819 ± 0.011	0.0141 ± 0.0004	0.1713 ± 0.0019	0.3372 ± 0.0121	0.5085 ± 0.014
04F1	0.0812 ± 0.00008	0.0547 ± 0.00019	0.0133 ± 0.00092	0.037 ± 0.00021	0.1626 ± 0.0008	-	0.1492 ± 0.001	0.1996 ± 0.0006	0.3488 ± 0.0005
04F2	0.0849 ± 0.00072	0.0521 ± 0.00028	0.0159 ± 0.00041	0.0416 ± 0.00055	0.2936 ± 0.0315	0.0137 ± 0.0009	0.1529 ± 0.0008	0.3489 ± 0.0329	0.5018 ± 0.0338
04F3	0.0698 ± 0.00204	0.0465 ± 0.00092	0.0117 ± 0.00028	0.0396 ± 0.00034	0.2739 ± 0.0154	0.0144 ± 0.0007	0.128 ± 0.0027	0.3279 ± 0.0164	0.4559 ± 0.0191
04F4	0.0773 ± 0.00188	0.0493 ± 0.00006	0.0129 ± 0.00015	0.0425 ± 0.00327	0.271 ± 0.0205	0.0135 ± 0.0005	0.1395 ± 0.0021	0.3269 ± 0.0167	0.4664 ± 0.0188
05F1	0.0976 ± 0.00096	0.0665 ± 0.00066	0.014 ± 0.00003	0.0373 ± 0.00035	0.2139 ± 0.0029	-	0.1781 ± 0.0016	0.2512 ± 0.0032	0.4293 ± 0.0048
05F2	0.0981 ± 0.0009	0.0635 ± 0.00044	0.014 ± 0.00291	0.0462 ± 0.00049	0.4187 ± 0.0199	0.0142 ± 0.001	0.1756 ± 0.0016	0.4791 ± 0.0184	0.6546 ± 0.02
05F3	0.083 ± 0.00015	0.0575 ± 0.00016	0.0124 ± 0.00043	0.0411 ± 0.00053	0.3205 ± 0.0008	0.0136 ± 0.0004	0.1529 ± 0.0004	0.3752 ± 0.0001	0.5281 ± 0.0003
05F4	0.0901 ± 0.00199	0.0602 ± 0.0008	0.0128 ± 0.00005	0.0449 ± 0.00026	0.2784 ± 0.0047	0.0131 ± 0.0001	0.1631 ± 0.0027	0.3364 ± 0.0048	0.4995 ± 0.0075
06F1	0.0875 ± 0.00027	0.0575 ± 0.00004	0.0127 ± 0.00008	0.0385 ± 0.0016	0.2018 ± 0.0083	-	0.1577 ± 0.0004	0.2403 ± 0.0067	0.398 ± 0.0064
06F2	0.0846 ± 0.00093	0.0545 ± 0.00088	0.017 ± 0.00088	0.042 ± 0.00183	0.38 ± 0.0023	0.0137 ± 0.0005	0.1561 ± 0.0009	0.4357 ± 0.0046	0.5917 ± 0.0055
06F3	0.0791 ± 0.00064	0.0507 ± 0.00031	0.0118 ± 0.00036	0.0409 ± 0.00223	0.3299 ± 0.0086	0.0142 ± 0.0003	0.1416 ± 0.0013	0.385 ± 0.0112	0.5266 ± 0.0125
06F4	0.0834 ± 0.00246	0.0528 ± 0.00146	0.0119 ± 0.00032	0.0395 ± 0.00078	0.2832 ± 0.0084	0.0134 ± 0.0001	0.1481 ± 0.0036	0.3361 ± 0.0077	0.4842 ± 0.0113
07F1	0.0923 ± 0.00006	0.0615 ± 0	0.0144 ± 0.00008	0.0361 ± 0.00046	0.1609 ± 0.0064	-	0.1682 ± 0.0001	0.197 ± 0.0069	0.3652 ± 0.007
07F2	0.0828 ± 0.00059	0.0543 ± 0.00151	0.0132 ± 0.00007	0.0383 ± 0.00042	0.2217 ± 0.0233	0.0132 ± 0.0003	0.1503 ± 0.002	0.2732 ± 0.0235	0.4235 ± 0.0255
07F3	0.063 ± 0.0012	0.0482 ± 0.00047	0.0114 ± 0.00002	0.0368 ± 0.00149	0.1712 ± 0.0096	0.0125 ± 0.0005	0.1226 ± 0.0017	0.2206 ± 0.0116	0.3432 ± 0.0132
07F4	0.0762 ± 0.00096	0.0538 ± 0.00067	0.0117 ± 0.00019	0.0366 ± 0.00036	0.1735 ± 0.0008	0.0124 ± 0.0002	0.1417 ± 0.0014	0.2225 ± 0.001	0.3642 ± 0.0024
08F1	0.1167 ± 0.00076	0.0676 ± 0.0001	0.0142 ± 0.00014	0.0369 ± 0.00048	0.2189 ± 0.0308	-	0.1985 ± 0.001	0.2558 ± 0.0312	0.4543 ± 0.0322
08F2	0.082 ± 0.00034	0.0556 ± 0.00023	0.013 ± 0.00078	0.041 ± 0.00084	0.3423 ± 0.0036	0.013 ± 0.0003	0.1506 ± 0.0002	0.3964 ± 0.0025	0.547 ± 0.0027
08F3	0.071 ± 0.00024	0.0496 ± 0.00004	0.0114 ± 0.00003	0.0379 ± 0.00023	0.2717 ± 0.0299	0.0131 ± 0	0.132 ± 0.0002	0.3227 ± 0.0297	0.4546 ± 0.0295
08F4	0.0862 ± 0.00683	0.0547 ± 0.00044	0.012 ± 0.00031	0.0379 ± 0.00077	0.2537 ± 0.0262	0.0126 ± 0.0005	0.1528 ± 0.0076	0.3042 ± 0.0275	0.457 ± 0.0351
09F1	0.1628 ± 0.00047	0.0905 ± 0.0005	0.0137 ± 0.00031	0.0397 ± 0.00004	0.313 ± 0.0029	0.0144 ± 0.0005	0.267 ± 0.0013	0.367 ± 0.0023	0.634 ± 0.0036
09F2	0.0996 ± 0.00048	0.0651 ± 0.00024	0.0133 ± 0	0.0464 ± 0.00009	0.4847 ± 0	0.0176 ± 0.0004	0.178 ± 0.0007	0.5487 ± 0.0003	0.7267 ± 0.0004

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Code ^a	C ^b	EC ^c	ECG ^d	C-P ^e	EC-P ^f	ECG-P ^g	ΣTer ^h	ΣExt ⁱ	ΣTotal ^j
09F3	0.0817 ± 0.00047	0.0551 ± 0.00018	0.0121 ± 0.00027	0.0424 ± 0.00037	0.408 ± 0.0244	0.0184 ± 0.0003	0.1489 ± 0.0004	0.4688 ± 0.0245	0.6177 ± 0.0241
09F4	0.1112 ± 0.00464	0.0677 ± 0.00191	0.0166 ± 0.00667	0.0453 ± 0.00444	0.3719 ± 0.0144	0.0169 ± 0.0005	0.1956 ± 0.0132	0.4341 ± 0.0105	0.6297 ± 0.0237
10F1	0.1215 ± 0.00141	0.0774 ± 0.00064	0.0129 ± 0.00015	0.0396 ± 0.00076	0.2507 ± 0.0074	-	0.2118 ± 0.0019	0.2903 ± 0.0066	0.5021 ± 0.0047
10F2	0.0887 ± 0.00078	0.0632 ± 0.00049	0.0139 ± 0.00088	0.0451 ± 0.00017	0.4386 ± 0.0091	0.0139 ± 0.0001	0.1658 ± 0.0004	0.4976 ± 0.0088	0.6634 ± 0.0084
10F3	0.0756 ± 0.00579	0.0536 ± 0.0015	0.0122 ± 0.00022	0.0414 ± 0.00018	0.3551 ± 0.0177	0.0161 ± 0.0005	0.1414 ± 0.0071	0.4125 ± 0.0183	0.5539 ± 0.0254
10F4	0.0972 ± 0.00323	0.063 ± 0.00253	0.012 ± 0.00038	0.0421 ± 0.00052	0.3363 ± 0.0083	0.014 ± 0.0003	0.1722 ± 0.0061	0.3923 ± 0.0091	0.5645 ± 0.0153
11F1	0.1088 ± 0.00041	0.0695 ± 0.00012	0.0134 ± 0.00034	0.0373 ± 0.00002	0.175 ± 0.0078	-	0.1917 ± 0.0002	0.2123 ± 0.0078	0.404 ± 0.0076
11F2	0.1061 ± 0.00024	0.0641 ± 0.00003	0.0135 ± 0.00048	0.0447 ± 0.00168	0.3833 ± 0.0165	0.0143 ± 0.0002	0.1837 ± 0.0002	0.4423 ± 0.0146	0.626 ± 0.0148
11F3	0.0849 ± 0.00019	0.0557 ± 0.0002	0.0119 ± 0.00012	0.0416 ± 0.00089	0.3571 ± 0.0024	0.0181 ± 0.0001	0.1524 ± 0.0003	0.4169 ± 0.0015	0.5693 ± 0.0017
11F4	0.1012 ± 0.00006	0.0616 ± 0.00325	0.0164 ± 0.00563	0.0434 ± 0.00258	0.3194 ± 0.007	0.0155 ± 0.0005	0.1791 ± 0.0089	0.3784 ± 0.0049	0.5574 ± 0.0139
12F1	0.0692 ± 0.00033	0.0541 ± 0.00012	0.0128 ± 0.00016	0.0337 ± 0.00025	0.1101 ± 0.0028	-	0.1361 ± 0.0003	0.1437 ± 0.0026	0.2798 ± 0.0028
12F2	0.0835 ± 0.00005	0.0592 ± 0.00022	0.0123 ± 0.00007	0.042 ± 0.00252	0.3253 ± 0.0263	0.0179 ± 0.0003	0.1549 ± 0.0001	0.3851 ± 0.0286	0.54 ± 0.0285
12F3	0.0635 ± 0.00085	0.0492 ± 0.00004	0.0117 ± 0.00005	0.0377 ± 0.0008	0.2261 ± 0.0047	0.0178 ± 0.0003	0.1244 ± 0.0009	0.2816 ± 0.0058	0.406 ± 0.0067
12F4	0.0679 ± 0.00302	0.0504 ± 0.00089	0.0117 ± 0.00012	0.0369 ± 0.00087	0.2248 ± 0.0256	0.0162 ± 0.0009	0.1301 ± 0.0023	0.2779 ± 0.0274	0.408 ± 0.0296
13F1	0.1059 ± 0.00294	0.0744 ± 0.00077	0.0166 ± 0.00382	0.0369 ± 0.00024	0.2247 ± 0.0259	-	0.1969 ± 0.0075	0.2616 ± 0.0261	0.4585 ± 0.0186
13F2	0.1081 ± 0.00022	0.0705 ± 0.00166	0.0127 ± 0.00006	0.0445 ± 0.00025	0.5164 ± 0.0012	0.0181 ± 0.0001	0.1913 ± 0.0019	0.579 ± 0.0015	0.7704 ± 0.0004
13F3	0.0817 ± 0.00006	0.053 ± 0.0003	0.0123 ± 0.00004	0.0411 ± 0.00039	0.4167 ± 0.0273	0.0222 ± 0.0008	0.147 ± 0.0003	0.48 ± 0.0284	0.627 ± 0.0281
13F4	0.0948 ± 0.00308	0.0652 ± 0.00074	0.0115 ± 0.0002	0.0415 ± 0.00172	0.3489 ± 0.0043	0.0179 ± 0.0001	0.1715 ± 0.0036	0.4083 ± 0.0027	0.5798 ± 0.0063
14F1	0.1109 ± 0.00094	0.0686 ± 0.00039	0.0122 ± 0.00008	0.0377 ± 0.00006	0.2482 ± 0.0022	-	0.1917 ± 0.0014	0.286 ± 0.0022	0.4777 ± 0.0008
14F2	0.1075 ± 0.00009	0.0712 ± 0.00008	0.0129 ± 0.00024	0.0466 ± 0.00013	0.496 ± 0.0003	0.0183 ± 0	0.1917 ± 0.0001	0.561 ± 0.0002	0.7527 ± 0.0002
14F3	0.091 ± 0.00002	0.0552 ± 0.00005	0.0125 ± 0.00011	0.044 ± 0.00071	0.5124 ± 0.0331	0.0214 ± 0.0001	0.1586 ± 0.0001	0.5778 ± 0.0325	0.7364 ± 0.0325
14F4	0.1001 ± 0.00381	0.0659 ± 0.00212	0.0121 ± 0.00013	0.0423 ± 0.0011	0.3985 ± 0.0191	0.0185 ± 0.0007	0.1781 ± 0.0058	0.4593 ± 0.0209	0.6374 ± 0.0267
15F1	0.1091 ± 0.00045	0.0691 ± 0.0028	0.0132 ± 0.00006	0.0396 ± 0.00053	0.2747 ± 0.0033	-	0.1913 ± 0.0032	0.3143 ± 0.0039	0.5056 ± 0.0007
15F2	0.1445 ± 0.00062	0.0787 ± 0.00015	0.0135 ± 0.00031	0.0462 ± 0.00052	0.541 ± 0.0037	0.0161 ± 0.0001	0.2366 ± 0.0005	0.6032 ± 0.0043	0.8399 ± 0.0039
15F3	0.0962 ± 0.00009	0.0592 ± 0.00016	0.0115 ± 0.00004	0.0478 ± 0.00019	0.6551 ± 0.0559	0.0242 ± 0.0007	0.1669 ± 0.0002	0.7271 ± 0.0568	0.894 ± 0.057
15F4	0.1197 ± 0.00034	0.0721 ± 0.0021	0.0119 ± 0.0002	0.0437 ± 0.00069	0.4834 ± 0.0168	0.0187 ± 0.0001	0.2036 ± 0.0026	0.5459 ± 0.0176	0.7495 ± 0.015
16F1	0.0723 ± 0.00037	0.0784 ± 0.00012	0.0122 ± 0.00011	0.0395 ± 0.00237	0.1989 ± 0.0022	0.0128 ± 0.0003	0.1629 ± 0.0006	0.2512 ± 0.0002	0.4141 ± 0.0004
16F2	0.1348 ± 0.01209	0.0765 ± 0.00485	0.0133 ± 0.00008	0.0429 ± 0.00098	0.4627 ± 0.0649	0.0198 ± 0.0016	0.2246 ± 0.0169	0.5254 ± 0.0675	0.7501 ± 0.0843
16F3	0.0725 ± 0.00037	0.0543 ± 0.00695	0.0114 ± 0.00008	0.0422 ± 0.00086	0.3539 ± 0.0069	0.0247 ± 0.0001	0.1382 ± 0.0072	0.4208 ± 0.0078	0.559 ± 0.0151

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Code ^a	C ^b	EC ^c	ECG ^d	C-P ^e	EC-P ^f	ECG-P ^g	ΣTer ^h	ΣExt ⁱ	ΣTotal ^j
16F4	0.1044 ± 0.02202	0.0701 ± 0.00483	0.0119 ± 0.00021	0.0414 ± 0.00252	0.3877 ± 0.1186	0.0191 ± 0.0006	0.1864 ± 0.0271	0.4481 ± 0.1206	0.6345 ± 0.1476
17F1	0.1245 ± 0.00057	0.0876 ± 0.00042	0.0125 ± 0.00015	0.0419 ± 0.0005	0.2914 ± 0.0321	0.0153 ± 0.0003	0.2246 ± 0.0008	0.3486 ± 0.0319	0.5733 ± 0.0328
17F2	0.1154 ± 0.00005	0.0753 ± 0.00155	0.0127 ± 0.00007	0.0449 ± 0.00023	0.5687 ± 0.0304	0.0259 ± 0.0018	0.2034 ± 0.0015	0.6395 ± 0.0324	0.8428 ± 0.0309
17F3	0.0877 ± 0.00097	0.0624 ± 0.00342	0.012 ± 0.00033	0.0474 ± 0.00006	0.6138 ± 0.0442	0.0369 ± 0.0001	0.1621 ± 0.0021	0.6981 ± 0.0444	0.8601 ± 0.0422
17F4	0.0972 ± 0.00392	0.0697 ± 0.00035	0.0117 ± 0.00004	0.0419 ± 0.0018	0.3869 ± 0.0634	0.023 ± 0.0027	0.1786 ± 0.0035	0.4518 ± 0.0679	0.6304 ± 0.0714
18F1	0.1802 ± 0.0092	0.1058 ± 0.00294	0.012 ± 0.00027	0.0425 ± 0.00104	0.3955 ± 0.0255	0.0182 ± 0.001	0.298 ± 0.0119	0.4562 ± 0.0275	0.7542 ± 0.0394
18F2	0.1117 ± 0.00036	0.0791 ± 0.00039	0.0123 ± 0.00047	0.0511 ± 0.00029	0.7368 ± 0.0086	0.0384 ± 0.002	0.203 ± 0.0003	0.8262 ± 0.0069	1.0292 ± 0.0072
18F3	0.065 ± 0.00013	0.0478 ± 0.00133	0.0113 ± 0.00003	0.0438 ± 0.00035	0.4544 ± 0.002	0.0329 ± 0.0001	0.124 ± 0.0015	0.5311 ± 0.0023	0.6551 ± 0.0038
18F4	0.1066 ± 0.0007	0.0675 ± 0.00461	0.0119 ± 0.00014	0.045 ± 0.00254	0.4439 ± 0.0147	0.0278 ± 0.0017	0.1859 ± 0.0038	0.5168 ± 0.019	0.7027 ± 0.0152

* ^a Wine codes used to label each of the 64 samples (16 wine samples within four weight classes or fractions), namely F1, F2, F3 and F4. ^{b-j} measurements based on HPLC-phloroglucinol subunit composition (in nmol): terminal subunit levels of ^b catechin, ^c epicatechin and ^d epicatechin gallate; extension subunit levels of ^e catechin-phloroglucinol, ^f epicatechin-phloroglucinol and ^g epicatechin gallate-phloroglucinol; number of ^h terminal, ⁱ extension and ^j total subunits. All measurements were duplicated and reported as their means ± standard deviation.

TABLE S4. Summarized chemical data obtained from phloroglucinolysis, based on tannin structure.

Wine code ^a	[RPLC-PGLU] ^b	mDP ^c	MC % ^d	% Galloyl ^e	Av. MM ^f
03F1	391	2.19 ± 0.112	7.81	3.13 ± 0.159	641 ± 33.3
04F1	260	3.46 ± 0.1786	5.20	4.86 ± 0.476	1022 ± 50.3
05F1	359	3.43 ± 0.0152	7.18	5.32 ± 0.18	1016 ± 5.4
06F1	321	2.97 ± 0.0493	6.42	5.31 ± 0.077	880 ± 14.9
07F1	281	2.34 ± 0.013	5.62	3.82 ± 0.259	688 ± 2.9
08F1	373	3.28 ± 0.2028	7.45	5.9 ± 0.138	976 ± 59.5
09F1	590	3.56 ± 0.0744	11.81	5.74 ± 0.155	1057 ± 21.3
10F1	458	3.34 ± 0.0849	9.17	5.66 ± 0.308	992 ± 23.6
11F1	335	2.41 ± 0.0055	6.71	3.25 ± 0.044	707 ± 1.5
12F1	112	3.73 ± 0.0804	2.23	4.3 ± 0.161	1099 ± 24.6
13F1	269	3.45 ± 0.0074	5.37	4.92 ± 0.003	1022 ± 2.2
14F1	420	3.06 ± 0.0051	8.40	5.2 ± 0.117	907 ± 2.1
15F1	458	2.52 ± 0.0465	9.15	3.19 ± 0.07	740 ± 13.3
16F1	316	3.79 ± 0.0126	6.32	5.18 ± 0.117	1123 ± 3.1
17F1	496	3.72 ± 0.0537	9.92	4.94 ± 0.012	1100 ± 15.9
18F1	670	3.27 ± 0.0032	13.39	5.24 ± 0.168	968 ± 1.8
03F2	465	2.17 ± 0.0398	9.30	3.94 ± 0.055	639 ± 11.5
04F2	416	2.82 ± 0.1316	8.33	6.24 ± 0.452	839 ± 37.2
05F2	578	2.8 ± 0.0702	11.55	6.97 ± 0.128	837 ± 20.4
06F2	491	2.57 ± 0.0089	9.82	6.62 ± 0.152	767 ± 3.2
07F2	214	2.29 ± 0.1508	4.27	3.13 ± 0.192	671 ± 43.5
08F2	301	3.63 ± 0.0126	6.01	4.77 ± 0.06	1073 ± 4.1
09F2	650	3.45 ± 0.2282	12.99	5.39 ± 0.345	1022 ± 65.8
10F2	567	2.99 ± 0.0816	11.34	5.39 ± 0.234	886 ± 23.1
11F2	539	2.37 ± 0.0022	10.78	4.43 ± 0.056	701 ± 0.4
12F2	456	4.08 ± 0.0144	9.13	4.26 ± 0.063	1203 ± 4.6

SUPPLEMENTARY DATA

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<https://doi.org/10.20870/oenone.2022.56.3.5392>

Wine code ^a	[RPLC-PGLU] ^b	mDP ^c	MC % ^d	% Galloyl ^e	Av. MM ^f
13F2	685	4.15 ± 0.1728	13.69	4.95 ± 0.191	1227 ± 49.9
14F2	661	3.22 ± 0.0968	13.23	5.31 ± 0.933	955 ± 24.1
15F2	763	2.37 ± 0.0435	15.27	2.58 ± 0.006	693 ± 12.7
16F2	666	4 ± 0.0599	13.32	4.19 ± 0.059	1179 ± 18
17F2	746	3.92 ± 0.0164	14.91	5.11 ± 0.19	1160 ± 6
18F2	945	3.28 ± 0.0281	18.91	4.61 ± 0.003	968 ± 8.3
03F3	447	2.11 ± 0.0418	8.94	3.31 ± 0.022	619 ± 12.3
04F3	379	3.41 ± 0.0769	7.58	4.44 ± 0.055	1006 ± 22.4
05F3	314	3.73 ± 0.0047	6.27	5.27 ± 0.055	1106 ± 1.1
06F3	487	3.11 ± 0.078	9.73	5.71 ± 0.962	925 ± 18.6
07F3	262	2.06 ± 0.0165	5.24	4.57 ± 0.105	607 ± 4.5
08F3	356	3.49 ± 0.186	7.11	5.6 ± 0.333	1035 ± 53.4
09F3	530	3.26 ± 0.0312	10.59	7.25 ± 0.027	977 ± 9.2
10F3	481	3.13 ± 0.1735	9.61	6.87 ± 0.253	936 ± 50.6
11F3	503	2.33 ± 0.1836	10.06	3.64 ± 0.981	685 ± 50.4
12F3	345	4.03 ± 0.0388	6.89	4 ± 0.008	1185 ± 11.5
13F3	534	4.27 ± 0.2004	10.68	5.5 ± 0.119	1265 ± 58.6
14F3	663	3.38 ± 0.0344	13.26	5.08 ± 0.074	1001 ± 10.6
15F3	872	2.49 ± 0.0224	17.43	2.56 ± 0.021	728 ± 6.5
16F3	503	3.93 ± 0.0001	10.06	4.15 ± 0.031	1157 ± 0.2
17F3	792	4.64 ± 0.2029	15.83	4.61 ± 0.177	1371 ± 58.6
18F3	589	3.58 ± 0.0333	11.78	4.8 ± 0.118	1058 ± 9.2
03F4	464	2.64 ± 0.0476	9.28	2.6 ± 0.008	773 ± 13.9
04F4	363	3.55 ± 0.0233	7.26	3.52 ± 0.034	1042 ± 7
05F4	464	5.36 ± 0.3346	9.29	4 ± 0.179	1576 ± 96.9
06F4	438	3.68 ± 0.1215	8.76	4.09 ± 0.091	1084 ± 35.2
07F4	274	2.54 ± 0.0067	5.47	6.05 ± 0.055	756 ± 2.2
08F4	404	3.33 ± 0.1252	8.07	4.44 ± 0.295	984 ± 35.4
09F4	346	4.05 ± 0.103	6.91	6.47 ± 0.175	1206 ± 31.7

SUPPLEMENTARY DATA

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Wine code ^a	[RPLC-PGLU] ^b	mDP ^c	MC % ^d	% Galloyl ^e	Av. MM ^f
10F4	520	3.38 ± 0.3009	10.39	5.02 ± 1.227	1001 ± 82.7
11F4	505	2.55 ± 0.1364	10.10	4.86 ± 0.246	755 ± 39.3
12F4	346	4.14 ± 0.1832	6.92	4.58 ± 0.052	1224 ± 54.4
13F4	531	5.31 ± 0.3302	10.62	5.68 ± 0.227	1576 ± 96.1
14F4	604	3.53 ± 0.3303	12.08	5.52 ± 0.203	1046 ± 96.8
15F4	725	2.53 ± 0.0313	14.49	4.02 ± 0.112	745 ± 8.8
16F4	520	5.07 ± 0.0283	10.41	4.92 ± 0.277	1499 ± 6.2
17F4	665	5.28 ± 0.0329	13.31	6.74 ± 0.042	1576 ± 10.1
18F4	709	3.78 ± 0.1583	14.19	5.64 ± 0.147	1122 ± 47.8

^a Wine codes used to label each of the 64 samples (16 wine samples within four weight classes or fractions), namely F1, F2, F3 and F4. ^{b-e} measurements based on HPLC-phloroglucinol structural information: ^b theoretical tannin concentration of samples as determined by HPLC-phloroglucinolysis, in mg/L epicatechin equivalents (based on subunits C, EC, C-P and EC-P); ^c mean degree of polymerization; ^d theoretical mass conversion % (based on subunits C, EC, C-P and EC-P); ^e galloylation %, and ^f average molecular mass of tannin isolate (in g/mol). All measurements were duplicated and reported as their means ± standard deviation, where applicable.

TABLE S5. Correlation coefficients of various sets of tannin estimation methods (A – C)* used during the present study, at each fraction (F1 – F4), across all vintages (2003 –2018), aged (2003 – 2010) and younger vintages (2011 – 2018).

A				
	F1	F2	F3	F4
All vintages	0.35	-0.23	0.58	0.56
Aged	-0.31	-0.37	0.38	0.40
Young	0.95	0.41	0.85	0.68
B				
	F1	F2	F3	F4
All vintages	0.23	0.05	0.00	-0.33
Aged	0.09	0.38	0.22	-0.34
Young	0.37	-0.06	0.48	0.04
C				
	F1	F2	F3	F4
All vintages	0.48	0.55	0.53	0.25
Aged	0.57	0.38	0.36	0.22
Young	0.45	0.38	0.75	0.48

* A comparison of the correlation coefficients between tannin concentrations, as determined by the following method combinations: ^A HPLC-PLRPs and MCP; ^B HPLC-PLRPs and HPLC-phloroglucinolysis; ^C MCP and HPLC-phloroglucinolysis.

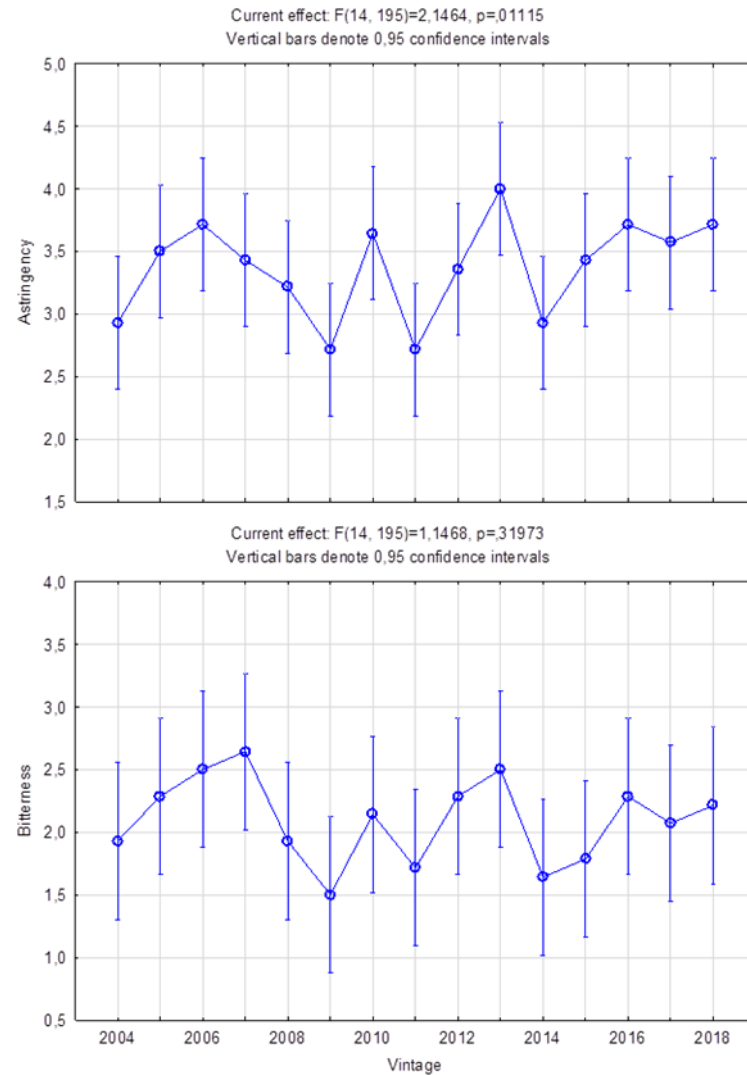


FIGURE S1. Mean astringency and bitterness intensity rating scores obtained from 16 panellists, for each of the 15 sensorially evaluated wines, from vintage year 2004 - 2018.