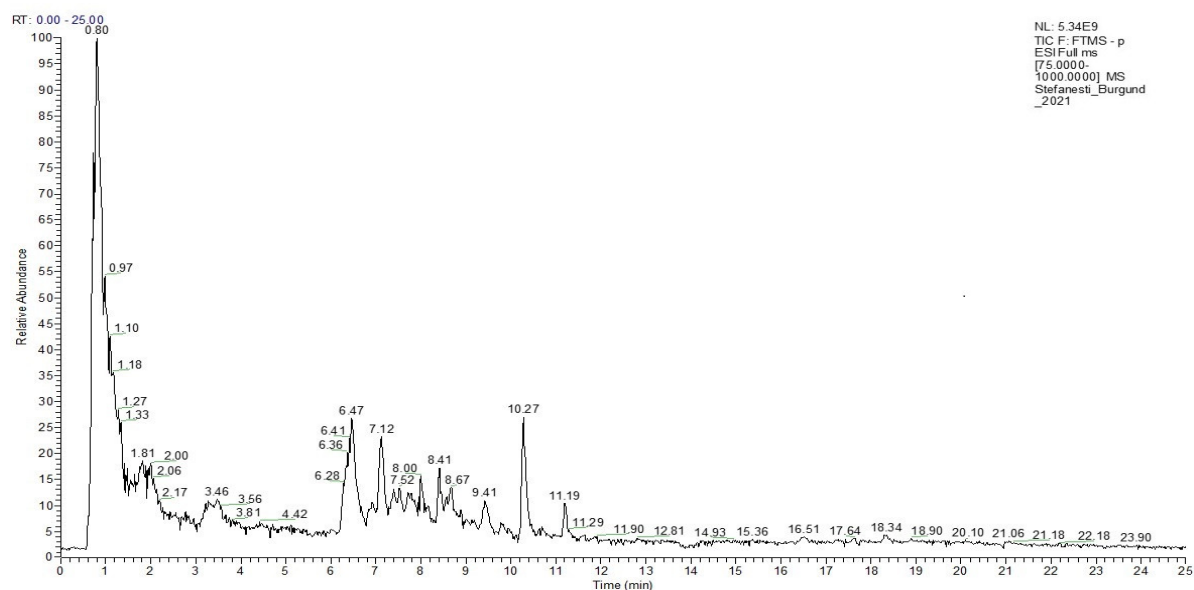


# Assessment of Bioactive Phenolic Compounds in Musts and the Corresponding Wines of White and Red Grape Varieties

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## Supplementary figures



**Figure S1.** The obtained total ion current (TIC) chromatogram for the separation of polyphenolic compounds in Burgund Mare grape must by UHPLC–ESI/HRMS.

## Supplementary tables

**Table S1.** The viticultural climate of the vegetation and maturation period corresponding to Stefanesti vineyard during the 2021 harvest year.

Period	Temperature (°C)			Precipitations (mm)	Days with rainfall > 10 mm	Sunshine (h)
	Average	Minimum	Maximum			
March	4.8	-1.1	12.3	73.8	10	
April	8.9	2.5	16.7	56.2	12	-
May	16.4	9.5	25.0	108.4	16	-
June	20.4	13.9	29.9	90.6	16	-
July	24.3	17.0	33.7	23.0	5	256.3
August	23.8	15.5	34.4	65.4	7	228.2
September	17.1	9.4	27.5	13.2	5	172.4

**Table S2.** Content of total phenolic compounds (TPC, expressed as mg GAE/l), total anthocyanins (TA, expressed in mg/l), TC – total catechins – catechine/ flavonoid content mg/l, TT- tannins (expressed in mg/l), AA-antioxidant activity (expressed in mMol Trolox/l) in wine and grape must.

Wine/Musts	TPC (mg GAE/L)	AA (mMol Trolox/L)	TA (mg/L)	TC (mg/L)	Tannins (mg/L)	references
Shiraz	2064	13.01	198	17.8	1293	[1]
Cabernet Sauvignon	2382	15.9	190	10.8	1476	
Merlot wine	2518	15.21	134	7.98	1312	
Chardonnay	445	1.54	--	-	-	
Cabernet Sauvignon	2081-24861	19.2	-	-	-	[2]
Syrah	2293-2338	20.2	-	-	-	
Merlot	2200-2239	19.9	-	-	-	
Pinot Noir	2329	21.2	-	-	-	
Merlot		21.7	-	-	-	
Cabernet Sauvignon		17.5	-	-	-	
Syrah		19.7	-	-	-	
Sauvignon	262	1.69	-	-	-	
Chardonnay	379	2.31	-	-	-	
Terret Sauvignon	289		-	-	-	
Cabernet Sauvignon	1750.9-2424.1	7.49-11.36	358.4-887.6	131.7-166.1	-	[3]
Muscat Ottonel	2365.9	3.19	-	2170.6	-	[4]
Shiraz	2938.2	4.19	-	2647.1	-	
	1687.5	4.6 9	-	1253.3	-	
Barbera	2479.7	4.89	-	2117.4	-	
Blended -	1498.1	6.79	-	1184.0	-	
Chasselar Dore	306.0	13.89	-	89.8	-	
Merlot	1977 - 2246	10.8-11.4	71.4 154	1086 1110	-	[5]
Cabernet Sauvignon	1646-2360	9.0-12.4	70.1-107.0	510-1028	-	
Risling Italian	303	0.25	nd	42.5	-	

Cabernet Sauvignon	1469	-	371	1976	1724	[6]
Merlot	1714	-	387	2170	2721	
Cabernet Sauvignon Grape juice / wine	416 / 1329	0.35 / 0.07 DPPH - IC50 (mg/mL)	-	-	-	[7]
Riesling Italian Grape juice / wine	2036 / 2162	8.40 / 0.09 DPPH - IC50 (mg/mL)	-	-	-	
Feteasca Regala	230	0.93	-	-	-	[8]
Feteasca Neaga	1877 / 2359	9.84	-	-	-	
Busuioaca de Bohotin	243	8.95	-	-	-	
Malbec	1932-3506	-	261-802	1932-4943	-	[9]
Merlot	1720	17.6	-	-	-	[10]
Cabernet Sauvignon	2320	18.1	-	-	-	

**Table S3.** Phenolic compounds in white grape musts (m) and wines (w) (mg/l).

	<b>Riesling Italian</b>	<b>Feteasca Regala</b>	<b>Chardonnay</b>	<b>Muscat Ottonel</b>	<b>Sauvignon Blanc</b>
gallic acid	n.d. (m)/0.07 (w) [7]	n.d. (w) [11]	n.d. (w) [7]; n.d. (w) [11]	7.21 (w) [12]	1.72-1.85 (w) [11]
syringic acid	n.d. (m)/0.10 (w) [7]	2.05 (w) [8]	0.17 (w) [7]	-	-
Ferrulic acid		0.16-0.84 (w) [11]	0.26 (w) [7]; 0.68 (w) [11]	0.97 (w) [12]; 0.84 (w) [11]	0.19-0.24 (w) [11]
t-cinnamic acid	-	n.d. (w) [11]	n.d. (w) [11]	n.d. (w) [11]	n.d. (w) [11]
Caffeic acid	n.d. (m)/3.26 (w) [7]		4.19 (w) [12]	15.1 (w) [11]	-
p-coumaric acid	0.19 (m)/0.21 (w) [7]	2.19-2.48 (w) [11]	0.15 (m)/1.16 (w) [11]; 2.12 (w) [11]	9.85 (w) [12]; 1.86 (w) [11]	1.92-2.02 (w) [11]
Ellagic acid	-	-	0.64 (w) [12]	-	-
catechin	n.d. (m)/2.00 (w) [7]	35.64 (w) [8]; 5.32-5.42 (w) [11]	n.d. (m)/1.34 (w) [7]	-	9.38-9.72 (w) [11]
epicatechin	n.d. (m)/1.43 (w) [7]	35.11 (w) [8]; 4.50-6.05 (w) [11]	n.d. (m)/1.16 (w) [7]; 2.66 (w) [11]	23.0 (w) [12]; 4.61 (w) [11]	2.53-10.99 (w) [11]
quercetin	0.18 (m)/0.19 (w) [7]	-	0.19 (m)/n.d. (w) [7]	8.40 (w) [12]	-
rutin	n.d.	-		3.2 (w) [12]	-
kaempferol	n.d.	8.44 (w) [8]	n.d. [7]	0.9 (w) [12]	-
t-resveratrol	n.d. (m)/0.71 (w) [7]	1.4 (w) [8]	n.d. (m)/1.13 (w) [7]	0.5 (w) [12]	0.31-0.62 (w) [13]

	0.21-2.4 (w) [13]	0.11-.037 (w) [13]; 0.43-2.84 (w) [11]	0.67 (w) [11]	0.34-0.92 (w) [13]; 0.77 (w) [11]	n.d.-2.04 (w) [11]
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**Table S4.** Phenolic compounds in red grape musts (m) and wines (w) (mg/l).

	<b>Cabernet Sauvignon</b>	<b>Merlot</b>	<b>Pinot Noire</b>	<b>Feteasca Neagra</b>	<b>Shiraz</b>	<b>Tempranillo</b>
gallic acid	11.66 (w) [6] 0.31 (m)/0.81 (w) [7] 61.22 (w) [12] 47.0 (w) [12]	17.01 (w) [6] 0.43 (m)/1.53 (w) [7] 52.11 (w) [12] 47.0 (w) [12]	1.74 (w) [11]	-	15.38 (w) [4]	4.25 (w) [14]
syringic acid	3.63 (w) [6] 1.01 (m)/0.81 (w) [7] 5.12 (w) [12]	1.84 (w) [6] 1.48 (m)/1.19 (w) [7] 5.09 (w) [10]	-	41.83-43.57 (w) [8]	7.32 (w) [4]	-
Ferrulic acid	1.21 (w) [12] 0.1 (w) [11]	0.06 (m)/0.1 (w) [10] 1.01 (w) [12] 0.79 (w) [11]	0.65 (w) [11]	-	-	-
t-cinnamic acid	0.73 (w) [11]	1.13 (w) [11]	0.56 (w) [11]	-	3.71 (w) [4]	1.69 (w) [14]
Caffeic acid	n.d. (w) [6] 0.78 (m)/2.04 (w) [7] 10.4 (w) [12]	0.29 (w) [6] 0.54 (m)/0.82 (w) [7] 7.05 (w) [12]	-	-	8.45 (w) [4]	2.45 (w) [14]
p-coumaric acid	1.07 (w) [6] 0.47 (m)/0.21 (w) [7] 7.87 (w) [12] 2.09 (w) [11]	n.d. (w) [6] 0.29 (m)/0.82 (w) [7] 7.05 (w) [12] 2.13 (w) [11]	1.82 (w) [11]	-	18.33 (w) [4]	--
ellagic acid	-	0.76 (m)/3.16 (w) [7]	-	-	-	-
catechin	27.18 (w) [6] 3.62 (m)/4.78 (w) [7] 25.73(w) [12] 5.99 (w) [11]	46.97 (w) [6] 7.38 (m)/7.70 (w) [7] 20.29 (w) [10] 6.04 (w) [11]	21.62 (w) [11]	241.16-331.59 (w) [8]	3.56(w) [4]	24.83 (w) [14]
epicatechin	8.56 (w) [6] 6.45 (m)/15.5 (w) [7] 51.91 (w) [10] 25.7(w) [4] 1.43 (w) [11]	19.10 (w) [6] 26.37 (w) [10] 33.1 (w) [12] 3.13 (w) [11]	2.34 (w) [11]	197.16-299.16 (w) [8]	2.32 (w) [4]	22.17 (w) [14]
quercetin	4.57 (w) [6]	4.65 (w) [6]	-	-	-	0.04 (w) <sup>s</sup>

	0.19 (m)/0.22 (w) [7] 5.46 (w) [12]	0.19 (m)/0.2 (w) [7] 5.78 (w) [12]				
rutin	0.02 (m)/0.17 (w) [7] 3.4 (w) [12]	2.52(w) [12]	-	25.64-71.34 (w) [8]	5.33 (w) [4]	0.74 (w) [14]
kaempferol	n.d. (w) [6] 0.01 (m)/n.d. (w) [7] 0.67 (w) [12]	0.54 (w) [6] 0.62 (w) [12]	-	-	-	-
resveratrol	0.31 (w) [6] 0.08 (m)/0.75 (w) [7] 0.69 (w) [12] 0.91-1.25 (w) [13]	0.55 (w) [6] 0.8 (m)/2.42 (w) [7] 0.4 (w) [12] 1.31-3.72 (w) [13]	1.67-5.19 (w) [13] 0.62 (w) [11]	2.63-3.52 (w) [8] 1.61-4.54 (w) [13]	2.76 (w) [4]	n.d. [14]

**Table S5.** Correlation matrix and Pearson coefficients of determination for individual phenolic compounds in must and wine for white grape cultivars.

Variables	GaA	3,4-DHBA	4-HBA	Cat	ChIA	CafA	ECat	SyA	p-CoumA	FA	Resv	EIA	AbsA	CinA	Qu	Kae	iRh	Apig	Pin	Chry	Ga
GaA	<b>1</b>	0.681	<b>0.766</b>	0.106	-0.290	-0.225	0.085	<b>0.980</b>	0.314	0.215	-0.170	0.594	-0.324	-0.630	-0.304	0.353	0.558	-0.239	<b>0.926</b>	0.014	-0.313
3,4-DHBA	0.681	<b>1</b>	0.528	-0.432	-0.548	-0.072	-0.395	0.546	0.326	0.454	-0.195	<b>0.851</b>	0.052	-0.433	-0.153	0.042	0.169	-0.323	0.606	-0.127	-0.402
4-HBA	<b>0.766</b>	0.528	<b>1</b>	-0.039	-0.479	0.328	0.298	0.704	0.247	0.146	-0.122	0.207	0.105	-0.265	0.215	-0.086	0.163	-0.601	0.668	-0.375	-0.627
Cat	0.106	-0.432	-0.039	<b>1</b>	0.700	0.104	<b>0.731</b>	0.178	-0.112	-0.330	0.561	-0.147	-0.365	-0.377	0.110	0.563	0.493	0.563	0.045	0.438	0.547
ChIA	-0.290	-0.548	-0.479	0.700	<b>1</b>	-0.121	0.582	-0.206	0.190	-0.033	0.381	-0.301	-0.006	-0.140	-0.140	0.094	-0.077	0.465	-0.198	0.105	0.468
CafA	-0.225	-0.072	0.328	0.104	-0.121	<b>1</b>	0.429	-0.336	-0.238	-0.308	0.506	-0.190	0.404	0.361	<b>0.978</b>	-0.241	-0.236	-0.107	-0.421	-0.177	-0.225
ECat	0.085	-0.395	0.298	<b>0.731</b>	0.582	0.429	<b>1</b>	0.116	0.284	-0.065	0.284	-0.418	0.212	-0.187	0.358	-0.053	-0.029	0.050	0.085	-0.164	0.089
SyA	<b>0.980</b>	0.546	0.704	0.178	-0.206	-0.336	0.116	<b>1</b>	0.281	0.154	-0.192	0.488	-0.418	-0.606	-0.404	0.394	0.595	-0.206	<b>0.929</b>	0.046	-0.272
p-CoumA	0.314	0.326	0.247	-0.112	0.190	-0.238	0.284	0.281	<b>1</b>	<b>0.871</b>	-0.590	0.083	0.584	-0.536	-0.376	-0.468	-0.383	-0.383	0.555	-0.559	-0.133
FA	0.215	0.454	0.146	-0.330	-0.033	-0.308	-0.065	0.154	<b>0.871</b>	<b>1</b>	-0.640	0.157	0.630	-0.562	-0.451	-0.495	-0.432	-0.475	0.501	-0.571	-0.094
Resv	-0.170	-0.195	-0.122	0.561	0.381	0.506	0.284	-0.192	-0.590	-0.640	<b>1</b>	0.077	-0.304	0.209	0.533	0.406	0.267	0.463	-0.429	0.380	0.149
EIA	0.594	<b>0.851</b>	0.207	-0.147	-0.301	-0.190	-0.418	0.488	0.083	0.157	0.077	<b>1</b>	-0.328	-0.469	-0.191	0.471	0.502	0.205	0.437	0.367	-0.012
AbsA	-0.324	0.052	0.105	-0.365	-0.006	0.404	0.212	-0.418	0.584	0.630	-0.304	-0.328	<b>1</b>	0.089	0.281	<b>-0.887</b>	<b>-0.874</b>	-0.560	-0.139	<b>-0.794</b>	-0.287
CinA	-0.630	-0.433	-0.265	-0.377	-0.140	0.361	-0.187	-0.606	-0.536	-0.562	0.209	-0.469	0.089	<b>1</b>	0.440	-0.381	-0.444	-0.123	<b>-0.742</b>	-0.161	-0.374
Qu	-0.304	-0.153	0.215	0.110	-0.140	<b>0.978</b>	0.358	-0.404	-0.376	-0.451	0.533	-0.191	0.281	0.440	<b>1</b>	-0.131	-0.148	0.041	-0.532	-0.012	-0.120
Kae	0.353	0.042	-0.086	0.563	0.094	-0.241	-0.053	0.394	-0.468	-0.495	0.406	0.471	<b>-0.887</b>	-0.381	-0.131	<b>1</b>	<b>0.961</b>	<b>0.739</b>	0.162	<b>0.915</b>	0.552
iRh	0.558	0.169	0.163	0.493	-0.077	-0.236	-0.029	0.595	-0.383	-0.432	0.267	0.502	<b>-0.874</b>	-0.444	-0.148	<b>0.961</b>	<b>1</b>	0.554	0.366	<b>0.809</b>	0.383
Apig	-0.239	-0.323	-0.601	0.563	0.465	-0.107	0.050	-0.206	-0.383	-0.475	0.463	0.205	-0.560	-0.123	0.041	<b>0.739</b>	0.554	<b>1</b>	-0.365	<b>0.897</b>	<b>0.832</b>
Pin	<b>0.926</b>	0.606	0.668	0.045	-0.198	-0.421	0.085	<b>0.929</b>	0.555	0.501	-0.429	0.437	-0.139	<b>-0.742</b>	-0.532	0.162	0.366	-0.365	<b>1</b>	-0.171	-0.253
Chry	0.014	-0.127	-0.375	0.438	0.105	-0.177	-0.164	0.046	-0.559	-0.571	0.380	0.367	<b>-0.794</b>	-0.161	-0.012	<b>0.915</b>	<b>0.809</b>	<b>0.897</b>	-0.171	<b>1</b>	0.704
Ga	-0.313	-0.402	-0.627	0.547	0.468	-0.225	0.089	-0.272	-0.133	-0.094	0.149	-0.012	-0.287	-0.374	-0.120	0.552	0.383	<b>0.832</b>	-0.253	0.704	<b>1</b>

Values in bold are different from 0 with a significance level  $\alpha=0.05$ .

**Table S6.** Correlation matrix and Pearson coefficients of determination for individual phenolic compounds in must and wine for red grape cultivars.

Variables	GaA	3,4-DHBA	4-HBA	Cat	ChIA	CafA	ECAt	SyA	p-CoumA	FA	Resv	EIA	AbsA	CinA	Qu	Kae	iRh	Apig	Pin	Chry	Ga
GaA	<b>1</b>	0.553	0.092	0.146	-0.048	-0.285	-0.117	<b>0.897</b>	0.639	<b>0.812</b>	0.323	0.344	0.636	0.318	0.227	-0.071	-0.050	-0.486	-0.405	-0.461	-0.555
3,4-DHBA	0.553	<b>1</b>	0.088	-0.455	0.151	-0.605	-0.518	0.804	0.252	0.266	0.061	0.169	-0.066	0.477	-0.406	-0.487	-0.372	-0.734	0.119	-0.656	-0.717
4-HBA	0.092	0.088	<b>1</b>	-0.510	<b>0.934</b>	-0.485	-0.438	0.174	0.765	0.532	-0.502	0.683	0.515	0.510	-0.491	-0.407	-0.256	-0.618	0.561	-0.572	-0.643
Cat	0.146	-0.455	-0.510	<b>1</b>	-0.738	<b>0.894</b>	<b>0.934</b>	-0.034	-0.328	-0.124	<b>0.832</b>	0.116	0.359	-0.056	<b>0.986</b>	<b>0.894</b>	<b>0.821</b>	0.766	-0.312	0.690	0.650
ChIA	-0.048	0.151	<b>0.934</b>	-0.738	<b>1</b>	-0.656	-0.625	0.082	0.665	0.409	-0.697	0.449	0.251	0.412	-0.699	-0.555	-0.422	-0.671	0.562	-0.707	-0.710
CafA	-0.285	-0.605	-0.485	<b>0.894</b>	-0.656	<b>1</b>	<b>0.976</b>	-0.354	-0.598	-0.496	0.725	0.073	0.095	-0.051	<b>0.848</b>	<b>0.921</b>	<b>0.875</b>	<b>0.922</b>	0.001	<b>0.827</b>	<b>0.817</b>
ECAt	-0.117	-0.518	-0.438	<b>0.934</b>	-0.625	<b>0.976</b>	<b>1</b>	-0.179	-0.482	-0.359	<b>0.812</b>	0.191	0.247	0.090	<b>0.918</b>	<b>0.977</b>	<b>0.946</b>	<b>0.861</b>	-0.002	0.699	0.686
SyA	<b>0.897</b>	0.804	0.174	-0.034	0.082	-0.354	-0.179	<b>1</b>	0.529	0.627	0.360	0.489	0.495	0.625	0.052	-0.119	-0.015	-0.597	-0.038	-0.614	-0.710
p-CoumA	0.639	0.252	0.765	-0.328	0.665	-0.598	-0.482	0.529	<b>1</b>	<b>0.950</b>	-0.351	0.522	0.727	0.320	-0.265	-0.428	-0.361	-0.732	-0.033	-0.675	-0.755
FA	<b>0.812</b>	0.266	0.532	-0.124	0.409	-0.496	-0.359	0.627	<b>0.950</b>	<b>1</b>	-0.162	0.413	0.763	0.216	-0.050	-0.303	-0.282	-0.631	-0.294	-0.587	-0.665
Resv	0.323	0.061	-0.502	<b>0.832</b>	-0.697	0.725	<b>0.812</b>	0.360	-0.351	-0.162	<b>1</b>	0.286	0.279	0.336	<b>0.844</b>	0.795	<b>0.812</b>	0.504	-0.066	0.406	0.341
EIA	0.344	0.169	0.683	0.116	0.449	0.073	0.191	0.489	0.522	0.413	0.286	<b>1</b>	0.771	<b>0.863</b>	0.141	0.206	0.396	-0.264	0.604	-0.284	-0.420
AbsA	0.636	-0.066	0.515	0.359	0.251	0.095	0.247	0.495	0.727	0.763	0.279	0.771	<b>1</b>	0.486	0.415	0.285	0.352	-0.166	0.008	-0.220	-0.328
CinA	0.318	0.477	0.510	-0.056	0.412	-0.051	0.090	0.625	0.320	0.216	0.336	<b>0.863</b>	0.486	<b>1</b>	0.011	0.164	0.376	-0.332	0.711	-0.495	-0.572
Qu	0.227	-0.406	-0.491	<b>0.986</b>	-0.699	<b>0.848</b>	<b>0.918</b>	0.052	-0.265	-0.050	<b>0.844</b>	0.141	0.415	0.011	<b>1</b>	<b>0.913</b>	<b>0.843</b>	0.726	-0.323	0.573	0.551
Kae	-0.071	-0.487	-0.407	<b>0.894</b>	-0.555	<b>0.921</b>	<b>0.977</b>	-0.119	-0.428	-0.303	0.795	0.206	0.285	0.164	<b>0.913</b>	<b>1</b>	<b>0.973</b>	<b>0.829</b>	0.013	0.558	0.576
iRh	-0.050	-0.372	-0.256	<b>0.821</b>	-0.422	<b>0.875</b>	<b>0.946</b>	-0.015	-0.361	-0.282	<b>0.812</b>	0.396	0.352	0.376	<b>0.843</b>	<b>0.973</b>	<b>1</b>	0.721	0.215	0.452	0.447
Apig	-0.486	-0.734	-0.618	0.766	-0.671	<b>0.922</b>	<b>0.861</b>	-0.597	-0.732	-0.631	0.504	-0.264	-0.166	-0.332	0.726	<b>0.829</b>	0.721	<b>1</b>	-0.133	<b>0.841</b>	<b>0.907</b>
Pin	-0.405	0.119	0.561	-0.312	0.562	0.001	-0.002	-0.038	-0.033	-0.294	-0.066	0.604	0.008	0.711	-0.323	0.013	0.215	-0.133	<b>1</b>	-0.213	-0.242
Chry	-0.461	-0.656	-0.572	0.690	-0.707	<b>0.827</b>	0.699	-0.614	-0.675	-0.587	0.406	-0.284	-0.220	-0.495	0.573	0.558	0.452	<b>0.841</b>	-0.213	<b>1</b>	<b>0.975</b>
Ga	-0.555	-0.717	-0.643	0.650	-0.710	<b>0.817</b>	0.686	-0.710	-0.755	-0.665	0.341	-0.420	-0.328	-0.572	0.551	0.576	0.447	<b>0.907</b>	-0.242	<b>0.975</b>	<b>1</b>

Values in bold are different from 0 with a significance level  $\alpha=0.05$



## References

1. Ginjom, I.R.; D'Arcy, B.R.; Caffin, N.A.; Gidley, M.J. Phenolic Contents and Antioxidant Activities of Major Australian Red Wines throughout the Winemaking Process. *J. Agric. Food Chem.* **2010**, *58*, 10133–10142, doi:10.1021/JF100822N.
2. Landrault, N.; Poucheret, P.; Ravel, P.; Gasc, F.; Cros, G.; Teissedre, P.L. Antioxidant Capacities and Phenolics Levels of French Wines from Different Varieties and Vintages. *J. Agric. Food Chem.* **2001**, *49*, 3341–3348, doi:10.1021/JF010128F.
3. Burin, V.M.; Falcão, L.D.; Chaves, E.S.; Gris, E.F.; Preti, L.F.; Bordignon-Luiz, M.T. Phenolic composition, colour, antioxidant activity and mineral profile of Cabernet Sauvignon wines. *Int. J. Food Sci. Technol.* **2010**, *45*, 1505–1512, doi:10.1111/J.1365-2621.2010.02296.X.
4. Woraratphoka, J.; Intarapichet, K.O.; Indrapichate, K. Phenolic compounds and antioxidative properties of selected wines from the northeast of Thailand. *Food Chem.* **2007**, *104*, 1485–1490, doi:10.1016/J.FOODCHEM.2007.02.020.
5. Li, H.; Wang, X.; Li, Y.; Li, P.; Wang, H. Polyphenolic compounds and antioxidant properties of selected China wines. *Food Chem.* **2009**, *112*, 454–460, doi:10.1016/J.FOODCHEM.2008.05.111.
6. Ortega, T.; De La Hera, E.; Carretero, M.E.; Gómez-Serranillos, P.; Naval, M.V.; Villar, A.M.; Prodanov, M.; Vacas, V.; Arroyo, T.; Hernández, T.; et al. Influence of grape variety and their phenolic composition on vasorelaxing activity of young red wines. *Eur. Food Res. Technol.* **2008**, *227*, 1641–1650, doi:10.1007/S00217-008-0888-9/TABLES/5.
7. Beara, I.N.; Torović, L.D.; Pintač, D.; Majkić, T.M.; Orčić, D.Z.; Mimica-Dukić, N.M.; Lesjak, M.M. Polyphenolic profile, antioxidant and neuroprotective potency of grape juices and wines from Fruška Gora region (Serbia). <https://doi.org/10.1080/10942912.2017.1375512> **2018**, *20*, S2552–S2568, doi:10.1080/10942912.2017.1375512.
8. Banc, R.; Loghin, F.; Miere, D.; Ranga, F.; Socaciu, C. Phenolic composition and antioxidant activity of red, rosé and white wines originating from Romanian grape cultivars. *Not. Bot. Horti Agrobot. Cluj-Napoca* **2020**, *48*, 716–734, doi:10.15835/NBHA48211848.
9. Fanzone, M.; Peña-Neira, A.; Jofré, V.; Assof, M.; Zamora, F. Phenolic characterization of malbec wines from mendoza province (Argentina). *J. Agric. Food Chem.* **2010**, *58*, 2388–97, doi:10.1021/jf903690v.
10. Anli, R.E.; Vural, N. Antioxidant phenolic substances of Turkish red wines from different wine regions. *Molecules* **2009**, *14*, 289–297, doi:10.3390/MOLECULES14010289.
11. Geana, E.I.; Marinescu, A.; Iordache, A.M.; Sandru, C.; Ionete, R.E.; Bala, C. Differentiation of Romanian Wines on Geographical Origin and Wine Variety by Elemental Composition and Phenolic Components. *Food Anal. Methods* **2014**, *7*, 2064–2074, doi:10.1007/S12161-014-9846-2.
12. Sen, I.; Tokatli, F. Authenticity of wines made with economically important grape varieties grown in Anatolia by their phenolic profiles. *Food Control* **2014**, *46*, 446–454, doi:10.1016/J.FOODCONT.2014.06.015.
13. Geana, E.I.; Costinel, D.; Marinescu, A.; Ionete, R.E.; Bala, C. Characterization of Wines by Trans - Resveratrol Concentration: A Case Study of Romanian Varieties. *Anal. Lett.* **2014**, *47*, 1737–1746, doi:10.1080/00032719.2014.883521.
14. Natividade, M.M.P.; Corrêa, L.C.; Souza, S.V.C. de; Pereira, G.E.; Lima, L.C. de O. Simultaneous analysis of 25 phenolic compounds in grape juice for HPLC: Method validation and characterization of São Francisco Valley samples. *Microchem. J.* **2013**, *110*, 665–674, doi:10.1016/J.MICROC.2013.08.010.