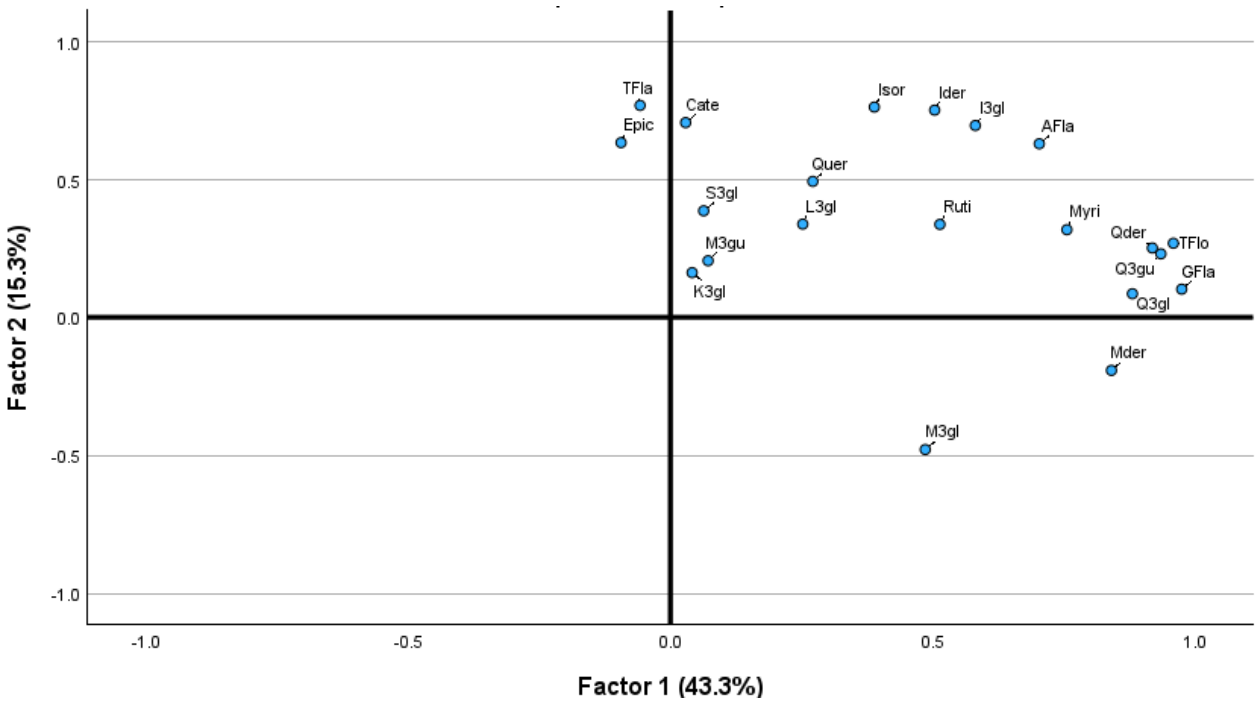

Figure S1. Projections of flavonoids on the factor analysis in space defined by the two first factors.

Table S1. Abbreviations of the non-colored flavonoid compounds considered in this study and means of identification (elution time, wavelength detection, characteristic UV maxima wavelength, commercial standard, and scientific literature employed).

Experimental compounds	Abbreviation	Retention time (min)	UV Max. λ (nm)	Quantification λ (nm)	Scientific References
Flavan-3-ols					
-Catechin [A]	Cate.	10.55	203, 278	280	[2, 16-21]
-Epicatechin [A]	Epic.	11.15	203, 278	280	[2, 16-21]
Flavonols					
-Myricetin-3-glucuronide [B]	M3gu.	4.15	260, 355	365	[23, 24]
-Myricetin-3-glucoside [B]	M3gl.	7.4	214, 368	365	[20, 23, 24]
-Laricitrin-3-glucoside [B]	L3gl.	8.9	217, 367	365	[22, 23, 24]
-Kaempferol-3-glucoside [B]	K3gl.	10.8	221, 364	365	[18, 20, 21, 23, 24]
-Myricetin [B]	Myri.	15.1	212, 371	365	[2, 18, 20, 22-24]
-Quercetin-3-glucuronide [B]	Q3gu.	16.2	257, 360	365	[16, 20-24]
-Quercetin-3-glucoside [B]	Q3gl.	17.1	254, 370	365	[2, 20, 21, 24]
-Rutin [A]	Ruti.	17.55	259, 360	280	[2, 19, 22]
-Isorhamnetin-3-glucoside [B]	I3gl.	18.05	255, 368	365	[21, 24]
-Isorhamnetin [B]	Isor.	18.95	219, 311	365	[2, 16, 22-24]
-Syringetin-3-glucoside [B]	S3gl.	20.65	212, 371	365	[22-24]
-Quercetin [A]	Quer.	21.9	214, 371	365	[2, 16, 18-24]

Identity based on: [A] Commercial standards; [B] Literature data comparing relative retention time, characteristic UV-Vis absorption based on flavonoid spectra and elution order using the method from Ibern-Gómez et al. [16] and references for UV-Vis spectra and chromatographic conditions from manuscript references: Taniguchi et al. [2], Baiano et al [17], Ginjom et al. [18], Meng et al. [19], Hernandez et. al [20], Milbury et al. [21], Jeffery et al. [22], Castillo-Muñoz [23], Hermosín-Gutiérrez et al. [24]

Table S2. Non-visible flavonoids (mg/l) according to the DO from Tenerife Island.

	DO Ycoden	DO Tacoronte-Acentejo	DO Valle de la Orotava	DO Abona	DOP Valle de Güímar
Cate	43.24^{a} (16.19)	41.74^{a} (16.87)	37.74^{a} (8.26)	42.17^{a} (17.38)	38.77^{a} (8.46)
Epic	71.08^{bc} (33.42)	73.35^{c} (34.49)	64.39^{abc} (17.72)	54.71^{ab} (27.49)	47.76^{a} (19.62)
TFla	114.32^{b} (46.64)	115.09^{b} (45.38)	102.13^{ab} (23.82)	96.88^{ab} (42.66)	86.53^{a} (24.03)
M3gu	0.23^{a} (0.20)	0.28^{ab} (0.21)	0.28^{ab} (0.21)	0.36^{b} (0.24)	0.37^{b} (0.21)
M3gl	10.40^{ab} (4.77)	9.02^{a} (4.85)	12.86^{b} (4.62)	8.06^{a} (5.54)	5.41^{a} (4.49)
L3gl	2.56^{a} (1.08)	2.29^{a} (1.12)	2.58^{a} (0.95)	2.69^{a} (1.37)	2.84^{a} (1.25)
K3gl	0.46^{ab} (0.12)	0.41^{ab} (0.16)	0.32^{a} (0.12)	0.47^{b} (0.23)	0.52^{c} (0.38)
Myri	5.23^{a} (3.58)	7.15^{ab} (2.98)	9.02^{bc} (3.04)	8.12^{bc} (4.33)	10.07^{c} (4.92)
Q3gu	8.91^{a} (4.70)	12.61^{b} (5.51)	16.89^{cd} (6.40)	14.69^{bc} (6.70)	19.35^{d} (10.00)
Q3gl	4.23^{a} (2.60)	8.45^{b} (4.87)	11.30^{bc} (4.77)	9.41^{bc} (5.78)	13.21^{c} (8.77)
Rutin	8.93^{ab} (6.08)	8.20^{a} (4.23)	9.30^{ab} (5.81)	8.79^{ab} (5.17)	11.53^{b} (8.93)
I3gl	3.43^{a} (1.68)	4.27^{ab} (1.77)	3.71^{ab} (1.37)	4.62^{b} (2.08)	6.31^{c} (4.33)
Isor	2.95^{a} (1.51)	3.61^{ab} (1.55)	2.79^{a} (1.15)	3.75^{ab} (2.42)	5.07^{b} (3.34)
S3gl	0.53^{ab} (0.42)	0.45^{ab} (0.36)	0.40^{a} (0.51)	0.69^{b} (0.60)	0.76^{b} (0.41)
Quer	1.03^{a} (1.19)	2.66^{b} (3.03)	1.98^{ab} (1.73)	3.22^{b} (2.60)	3.01^{b} (2.10)
AFlo	9.34^{a} (3.91)	13.21^{b} (5.27)	13.53^{b} (4.52)	15.24^{bc} (7.33)	17.94^{c} (8.60)
GFlo	30.76^{a} (11.91)	37.78^{ab} (14.68)	48.36^{c} (14.23)	41.01^{bc} (16.06)	48.77^{c} (22.39)
Qder	14.17^{a} (7.00)	23.72^{b} (11.69)	30.17^{bc} (11.15)	27.33^{bc} (13.51)	35.57^{c} (19.39)
Mder	15.85^{a} (6.62)	16.45^{a} (6.33)	22.16^{b} (6.31)	16.55^{a} (6.61)	18.84^{ab} (5.76)
Ider	6.38^{a} (3.05)	7.88^{a} (3.22)	6.50^{a} (2.39)	8.37^{a} (4.30)	11.37^{b} (7.64)
TFlo	39.96^{a} (14.96)	51.20^{b} (18.69)	62.15^{bc} (18.09)	56.11^{bc} (21.08)	66.91^{c} (30.52)

* Standard deviation was included between brackets. ** Different letters in each row indicate the differences between means are significant ($p < 0.05$). *** Flavonoid abbreviations: Cate: catechin; Epic: epicatechin; TFla: total flavanols; M3gu: myricetin-3-glucuronide; M3gl: myricetin-3-glucoside; L3gl: laricitrin-3-glucoside; K3gl: kaempferol-3-glucoside; Myri: myricetin; Q3gu: quercetin-3-glucuronide; Q3gl: quercetin-3-glucoside; Ruti: rutin;

I3gl: isorhamnetin-3-glucoside; Isor: isorhamnetin; S3gl: syringetin-3-glucoside; Quer: quercetin; AFla: aglyconed flavonols; GFlo: sugar-derived flavonols; Qder: quercetin derivatives; Mder: myricetin derivatives; Ider: isorhamnetin derivatives; TFlo: total flavonols.

Table S3. Results of non-visible flavonoid concentrations (mg/l) according to aging.

	Young wines (≤2 year)	**Short-aged wines (3-5 years)**	**Old wines (≥6 years)**
Cate	37.81 [a] ± 14.37	41.25 [a] ± 18.72	37.64 [a] ± 34.50
Epic	61.02 [a] ± 26.11	71.45 [ab] ± 32.05	85.23[b] ± 35.55
TFla	97.84[a] ± 36.00	112.32[a] ± 41.68	122.86[a] ± 60.65
M3gu	0.29 [a] ± 0.22	0.34 [a] ± 0.23	0.21 [a] ± 0.14
M3gl	10.20 [a] ± 5.98	10.04 [a] ± 5.03	9.08 [a] ± 2.07
L3gl	2.43[ab] ± 1.17	2.43[b] ± 1.10	1.29 [a] ± 0.22
K3gl	0.42 [a] ± 0.26	0.48 [a] ± 0.22	0.40 [a] ± 0.12
Myri	7.55[b] ± 4.20	6.25 [b] ± 3.85	3.27 [a] ± 2.54
Q3gu	13.65 [b] ± 7.01	12.51 [b] ± 7.25	7.69 [a] ± 3.80
Q3gl	9.22[b] ± 5.41	7.78 [ab] ± 5.88	4.30 [a] ± 2.74
Ruti	8.02[b] ± 6.13	7.81[b] ± 4.02	3.40 [a] ± 1.39
I3gl	3.63 [ab] ± 1.77	4.92 [b] ± 2.41	3.01 [a] ± 1.24
Isor	2.69 [a] ± 1.27	4.64 [b] ± 2.37	3.03 [a] ± 1.24
S3gl	0.47 [a] ± 0.48	0.65 [ab] ± 0.63	0.85 [b] ± 0.81
Quer	2.07 [a] ± 2.10	3.68 [a] ± 2.88	2.77 [a] ± 2.94
AFlo	12.27 [ab] ± 5.77	14.32[b] ± 7.09	8.66 [a] ± 6.28
GFlo	40.32 [b] ± 16.35	39.17 [b] ± 16.14	26.81 [a] ± 9.16
Qder	24.93 [b] ± 12.88	23.97 [b] ± 14.03	14.76 [a] ± 9.41
Mder	18.04 [b] ± 7.27	16.63 [ab] ± 6.12	12.55 [a] ± 4.22
Ider	6.32 [a] ± 2.92	9.55[b] ± 4.67	6.04 [a] ± 2.49

TFlo	52.63[b] ± 20.84	53.74 [b] ± 21.73	35.89 [a] ± 15.59

* Standard deviation was included between brackets. ** Different letters in each row indicate the differences between means are significant ($p < 0.05$). *** Flavonoid abbreviations: Cate: catechin; Epic: epicatechin; TFla: total flavanols; M3gu: myricetin-3-glucuronide; M3gl: myricetin-3-glucoside; L3gl: laricitrin-3-glucoside; K3gl: kaempferol-3-glucoside; Myri: myricetin; Q3gu: quercetin-3-glucuronide; Q3gl: quercetin-3-glucoside; Ruti: rutin; I3gl: isorhamnetin-3-glucoside; Isor: isorhamnetin; S3gl: syringetin-3-glucoside; Quer: quercetin; AFla: aglyconed flavonols; GFlo: sugar-derived flavonols; Qder: quercetin derivatives; Mder: myricetin derivatives; Ider: isorhamnetin derivatives; TFlo: total flavonols.