

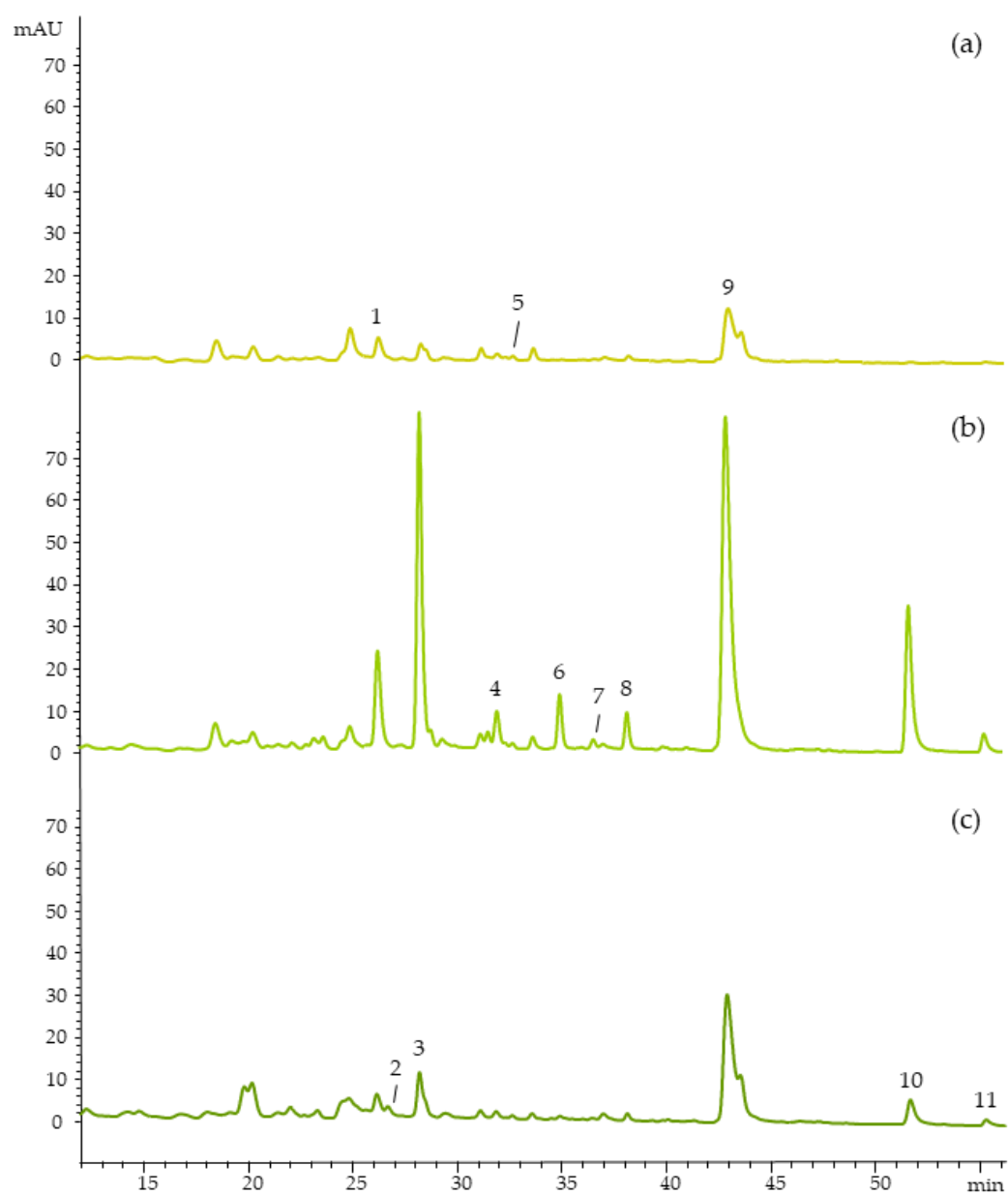


Figure S1. Flavonol profiles (HPLC DAD-chromatograms at 360 nm) in white wines made from Airén and novel grape genotypes: (a) Airén, (b) Albillo Dorado, (c) Montonera del Casar. Peak numbering is as in Table 1.

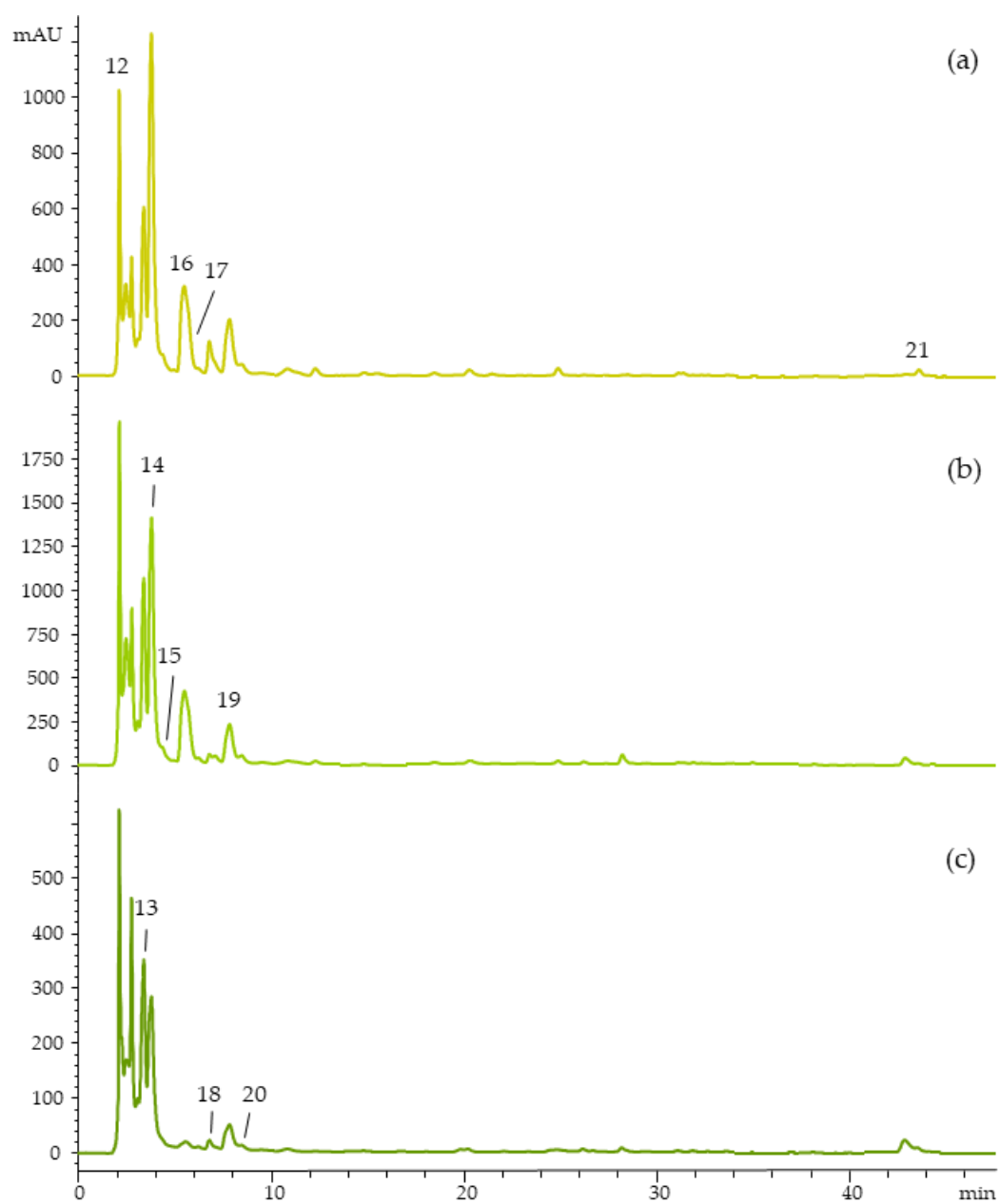


Figure S2. Hydroxycinnamic acid derivative profiles (HPLC DAD-chromatograms at 320 nm) in white wines made from Airén and novel grape genotypes: **(a)** Airén, **(b)** Albillo Dorado, **(c)** Montonera del Casar. Peak numbering is as in Table 1.

Table S1. Calibration data of commercial standards used for the quantification of flavonols and hydroxycinnamic acid derivatives in white wines made from Airén and novel grape genotypes.

Compound	Linear range (mg/L)	Linear curve	R ²
Quercetin 3-glucoside	10 - 100	$y = 0.0053 + 0.0009$	0.9998
<i>trans</i> -Caftaric acid	5 - 100	$y = 0.0033 - 0.2715$	0.9996

Table S2. Physicochemical parameters, global phenolic composition and chromatic characteristics (mean value $\pm$ standard deviation, n=2) in white wines made from Airén and novel grape genotypes.

	Airén		Albillo Dorado		Montonera del Casar	
	2015	2016	2015	2016	2015	2016
Physicochemical parameters						
Relative density	0.987 $\pm$ 0.002 a	0.989 $\pm$ 0.000 b	0.987 $\pm$ 0.001 a	0.989 $\pm$ 0.000 b	0.991 $\pm$ 0.000 b	0.989 $\pm$ 0.000 b
Alcoholic strength (% v/v)	12.35 $\pm$ 0.03 ab	11.82 $\pm$ 0.01 a	13.76 $\pm$ 1.08 b	12.77 $\pm$ 0.05 ab	11.25 $\pm$ 0.06 a	13.37 $\pm$ 0.03 b
Total acidity (g L ⁻¹)	3.74 $\pm$ 0.01 a	3.97 $\pm$ 0.20 a	3.79 $\pm$ 0.03 a	4.58 $\pm$ 0.13 b	4.79 $\pm$ 0.07 b	5.58 $\pm$ 0.01 c
pH	3.62 $\pm$ 0.02 a	3.49 $\pm$ 0.01 a	3.54 $\pm$ 0.08 a	3.55 $\pm$ 0.01 a	3.52 $\pm$ 0.01 a	3.61 $\pm$ 0.02 a
Volatile acidity (g L ⁻¹)	0.23 $\pm$ 0.03 a	0.28 $\pm$ 0.03 a	0.43 $\pm$ 0.01 b	0.28 $\pm$ 0.00 a	0.22 $\pm$ 0.01 a	0.44 $\pm$ 0.00 b
Total SO ₂ (mg L ⁻¹)	141.00 $\pm$ 5.66 c	169.00 $\pm$ 1.41 d	130.00 $\pm$ 2.83 bc	104.00 $\pm$ 2.83 a	120.00 $\pm$ 11.31 b	119.00 $\pm$ 1.41 b
Glucose + Fructose (g L ⁻¹)	0.24 $\pm$ 0.01 c	0.22 $\pm$ 0.01 ab	0.20 $\pm$ 0.00 ab	0.18 $\pm$ 0.00 a	0.30 $\pm$ 0.04 c	0.35 $\pm$ 0.01 d
Malic acid (g L ⁻¹)	1.17 $\pm$ 0.03 a	1.07 $\pm$ 0.01 a	1.02 $\pm$ 0.28 a	1.39 $\pm$ 0.13 ab	1.69 $\pm$ 0.05 b	1.65 $\pm$ 0.07 b
Tartaric acid (g L ⁻¹)	1.26 $\pm$ 0.03 a	1.23 $\pm$ 0.08 a	1.60 $\pm$ 0.13 a	1.73 $\pm$ 0.19 a	2.18 $\pm$ 0.28 b	2.27 $\pm$ 0.00 b
Succinic acid (g L ⁻¹)	0.54 $\pm$ 0.04 ab	0.40 $\pm$ 0.03 a	0.66 $\pm$ 0.12 b	0.57 $\pm$ 0.03 ab	0.59 $\pm$ 0.05 ab	0.44 $\pm$ 0.00 ab
Citric acid (g L ⁻¹)	0.21 $\pm$ 0.01 c	0.17 $\pm$ 0.00 b	0.17 $\pm$ 0.01 b	0.11 $\pm$ 0.00 a	0.43 $\pm$ 0.00 e	0.37 $\pm$ 0.01 d
Glycerin (g L ⁻¹)	5.38 $\pm$ 0.07 ab	5.11 $\pm$ 0.03 a	6.63 $\pm$ 0.23 e	5.75 $\pm$ 0.14 c	5.60 $\pm$ 0.05 bc	6.34 $\pm$ 0.01 d
Polyphenols and color						
Total polyphenols (g L ⁻¹) ¹	0.41 $\pm$ 0.06 a	0.35 $\pm$ 0.02 a	0.40 $\pm$ 0.05 a	0.34 $\pm$ 0.02 a	0.35 $\pm$ 0.03 a	0.30 $\pm$ 0.02 a
Condensed tannins (mg L ⁻¹) ²	75.14 $\pm$ 19.85 c	74.41 $\pm$ 13.34 c	54.65 $\pm$ 13.19 b	58.69 $\pm$ 10.37 b	16.24 $\pm$ 2.22 a	10.48 $\pm$ 2.96 a
Lightness (L*)	99.32 $\pm$ 0.00 a	99.15 $\pm$ 0.07 a	98.70 $\pm$ 0.26 a	98.65 $\pm$ 0.00 a	98.83 $\pm$ 0.42 a	98.22 $\pm$ 0.07 a
Red-greenness (a*)	-0.83 $\pm$ 0.05 c	-0.75 $\pm$ 0.04 c	-0.99 $\pm$ 0.02 bc	-1.03 $\pm$ 0.01 bc	-1.10 $\pm$ 0.04 b	-1.22 $\pm$ 0.11 a
Yellow-blueness (b*)	4.27 $\pm$ 0.32 a	3.96 $\pm$ 0.08 a	5.43 $\pm$ 0.44 b	6.33 $\pm$ 0.24 bc	6.23 $\pm$ 0.55 bc	7.05 $\pm$ 0.36 c
Chroma (C*)	4.35 $\pm$ 0.30 a	4.03 $\pm$ 0.07 a	5.52 $\pm$ 0.43 b	6.42 $\pm$ 0.23 bc	6.33 $\pm$ 0.54 bc	7.16 $\pm$ 0.38 c
Hue angle (h*)	101.02 $\pm$ 1.41 a	100.77 $\pm$ 0.69 a	100.35 $\pm$ 0.76 a	99.29 $\pm$ 0.45 a	100.05 $\pm$ 1.20 a	99.79 $\pm$ 0.31 a

¹ As gallic acid equivalents. ² As (-)-epicatechin equivalents. Different letters in the same row indicates that the values are significantly different (ANOVA, Student–Newman–Keuls test, $p < 0.05$).

Table S3. Flavan-3-ol monomer, dimer and stilbene molar percentage and total concentration (mean value $\pm$ standard deviation, n=2) in white wines made from Airén and novel grape genotypes.

Compounds	m/z pairs ⁴	Airén				Albillo Dorado				Montonera del Casar			
		2015		2016		2015		2016		2015		2016	
Flavan-3-ol monomers (mg L⁻¹)¹		16.47 $\pm$ 1.41 c	15.80 $\pm$ 0.59 c	7.91 $\pm$ 1.95 b	14.05 $\pm$ 0.21 c	1.81 $\pm$ 0.26 a	1.51 $\pm$ 0.14 a						
(+)-Catechin	289/137; 289/164	56.18 $\pm$ 1.07 a	56.60 $\pm$ 0.04 a	55.23 $\pm$ 1.34 a	53.77 $\pm$ 1.07 a	68.01 $\pm$ 1.98 b	70.42 $\pm$ 3.18 b						
(-)-Epicatechin	289/137; 289/164	21.50 $\pm$ 0.87 f	14.13 $\pm$ 0.12 c	16.55 $\pm$ 0.44 d	18.91 $\pm$ 0.51 e	11.67 $\pm$ 1.28 b	7.27 $\pm$ 0.90 a						
(-)-Gallocatechin	305/109; 305/137	15.77 $\pm$ 0.68 b	21.92 $\pm$ 0.20 c	17.46 $\pm$ 1.59 b	17.76 $\pm$ 0.01 b	5.60 $\pm$ 1.12 a	4.57 $\pm$ 0.14 a						
(-)-Epigallocatechin	305/109; 305/137	1.40 $\pm$ 0.11 a	1.81 $\pm$ 0.05 b	1.80 $\pm$ 0.16 b	2.06 $\pm$ 0.16 b	ND	ND						
(-)-Epicatechin gallate	441/245; 441/289	0.04 $\pm$ 0.02 a	0.06 $\pm$ 0.00 a	0.28 $\pm$ 0.07 ab	0.19 $\pm$ 0.03 a	0.55 $\pm$ 0.26 b	ND						
Monoglucosides	451/289; 451/245	5.12 $\pm$ 0.61 a	5.48 $\pm$ 0.07 a	8.68 $\pm$ 0.41 a	7.32 $\pm$ 0.38 a	14.17 $\pm$ 2.09 b	17.74 $\pm$ 2.15 c						
Flavan-3-ol dimers (mg L⁻¹)²		13.00 $\pm$ 3.17 b	10.12 $\pm$ 1.87 b	2.17 $\pm$ 0.12 a	4.93 $\pm$ 0.92 a	0.19 $\pm$ 0.01 a	0.12 $\pm$ 0.01 a						
Procyanidin B1	577/425; 577/407	36.05 $\pm$ 2.90 a	60.26 $\pm$ 1.28 b	60.98 $\pm$ 1.30 b	64.03 $\pm$ 1.18 b	62.63 $\pm$ 1.20 b	78.33 $\pm$ 0.39 c						
Procyanidin B2	577/425; 577/407	7.28 $\pm$ 0.92 a	7.58 $\pm$ 0.26 a	15.25 $\pm$ 0.55 a	14.61 $\pm$ 0.35 a	17.06 $\pm$ 6.14 a	11.57 $\pm$ 2.38 a						
Procyanidin B4	577/425; 577/407	30.51 $\pm$ 4.10 c	11.63 $\pm$ 0.65 b	2.71 $\pm$ 1.01 a	2.57 $\pm$ 0.04 a	ND	ND						
Other dimers	577/425; 577/407	26.00 $\pm$ 0.01 b	20.14 $\pm$ 0.39 ab	20.04 $\pm$ 1.07 ab	17.65 $\pm$ 1.05 ab	21.31 $\pm$ 7.34 ab	10.10 $\pm$ 1.99 a						
Galloylated dimers	729/577; 729/289	0.16 $\pm$ 0.06 a	0.39 $\pm$ 0.03 a	1.02 $\pm$ 0.24 b	1.14 $\pm$ 0.26 b	ND	ND						
Stilbenes (mg L⁻¹)³		0.19 $\pm$ 0.00 b	0.13 $\pm$ 0.02 ab	0.13 $\pm$ 0.05 ab	0.32 $\pm$ 0.02 c	0.09 $\pm$ 0.01 a	0.07 $\pm$ 0.00 a						
<i>cis</i> -Resveratrol	227/143; 227/185	61.79 $\pm$ 0.00 d	45.06 $\pm$ 3.47 b	38.66 $\pm$ 2.35 ab	38.55 $\pm$ 1.83 ab	32.01 $\pm$ 0.48 a	51.17 $\pm$ 2.78 c						
<i>cis</i> -Piceid	389/227; 227/185	28.58 $\pm$ 0.21 a	36.55 $\pm$ 3.52 b	35.82 $\pm$ 0.22 b	42.94 $\pm$ 0.69 c	44.86 $\pm$ 3.23 c	33.52 $\pm$ 1.15 ab						
<i>trans</i> -Piceid	389/227; 227/185	9.63 $\pm$ 0.22 a	18.40 $\pm$ 0.05 bc	25.51 $\pm$ 2.13 d	18.51 $\pm$ 1.15 bc	23.13 $\pm$ 2.75 cd	15.31 $\pm$ 1.63 b						

¹ As (+)-catechin equivalents. ² As procyanidin B1 equivalents. ³ As *trans*-resveratrol equivalents. ⁴ Mass transition pairs data for MRM scan used in the identification of the compounds. Abbreviations: ND, not detected. Different letters in the same row indicates that the values are significantly different (ANOVA, Student–Newman–Keuls test, $p < 0.05$).