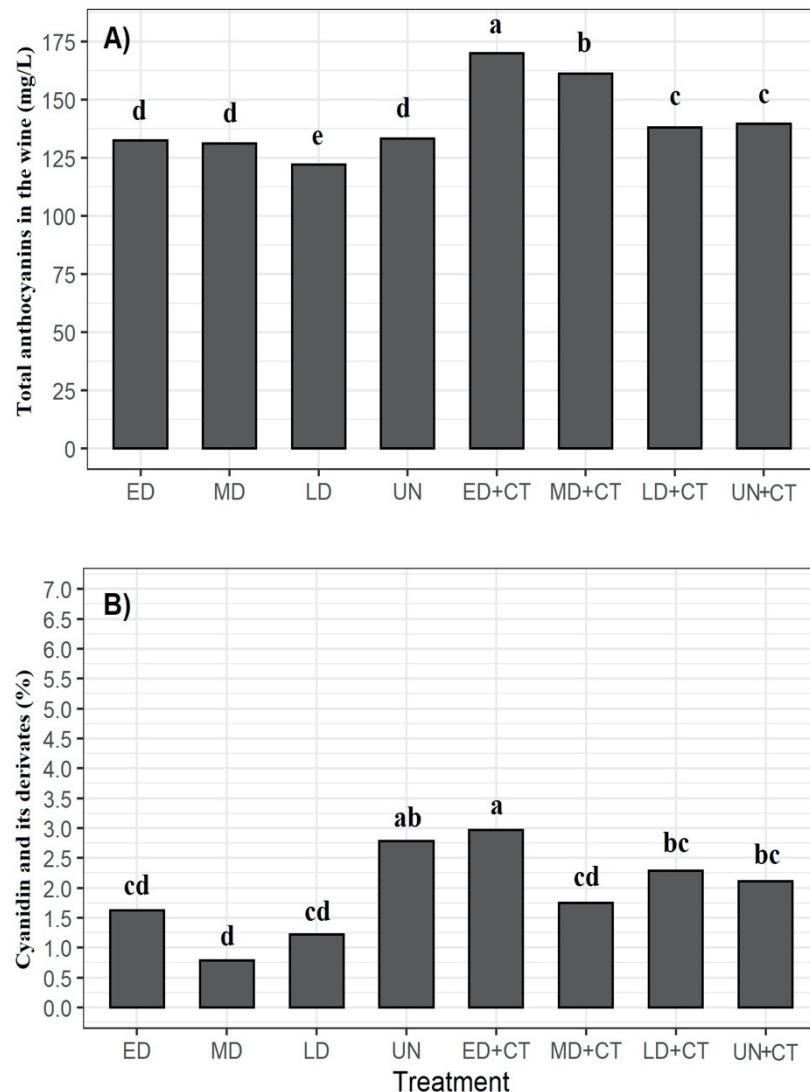


Supplementary Table 1. Interaction among the factors

Different small letters within the column indicate significant difference between the treatments p<0.05
 (Duncan's test)

Interaction			CT x LR x Y			LR x Y			CT x Y			
						TSS (%)	TA (g/L)	Total Antho. (mg/L)				
Year	Treatment	Probus	Treatment	Cab. Sauv.	Probus	Probus	Probus	Probus	Treatment	Cab. Sauv.	Probus	
2014	ED	1.15 f-i	ED	22.1 bc	7.3 cd	1436.5 bc			CT	0.25 c	172.3 cd	9.6 a
	MD	1.25 d-g	MD	22.6 b	8.2 bc	1517.3 b			NoCT	0.55 b	168.3 d	7.9 b
	LD	1.25 d-g	LD	24.2 a	8.4 b	1392.8 bc						
	UN	0.82 i	UN	22.7 b	11.2 a	1414.3 bc						
	ED+CT	0.49 j										
	MD+CT	0.46 j										
	LD+CT	0.44 j										
	UN+CT	0.42 j										
2015	ED	1.56 a-e	ED	20.3 de	4.8 g	1443.6 bc			CT	0.57 b	295.3 a	5.2 d
	MD	1.56 a-e	MD	19.8 e	5.2 fg	1175.7 c			NoCT	1.02 a	237.4 b	5.2 d
	LD	1.69 abc	LD	19.6 e	5.0 g	1385.1 bc						
	UN	1.80 ab	UN	19.9 de	5.8 efg	1689.8 ab						
	ED+CT	0.88 hi										
	MD+CT	1.17 fgh										
	LD+CT	1.03 ghi										
	UN+CT	1.4 c-f										
2016	ED	1.84 a	ED	22.1 bc	6.2 def	1876.4 a			CT	0.64 b	248.8 b	6.5 cd
	MD	1.59 a-d	MD	21.8 bc	6.8 de	1575.4 ab			NoCT	1.10 a	212.1 bc	6.8 bc
	LD	1.46 b-f	LD	20.8 cde	6.4 de	1404.9 bc						
	UN	1.54 a-e	UN	21.3 bcd	7.1 cd	1509.7 b						
	ED+CT	1.04 ghi										
	MD+CT	1.04 ghi										
	LD+CT	1.41 c-f										
	UN+CT	1.22 e-h										



Supplementary Figure 1. Total anthocyanins (A) and Cyanidin and its derivates (B) in the wines of Probus derived from different treatments in 2015.

Different small letters on the top of the bars indicate significant difference between the treatments $p<0.05$ (Duncan's test)

Supplementary Table 2. Yield, cluster weight and incidence of *Botrytis* sp. for Cabernet Sauvignon and Probus (2014-2016). The results are presented as mean \pm standard error.

Year	Treatment	Grape yield (kg/m ²)		Cluster weight (g)		Botrytis sp. (%)	
		Cabernet	Probus	Cabernet	Probus	Cabernet	Probus
		Sauvignon		Sauvignon		Sauvignon	
2014	ED	0.49 \pm 0.0	1.15 \pm 0.1	85.3 \pm 3	160.7 \pm 17	10 \pm 0.0	18 \pm 1.7
	MD	0.51 \pm 0.1	1.25 \pm 0.0	90.7 \pm 14	188.7 \pm 5	10 \pm 0.0	18 \pm 1.7
	LD	0.55 \pm 0.1	1.25 \pm 0.1	108.3 \pm 11	185.7 \pm 15	12 \pm 1.7	20 \pm 0.0
	UN	0.64 \pm 0.1	0.82 \pm 0.0	94.7 \pm 2	138.0 \pm 9	12 \pm 1.7	25 \pm 5.0
	ED+CT	0.22 \pm 0.0	0.49 \pm 0.1	99.3 \pm 5	162.7 \pm 13	8 \pm 1.7	17 \pm 3.3
	MD+CT	0.28 \pm 0.1	0.46 \pm 0.1	100.7 \pm 17	162.7 \pm 31	10 \pm 0.0	22 \pm 1.7
	LD+CT	0.22 \pm 0.0	0.44 \pm 0.1	101.7 \pm 12	191.0 \pm 20	10 \pm 0.0	17 \pm 1.7
	UN+CT	0.30 \pm 0.0	0.42 \pm 0.1	104.3 \pm 14	173.0 \pm 8	10 \pm 0.0	23 \pm 3.3
	ED	0.78 \pm 0.0	1.56 \pm 0.1	114.7 \pm 14	198.0 \pm 17	1 \pm 0.0	5 \pm 1.2
2015	MD	1.00 \pm 0.0	1.56 \pm 0.1	130.7 \pm 10	254.7 \pm 4	3 \pm 1.0	5 \pm 0.0
	LD	1.06 \pm 0.1	1.69 \pm 0.1	153 \pm 11	246.0 \pm 19	2 \pm 0.3	5 \pm 0.9
	UN	1.24 \pm 0.1	1.80 \pm 0.2	142.7 \pm 4	251.0 \pm 10	2 \pm 1.0	7 \pm 0.9
	ED+CT	0.45 \pm 0.0	0.88 \pm 0.1	152 \pm 14	283.0 \pm 17	1 \pm 0.7	5 \pm 1.5
	MD+CT	0.62 \pm 0.1	1.17 \pm 0.1	167.7 \pm 15	311.0 \pm 32	1 \pm 0.7	7 \pm 1.5
	LD+CT	0.59 \pm 0.1	1.03 \pm 0.0	151 \pm 9	319.3 \pm 29	2 \pm 0.9	6 \pm 2.0
	UN+CT	0.64 \pm 0.0	1.41 \pm 0.2	162.7 \pm 18	267.7 \pm 19	1 \pm 0.7	6 \pm 1.0
	ED	0.87 \pm 0.0	1.84 \pm 0.2	144.7 \pm 3	196.7 \pm 12	0.0	3 \pm 0.9
	MD	1.17 \pm 0.2	1.59 \pm 0.1	178.3 \pm 19	205.0 \pm 5	0.0	9 \pm 3.5
2016	LD	1.06 \pm 0.0	1.46 \pm 0.2	196.7 \pm 23	223.3 \pm 30	0.0	11 \pm 4.9
	UN	1.29 \pm 0.1	1.54 \pm 0.0	197.7 \pm 16	223.3 \pm 24	0.0	12 \pm 1.7
	ED+CT	0.44 \pm 0.1	1.04 \pm 0.1	143.3 \pm 3	253.3 \pm 17	0.0	8 \pm 3.3
	MD+CT	0.73 \pm 0.1	1.04 \pm 0.1	193.3 \pm 23	257.3 \pm 20	0.0	13 \pm 4.4
	LD+CT	0.69 \pm 0.1	1.41 \pm 0.0	186.7 \pm 19	237.7 \pm 22	0.0	12 \pm 1.5
	UN+CT	0.68 \pm 0.1	1.22 \pm 0.1	176.7 \pm 23	246.7 \pm 52	0.0	13 \pm 1.7

Supplementary Table 3. Berry weight and skin weight for Cabernet Sauvignon and Probus (2014-2016).
 The results are presented as mean \pm standard error.

Year	Treatment	Berry weight (g)		Skin weight (g)	
		Cabernet Sauvignon	Probus	Cabernet Sauvignon	Probus
2014	ED	1.50 \pm 0.01	2.16 \pm 0.12	0.56 \pm 0.03	0.74 \pm 0.02
	MD	1.50 \pm 0.08	2.08 \pm 0.10	0.63 \pm 0.09	0.81 \pm 0.04
	LD	1.40 \pm 0.02	2.36 \pm 0.15	0.56 \pm 0.02	1.02 \pm 0.07
	UN	1.44 \pm 0.13	2.02 \pm 0.10	0.54 \pm 0.04	0.72 \pm 0.05
	ED+CT	1.44 \pm 0.07	2.03 \pm 0.03	0.53 \pm 0.03	0.83 \pm 0.04
	MD+CT	1.59 \pm 0.08	2.13 \pm 0.20	0.69 \pm 0.10	0.83 \pm 0.05
	LD+CT	1.55 \pm 0.05	2.29 \pm 0.12	0.60 \pm 0.03	0.96 \pm 0.04
	UN+CT	1.44 \pm 0.05	2.04 \pm 0.13	0.55 \pm 0.02	0.80 \pm 0.09
2015	ED	1.32 \pm 0.03	2.02 \pm 0.12	0.31 \pm 0.01	0.53 \pm 0.08
	MD	1.35 \pm 0.04	1.86 \pm 0.04	0.35 \pm 0.03	0.53 \pm 0.02
	LD	1.30 \pm 0.01	2.13 \pm 0.06	0.33 \pm 0.02	0.68 \pm 0.03
	UN	1.23 \pm 0.08	1.98 \pm 0.12	0.28 \pm 0.02	0.52 \pm 0.03
	ED+CT	1.26 \pm 0.08	1.97 \pm 0.08	0.31 \pm 0.04	0.62 \pm 0.03
	MD+CT	1.37 \pm 0.05	2.10 \pm 0.09	0.30 \pm 0.01	0.62 \pm 0.03
	LD+CT	1.52 \pm 0.14	2.05 \pm 0.07	0.33 \pm 0.02	0.64 \pm 0.02
	UN+CT	1.27 \pm 0.03	1.76 \pm 0.03	0.33 \pm 0.02	0.54 \pm 0.02
2016	ED	1.16 \pm 0.01	1.83 \pm 0.01	0.28 \pm 0.04	0.53 \pm 0.03
	MD	1.21 \pm 0.09	1.64 \pm 0.02	0.27 \pm 0.03	0.46 \pm 0.04
	LD	1.19 \pm 0.01	1.74 \pm 0.12	0.29 \pm 0.03	0.48 \pm 0.05
	UN	1.03 \pm 0.04	1.89 \pm 0.04	0.22 \pm 0.02	0.55 \pm 0.04
	ED+CT	1.14 \pm 0.04	1.91 \pm 0.06	0.32 \pm 0.03	0.60 \pm 0.04
	MD+CT	1.22 \pm 0.03	2.07 \pm 0.08	0.21 \pm 0.02	0.62 \pm 0.02
	LD+CT	1.49 \pm 0.31	1.70 \pm 0.08	0.27 \pm 0.02	0.48 \pm 0.07
	UN+CT	1.04 \pm 0.02	1.59 \pm 0.11	0.30 \pm 0.03	0.46 \pm 0.15

Supplementary Table 4. Number of seeds/berry and weight for seeds/berry for Cabernet Sauvignon and Probus (2014-2016). The results are presented as mean \pm standard error.

Year	Treatment	Number of seeds/berry		Weight of seeds/berry (g)	
		Cabernet Sauvignon	Probus	Cabernet Sauvignon	Probus
2014	ED	1.97 \pm 0.12	2.13 \pm 0.19	0.08 \pm 0.00	0.11 \pm 0.01
	MD	1.87 \pm 0.12	1.93 \pm 0.09	0.08 \pm 0.01	0.11 \pm 0.01
	LD	1.80 \pm 0.10	1.77 \pm 0.09	0.07 \pm 0.00	0.12 \pm 0.01
	UN	1.83 \pm 0.18	2.10 \pm 0.15	0.07 \pm 0.01	0.08 \pm 0.01
	ED+CT	1.83 \pm 0.26	1.93 \pm 0.12	0.08 \pm 0.01	0.09 \pm 0.01
	MD+CT	1.83 \pm 0.09	1.83 \pm 0.12	0.09 \pm 0.01	0.10 \pm 0.00
	LD+CT	2.03 \pm 0.15	1.90 \pm 0.15	0.09 \pm 0.01	0.12 \pm 0.01
	UN+CT	1.77 \pm 0.03	2.00 \pm 0.15	0.07 \pm 0.01	0.08 \pm 0.01
2015	ED	2.30 \pm 0.09	2.02 \pm 0.12	0.09 \pm 0.00	0.09 \pm 0.01
	MD	1.93 \pm 0.07	1.83 \pm 0.11	0.09 \pm 0.01	0.09 \pm 0.01
	LD	1.95 \pm 0.10	1.55 \pm 0.09	0.08 \pm 0.01	0.09 \pm 0.00
	UN	1.72 \pm 0.08	2.05 \pm 0.12	0.07 \pm 0.00	0.09 \pm 0.01
	ED+CT	2.00 \pm 0.07	1.88 \pm 0.09	0.07 \pm 0.00	0.09 \pm 0.01
	MD+CT	1.98 \pm 0.03	1.85 \pm 0.12	0.09 \pm 0.01	0.09 \pm 0.01
	LD+CT	2.10 \pm 0.08	1.80 \pm 0.09	0.09 \pm 0.00	0.08 \pm 0.01
	UN+CT	1.72 \pm 0.15	1.75 \pm 0.10	0.07 \pm 0.01	0.08 \pm 0.01
2016	ED	2.55 \pm 0.08	1.85 \pm 0.09	0.09 \pm 0.00	0.08 \pm 0.01
	MD	2.00 \pm 0.15	1.73 \pm 0.12	0.08 \pm 0.01	0.07 \pm 0.00
	LD	2.10 \pm 0.21	1.25 \pm 0.09	0.09 \pm 0.01	0.07 \pm 0.01
	UN	1.60 \pm 0.06	1.90 \pm 0.13	0.07 \pm 0.00	0.07 \pm 0.03
	ED+CT	2.40 \pm 0.08	1.85 \pm 0.09	0.10 \pm 0.00	0.07 \pm 0.01
	MD+CT	2.20 \pm 0.15	1.87 \pm 0.13	0.10 \pm 0.00	0.08 \pm 0.01
	LD+CT	2.17 \pm 0.03	1.55 \pm 0.09	0.09 \pm 0.00	0.06 \pm 0.00
	UN+CT	1.70 \pm 0.08	1.60 \pm 0.28	0.08 \pm 0.00	0.08 \pm 0.02

Supplementary Table 5. TSS, TA and total anthocyanins of Cabernet Sauvignon and Probus (2014-2016)

The results are presented as mean \pm standard error.

Year	Treatment	TSS (%)		TA (g/l)		Total Anthocyanins (mg L ⁻¹)	
		Cabernet Sauvignon	Probus	Cabernet Sauvignon	Probus	Cabernet Sauvignon	Probus
2014	ED	22.5 \pm 0.6	20.5 \pm 0.6	7.8 \pm 0.3	6.4 \pm 0.2	815.7 \pm 55	1429 \pm 51
	MD	23.3 \pm 0.3	20.1 \pm 0.7	8.0 \pm 0.2	6.9 \pm 0.1	708.1 \pm 94	1468 \pm 99
	LD	23.9 \pm 0.2	21.6 \pm 0.3	8.0 \pm 0.6	7.3 \pm 0.5	777.6 \pm 11	1399 \pm 47
	UN	23.2 \pm 0.6	20.6 \pm 1.0	8.6 \pm 0.6	11.0 \pm 1.0	685.3 \pm 26	1493 \pm 93
	ED+CT	21.7 \pm 0.1	21.4 \pm 0.2	7.4 \pm 0.3	8.1 \pm 0.4	865.9 \pm 54	1387 \pm 85
	MD+CT	21.9 \pm 0.7	22.5 \pm 1.2	7.2 \pm 0.3	9.5 \pm 0.6	728.9 \pm 73	1566 \pm 73
	LD+CT	24.4 \pm 0.3	22.3 \pm 0.5	7.3 \pm 0.2	9.5 \pm 0.3	814.6 \pm 76	1385 \pm 76
	UN+CT	22.3 \pm 0.5	19.8 \pm 0.4	8.1 \pm 0.5	11.5 \pm 1.4	736.8 \pm 86	1334 \pm 86
2015	ED	20.3 \pm 0.3	19.9 \pm 1.0	6.0 \pm 0.3	4.7 \pm 0.2	695.6 \pm 49	1560 \pm 63
	MD	20.1 \pm 0.3	17.4 \pm 0.4	5.6 \pm 0.2	5.2 \pm 0.1	563.9 \pm 32	1288 \pm 32
	LD	19.2 \pm 0.4	17.0 \pm 1.0	5.8 \pm 0.2	5.2 \pm 0.1	650.0 \pm 11	1267 \pm 85
	UN	19.9 \pm 0.1	17.9 \pm 1.2	6.6 \pm 0.4	5.6 \pm 0.1	603.1 \pm 14	1719 \pm 86
	ED+CT	20.3 \pm 0.3	21.4 \pm 0.7	5.6 \pm 0.1	4.9 \pm 0.4	657.0 \pm 86	1326 \pm 93
	MD+CT	19.6 \pm 0.2	19.8 \pm 0.6	5.6 \pm 0.1	5.3 \pm 0.1	576.1 \pm 26	1067 \pm 21
	LD+CT	20.0 \pm 0.4	19.3 \pm 0.9	5.8 \pm 0.1	4.7 \pm 0.2	609.7 \pm 67	1501 \pm 26
	UN+CT	20.0 \pm 0.5	18.7 \pm 0.	6.0 \pm 0.3	6.0 \pm 0.1	702.6 \pm 98	1660 \pm 67
2016	ED	22.1 \pm 0.2	19.8 \pm 1.7	7.6 \pm 0.3	6.2 \pm 0.2	778.5 \pm 49	1787 \pm 64
	MD	21.7 \pm 0.2	19.6 \pm 0.8	8.0 \pm 0.2	7.1 \pm 0.2	626.2 \pm 79	1636 \pm 85
	LD	21.0 \pm 0.4	20.4 \pm 1.1	8.3 \pm 0.1	6.9 \pm 0.5	634.8 \pm 42	1369 \pm 98
	UN	21.3 \pm 0.5	20.0 \pm 0.1	8.6 \pm 0.3	7.0 \pm 0.3	543.4 \pm 32	1813 \pm 45
	ED+CT	22.1 \pm 0.4	22.2 \pm 0.1	7.8 \pm 0.3	6.3 \pm 0.4	780.3 \pm 50	1936 \pm 33
	MD+CT	21.8 \pm 0.2	21.2 \pm 0.3	7.9 \pm 0.1	6.5 \pm 0.2	657.6 \pm 90	1515 \pm 91
	LD+CT	20.6 \pm 0.3	21.7 \pm 0.6	8.4 \pm 0.1	5.9 \pm 0.0	619.1 \pm 50	1441 \pm 92
	UN+CT	21.4 \pm 0.7	22.1 \pm 0.6	7.8 \pm 0.1	7.1 \pm 0.2	675.4 \pm 46	1206 \pm 86