Table S4 Effect of different leaf canopy thickness on monomeric anthocyanins in 'Merlot' wine (mg·L^{-1})

NO.	Name of the compounds	2023				2024			
		M40	M60	M80	M100	M40	M60	M80	M100
1	Delphindin-3-*O*-glucoside	3.92± 1.50a	3.13± 0.04ab	3.02± 0.09ab	1.72± 0.11b	6.82± 1.31ab	9.04± 5.61a	0.00± 0.00b	0.00± 0.00b
2	Cyanidin-3-*O*-glucoside	3.57± 0.10	4.04± 1.42	4.47± 1.00	6.14± 1.57	6.63± 1.05b	11.37± 2.53a	9.48± 0.14ab	10.19± 0.68ab
3	Petunidin-3-*O*-glucoside	5.70± 0.09ab	6.95± 1.91a	4.69± 0.04ab	3.16± 0.69b	8.04± 1.04b	11.59± 2.70ab	14.35± 1.25a	8.89± 0.17b
4	Peonidin-3-*O*-glucoside	5.32± 0.14b	6.40± 0.11a	6.72± 0.56a	3.50± 0.04c	8.53± 0.42ab	14.58± 4.72a	0.00± 0.00b	0.00± 0.00b
5	Malvidin-3-*O*-glucoside	113.28± 8.21c	159.92± 6.51a	139.02±2.2 5b	90.22± 0.41d	50.00± 0.63d	134.25± 10.70b	161.47± 6.63a	93.03± 3.73c
	Monosaccharides kinds	5	5	5	5	5	5	5	5
	Monosaccharides subtotal	131.80± 6.67c	180.44± 9.98a	157.93± 3.85b	104.73± 2.53d	80.01± 1.83b	180.83± 26.26a	185.30± 7.74a	112.11± 3.22b
	Monosaccharides proportion（%）	75.76	72.93	71.03	79.82	48.15	72.92	58.41	54.34
6	Delphindin-3-*O*-acetylglucoside	2.56± 0.28c	3.56± 0.12b	4.55± 0.08a	1.72± 0.03d	6.07± 0.11a	3.98± 0.71c	5.04± 0.04b	6.41± 0.06a
7	Cyanidin-3-*O*-acetylglucoside	2.65± 1.55ab	3.67± 2.13ab	5.67± 0.87a	1.68± 0.30b	7.78± 0.83b	5.64± 0.71c	16.51± 1.02a	0.00± 0.00d

Table S4 (continued)

NO.	Name of the compounds	2023				2024			
		M40	M60	M80	M100	M40	M60	M80	M100
8	Petunidin-3-*O*-acetylglucoside	7.09± 1.51a	8.10± 1.72a	10.01± 0.10a	3.65± 0.41b	0.00± 0.00c	4.99± 1.41b	9.03± 0.17a	0.00± 0.00c
9	Peonidin-3-*O*-acetylglucoside	-	-	-	-	0.00± 0.00c	4.56± 1.41b	0.00± 0.00c	7.77± 0.72a
10	Malvidin-3-*O*-acetylglucoside	22.07± 2.25c	42.32± 1.48a	37.71± 1.24b	13.10± 1.26d	33.25± 6.36b	33.40± 4.24b	68.52± 5.59a	41.14± 2.19b
	Acetylation kinds	4	4	4	4	5	5	5	5
	Acetylation subtotal	34.38± 5.04b	57.64± 5.46a	57.93± 0.56a	20.14± 2.00c	47.10± 5.42b	52.57± 4.24b	99.11± 6.48a	55.31± 2.97b
	Acetylation proportion（%）	19.69	23.27	26.06	15.32	28.36	21.44	31.22	26.81
11	Petunidin-3-*O*-(6-*O*-caffeoyl) glucoside	3.63± 0.40a	1.27± 0.26b	1.49± 0.47b	3.30± 0.45a	9.04± 1.62	6.96± 1.41	8.34± 0.26	10.03± 1.57
12	Peonidin-3-*O*-(6-*O*-caffeoyl) glucoside	0.82± 0.01b	1.10± 0.14a	0.99± 0.03ab	0.52± 0.00b	-	-	-	-
	Coffee acylation kinds	2	2	2	2	1	1	1	1
	Coffee acylation subtotal	4.45± 0.39a	2.37± 0.12b	2.48± 0.50b	3.82± 0.45a	9.04± 1.62	6.96± 1.41	8.34± 0.26	10.03± 1.57
	Coffee acylation proportion（%）	2.55	0.96	1.12	2.91	5.44	2.80	2.63	4.86

Table S4 (continued)

NO.	Name of the compounds	2023				2024			
		M40	M60	M80	M100	M40	M60	M80	M100
13	Delphindin-3-*O*-(6-*O*-coumaroyl) glucoside (*cis* isomer)	0.50± 0.00	0.58± 0.01	0.66± 0.01	0.60± 0.23	-	-	-	-
14	Peonidin-3-*O*-(6-*O*-coumaroyl) glucoside(*cis* isomer)	0.52± 0.12a	0.55± 0.15a	0.00± 0.00a	0.00± 0.00a	-	-	-	-
15	Peonidin-3-*O*-(6-*O*-coumarovl) glucoside (*trans* isomer)	2.44± 0.09c	4.62± 0.37a	3.33± 0.27b	1.15± 0.28d	8.39± 3.03	7.07± 1.41	7.99± 0.17	9.87± 3.13
16	Malvidin-3-*O*-(6-*O*-coumaroyl) glucoside (*trans* isomer)	0.00± 0.00c	1.29± 0.22a	0.00± 0.00c	0.81± 0.14b	21.63± 3.37a	0.00± 0.00b	16.53± 0.02a	18.97± 4.61a
	Conjugation with vanillin kinds	4	4	4	4	2	2	2	2
	Conjugation with vanillin subtotal	3.46± 0.03b	7.04± 0.44a	3.99± 0.28b	2.55± 0.19c	30.02± 6.40a	7.07± 1.41b	24.52± 0.20a	28.84± 7.74a
	Conjugation with vanillin proportion （%）	1.99	2.85	1.79	1.95	18.05	2.84	7.74	13.98
	Total kinds	15	15	15	15	13	13	13	13
	Total	174.09± 12.07b	247.49± 16.01a	222.34± 4.19a	131.24± 5.17c	166.17± 1.19c	247.42± 24.85b	317.27± 14.28a	206.30± 0.02c

a, b, c, and d indicate significant differences at $P < 0.05$.