



**Suppl Table 1.** Number of clusters per plant, fresh mass of clusters, berry and seeds, production, and yield of ‘BRS Lorena’ vine grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis systems.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Number of clusters per plant	I	High	6.0 ± 0.0	8.0 ± 0.0	18.6
		Low	6.0 ± 0.0	8.0 ± 0.0	
	II	High	8.0 ± 0.1	9.0 ± 0.1	
		Low	8.0 ± 0.1	10.0 ± 0.1	
	Aver.	High	7.0 ± 0.0 Aa	8.0 ± 0.4 Aa	
		Low	7.0 ± 0.0 Ba	9.0 ± 0.9 Aa	
Fresh mass of clusters (g)	I	High	200.0 ± 3.3	214.4 ± 4.2	11.1
		Low	112.2 ± 1.4	198.4 ± 10.4	
	II	High	212.1 ± 1.5	219.9 ± 1.9	
		Low	103.8 ± 1.6	212.4 ± 1.9	
	Aver.	High	206.1 ± 5.1 Aa	217.1 ± 7.2 Aa	
		Low	108.0 ± 3.5 Aa	205.4 ± 17.3 Aa	
Fresh mass of berry (g)	I	High	1.9 ± 0.0	2.0 ± 0.0	6.1
		Low	1.9 ± 0.0	2.2 ± 0.0	
	II	High	2.9 ± 0.0	2.9 ± 0.0	
		Low	2.8 ± 0.0	2.8 ± 0.0	
	Aver.	High	2.4 ± 0.0 Aa	2.5 ± 0.5 Aa	
		Low	2.4 ± 0.0 Aa	2.5 ± 0.9 Aa	
Production (kg per plant)	I	High	1.2 ± 0.0	1.7 ± 0.0	22.2
		Low	1.4 ± 0.0	1.9 ± 0.0	
	II	High	1.4 ± 0.0	2.0 ± 0.0	
		Low	1.6 ± 0.0	1.9 ± 0.0	
	Aver.	High	1.3 ± 0.0 Aa	1.9 ± 0.0 Aa	
		Low	1.5 ± 0.0 Ba	1.9 ± 0.0 Aa	
Yield (t ha <sup>-1</sup> )	I	High	3.5 ± 0.4	4.6 ± 0.4	23.5
		Low	3.9 ± 0.4	4.9 ± 0.4	
	II	High	7.1 ± 0.4	9.5 ± 0.4	
		Low	5.8 ± 0.4	9.6 ± 0.4	
	Aver.	High	5.3 ± 0.0 Aa	7.0 ± 0.1 Aa	
		Low	4.8 ± 0.0 Ba	7.2 ± 0.8 Aa	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).

**Suppl Table 2.** Soluble solids, pH, titratable acidity, maturation rate, and reducing sugars of ‘BRS Lorena’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis systems.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Soluble solids (°Brix)	I	High	19.4 ± 1.4	19.8 ± 1.4	5.1
		Low	19.4 ± 1.4	19.0 ± 1.4	
	II	High	25.2 ± 3.0	21.0 ± 3.4	
		Low	21.7 ± 3.0	21.0 ± 3.4	
	Aver.	High	22.3 ± 2.6 Aa	20.4 ± 1.2 Ba	
		Low	20.6 ± 5.5 Ab	20.0 ± 4.0 Aa	
	I	High	3.4 ± 0.4	3.4 ± 0.4	
		Low	3.4 ± 0.3	3.5 ± 0.3	
pH	II	High	3.6 ± 1.4	3.5 ± 1.4	2.2
		Low	3.6 ± 1.4	3.5 ± 1.4	
	Aver.	High	3.5 ± 0.4 Aa	3.5 ± 0.0 Aa	
		Low	3.5 ± 0.8 Aa	3.5 ± 0.1 Aa	
	I	High	0.7 ± 0.0	0.7 ± 0.0	
		Low	0.7 ± 0.0	0.7 ± 0.0	
	II	High	0.7 ± 0.0	0.9 ± 0.0	
		Low	1.0 ± 0.0	1.0 ± 0.0	
Titratable acidity (% tartaric acid)	Aver.	High	0.7 ± 0.0 Bb	0.8 ± 0.0 Ab	6.9
		Low	0.8 ± 0.0 Aa	0.9 ± 0.0 Aa	
	I	High	28.1 ± 3.1	28.7 ± 3.1	
		Low	28.1 ± 2.1	27.5 ± 2.1	
	II	High	38.5 ± 3.1	23.0 ± 3.9	
		Low	27.3 ± 3.1	28.72 ± 3.9	
	Aver.	High	33.3 ± 7.0 Aa	25.8 ± 4.4 Ba	
		Low	27.7 ± 1.2 Ab	28.1 ± 4.6 Aa	
Maturation rate (SS/AT)	I	High	14.9 ± 0.0	14.5 ± 0.0	12.6
		Low	14.4 ± 0.0	14.4 ± 0.0	
	II	High	20.9 ± 0.0	15.1 ± 0.0	
		Low	17.4 ± 0.0	14.5 ± 0.0	
	Aver.	High	17.9 ± 0.05 Aa	14.8 ± 2.6 Ba	
		Low	15.9 ± 0.06 Ab	14.4 ± 0.0 Aa	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).

**Suppl Table 3.** Total phenolic compounds, total flavonoid, and antioxidant activity (DPPH and FRAP) of pulp and skin of ‘BRS Lorena’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis system.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Total phenolic compounds (mg 100 g <sup>-1</sup> )	I	High	34.0 ± 9.0	33.2 ± 9.3	23.4
		Low	30.1 ± 12.1	30.1 ± 10.1	
	II	High	38.7 ± 9.0	41.1 ± 12.0	
		Low	31.5 ± 9.1	38.6 ± 12.5	
	Aver.	High	36.4 ± 10.3 Aa	37.1 ± 2.4Aa	
		Low	30.8 ± 7.5 Aa	34.3 ± 4.6 Aa	
	I	High	0.2 ± 0.0	0.3 ± 0.0	
		Low	0.2 ± 0.0	0.1 ± 0.0	
Total flavonoid (mg 100 g <sup>-1</sup> )	II	High	0.5 ± 0.0	0.4 ± 0.0	27.7
		Low	0.4 ± 0.0	0.2 ± 0.0	
	Aver.	High	0.3 ± 0.0 Aa	0.4 ± 0.0 Aa	
		Low	0.3 ± 0.0 Aa	0.2 ± 0.0 Ab	
	I	High	1200.4 ± 80.0	989.4 ± 49.4	
		Low	1190.0 ± 80.0	890.9 ± 49.9	
	DPPH (μm g <sup>-1</sup> )	II	1494.4 ± 80.0	1214.5 ± 89.2	
		Low	1363.8 ± 90.0	1056.5 ± 49.5	
	Aver.	High	1347.4 ± 68.3 Aa	1102.0 ± 69.4 Aa	
		Low	1276.9 ± 101.2 Aa	973.7 ± 41.2 Ba	
FRAP (mmol Fe kg <sup>-1</sup> )	I	High	6.6 ± 0.9	6.8 ± 0.9	25.5
		Low	5.8 ± 0.0	5.2 ± 1.1	
	II	High	6.7 ± 0.9	6.9 ± 0.9	
		Low	5.9 ± 0.0	5.4 ± 1.1	
	Aver.	High	6.7 ± 0.9 Aa	6.8 ± 0.9 Aa	
		Low	5.9 ± 0.0 Aa	5.3 ± 1.1 Aa	
	I	High	64.5 ± 3.8	54.3 ± 1.2	
		Low	66.4 ± 2.4	48.5 ± 2.9	
Total phenolic compounds (mg 100 g <sup>-1</sup> )	II	High	64.8 ± 3.9	54.6 ± 1.2	15.9
		Low	66.5 ± 2.4	48.6 ± 3.1	
	Aver.	High	64.7 ± 3.9 Aa	54.5 ± 1.2 Aa	
		Low	66.4 ± 2.4 Aa	48.6 ± 3.0 Aa	
	I	High	1.5 ± 0.0	1.9 ± 0.0	
		Low	1.4 ± 0.0	1.3 ± 0.0	
Total flavonoid (mg 100 g <sup>-1</sup> )	II	High	1.6 ± 0.0	2.4 ± 0.0	18.0
		Low	1.4 ± 0.0	1.8 ± 0.0	
	Aver.	High	1.5 ± 0.0 Aa	2.2 ± 0.0 Aa	
		Low	1.4 ± 0.0 Aa	1.6 ± 0.0 Ab	
	I	High	5787.8 ± 439.4	5319.9 ± 390.9	
		Low	7225.4 ± 398.9	4439.4 ± 419.1	
	DPPH (μm g <sup>-1</sup> )	II	6000.0 ± 419.1	5639.3 ± 439.2	
		Low	7000.0 ± 312.4	4911.5 ± 410.4	
	Aver.	High	5893.9 ± 762.5 Aa	5479.4 ± 842.1 Aa	
		Low	7112.7 ± 1620.0 Aa	4675.45 ± 317.3 Aa	
FRAP (mmol Fe kg <sup>-1</sup> )	I	High	289.1 ± 12.4	300.4 ± 12.2	24.9
		Low	190.9 ± 19.4	198.9 ± 19.1	
	II	High	339.1 ± 12.5	388.8 ± 18.2	
		Low	382.0 ± 18.1	217.0 ± 14.1	
	Aver.	High	314.1 ± 17.4 Aa	344.6 ± 14.6 Aa	
		Low	286.4 ± 21.1 Aa	208.0 ± 9.0 Bb	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).

**Suppl Table 4.** Number of clusters per plant, fresh mass of clusters, berry and seeds, production, and yield of ‘IAC 21-14 Madalena’ vine grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis systems.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Number of clusters per plant	I	High	9.0 ± 0.8	12.0 ± 0.9	21.9
		Low	8.0 ± 0.9	7.0 ± 0.9	
	II	High	9.0 ± 0.9	8.0 ± 0.9	
		Low	12.0 ± 0.9	7.0 ± 0.9	
	Aver.	High	9.0 ± 0.8 Aa	12.0 ± 0.1 Aa	
		Low	8.0 ± 1.0 Ab	7.0 ± 0.9 Ab	
Fresh mass of clusters (g)	I	High	140.0 ± 12.2	160.0 ± 10.1	7.5
		Low	150.0 ± 19.1	110.0 ± 14.1	
	II	High	156.1 ± 10.2	172.4 ± 10.2	
		Low	170.3 ± 10.2	126.2 ± 10.2	
	Aver.	High	148.1 ± 15.8 Aa	166.2 ± 18.4 Aa	
		Low	160.3 ± 27.3 Ab	118.1 ± 34.0 Ba	
Fresh mass of berry (g)	I	High	2.7 ± 0.1	2.4 ± 0.1	4.3
		Low	2.4 ± 0.1	2.5 ± 0.2	
	II	High	2.9 ± 0.1	2.5 ± 0.2	
		Low	2.8 ± 0.1	2.7 ± 0.2	
	Aver.	High	2.8 ± 0.1 Aa	2.5 ± 0.2 Aa	
		Low	2.6 ± 0.4 Aa	2.6 ± 0.2 Aa	
Production (kg per plant)	I	High	1.2 ± 0.0	1.7 ± 0.0	17.7
		Low	1.3 ± 0.0	0.9 ± 0.0	
	II	High	1.7 ± 0.0	1.9 ± 0.0	
		Low	1.5 ± 0.0	1.0 ± 0.0	
	Aver.	High	1.5 ± 0.3 Aa	1.8 ± 0.1 Aa	
		Low	1.4 ± 0.1 Ab	0.9 ± 0.0 Ab	
Yield (t ha <sup>-1</sup> )	I	High	4.7 ± 0.9	6.9 ± 0.4	14.5
		Low	5.5 ± 0.9	4.4 ± 0.4	
	II	High	6.5 ± 0.9	7.1 ± 0.4	
		Low	5.8 ± 0.9	4.5 ± 0.4	
	Aver.	High	5.6 ± 0.9 Aa	7.0 ± 0.1 Aa	
		Low	5.7 ± 0.1 Ab	4.5 ± 0.1 Ab	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).

**Suppl Table 5.** Soluble solids, pH, titratable acidity, maturation rate, and reducing sugars of ‘IAC 21-14 Madalena’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis system.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Soluble solids (°Brix)	I	High	14.9 ± 1.2	15.2 ± 1.1	3.9
		Low	14.2 ± 1.1	14.9 ± 1.1	
	II	High	16.6 ± 1.0	18.2 ± 1.7	
		Low	19.1 ± 0.9	17.5 ± 3.1	
	Aver.	High	15.8 ± 2.1 Aa	16.7 ± 1.8 Aa	
		Low	16.6 ± 1.2 Aa	16.2 ± 3.1 Aa	
	I	High	3.4 ± 0.2	3.4 ± 0.1	
		Low	3.2 ± 0.4	3.4 ± 0.1	
pH	II	High	3.6 ± 0.6	3.7 ± 0.0	2.6
		Low	3.9 ± 0.4	3.7 ± 0.4	
	Aver.	High	3.5 ± 0.7 Aa	3.5 ± 0.0 Aa	
		Low	3.6 ± 0.4 Aa	3.5 ± 0.5 Aa	
	I	High	0.8 ± 0.0	0.9 ± 0.0	
		Low	0.9 ± 0.0	0.9 ± 0.0	
	II	High	1.0 ± 0.0	0.9 ± 0.0	
		Low	0.8 ± 0.0	1.0 ± 0.0	
	Aver.	High	0.9 ± 0.0 Aa	0.9 ± 0.0 Aa	
		Low	0.9 ± 0.0 Aa	0.9 ± 0.0 Aa	
Titratable acidity (% tartaric acid)	I	High	18.6 ± 3.8	17.1 ± 3.4	8.6
		Low	16.6 ± 2.3	15.9 ± 2.0	
	II	High	19.5 ± 3.8	21.2 ± 3.4	
		Low	20.3 ± 0.1	18.8 ± 3.0	
	Aver.	High	19.1 ± 3.9 Aa	19.1 ± 3.4 Aa	
		Low	18.4 ± 2.3 Aa	17.4 ± 2.0 Aa	
	I	High	12.0 ± 2.4	12.0 ± 0.9	
		Low	12.2 ± 0.1	11.4 ± 1.4	
Maturation rate (SS/AT)	II	High	11.3 ± 2.4	11.2 ± 0.9	9.5
		Low	12.3 ± 0.1	11.5 ± 1.5	
	Aver.	High	11.7 ± 2.5 Aa	11.6 ± 0.9 Aa	
		Low	12.2 ± 0.1 Aa	11.5 ± 1.5 Aa	
	I	High	12.0 ± 2.4	12.0 ± 0.9	
		Low	12.2 ± 0.1	11.4 ± 1.4	
	II	High	11.3 ± 2.4	11.2 ± 0.9	
		Low	12.3 ± 0.1	11.5 ± 1.5	
	Aver.	High	11.7 ± 2.5 Aa	11.6 ± 0.9 Aa	
		Low	12.2 ± 0.1 Aa	11.5 ± 1.5 Aa	
Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).					

**Suppl Table 6.** Total phenolic compounds, total flavonoid, and antioxidant activity (DPPH and FRAP) of pulp and skin of ‘IAC 21-14 Madalena’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis system

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Total phenolic compounds (mg 100 g <sup>-1</sup> )	I	High	17.0 ± 9.5	19.5 ± 3.2	15.1
		Low	19.8 ± 4.1	16.8 ± 0.2	
	II	High	17.8 ± 9.8	20.5 ± 3.2	
		Low	20.2 ± 4.1	17.1 ± 0.2	
	Aver.	High	17.4 ± 9.6 Aa	20.0 ± 3.2 Aa	
		Low	20.0 ± 4.1 Aa	17.0 ± 0.2 Aa	
	Pulp	I	0.2 ± 0.0	0.4 ± 0.0	
		Low	0.2 ± 0.0	0.3 ± 0.0	
Total flavonoid (mg 100 g <sup>-1</sup> )	II	High	0.2 ± 0.0	0.4 ± 0.0	34.1
		Low	0.2 ± 0.0	0.3 ± 0.0	
	Aver.	High	0.2 ± 0.0 Ba	0.4 ± 0.0 Aa	
		Low	0.2 ± 0.0 Ba	0.3 ± 0.0 Ab	
	DPPH (μm g <sup>-1</sup> )	I	980.0 ± 78.0	505.0 ± 97.5	
		Low	648.0 ± 55.5	630.0 ± 12.5	
	Aver.	High	996.4 ± 79.9	515.9 ± 99.4	
		Low	656.7 ± 56.1	641.4 ± 13.1	
FRAP (mmol Fe kg <sup>-1</sup> )	I	High	988.2 ± 79.0 Aa	510.4 ± 98.4 Aa	17.2
		Low	652.4 ± 55.8 Ab	635.7 ± 12.8 Ba	
	II	High	9.8 ± 0.7	3.5 ± 0.1	
		Low	3.2 ± 0.5	4.2 ± 1.1	
	Aver.	High	10.2 ± 0.8	3.7 ± 0.1	
		Low	3.4 ± 0.5	4.6 ± 1.1	
	Total phenolic compounds (mg 100 g <sup>-1</sup> )	High	10.0 ± 0.7 Aa	3.6 ± 0.1 Ba	
		Low	3.3 ± 0.5 Ab	4.4 ± 1.1 Aa	
Skin	I	High	120.0 ± 7.8	90.0 ± 7.6	6.9
		Low	102.0 ± 18.2	88.0 ± 10.8	
	II	High	122.3 ± 8.2	105.0 ± 18.7	
		Low	91.9 ± 7.8	90.0 ± 11.2	
	Aver.	High	121.2 ± 8.0 Aa	91.0 ± 7.7 Ba	
		Low	103.5 ± 18.4 Ab	89.0 ± 11.0 Ba	
	Total flavonoid (mg 100 g <sup>-1</sup> )	I	4.8 ± 0.7	1.3 ± 0.1	
		Low	1.2 ± 0.0	1.1 ± 0.0	
DPPH (μm g <sup>-1</sup> )	II	High	4.9 ± 0.8	1.5 ± 0.1	12.5
		Low	1.2 ± 0.0	1.2 ± 0.0	
	Aver.	High	4.9 ± 0.7 Aa	1.4 ± 0.1 Ba	
		Low	1.2 ± 0.0 Ab	1.1 ± 0.04 Aa	
	I	High	6390.9 ± 119.9	6100.4 ± 119.4	
		Low	6019.4 ± 112.4	6003.4 ± 140.4	
	II	High	8934.1 ± 189.9	8811.6 ± 192.4	
		Low	8940.3 ± 190.8	9825.3 ± 180.4	
	Aver.	High	7662.5 ± 148.0 Aa	7456.0 ± 98.4 Aa	
		Low	7479.9 ± 225.0 Aa	7914.3 ± 12.8 Aa	
FRAP (mmol Fe kg <sup>-1</sup> )	I	High	100.4 ± 1.1	92.9 ± 0.9	29.7
		Low	89.4 ± 0.40	80.4 ± 0.4	
	II	High	175.3 ± 1.1	172.3 ± 0.9	
		Low	164.5 ± 0.4	220.4 ± 0.4	
	Aver.	High	137.9 ± 0.5 Aa	132.6 ± 0.1 Aa	

	Low	$127.0 \pm 0.7$ Aa	$150.4 \pm 1.1$ Aa
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Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey's test ( $p < 0.05$ ).

**Suppl Table 7.** Number of clusters per plant, fresh mass of clusters, berry and seeds, production, and yield of 'IAC 116-31 Rainha' vine grafted on 'IAC 766 Campinas' and 106-8 'Mgt' rootstocks and on low and high trellis systems.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			'IAC 766 Campinas'	106-8 'Mgt'	
Number of clusters per plant	I	High	$20.0 \pm 0.3$	$16.2 \pm 1.1$	1.9
		Low	$14.4 \pm 1.3$	$16.2 \pm 0.7$	
	II	High	$20.3 \pm 0.3$	$16.5 \pm 1.1$	
		Low	$14.6 \pm 1.3$	$16.3 \pm 0.7$	
	Aver.	High	$20.1 \pm 0.3$ Aa	$16.4 \pm 1.1$ Ba	
		Low	$14.5 \pm 1.3$ Ab	$16.3 \pm 0.7$ Aa	
Fresh mass of clusters (g)	I	High	$115.0 \pm 32.0$	$106.0 \pm 27.5$	7.5
		Low	$117.0 \pm 6.9$	$117.0 \pm 16.0$	
	II	High	$118.0 \pm 33.1$	$109.6 \pm 28.8$	
		Low	$118.0 \pm 7.1$	$119.6 \pm 17.1$	
	Aver.	High	$116.5 \pm 32.6$ Aa	$107.8 \pm 28.2$ Aa	
		Low	$117.5 \pm 7.0$ Aa	$118.3 \pm 16.6$ Aa	
Fresh mass of berry (g)	I	High	$1.6 \pm 0.0$	$1.6 \pm 0.5$	4.3
		Low	$1.5 \pm 0.1$	$1.5 \pm 0.7$	
	II	High	$1.6 \pm 0.0$	$1.6 \pm 0.5$	
		Low	$1.5 \pm 0.1$	$1.6 \pm 0.8$	
	Aver.	High	$1.6 \pm 0.0$ Aa	$1.6 \pm 0.5$ Aa	
		Low	$1.5 \pm 0.1$ Aa	$1.5 \pm 0.8$ Aa	
Production (kg per plant)	I	High	$2.3 \pm 0.1$	$2.1 \pm 0.1$	17.7
		Low	$1.7 \pm 0.1$	$1.9 \pm 0.1$	
	II	High	$2.3 \pm 0.1$	$2.1 \pm 0.1$	
		Low	$1.7 \pm 0.05$	$1.9 \pm 0.1$	
	Aver.	High	$2.3 \pm 0.1$ Aa	$2.6 \pm 0.1$ Ba	
		Low	$1.7 \pm 0.1$ Ab	$1.9 \pm 0.1$ Aa	
Yield (t ha <sup>-1</sup> )	I	High	$11.5 \pm 0.2$	$9.0 \pm 0.1$	14.5
		Low	$8.1 \pm 0.1$	$9.5 \pm 0.2$	
	II	High	$11.7 \pm 0.2$	$9.1 \pm 0.1$	
		Low	$8.2 \pm 0.1$	$9.6 \pm 0.2$	
	Aver.	High	$11.6 \pm 0.2$ Aa	$9.1 \pm 0.1$ Ba	
		Low	$8.2 \pm 0.1$ Ab	$9.6 \pm 0.2$ Aa	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey's test ( $p < 0.05$ ).

**Suppl Table 8.** Soluble solids, pH, titratable acidity, maturation rate, and reducing sugars of ‘IAC 116-31 Rainha’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis system.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Soluble solids (°Brix)	I	High	22.0 ± 3.5	20.0 ± 1.8	3.9
		Low	18.5 ± 0.0	19.8 ± 1.0	
	II	High	22.8 ± 3.5	20.5 ± 1.9	
		Low	18.7 ± 0.0	20.0 ± 1.0	
	Aver.	High	22.4 ± 3.5 Aa	20.3 ± 1.9 Ba	
		Low	18.6 ± 0.0 Ab	19.9 ± 1.0 Aa	
	I	High	3.6 ± 0.5	3.7 ± 1.0	
		Low	3.7 ± 1.0	3.8 ± 0.7	
pH	II	High	3.6 ± 0.48	3.7 ± 1.0	2.6
		Low	3.6 ± 0.58	3.8 ± 0.7	
	Aver.	High	3.61 ± 0.5 Aa	3.7 ± 1.0 Aa	
		Low	3.60 ± 0.6 Ba	3.8 ± 0.7 Aa	
	I	High	0.7 ± 0.0	0.8 ± 0.0	
		Low	0.8 ± 0.0	0.8 ± 0.0	
	II	High	0.7 ± 0.0	0.9 ± 0.0	8.6
		Low	0.8 ± 0.0	0.8 ± 0.0	
	Aver.	High	0.7 ± 0.0 Ba	0.8 ± 0.0 Aa	
		Low	0.8 ± 0.0 Ab	0.8 ± 0.0 Aa	
Titratable acidity (% tartaric acid)	I	High	29.0 ± 4.3	27.5 ± 5.0	9.5
		Low	24.0 ± 4.6	24.0 ± 6.2	
	II	High	29.5 ± 4.4	28.2 ± 5.1	
		Low	24.6 ± 4.7	24.6 ± 6.2	
	Aver.	High	29.3 ± 4.3 Aa	27.9 ± 5.0 Ba	
		Low	24.3 ± 4.7 Ab	24.3 ± 6.2 Aa	
	I	High	14.5 ± 2.7	13.0 ± 1.5	
		Low	13.0 ± 1.7	12.8 ± 2.8	
Reducing sugars (%)	II	High	15.4 ± 2.8	13.28 ± 1.5	6.9
		Low	13.6 ± 1.7	13.22 ± 2.8	
	Aver.	High	15.0 ± 2.7 Aa	13.14 ± 1.5 Ba	
		Low	13.3 ± 1.7 Aa	13.01 ± 2.8 Aa	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey’s test ( $p < 0.05$ ).

**Suppl Table 9.** Total phenolic compounds, total flavonoid, and antioxidant activity (DPPH and FRAP) of pulp and skin of ‘IAC 116-31 Rainha’ grape grafted on ‘IAC 766 Campinas’ and 106-8 ‘Mgt’ rootstocks and on low and high trellis system.

Variables	Cycle	Trellis system	Rootstocks		CV (%)
			‘IAC 766 Campinas’	106-8 ‘Mgt’	
Total phenolic compounds (mg 100 g <sup>-1</sup> )	I	High	19.9 ± 1.2	19.0 ± 3.9	15.1
		Low	18.9 ± 3.4	18.2 ± 3.7	
	II	High	25.2 ± 5.7	29.5 ± 3.7	
		Low	18.7 ± 1.2	24.2 ± 3.9	
	Aver.	High	22.5 ± 1.2 Aa	24.27 ± 4.0 Aa	
		Low	18.8 ± 5.7 Aa	21.18 ± 3.9 Aa	
	I	High	0.5 ± 0.0	0.5 ± 0.0	
		Low	0.7 ± 0.0	0.2 ± 0.0	
Total flavonoid (mg 100 g <sup>-1</sup> )	II	High	0.3 ± 0.0	0.4 ± 0.0	34.1
		Low	0.7 ± 0.0	0.4 ± 0.0	
	Aver.	High	0.3 ± 0.0 Ba	0.5 ± 0.0 Aa	
		Low	0.4 ± 0.0 Aa	0.5 ± 0.0 Ab	
	Pulp	High	1970.0 ± 119.0	1040.0 ± 220.0	
		Low	945.0 ± 25.0	1210.0 ± 98.5	
	DPPH (µm g <sup>-1</sup> )	II	1977.5 ± 119.6	1045.8 ± 222.0	42.5
		Low	953.0 ± 25.7	1215.8 ± 98.6	
	FRAP (mmol Fe kg <sup>-1</sup> )	Aver.	1973.7 ± 119.3 Aa	1042.9 ± 221.0 Ba	107.2
		High	949.0 ± 25.4 Ab	1212.9 ± 98.5 Aa	
	I	High	3.2 ± 0.2	3.0 ± 0.0	
		Low	3.1 ± 0.2	3.0 ± 0.0	
	II	High	6.8 ± 0.2	5.7 ± 0.0	
		Low	3.6 ± 0.2	4.1 ± 0.0	
	Aver.	High	5.0 ± 0.2 Aa	4.4 ± 0.1 Aa	
		Low	3.4 ± 0.7 Aa	3.4 ± 0.4 Aa	
Total phenolic compounds (mg 100 g <sup>-1</sup> )	I	High	64.0 ± 16.2	32.0 ± 1.3	6.9
		Low	33.5 ± 5.4	28.9 ± 0.1	
	II	High	65.6 ± 16.5	32.8 ± 1.4	
		Low	33.8 ± 5.4	29.1 ± 0.1	
	Aver.	High	64.8 ± 16.4 Aa	32.4 ± 1.3 Ba	
		Low	33.6 ± 5.4 Ab	29.0 ± 0.1 Aa	
	Skin	I	2.6 ± 0.04	2.4 ± 0.1	
		Low	1.9 ± 0.1	2.1 ± 0.0	
Total flavonoid (mg 100 g <sup>-1</sup> )	II	High	2.6 ± 0.0	2.5 ± 0.2	62.5
		Low	1.9 ± 0.1	2.1 ± 0.0	
	Aver.	High	2.6 ± 0.0 Aa	2.4 ± 0.1 Ba	
		Low	1.9 ± 0.1 Ab	2.1 ± 0.0 Aa	
	I	High	19350.0 ± 656.0	5200.0 ± 26.5	
		Low	17840.0 ± 542.0	14500.0 ± 214.0	
	DPPH (µm g <sup>-1</sup> )	II	19374.0 ± 660.0	5266.8 ± 27.1	15.4
		Low	17852.2 ± 546.0	14515.0 ± 216.4	
	FRAP (mmol Fe kg <sup>-1</sup> )	Aver.	19362.0 ± 658.0 Aa	5233.4 ± 26.8 Bb	107.2
		High	17846.1 ± 544.0 Ab	14507.5 ± 215.2 Aa	
	I	High	116.00 ± 12.30	69.00 ± 5.9	
		Low	106.50 ± 37.00	78.00 ± 0.5	

II	High	$116.94 \pm 12.68$	$69.32 \pm 6.1$	
	Low	$107.46 \pm 38.10$	$78.54 \pm 0.5$	29.7
Aver.	High	$116.47 \pm 12.49$ Aa	$69.16 \pm 6.0$ Ba	
	Low	$106.98 \pm 37.55$ Ab	$78.27 \pm 0.5$ Ba	

Means followed by the same lowercase letter in the column and capital letter in the row do not differ from each other by Tukey's test ( $p < 0.05$ ).