SUPPLEMENTARY DATA
Verdenal, T., Zufferey, V., Dienes-Nagy, Àgnes, Belcher, S., Bourdin, G., Reynard, J.-S., & Spring, J.-L. (2025). Increasing grapevine canopy height to compensate for pre-flowering basal leaf removal: This article is an original research article submitted in cooperation with Open GPB 2024. OENO One, 59(2).
https://doi.org/10.20870/oeno-one.2025.59.2.8451

SUPPLEMENTARY DATA

Table S1. Average temperature and total rainfall per month during the experimental period. Data from Sion, Valais, Switzerland (MétéoSuisse).

	Average temperature (°C)							Total rainfall (mm)						
	2016	**2017**	**2018**	**2019**	**2020**	**2021**	**1991–2020 norm**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**1991–2020 norm**
Jan	2.3	–2.3	3.9	0.0	1.4	0.1	0.5	127	31	197	25	24	94	54
Feb	4.4	5.3	0.8	4.1	5.7	5.4	2.3	87	40	29	17	75	37	40
Mar	6.6	9.7	6.0	7.9	7.4	7.2	7.2	18	62	33	37	68	32	38
Apr	11.3	11.6	14.3	11.4	13.9	10.0	11.3	39	19	29	28	23	20	33
May	14.7	16.4	16.8	13.2	16.4	12.3	15.4	76	45	38	51	48	108	52
Jun	18.7	21.7	21.1	21.1	18.6	20.4	19.1	44	68	26	53	47	42	49
Jul	21.5	22.1	23.3	22.9	21.4	19.3	20.7	46	51	25	76	38	134	60
Aug	21.0	21.3	21.8	20.9	20.5	18.9	20.0	27	69	82	82	22	42	58
Sep	18.4	14.8	18.7	17.4	16.7	17.0	15.8	14	11	19	5	35	51	38
Oct	10.1	11.8	12.4	12.9	9.7	10.0	10.8	32	12	40	48	67	17	41
Nov	5.9	4.2	6.8	5.8	5.4	4.3	5.0	75	43	7	78	5	16	51
Dec	–0.7	–0.6	2.9	3.2	1.9	–0.9	0.9	0	113	111	107	24	104	67
Average	11.2	11.3	12.4	11.7	11.6	10.3	10.8	587	564	634	608	474	696	580

SUPPLEMENTARY DATA
Verdenal, T., Zufferey, V., Dienes-Nagy, Àgnes, Belcher, S., Bourdin, G., Reynard, J.-S., & Spring, J.-L. (2025). Increasing grapevine canopy height to compensate for pre-flowering basal leaf removal: This article is an original research article submitted in cooperation with Open GPB 2024. OENO One, 59(2).
https://doi.org/10.20870/oeno-one.2025.59.2.8451

Table S2. Vineyard measurements, must analyses and wine analyses, and tasting as a function of year. Petite Arvine, Leytron, Switzerland. ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$; ˙$p < 0.10$; *n.s.*, non-significant. Numbers followed by different letters on the same line are significantly different (Tukey's test).

	Observations	Year						
		2016	2017	2018	2019	2020	2021	*p*-value
Vineyard measurements	Bud fruitfulness (clusters per shoot)	1.9 a	1.5 bc	1.6 b	2.0 a	2.0 a	1.4 c	***
	Leaf nitrogen (% dry mass)	2.7 a	2.6 ab	2.3 b	2.6 ab	2.3 b	2.6 ab	**
	Leaf phosphorus (% dry mass)	0.2	0.2	0.2	0.2	0.2	0.2	*
	Leaf potassium (% dry mass)	1.7	1.8	1.6	1.6	1.7	1.5	*n.s.*
	Leaf calcium (% dry mass)	3.0 b	3.4 a	3.5 a	3.2 ab	3.2 ab	3.3 a	**
	Leaf magnesium (% dry mass)	0.2 b	0.3 a	0.3 a	0.3 a	0.3 ab	0.3 ab	***
	Chlorophyll index mid-June	–	494 a	509 a	458 b	472 b	460 b	***
	Chlorophyll index mid-July	481 c	538 a	536 a	533 a	528 a	510 b	***
	Chlorophyll index mid-August	525 bc	553 a	512 cd	544 ab	530 bc	496 d	***
	Early estimated yield (kg/m^2)	0.8 b	1.2 a	1.3 a	1.5 a	1.2 a	0.9 b	***
	Cluster thinning (number removed per vine)	0.8 bc	0.4 bc	1.3 b	3.1 a	1.2 b	0.0 c	***
	Light-exposed leaf area (m^2/m^2 of ground)	1.0 d	1.3 ab	1.3 a	1.2 bc	1.1 c	1.2 b	***
	Cluster weight at harvest (g)	124 c	188 b	233 a	121 c	119 c	140 c	***
	Number of berries par cluster	125 c	198 ab	210 a	178 b	188 ab	175 b	***
	Berry weight at harvest (g)	0.9 c	1.2 a	1.1 b	0.9 c	1.0 bc	1.1 b	***
	Yield at harvest (kg/m^2)	0.6 c	1.2 a	1.2 a	0.8 b	0.8 b	0.8 b	***
	Leaf-to-fruit ratio (m^2/kg)	3.0 a	1.2 b	1.2 b	1.5 b	1.5 b	1.7 b	***
	Pruning weight (g/m)	52 a	47 ab	46 ab	47 ab	46 ab	42 b	**
Must analyses	Total soluble sugars (°Brix)	24.0 b	23.4 bc	24.8 a	23.3 c	23.3 cd	22.7 d	***
	pH	2.96 e	3.02 c	3.08 a	2.97 de	3.05 b	2.99 d	***
	Titratable acidity (g tartrate/L)	11.9 a	11.2 b	10.2 c	11.5 ab	9.6 d	11.5 ab	***
	Tartaric acid (g/L)	9.9 b	9.3 cd	10.7 a	9.5 c	9.0 d	8.3 e	***
	Malic acid (g/L)	4.3 b	4.3 b	2.3 d	4.4 b	2.7 c	5.7 a	***
	Ammonium (mg/L)	149 b	150 b	124 c	165 a	104 d	117 cd	***
	Alpha-amino N (mg N/L)	158 b	177 a	148 b	152 b	110 c	117 c	***
	Yeast assimilable nitrogen (mg N/L)	281 b	300 a	250 c	288 ab	195 e	213 d	***
	Cys-3MH (µg/L)	9.3 c	16.3 b	12.8 bc	26.2 a	12.3 bc	30.1 a	***
Wine analyses	Folin index wine	6.6 bc	7.3 a	7.2 ab	7.3 a	6.5 c	5.2 d	***
	Lightness L	98.1 d	98.8 c	98.9 bc	99.1 b	99.1 bc	99.5 a	***
	Colour a (red/green)	–0.9 b	–1.1 b	–1.0 b	–1.0 b	–1.0 b	–0.6 a	***
	Colour b (yellow/blue)	6.0 ab	6.8 a	6.0 ab	5.5 b	5.3 b	2.9 c	***
Wine tasting (quote 1-7)	Colour intensity	4.2 ab	4.4 a	4.2 b	4.1 bc	3.9 cd	3.7 d	***
	Fruitiness	4.2	4.4	4.5	4.5	4.5	4.2	*n.s.*
	Floral	2.4 b	3.1 a	2.9 ab	2.7 ab	2.9 ab	2.5 b	**
	Herbaceous	1.6	1.5	1.7	1.7	1.8	1.7 a	*n.s.*
	Global nose impression	4.3 a	4.4 a	4.4 a	4.6 a	4.4 a	4.3 a	·
	Volume	4.5 c	4.8 a	4.6 b	4.7 b	4.4 c	4.2 d	***
	Acidity	4.5	4.5	4.5	4.5	4.6	4.6	*n.s.*
	Bitterness	2.6 ab	2.2 c	2.3 bc	2.3 bc	2.3 bc	2.8 a	***
	General impression	4.1 bc	4.4 ab	4.3 ab	4.5 a	4.2 b	3.8 c	***