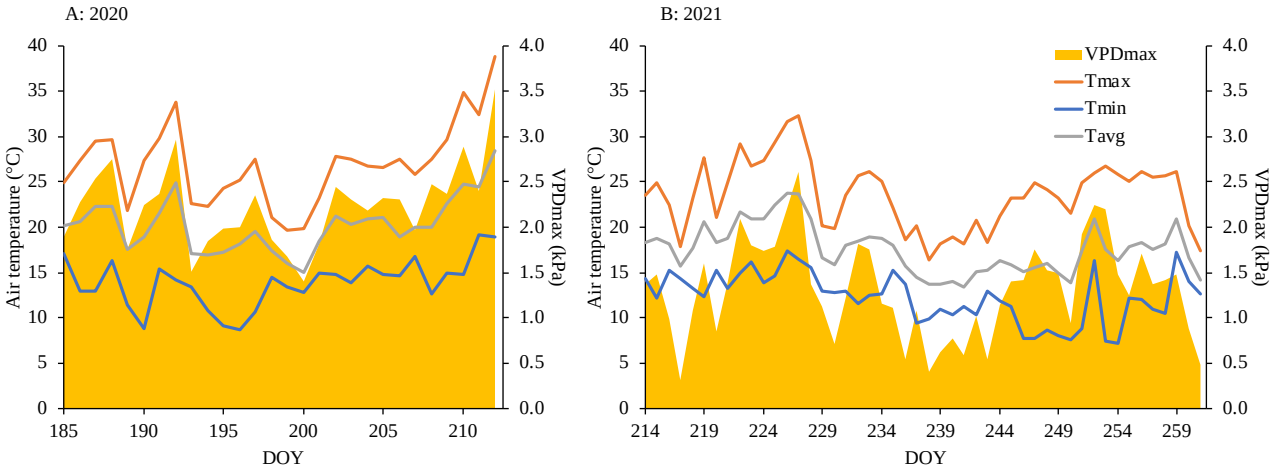
SUPPLEMENTARY DATA
Linhart, L., Moretti, B., Herrera, J. C., & Forneck, A. (2023). Maximum stomatal conductance rather than stomatal sensitivity to drought differentiates the PIWI grapevine cultivar Souvignier gris from Muscaris and Donauriesling. *OENO One*, *57*(2).
https://doi.org/10.20870/oeno-one.2023.57.2.7307

Supplementary Material

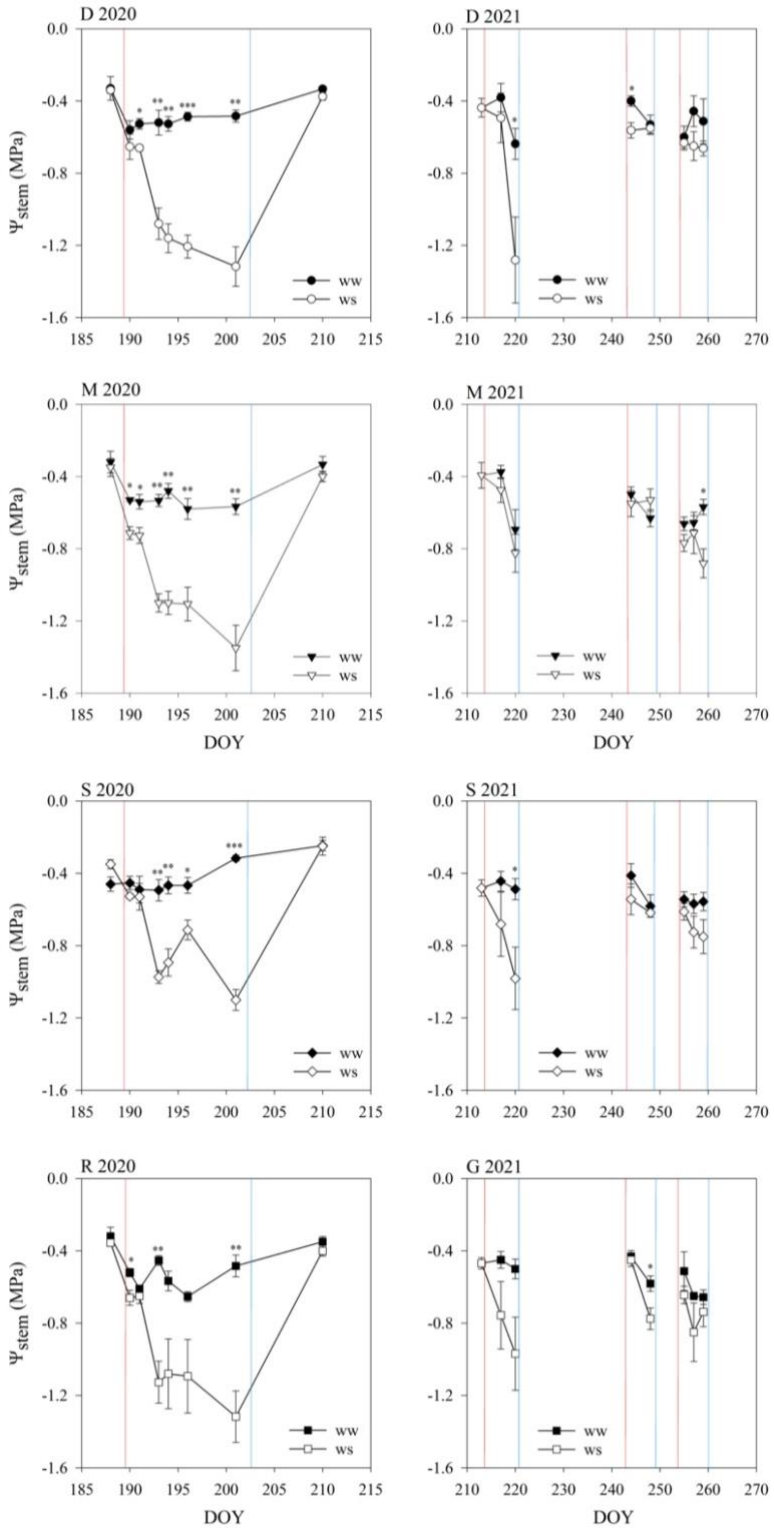
SUPPLEMENTARY TABLE 1. Leaf area equation for the tested cultivars.

	Leaf area equation	**R^2**
Donauriesling	$y = 0{,}5919x^2 + 4{,}9389x$	0.9602
Muscaris	$y = 0.5957x^2 + 6.2614x$	0.9467
Souvignier gris	$y = 0{,}9624x^2 + 1{,}3257x$	0.9599

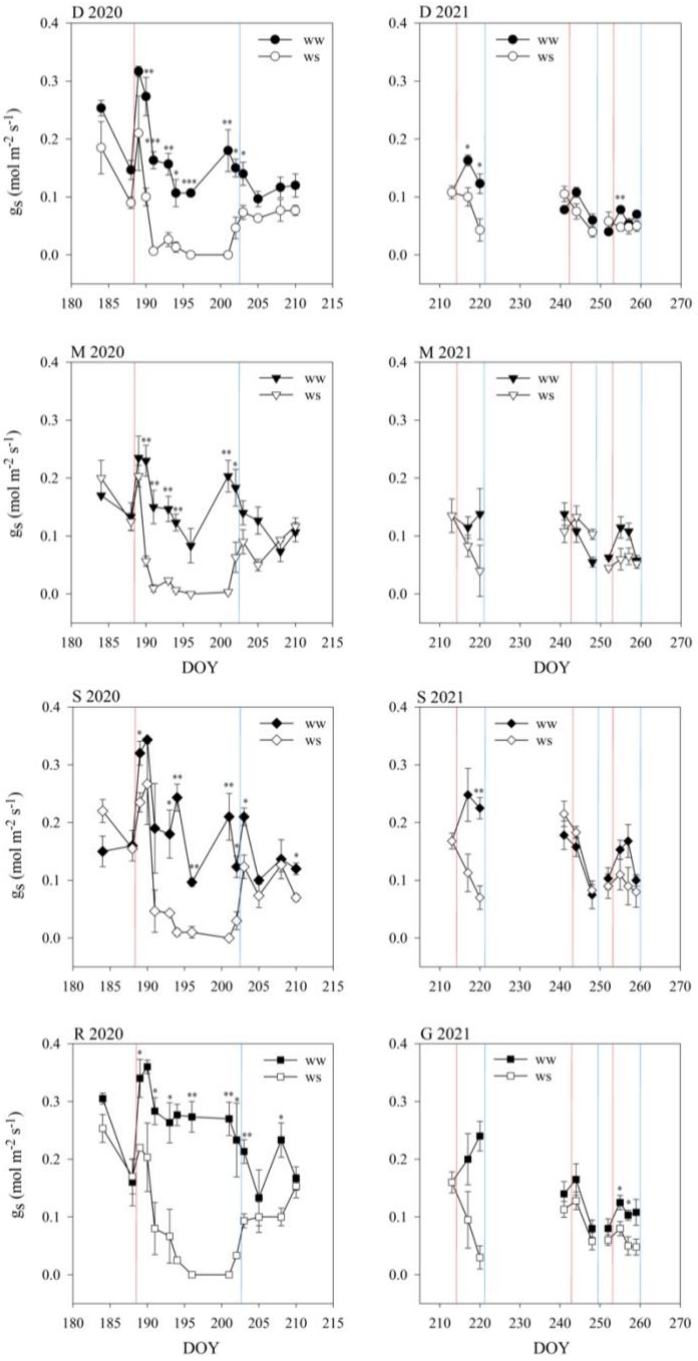
y = leaf area; x = leaf length; R^2 = associated coefficient of determination.



SUPPLEMENTARY FIGURE 1. Climate data recorded in season 2020 (A) and 2021 (B) from start until the end of experiment. VPDmax, daily maximum vapour pressure deficit; Tmax, daily maximum temperature; Tmin, daily minimum temperature; Tavg, daily average temperature; DOY, day of the year. In season 2020 data was collected in the greenhouse while in 2021 outside under semi-field conditions.

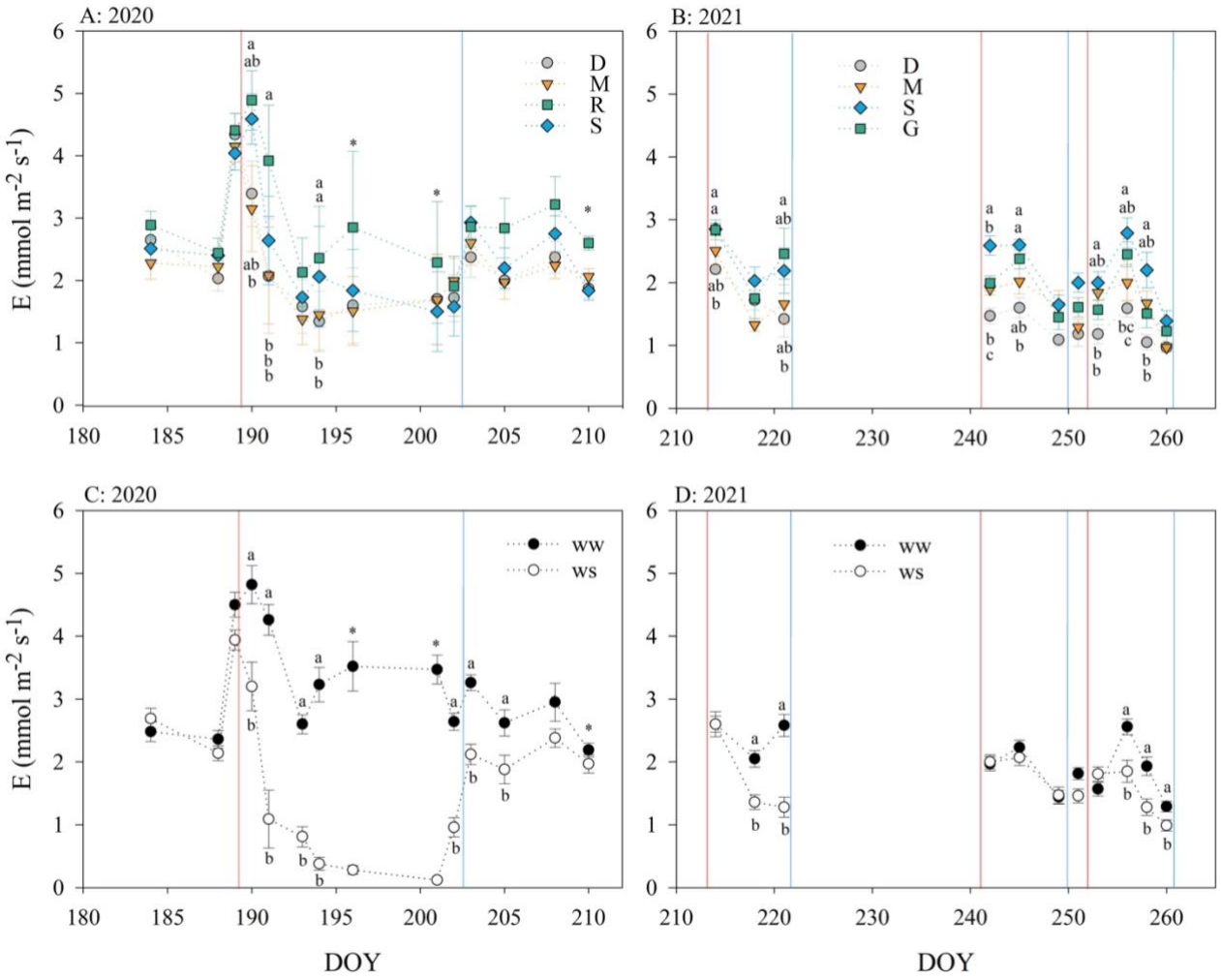


SUPPLEMENTARY FIGURE 2. Midday stem water potential (Ψ_{stem} in MPa) per cultivar in 2020 (left column) and 2021 (right column). Vertical lines indicate imposition of drought (red) and re-watering (blue) treatments. Values are averages ± standard error (2020: n = 3; 2021: n = 4) on each date (DOY, day of the year). Statistics are reported after one-way ANOVA with treatment as main factor: ***, **, *, state $p < 0.001$, $p < 0.01$, and $p < 0.05$, respectively. D, Donauriesling; M, Muscaris; S, Souvignier gris; R, Riesling/G, Grüner Veltliner; ww, well-watered; ws, water-stressed.

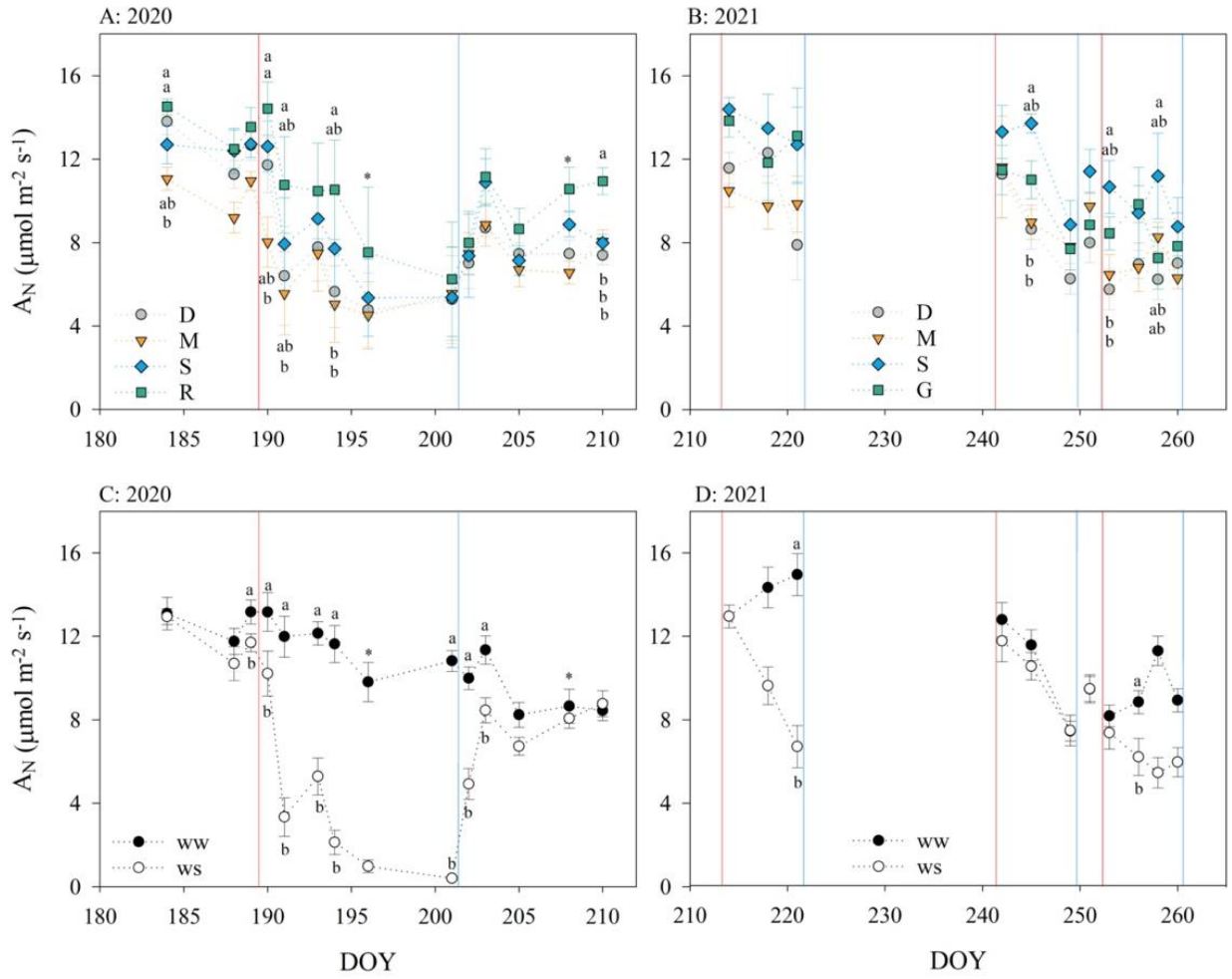


SUPPLEMENTARY FIGURE 3. Stomatal conductance (g_s in mol $m^{-2}s^{-1}$) per cultivar measured on mature leaves in 2020 (left column) and 2021 (right column). Vertical lines indicate imposition of drought (red) and re-watering (blue) treatment. Values are averages ± standard error (2020: n = 3; 2021: n = 4) on each date (DOY, day of the year). Statistics are reported after one-way ANOVA with treatment as main factor: ***, **, *, state $p < 0.001$, $p < 0.01$, and $p < 0.05$, respectively. D, Donauriesling; M, Muscaris; S, Souvignier gris; R, Riesling/G, Grüner Veltliner; ww, well-watered; ws, water-stressed. This figure was modified from Linhart *et al.* (2023)[1] with permission of *DER WINZER*.

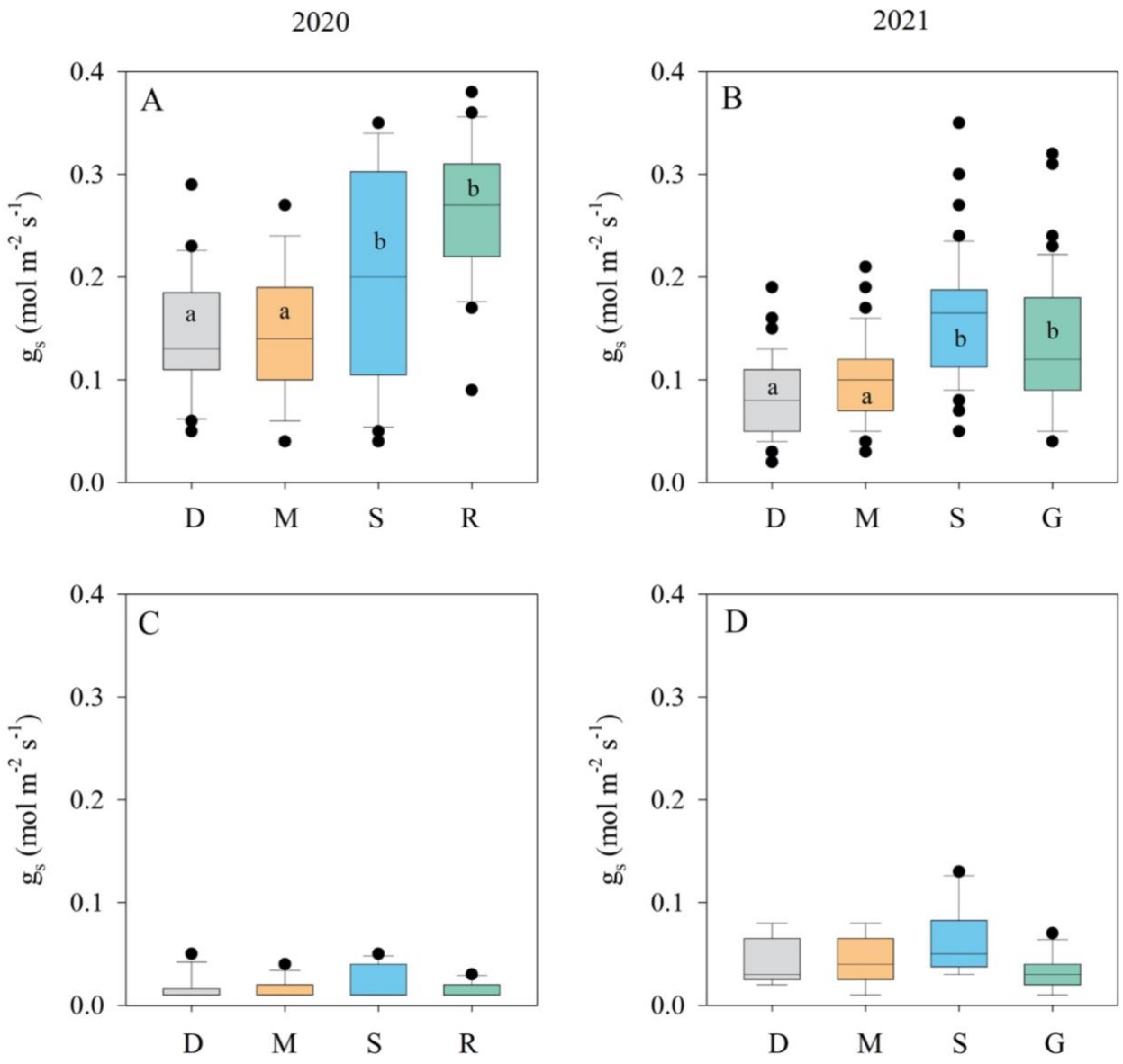
[1] Linhart, L., Herrera, J. C., & Forneck, A. (2023): Pilzwiderstandsfähig und angepasst an den Klimawandel? DER WINZER, 79(4), 16-18. Österreichischer Agrarverlag, Wien.



SUPPLEMENTARY FIGURE 4. Transpiration rate (E in mmol $m^{-2}s^{-1}$) measured in 2020 (A,C) and 2021 (B,D). Vertical lines indicate imposition of drought (red) and re-watering (blue) treatment. Figures represent a two-way ANOVA analysis with cultivars and treatments as main factors; therefore, values are presented as averages ± standard error per cultivar (A, 2020: n = 6; B, 2021: n = 8) or per treatment (C, 2020: n = 12; D, 2021: n = 16) on each date (DOY, day of the year). No interaction between main factors were observed for almost any date of observation. In the figure, different letters denote significant differences ($p < 0.05$) between the main factor cultivar (A,B) or treatment (C,D); eventual significant interactions are represented with an asterisk (*) between main factors cultivar and treatment ($p<0.05$): No differences among cultivars were recorded within the ws treatment, but within the ww treatment Souvignier gris and Riesling were significantly higher than Donauriesling and Muscaris. D, Donauriesling; M, Muscaris; S, Souvignier gris; R, Riesling/G, Grüner Veltliner; ww, well-watered; ws, water-stressed.



SUPPLEMENTARY FIGURE 5. Net assimilation rate (A_N in µmol m^{-2}s^{-1}) measured in 2020 (A,C) and 2021 (B,D). Vertical lines indicate imposition of drought (red) and re-watering (blue) treatment. Figures represent a two-way ANOVA analysis with cultivars and treatments as main factors; therefore, values are presented as averages ± standard error per cultivar (A, 2020: n = 6; B, 2021: n = 8) or per treatment (C, 2020: n = 12; D, 2021: n = 16) on each date (DOY, day of the year). No interaction between main factors were observed for almost any date of observation. In the figure, different letters denote significant differences ($p < 0.05$) between the main factor cultivar (A,B) or treatment (C,D); eventual significant interactions are represented with an asterisk (*) between main factors cultivar and treatment ($p<0.05$): No differences among cultivars were recorded within the ws treatment, but within the ww treatment Souvignier gris and Riesling were significantly higher than Donauriesling and Muscaris. D, Donauriesling; M, Muscaris; S, Souvignier gris; R, Riesling / G, Grüner Veltliner; ww, well-watered; ws, water-stressed.



SUPPLEMENTARY FIGURE 6. **The box plots represent stomatal conductance (g_s) values of Donauriesling (D), Muscaris (M), Souvigner gris (S), Riesling (R), and G.Veltliner (G), when midday stem water potential (Ψ_{stem}) was higher than -0.75 MPa (A, B) or when it was lower than -0.75 MP (C,D) in 2020 (A,C) and 2021 (B,D).** Differences in g_s among cultivars were observed only when Ψ_{stem} > -0.75 MPa and are shown as different letters after a LSD post-hoc test (P<0.05). D, Donauriesling; M, Muscaris; S, Souvignier gris; R, Riesling/G, Grüner Veltliner; ww, well-watered; ws, water-stressed. The data was taken from Figure 5.