

Supplementary material of the manuscript published in *Vitis* **60**, 153–161 (2021):

Physiological changes induced by either pre- or post-veraison deficit irrigation in 'Merlot' vines grafted on two different rootstocks

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Supplemental Table 1

The significance (p value) of rootstock, irrigation and their interaction effect on grapevine stem water potential (SWP) of grapevines ('Merlot') grafted on two rootstocks and subjected to three irrigation regimes (Fig. 1). Statistical significance was determined after analysis of variance for a split plot design with rootstock as the main plot and irrigation as the subplot ($P < 0.05$; n.s., not significant)

Year	DOY	Rootstock (R)	Irrigation (I)	R x I
2018	153	n.s.	n.s.	n.s.
	161	n.s.	0.000	0.006
	170	0.039	0.000	n.s.
	176	n.s.	0.001	n.s.
	177	n.s.	0.000	n.s.
	184	0.031	0.000	n.s.
	190	n.s.	0.002	n.s.
	198	n.s.	0.000	n.s.
	204	n.s.	0.000	n.s.
	211	n.s.	0.000	n.s.
	218	n.s.	0.000	n.s.
	220	n.s.	0.000	0.021
	224	n.s.	0.000	n.s.
	233	0.026	0.000	n.s.
2019	163	n.s.	n.s.	n.s.
	174	n.s.	0.001	n.s.
	181	n.s.	0.000	n.s.
	196	0.000	0.000	n.s.
	203	n.s.	0.000	n.s.
	212	n.s.	0.000	0.005
	218	0.009	0.000	0.017
	224	n.s.	n.s.	n.s.
	230	n.s.	0.000	0.000
	237	n.s.	0.000	n.s.
246	n.s.	0.000	n.s.	

Supplemental Table 2

The significance (p value) of rootstock, irrigation and their interaction effect on trunk diameter increment (TD) in 2018 and canopy volume (CV) in 2019 of grapevines ('Merlot') grafted on two rootstocks and subjected to three irrigation regimes (Fig. 3). Statistical significance was determined after analysis of variance for a split plot design with rootstock as the main plot and irrigation as the subplot ($P < 0.05$; n.s., not significant)

Parameter	DOY	Rootstock (R)	Irrigation (I)	R x I
TD	93	n.s.	n.s.	n.s.
	130	n.s.	n.s.	n.s.
	155	0.049	n.s.	n.s.
	169	n.s.	0.002	n.s.
	191	n.s.	0.000	0.029
	205	n.s.	0.000	n.s.
	225	0.000	0.000	n.s.
	256	n.s.	0.000	n.s.
CV	149	n.s.	0.024	n.s.
	163	0.020	n.s.	n.s.
	182	n.s.	0.000	n.s.
	194	0.033	0.002	n.s.
	213	n.s.	0.000	n.s.
	230	0.035	0.003	n.s.
	256	0.028	0.003	n.s.

Supplemental Table 3

The significance (p value) of rootstock, irrigation and their interaction effect on stomatal conductance of grapevines ('Merlot') grafted on two rootstocks and subjected to three irrigation regimes (Fig. 4). Statistical significance was determined after analysis of variance for a split plot design with rootstock as the main plot and irrigation as the subplot ($P < 0.05$; FS, fruit set; V, veraison; H, harvest; n.s., not significant)

Year	Phenological interval	Rootstock (R)	Irrigation (I)	R x I
2018	FS - V	n.s.	0.000	n.s.
	V - H	n.s.	n.s.	n.s.
2019	FS - V	n.s.	0.001	n.s.
	V - H	n.s.	0.003	n.s.

Supplemental Table 4

The significance (p value) of rootstock, irrigation and their interaction effect on nonphotochemical quenching (NPQ) of grapevines ('Merlot') grafted on two rootstocks and subjected to three irrigation regimes (Fig. 6). Statistical significance was determined after analysis of variance for a split plot design with rootstock as the main plot and irrigation as the subplot ($P < 0.05$; n.s., not significant)

DOY	Rootstock (R)	Irrigation (I)	R x I
163	n.s.	n.s.	n.s.
174	n.s.	0.001	n.s.
181	n.s.	0.000	n.s.
190	n.s.	0.000	n.s.
196	n.s.	0.002	n.s.
203	n.s.	n.s.	n.s.
212	n.s.	0.003	n.s.
218	n.s.	n.s.	n.s.
224	n.s.	n.s.	n.s.
230	n.s.	0.012	0.012
237	n.s.	n.s.	n.s.
246	n.s.	n.s.	n.s.

Supplemental Table 5

The significance (p value) of rootstock, irrigation and their interaction effect on yield, berry fresh weight (FW), berry dry weight (DW), pH, titratable acidity (TA) and Ravaz index of grapevines ('Merlot') grafted on two rootstocks and subjected to three irrigation regimes (Fig. 7). Statistical significance was determined after analysis of variance for a split plot design with rootstock as the main plot and irrigation as the subplot ($P < 0.05$; n.s., not significant)

Year	Parameter	Rootstock (R)	Irrigation (I)	R x I
2018	Vine yield	n.s.	0.001	n.s.
	Berry FW	n.s.	0.000	n.s.
	Berry DW	n.s.	0.000	n.s.
	pH	n.s.	0.000	n.s.
	TA	n.s.	0.000	n.s.
	Ravaz index	n.s.	n.s.	n.s.
2019	Vine yield	n.s.	0.019	n.s.
	Berry FW	n.s.	0.000	n.s.
	Berry DW	0.024	0.022	n.s.
	pH	0.039	0.000	0.004
	TA	0.048	0.000	0.010
	Ravaz index	n.s.	0.005	n.s.