	Chardonnay	pН	EC (µS cm-1)	N (g kg-1)
4 d	Full Irrigation	7.30	1199	1.31
	Light Water Stress	7.44	2266	1.40
	Moderate Water	7.60	1507	1 01
	Stress	7.60	1397	1.21
	Heat Stress	7.64	2049	1.40
8 d	Full Irrigation	7.65	1490	1.17
	Light Water Stress	7.55	1474	1.17
	Moderate Water	7 72	0/11 1	1 17
	Stress	7.73	841.1	1.17
	Heat Stress	7.68	1128	1.07
20 d	Full Irrigation	7.77	1088	1.07
	Light Water Stress	7.77	1256	1.12
	Moderate Water	7.80	1074	0.02
	Stress	7.00	1074	0.95
	Heat Stress	7.79	1359	0.93

Table 1. S. Soil analysis for pH, EC and N levels in Chardonnay and Xynisteri.

	Xynisteri	pН	EC (μS cm ⁻¹)	N (g kg-1)
4 d	Full Irrigation	7.88	1005	1.072
	Light Water Stress	7.89	938	1.119
	Moderate Water Stress	7.90	1134	1.260
	Heat Stress	7.84	1339	1.212
8 d	Full Irrigation	7.70	1357	1.026
	Light Water Stress	7.82	1281	1.119
	Moderate Water Stress	7.69	1473	1.025
	Heat Stress	7.78	1473	1.257
20 d	Full Irrigation	7.69	1565	1.210
	Light Water Stress	7.77	1612	0.978
	Moderate Water Stress	7.82	1464	1.306
	Heat Stress	7.84	890	0.838



Figure 1. S. Mean temperature and relative humidity for outdoors and indoors (greenhouse) during the drought and heat stress experiments. Values are mean of records taken every 30 min during 2.5 weeks period.



Figure 2. S. Impact of short-term drought and heat stress on the content of phenols, flavonoids and antioxidant activity in two grapevine cultivars, Chardonnay and Xynisteri. Plants were fully irrigated (FI) or exposed to light water stress (LS) with 80% of the FI, moderate water stress (MS) with 50% of the FI, and heat stress (HS). Total phenols, total flavonoids and antioxidant activity (FRAP, ABTS) were determined after 4, 8, and 20 d of stress. Data are means ± SE (n=4), and significant differences (*P*<0.05) among treatments are indicated by different letters. ns: not significant.





Figure 3. S. Impact of short-term drought and heat stress on H_2O_2 and malondialdehyde (MDA) contents, and activity of antioxidative enzymes in the leaves of two grapevine cultivars, Chardonnay and Xynisteri. Plants were fully irrigated (FI) or exposed to light water stress (LS) with 80% of the FI, moderate water stress (MS) with 50% of the FI, and heat stress (HS). H_2O_2 , MDA and activities of superoxide dismutase (SOD), catalase (CAT), and peroxidase (POD) were analyzed after 4, 8, and 20 d of stress. Data are means ± SE (n=4), and significant differences (P < 0.05) among treatments are indicated by different letters. ns: not significant.



Figure 4. Impact of short-term drought and heat stress on photosynthetic rates in two grapevine cultivars, Chardonnay and Xynisteri. Plants were full irrigated (FI; control) or exposed to light water stress (LS) with 80% of the FI, moderate water stress (MS) with 50% of the FI, and heat stress (HS). Leaf photosynthetic rate (*P*n) was measured after 4, 8, and 20 d of stress. Data are means \pm SE (n=4), and significant differences (*P* < 0.05) among treatments are indicated by different letters. ns: not significant.