

Supplementary Materials: The following are available online at www.mdpi.com/xxx/s1

Table S1. Statistical values obtained in leaf photosynthesis parameters in *Quercus* spp. (A) and Andalusian *Q. ilex* populations (B) at day 9, and Andalusian *Q. ilex* population (C) at day 21. Asterisk (*) indicates that the Kruskal–Wallis test was carried out obtaining *F* values.

A		A		Gs	
	<i>T</i>	<i>p-Value</i>	<i>T</i>	<i>p-Value</i>	
<i>Q. faginea</i>	5.65	0.0048	4.20	0.0137	
<i>Q. pyrenaica</i>	6.39	0.0031	28.99	0.0000	
<i>Q. robur</i>	8.97	0.0009	12.73	0.0002	
<i>Q. suber</i>	11.83	0.0003	5.54	0.0052	
<i>Q. ilex</i>	1.69	0.1672	3.78	0.0194	
B		A		Gs	
	<i>T</i>	<i>p-Value</i>	<i>T</i>	<i>p-Value</i>	
Ca	−0.04	0.9732	1.22	0.2879	
Co	3.03	0.0387	4.28	0.0129	
Se	−0.99	0.3790	1.11	0.3295	
Gr	0.27	0.8020	8.49	0.0011	
Ja	3.29	0.0303	6.36	0.0031	
C		A		Gs	
	<i>T</i> *	<i>p-Value</i>	<i>T</i> *	<i>p-Value</i>	
Ca	5.23	0.0064	7.83	0.0014	
Co	13.5 *	0.0213	27.00 *	0.0065	
Se	13.5 *	0.0213	22.00	0.0000	
Gr	9.94	0.0006	18.00 *	0.0132	
Ja	13.5 *	0.0213	36.00 *	0.0039	

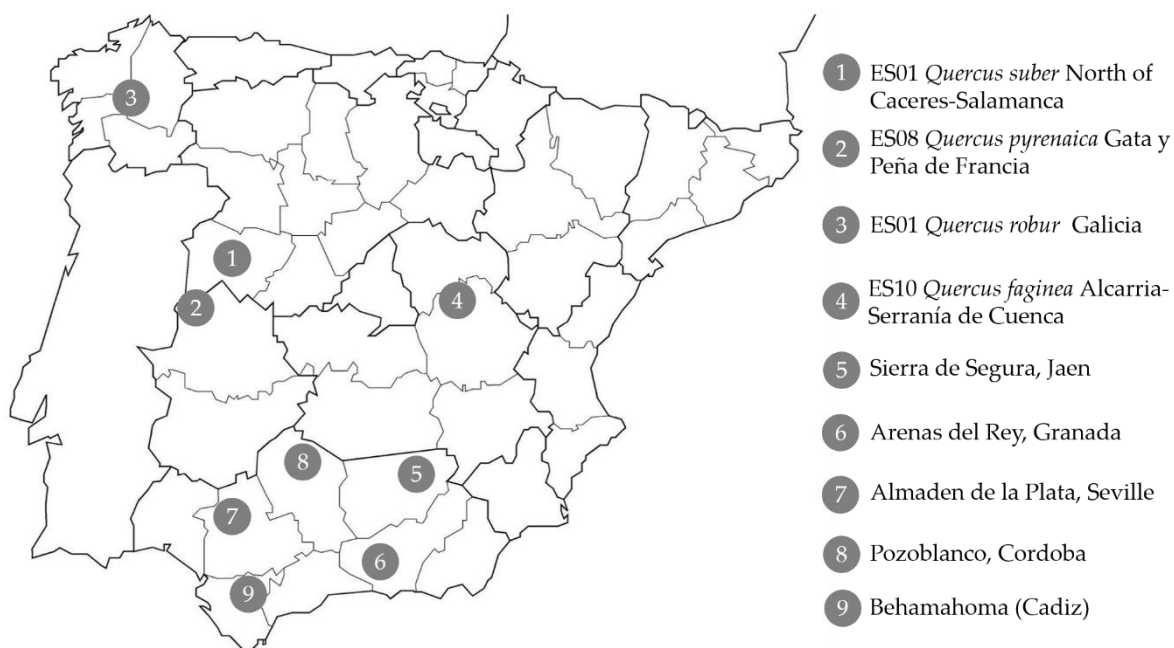


Figure S1. Localization of all *Quercus* spp., and Andalusian *Q. ilex* population used in this study.

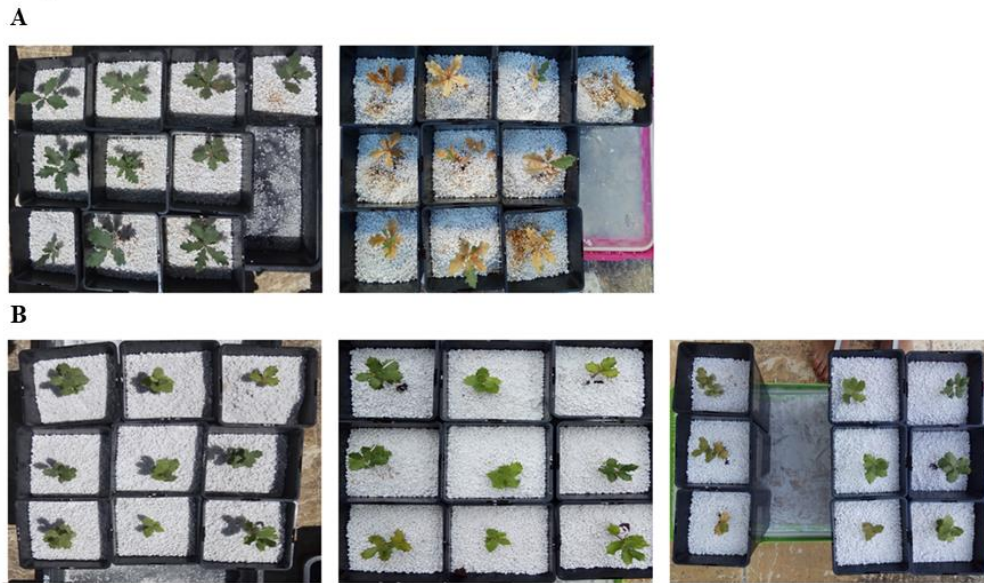


Figure S2. Visual evaluation of damage symptoms in the two most contrasting species: *Q. pyrenaica* (A) and *Q. ilex* (B). Pictures were taken at days 1 and 9 in *Q. pyrenaica* and at days 1, 9, and 27 in *Q. ilex*; whereas all the seedlings for *Q. pyrenaica* were dead, no clear damage symptoms were observed in any of the *Q. ilex* seedlings.

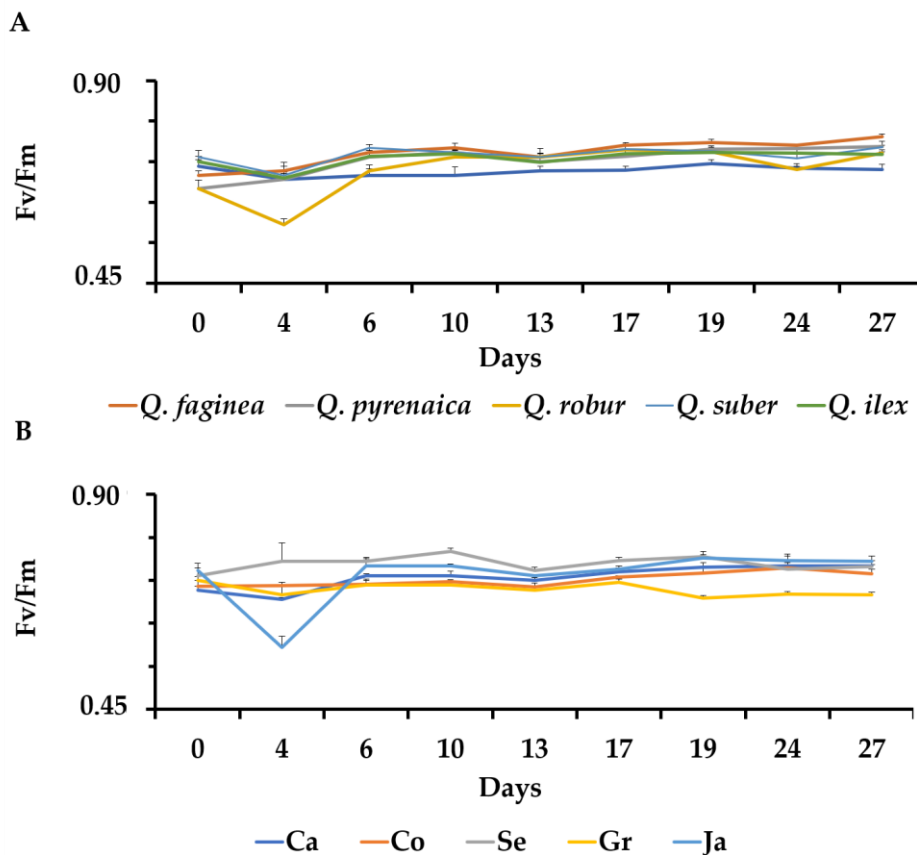


Figure S3. Measurements of quantum yield of photosystem II (F_v/F_m) in dark adapted leaves from *Quercus* spp., (A) and *Q. ilex* interpopulation species (B) (irrigated seedlings) during drought progression. Values are mean \pm SE of three biological replicates.

