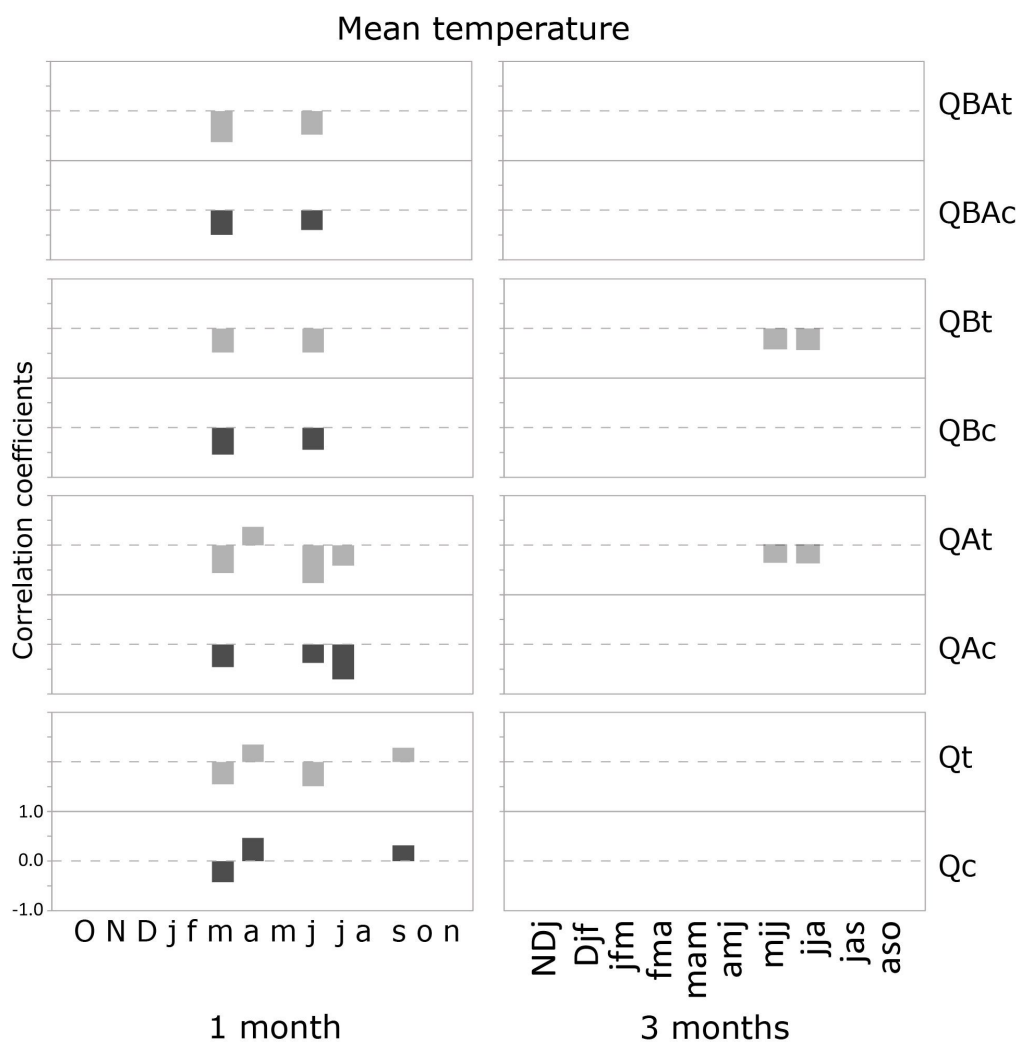


## Supplementary Material

**Fig. S1** - Significant Pearson's correlation coefficients between standardized mean stand chronologies and mean temperature at monthly time scale. Dark and light grey indicate the significant coefficients of thinned and unthinned stands, respectively. Lowercase and uppercase letters refer to the current year of growth and the year before, respectively. Q: pure oak; QA: oak mixed with alder; QB: oak mixed with two valuable broadleaves; QBA: oak mixed with two valuable broadleaves and alder.



**Tab. S1** - Summary of the LMM (Linear mixed-effects model) statistics. df: degree of freedom, P: precipitation, S: SPEI, Variance (%): variance explained by the random effects that is remained after that one explained by the fixed effects, R<sup>2</sup>c: conditional R squared.

Random effect	Predictors	df	F-value	p-value	Variance (%)	R <sup>2</sup> c
(1): tree species mixture	P_june	131	6.8	0.011	7.7	0.12
	P_mjj		11.1	0.001	8.0	0.14
	P_fmamjj		7.7	0.006	7.7	0.12
	S_june		12.0	0.001	8.0	0.15
	S_mjj		16.4	<0.0001	8.3	0.17
	S_fmamjj		12.2	0.001	8.0	0.15
(1): treatment	P_june	133	11.4	0.001	60.9	0.62
	P_mjj		19.0	<0.0001	62.1	0.64
	P_fmamjj		13.1	<0.0001	61.2	0.63
	S_june		20.7	<0.0001	62.4	0.64
	S_mjj		28.8	<0.0001	63.6	0.66
	S_fmamjj		21.1	<0.0001	62.4	0.65
(2): treatment + tree species mixture	P_june	127	18.6	<0.0001	64.0	0.67
	P_mjj		32.2	<0.0001	65.4	0.69
	P_fmamjj		32.2	<0.0001	64.4	0.68
	S_june		35.4	<0.0001	65.7	0.70
	S_mjj		51.5	<0.0001	67.1	0.71
	S_fmamjj		36.1	<0.0001	65.8	0.70