Electronic Supplementary Material (ESM)

Table A1. Weather and site variables (mean values) for the five sites studied. Weather information is based on the period 2002-2010 (hydrological years).

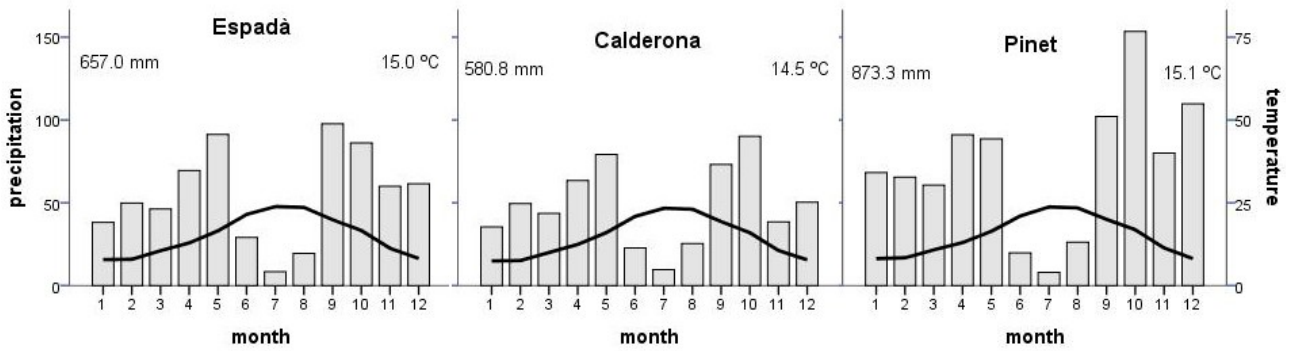| Location:	Espadà		Calderona		Pinet
Sites:	E1	E2	C1	C2	P1
Site variables					
Basal area (cm^2/tree)	1017	1671	1439	879	1047
Distance to coast (km)	26.8	18.9	25.8	21.7	12.1
Altitude (m.a.s.l.)	689	550	637	764	599
Slope (%)	18.4	18.9	11.3	10.7	13.7
Climatic variables					
Annual precipitation	652.4	665.2	565.6	580.8	898.9
Spring precipitation	212.2	225.6	194.5	193.2	253.8
Summer precipitation	71.1	52.6	63.1	63.5	59.5
Drought Index	186.2	225.9	266.4	255.2	237.2
September precipitation	95.7	98.0	76.2	78.9	106.8
Frost days in late march	0.1	0.1	0.1	0.0	0.2
Spring frost days	1.7	1.3	2.1	1.9	1.8
Mean April temperature	12.5	13.3	12.6	12.3	13.0
Mean May temperature	16.1	16.9	16.1	15.8	16.4
Mean June-July temperature	22.3	23.0	22.3	21.9	22.4

Fig. A1. Climatic diagram for the three areas studied during the study period (2002-2010). Bars and left axis: mean annual precipitation (2001-2010); lines and right axis: mean annual temperature.
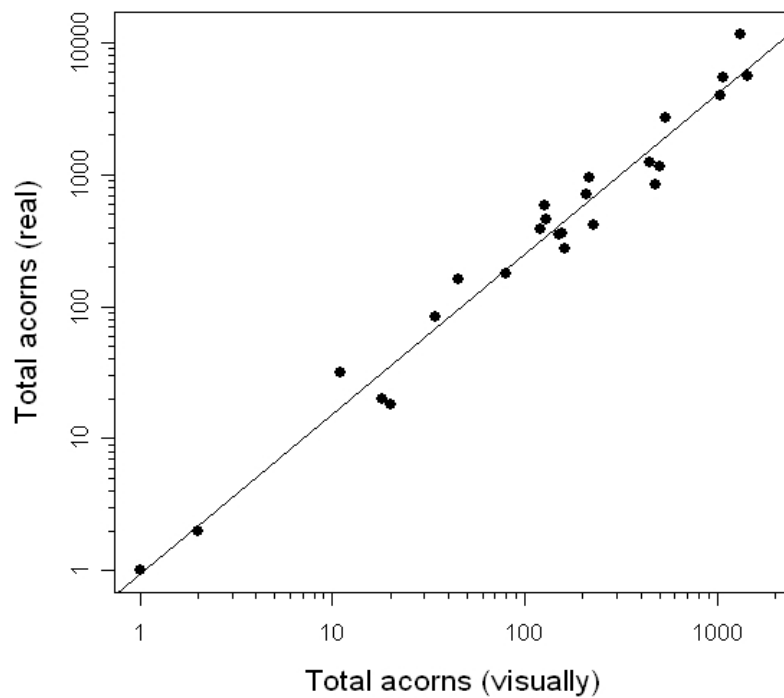

Fig. A2. Relation between the number of acorns estimated visually (by counting acorns with binoculars) and the number of acorns counted by climbing the tree and beating down all the acorns (real). The fitted line represents the following function: $\log_{10}(\text{real \#acorns} + 1) = -0.02536 + 1.21336 \cdot \log_{10}(\text{visual \#acorns} + 1)$; n= 25, $F_{1,23}$= 731, R^2= 0.9695, p<0.0001.
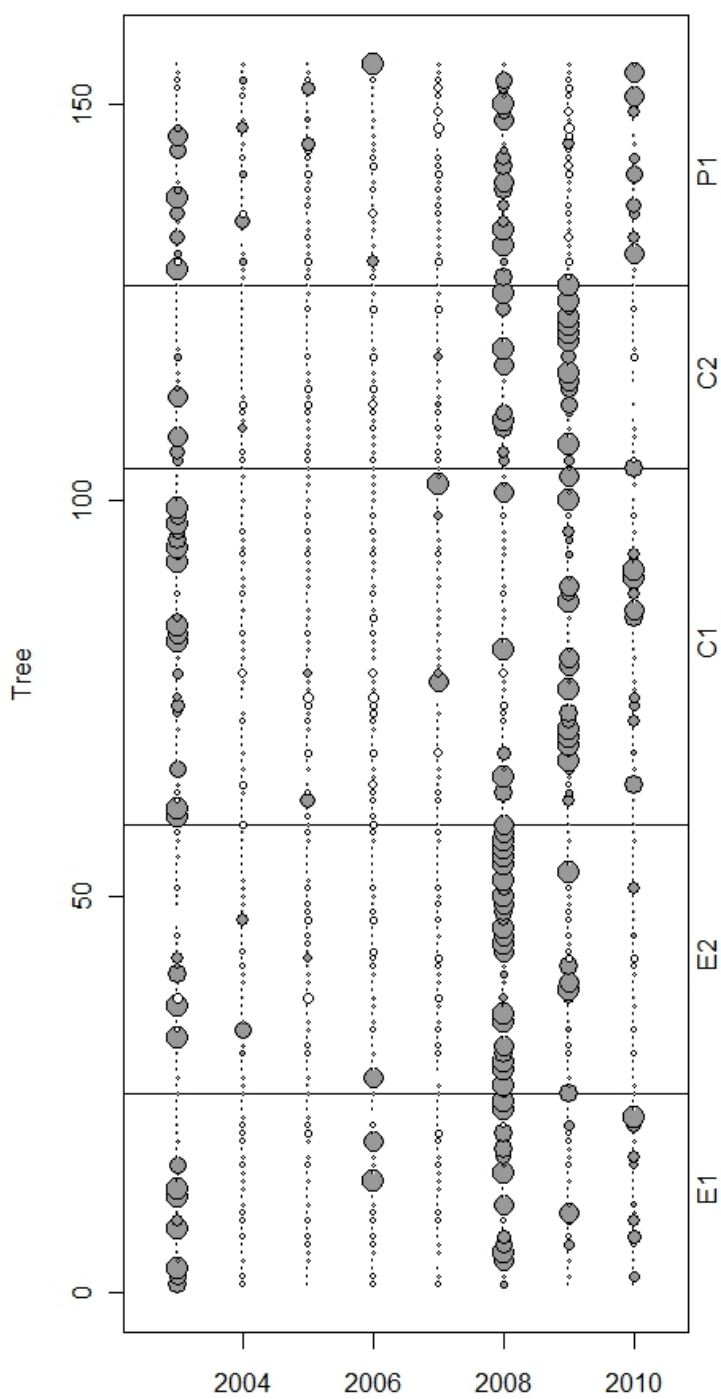
Fig. A3. Standardised acorn production for each of the trees on the five sites (E1, E2, C1, C2, P1) during the study period (2003 to 2010). The size of the symbols is proportional to the absolute value of the standardised acorn production; white and grey colour correspond to negative and positive values, respectively.