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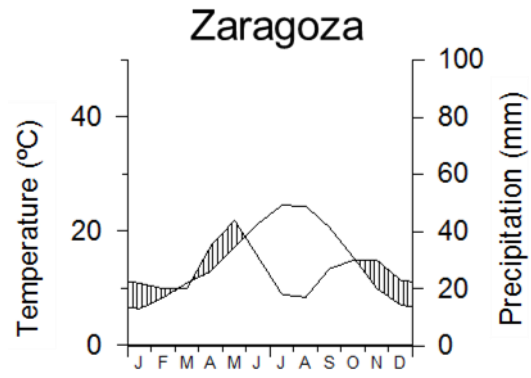
## 2 SUPPLEMENTARY INFORMATION

Period	Treatment	Sectors ( <u>earlywood</u> → latewood)									
		S1	S2	S3	S4	S5	S6	S7	S8	S9	S10
Lumen area ( $\mu\text{m}^2$ )											
Irrigation	TI	742 ± 36.6	866 ± 41.6	916 ± 41.1	893 ± 42.8	821 ± 40.2	710 ± 37.8	605 ± 30.2	525 ± 27.7	418 ± 22.2	282 ± 14.4
	Control	434 ± 20.5	513 ± 26.8	547 ± 32.7	541 ± 33.5	512 ± 31.1	471 ± 27.8	388 ± 24.2	292 ± 20.8	206 ± 14.6	146 ± 7.8
	IR	797 ± 28.6	905 ± 29.7	935 ± 33.5	895 ± 32.1	784 ± 29.4	652 ± 29	527 ± 23.7	385 ± 19.6	282 ± 15.3	212 ± 10.5
Post-irrigation	TI	662 ± 27.3	747 ± 29.9	799 ± 29.2	812 ± 28.8	759 ± 30.7	693 ± 32.6	580 ± 29.2	431 ± 22.8	310 ± 15.2	190 ± 5.4
	Control	490 ± 19.5	539 ± 20.4	573 ± 21.7	592 ± 23.1	571 ± 23.9	528 ± 24	448 ± 23.3	356 ± 19.9	241 ± 14.1	169 ± 7
	IR	1046 ± 19.9	1150 ± 20.3	1199 ± 18.2	1133 ± 19	960 ± 21.3	750 ± 19.3	593 ± 16	481 ± 12.4	399 ± 12.4	265 ± 8.6
Cell-wall thickness ( $\mu\text{m}$ )											
Irrigation	TI	5.17 ± 0.14	5.29 ± 0.15	5.45 ± 0.14	5.41 ± 0.13	5.41 ± 0.13	5.61 ± 0.14	5.87 ± 0.15	6.33 ± 0.14	7.02 ± 0.12	7.1 ± 0.12
	Control	4.6 ± 0.08	4.41 ± 0.08	4.39 ± 0.07	4.39 ± 0.08	4.46 ± 0.08	4.61 ± 0.08	4.72 ± 0.08	4.89 ± 0.09	5.05 ± 0.09	4.99 ± 0.09
	IR	5.31 ± 0.12	5.26 ± 0.13	5.25 ± 0.12	5.2 ± 0.12	5.32 ± 0.13	5.6 ± 0.14	6.06 ± 0.15	6.55 ± 0.16	7.07 ± 0.14	6.95 ± 0.13
Post-irrigation	TI	5.21 ± 0.08	5.11 ± 0.08	5.18 ± 0.08	5.27 ± 0.08	5.41 ± 0.08	5.6 ± 0.09	5.73 ± 0.09	5.99 ± 0.1	6.23 ± 0.12	6.15 ± 0.12
	Control	4.58 ± 0.06	4.42 ± 0.06	4.45 ± 0.06	4.52 ± 0.06	4.55 ± 0.06	4.59 ± 0.06	4.69 ± 0.06	4.83 ± 0.07	5.02 ± 0.08	5.06 ± 0.09
	IR	5.21 ± 0.06	5.15 ± 0.07	5.08 ± 0.06	5.04 ± 0.06	5.2 ± 0.06	5.58 ± 0.08	6.17 ± 0.08	6.85 ± 0.07	7.36 ± 0.07	7.33 ± 0.06

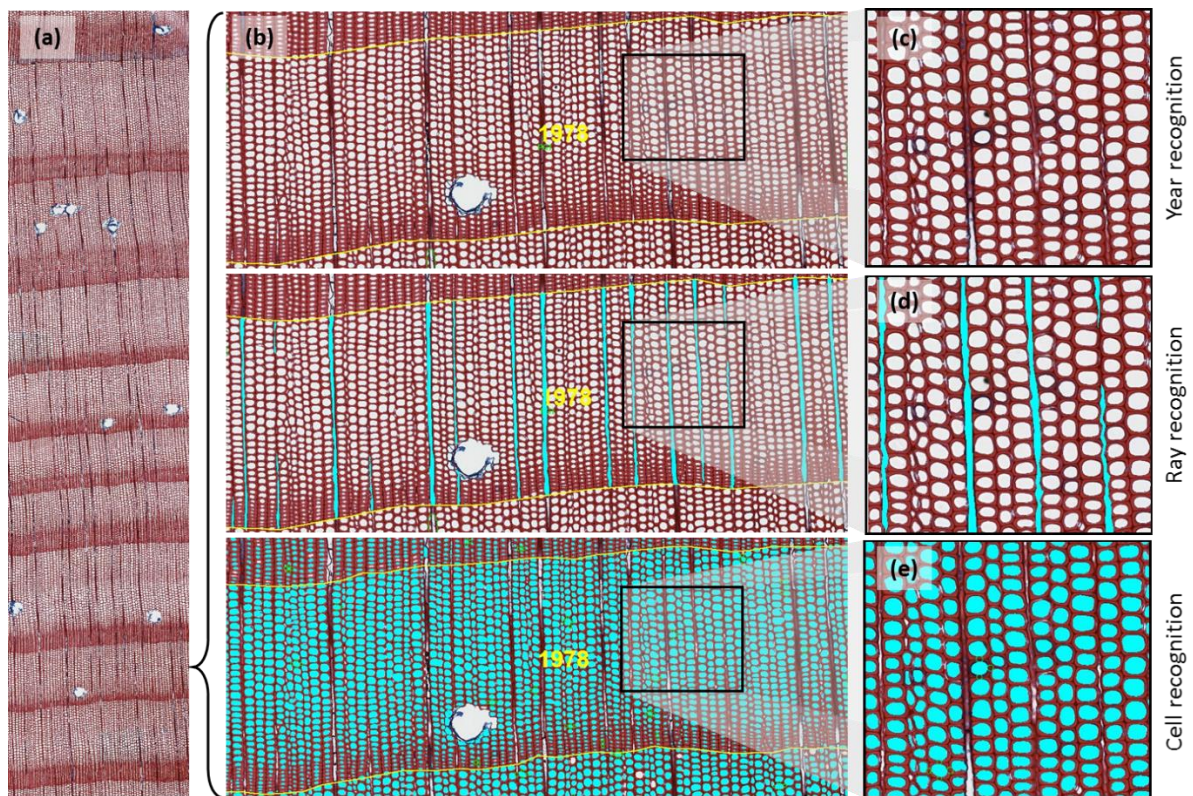
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5 **Table S1.** Mean values of wood anatomical traits (lumen area and cell wall thickness) along the ten ring sectors and comparing the three  
6 treatments (control: no irrigation; IR: irrigated trees; TI: temporarily irrigated) during the irrigation (1980s) and post-irrigation (1990-2010)  
7 periods. Values are means ± SE.



**Figure S1.** Climate diagrams from Zaragoza airport weather station showing data for the period 1950-2014.



**Figure S2.** Scheme of the semiautomatic image analysis performed by Roxas. (a) Panoramic image of tree core transversal section already coloured and fixed on a glass slide, (b) close-up of a single year three steps of anatomical recognition: (c) zoom on year recognition, (d) zoom on manual ray recognition and (e) zoom on automatic cell recognition.