

Supplementary material

Carbon and nitrogen dynamics in decaying wood: paleoenvironmental implications

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Table S1. Content and isotopic initial variability of carbon and nitrogen along the branch

Green shading refers to the average of replicates 1 and 2

Samples	$\delta^{13}\text{C}$ -1	$\delta^{13}\text{C}$ -2	$\delta^{13}\text{C}$	%C-1	%C-2	%C	$\delta^{15}\text{N}$ -1	$\delta^{15}\text{N}$ -2	$\delta^{15}\text{N}$	%N-1	%N-2	%N
T0-Sci (4)-1	-24.2	-24.2	-24.2	48.1	48.3	48.2	-0.5	-0.7	-0.6	0.08	0.08	0.08
T0-Sci (4)-22	-24.0	-	-24.0	48.0	-	48.0	-0.1	-0.4	-0.3	0.08	0.08	0.08
T0-Sci (4)-40	-24.1	-	-24.1	46.7	-	46.7	-	-	-	-	-	-
T0-Sci (4)-60	-24.0	-24.2	-24.1	47.5	47.3	47.4	-0.3	-0.1	-0.2	0.09	0.09	0.09
T0-Sci (4)-80	-24.1	-	-24.1	47.7	-	47.7	-0.2	0.2	0.0	0.08	0.08	0.08
T0-Sci (4)-95	-24.1	-	-24.1	46.9	-	46.9	1.1	0.9	1.0	0.09	0.09	0.09
T0-Sci (4)-136	-24.0	-	-24.0	47.4	-	47.4	-0.4	-0.3	-0.3	0.08	0.08	0.08
T0-Sci (3)-1	-24.3	-24.2	-24.3	47.2	47.0	47.1	-0.4	-0.5	-0.5	0.10	0.10	0.10
T0-Sci (3)-16	-23.9	-	-23.9	47.1	-	47.1	0.1	-0.2	0.0	0.07	0.07	0.07
T0-Sci (3)-31	-24.1	-	-24.1	47.8	-	47.8	-0.7	-0.8	-0.7	0.10	0.10	0.10
T0-Sci (3)-45	-24.1	-24.0	-24.0	47.5	47.7	47.6	0.1	0.0	0.0	0.08	0.08	0.08
Averages	-	-	-24.1	-	-	47.4	-	-	-0.2	-	-	0.08

Table S2. Content and isotopic data of carbon and nitrogen in distilled water (DW)

Samples	Duration of experiment (weeks)	$\delta^{13}\text{C}$	%C	$\delta^{15}\text{N}$	%N
t1-Sci (4)-10	2	-24.2 ^A	48.3 ^A	-1.0 ^A	0.07 ^A
t2-Sci (4)-17	4	-24.0	49.0	-0.9 ^A	0.07 ^A
t3-Sci (4)-20	8	-24.0 ^A	48.6 ^A	-0.3 ^A	0.06 ^A
t4-Sci (4)-24	16	-24.0	49.1	-0.7 ^A	0.07 ^A
t5-Sci (4)-27	32	-23.9	47.8	0.0 ^A	0.07 ^A
t6-Sci (4)-30	52	-24.1	48.2	-0.8 ^A	0.07 ^A
t7-Sci (4)-43	73	-24.1	48.0	-0.6 ^A	0.07 ^A
t1-Sci (4)-59	2	-24.1	48.2	-0.1 ^A	0.07 ^A
t2-Sci (4)-65	4	-24.1	48.5	-0.4 ^A	0.07 ^A
t3-Sci (4)-68	8	-24.1	48.5	-0.8 ^A	0.07 ^A
t4-Sci (4)-56	16	-23.9	49.0	-1.1 ^A	0.08 ^A
t5-Sci (4)-49	32	-24.2	48.6	-1.4 ^A	0.08 ^A
t6-Sci (4)-46	52	-24.1	48.6	-1.3 ^A	0.07 ^A
t7-Sci (4)-53	73	-24.1	48.4	-0.9 ^A	0.08 ^A
t1-Sci (3)-38	2	-23.9	49.2	-0.6 ^A	0.07 ^A
t2-Sci (3)-33	4	-24.1	49.0	-1.2 ^A	0.07 ^A
t3-Sci (3)-28	8	-24.1	48.1	-0.5 ^A	0.07 ^A
t4-Sci (4)-82	16	-24.0	48.1	2.1 ^A	0.06 ^A
t5-Sci (4)-78	32	-24.0	48.7	-0.5 ^A	0.06 ^A
t6-Sci (4)-71	52	-24.0 ^A	48.4 ^A	-0.7 ^A	0.06 ^A
t7-Sci (4)-74	73	-24.0 ^A	47.7 ^A	0.4 ^A	0.06 ^A

^ABased on replicates

Table S3. Content and isotopic data of carbon and nitrogen in River Water (RW)

Samples	Time Experience (weeks)	$\delta^{13}\text{C}$	%C	$\delta^{15}\text{N}$	%N
t1-Sci (4)-12	2	-24.0	48.7	-0.4 ^A	0.08 ^A
t2-Sci (4)-18	4	-23.9	47.9	2.9 ^A	0.08 ^A
t3-Sci (4)-21	8	-23.9 ^A	48.8 ^A	3.0 ^A	0.09 ^A
t4-Sci (4)-25	16	-23.8	48.1	2.4 ^A	0.10 ^A
t5-Sci (4)-28	32	-24.0	48.7	1.0 ^A	0.09 ^A
t6-Sci (4)-41	52	-23.9	49.1	2.2 ^A	0.09 ^A
t7-Sci (4)-44	73	-24.0	48.1	2.2 ^A	0.12 ^A
t1-Sci (4)-61	2	-24.1 ^A	49.1 ^A	0.1 ^A	0.08 ^A
t2-Sci (4)-66	4	-24.0	48.2	0.0 ^A	0.07 ^A
t3-Sci (4)-69	8	-23.8	48.1	2.0 ^A	0.10 ^A
t4-Sci (4)-57	16	-23.9 ^A	47.9 ^A	1.5 ^A	0.11 ^A
t5-Sci (4)-50	32	-24.1	50.0	-0.1 ^A	0.08 ^A
t6-Sci (4)-54	52	-24.1	47.4	1.0 ^A	0.11 ^A
t7-Sci (4)-47	73	-24.0	47.9	2.3 ^A	0.12 ^A
t1-Sci (3)-39	2	-24.0	48.7	-0.3 ^A	0.07 ^A
t2-Sci (3)-36	4	-23.8	48.1	-0.5 ^A	0.09 ^A
t3-Sci (3)-29	8	-23.9	48.4	2.3 ^A	0.10 ^A
t4-Sci (4)-84	16	-24.0	48.7	2.4 ^A	0.09 ^A
t5-Sci (4)-79	32	-23.8	48.1	2.0 ^A	0.09 ^A
t6-Sci (4)-72	52	-23.9 ^A	47.8 ^A	2.4 ^A	0.12 ^A
t7-Sci (4)-75	73	-23.8	46.9	2.5 ^A	0.15 ^A

^ABased on replicates