

**Table S1.** Relative growth rate of whole plant weight (total-W-RGR), leaf area ratio (LAR), leaf weight ratio (LWR), fine root ratio (fine RWR/RW), and T/R ratio in *Quercus mongolica* (*Quercus*) and *Acer mono* (*Acer*). Mean values (standard error) for each treatment are shown ( $n = 6$ ). Results of ANOVA ( $F$ -value) for CO<sub>2</sub> treatments (ambient: ambient CO<sub>2</sub>; elevated: elevated CO<sub>2</sub>) and N treatments (high N, low N) are shown. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .

Characteristics	Species	High N		Low N		Source of variance		
		Ambient	Elevated	Ambient	Elevated	CO <sub>2</sub>	N	CO <sub>2</sub> x N
Total-W-RGR (g g <sup>-1</sup> 100 days <sup>-1</sup> )	<i>Quercus</i>	2.06 (0.10)	2.62 (0.15)	1.70 (0.11)	1.76 (0.10)	5.8*	23.0***	4.0
	<i>Acer</i>	1.93 (0.09)	2.03 (0.17)	1.74 (0.11)	1.82 (0.11)	0.50	2.5	0.00
LAR (m <sup>2</sup> g <sup>-1</sup> )	<i>Quercus</i>	34.3 (2.7)	27.9 (1.4)	26.8 (2.5)	21.0 (2.2)	6.8*	9.3**	0.02
	<i>Acer</i>	25.3 (1.1)	24.8 (1.4)	29.7 (1.8)	28.6 (2.6)	0.18	4.8*	0.04
LWR (g g <sup>-1</sup> )	<i>Quercus</i>	0.24 (0.02)	0.23 (0.01)	0.18 (0.01)	0.20 (0.01)	0.11	5.5*	1.0
	<i>Acer</i>	0.19 (0.01)	0.21 (0.01)	0.19 (0.01)	0.23 (0.02)	5.8*	1.9	0.43
Fine RW/RW (g g <sup>-1</sup> )	<i>Quercus</i>	35.0 (2.9)	32.9 (2.0)	35.0 (3.2)	31.8 (3.6)	0.91	0.04	0.03
	<i>Acer</i>	36.6 (1.8)	43.0 (2.8)	42.7 (3.0)	48.7 (2.1)	6.4*	5.8*	0.01
T/R	<i>Quercus</i>	1.3 (0.2)	1.4 (0.1)	0.6 (0.03)	0.7 (0.05)	0.33	40.8***	0.07
	<i>Acer</i>	1.1 (0.1)	1.1 (0.1)	0.8 (0.08)	1.0 (0.1)	1.4	3.1	0.86