

Online Appendix 1. Explanatory variables used for SEM analyses (means across blocks; N=40) in different tree communities at the IDENT Montreal site (Québec, Canada). Environmental variables are relative elevation and soil clay content. Plot functional identity values were computed as community weighted means of trait values (Table 1) using stem volumes as weight. Plot density was assessed using both stem volume and root biomass in 7cm soil cores (0-5cm).

	S. maple	Tamarak + s. maple	Tamarak	Tamarak + W. pine	W. pine
<i>Environment</i>					
Relative elevation (m)	-1.129	-1.040	-1.156	-1.097	-1.125
Clay content (%)	18.94	16.04	14.42	14.02	18.03
<i>Leaf CWM trait</i>					
[Nitrogen] (%)	1.830	1.455	1.360	1.370	1.420
[Phosphorus] (%)	0.200	0.104	0.080	0.083	0.100
[Leaf dry matter] (%)	411.9	318.9	295.4	303.6	343.8
Specific leaf area (m <sup>2</sup> g <sup>-1</sup> )	11.27	8.87	8.26	7.97	6.54
<i>Litter CWM trait</i>					
LittN (%)	6.91	6.91	6.91	7.00	7.43
LittC (%)	435.4	496.2	511.6	514.0	525.4
LittLig (%)	16.6	29.9	33.3	31.4	22.3
LittC:N	63.0	71.8	74.0	73.5	70.7
LittLig:N	2.40	4.33	4.82	4.51	3.00
<i>Root CWM trait</i>					
Diameter (mm)	0.330	0.370	0.380	0.411	0.560
Specific root length (m g <sup>-1</sup> )	57.8	44.6	41.3	37.0	16.1
biomass (tips cm <sup>-1</sup> )	2.70	2.78	2.80	2.87	3.20
<i>Plot density</i>					
Stem volume (cm <sup>3</sup> )	2156	9043	6286	9107	2636
Root biomass (g)	0.047	0.218	0.287	0.286	0.184