

	Northern forest			Southern forest		
	Initial	Final (5 °C)	Final (18 °C)	Initial	Final (5 °C)	Final (18 °C)
Alkyl (50–0)	9.08 ± 0.2	8.23 ± 0.6	8.57 ± 2	9.88 ± 0.5	8.66 ± 0.2	7.57 ± 0.7
O-alkyl (90–65)	55.31 ± 0.3	54.01 ± 1.0	55.36 ± 3	54.75 ± 1.6	54.98 ± 0.5	57.09 ± 0.3
Di-O-alkyl (110–90)	15.57 ± 0.1	15.32 ± 0.1	15.19 ± 1	15.11 ± 0.1	15.06 ± 0.2	15.49 ± 0.1
Aromatic (145–110)	4.44 ± 0.2	7.18 ± 0.1	6.55 ± 0.02	5.05 ± 1.9	6.05 ± 0.004	5.64 ± 0.9
Phenolic (165–145)	2.35 ± 0.2	2.07 ± 0.1	1.74 ± 0.2	1.68 ± 0.4	1.57 ± 0.1	1.24 ± 0.01
Carbonyl and amide (190–165)	3.40 ± 0.2	4.76 ± 0.2	4.61 ± 1	4.15 ± 0.1	5.12 ± 0.2	4.69 ± 0.2
Aromatic and phenolic (145–110)	6.79 ± 0.4	9.25 ± 0.1	8.29 ± 0.2	6.74 ± 2.3	7.62 ± 0.1	6.87 ± 0.9
O-alkyl : Di-O-alkyl	3.55 ± 0.03	3.53 ± 0.04	3.64 ± 0.1	3.62 ± 0.1	3.65 ± 0.01	3.69 ± 0.002
Alkyl : O-alkyl	0.16 ± 0.003	0.15 ± 0.01	0.16 ± 0.04	0.18 ± 0.004	0.16 ± 0.002	0.13 ± 0.01
Carboxyl/ester *	2.24 ± 0.1	3.14 ± 0.2	2.43 ± 1	2.30 ± 0.1	2.92 ± 0.5	2.39 ± 0.1
Amide*	1.16 ± 0.06	1.62 ± 0.4	2.18 ± 0.1	1.85 ± 0.1	2.20 ± 0.2	2.30 ± 0.04
%C	43.6 ± 0.5	44.4 ± 0.4	43.3 ± 0.3	43.9 ± 0.1	44.1 ± 0.2	42.3 ± 0.7
%N Nitrogen	0.590 ± 0.03	0.823 ± 0.1	1.08 ± 0.07	0.920 ± 0.05	1.12 ± 0.09	1.19 ± 0.08
C : N	86.3 ± 3	64.0 ± 9.7	46.9 ± 2.7	55.6 ± 3.2	46.1 ± 3.7	41.6 ± 3.4
δ ¹⁵ N	-3.19 ± 0.2	-1.25 ± 0.8	-2.42 ± 0.4	-3.72 ± 0.4	-1.61 ± 2	-0.8 ± 2
δ ¹³ C	-31.8 ± 0.5	-32.1 ± 0.2	-31.8 ± 0.2	-32.0 ± 0.2	-31.5 ± 0.03	-30.6 ± 0.3
%N as nitrate + nitrite	0.058 ± 0.006	6.5 ± 9.0	10.4 ± 9	0.034 ± 0.003	7.27 ± 11	6.21 ± 10.0
%N as ammonium	2.41 ± 0.1	8.41 ± 2.0	5.24 ± 2	1.59 ± 0.06	8.14 ± 3	6.99 ± 1.0
%C as amino acids	2.54 ± 0.03	n.d.	2.31 ± 0.7	3.83 ± 0.03	n.d.	2.12 ± 0.7
%N as amino acids	52.1 ± 1.1	n.d.	26.4 ± 6.6	50.9 ± 5	n.d.	21.2 ± 3.0
Total amino acids (nmol mg ⁻¹)	207.2 ± 3	n.d.	193.0 ± 60	313.0 ± 30	n.d.	171.0 ± 20.0